

## The Connection Between "Dryness" and "Ancient Civilization"

Our relationship with Taiki Sangyo Co., Ltd. of Okayama Prefecture (hereafter referred to as Taiki Sangyo) began with the aim of launching an onion drying project based on our established network and accumulated knowledge and experience in Sudan. It was in April 2015 that we put together the proposals for the JICA Public-Private Partnership Feasibility Survey (hereafter referred to as Feasibility Survey) placing the highest priority on site needs, and since then four years have passed. The background and outline of preparation and implementation of the investigation is described in the AAI News mini-series that began in issue 94. The Feasibility Survey was also the beginning of a "dry" collaboration between AAI, which has many years of experience in dry land consultancy work, and Taiki Sangyo, an electric dryer maker, which holds the largest market share in Japan.

In the project investigation, Taiki Sangyo brought a 120 kg electric dryer (E-30 type) to Sudan's Kassala state. The E-30 type was one of the largest electric dryers in Japan at that time and was the main product of Taiki Sangyo. We closely evaluated the machine's performance upon its installation and operation on site and observed one problem - the amount processed per individual operation was less than the expectations of farmers given their scale of onion production. To meet this challenge, Taiki Sangyo decided promptly develop an E-60 type, which has double the processing capacity. It is worth noting that one of the actual results of our Feasibility Survey was that Japan's Ministry of Foreign Affairs adopted the Economic and Social Development Plan (formerly a 'non-project type' grant aid), through TICAD VI held in Kenya, which was implemented as an ODA project. In this project, 23 units of the E-30 type were deployed and installed in a total of 10 locations; 4 locations in Kassala state, 3 locations in Khartoum state, and 3 locations in River Nile state.

With the steady dissemination of Taiki Sangyo's electric dryers in Sudan, with the utmost care the introduction of the new model E-60 type was promoted in the JICA project, starting in October 2018. In the extension/

demonstration stage, based on the trial results of the Feasibility Survey we aim to demonstrate it as a dry factory with three E-60 types, in a more practical form to be used by the farmers' association. I would like to introduce the details in the future in the form of a mini-series.

Now, the connection with Taiki Sangyo was not only "dryness". It is a shared interest in "ancient civilization". Arid land, which has been the main stage of activity for AAI, is undoubtedly the center of the birth of ancient civilization. While working in developing countries, AAI staffers often visit ruins and historic sites, and many of them have a good knowledge of ancient human history. Since Sudan is the cradle of the Kush (Nubian) civilization, which has a close and mutually influential relationship with Egypt, the author is also investigating its history. However, President Yasuhara of Taiki Sangyo also goes to the Khartoum National Museum on his holidays in Sudan. In addition, he negotiated to borrow several exhibits from the museum for the Okayama Orient Museum Special Exhibition. I was wondering if he just spontaneously began go start negotiations on the exhibits when the reason for his actions suddenly became clear. The Okayama City Orient Museum was founded with the donation of the Orient art collection by President Yasuhara's own grandfather, the late Shinjiro.

After hearing this intriguing story, when the project kick-off party was held in Okayama last fall, I eagerly asked Mr. Yasuhara to take me on a guided tour of the museum. With the common theme of "dryness," we would like to adopt another key phrase in our work alongside Taiki Sangyo "ancient civilization". (April 2018 Naoki Koga)



Pyramids in Sudan



Ancient painting

## Ingenuity of demonstration fields <Part 3>

### Demonstration farm model of farmers' participation and cost sharing

I have been involved in the agriculture and livelihood improvement cluster of the JICA project, "Capacity Development Project for the Provision of Services for Basic Human Needs in Kassala, the Republic of Sudan" (K-Top), for about four years from May 2011 to March 2015. In this project, the technology exhibition in the demonstration fields also served as an important dissemination method and tool. However, this was not limited to a mere technical demonstration and we have attempted to bring out the pro-activeness and independence of farmers. In this issue, I would like to introduce this activity as an example of this approach.

First of all, I would like to explain a bit about the background to the project. Sudan has been stigmatized as a terrorism-supporting nation in Europe and the United States for many years with the result that other donors' aid forms have been limited to humanitarian (emergency) types. By contrast Japanese assistance was characterized as technical cooperation (development-type) and was evaluated as a unique method in itself. K-Top was formulated in response to "Reconstruction assistance" after the 2005 peace agreement concluding the eastern conflict Peace Agreement, and in the area of agriculture and livelihood improvement, the two foci of "economic growth" and "poverty eradication" were requested by the Ministry of Agriculture. It started in various districts and focused on various themes, from horticulture to mechanized agriculture, flood irrigation to traditional rainfed methods, and furthermore encompassed livelihood improvement activities. However, the eastern conflict was a minor and relatively short conflict compared to the Sudanese Darfur conflict and the South Sudan War of Independence, so it was considered to be a realistic development project at the implementation stage.

As part of the K-Top agriculture and livelihood improvement plan, demonstration fields focusing on "development" were created on the above-mentioned themes and in the aforementioned districts as the process unfolded, we gradually realized how passive the farmers actually were. This was actually coming as no surprise. The assistance



Field Day

form of other donors, including state ministry services and NGOs, was "humanitarian /emergency", and the main thrust of these interventions was the distribution of goods and money. An inevitable consequence of this aid was that farmers exposed to such one-sided assistance become passive. The farmers continued their normal activities while receiving support, but remained the same with no change once the crisis support was over. It was pointed out that this passive dependence created vicious cycle that stifled creativity and innovation on the part of farmers who opted to wait for future handouts rather than improve their work technology or practices.

Under these circumstances, K-Top proposed and implemented a demonstration field model that was a "development type" and what is called a "beneficiary burden". The first year was a purely technical demonstration with the project bearing the full cost of the exhibition. However, from the second year onward, the principle of beneficiary burden was gradually introduced. For example, in the horticultural area and flood irrigation area, the payback method was used, and the project supported the initial input of seed and fertilizer costs, etc., but if there was a profit through harvesting and sales, the demo farmers in the second year were able to pay back the full cost to the State Department of Agriculture. The repayment was used as a fund, and the Ministry of Agriculture created a circulation system in which it was used as a source to generate income to invest in the following year's demonstration field. In addition, since the traditional rain-fed area is a poor area in Kassala, the project provided technical support for the creation of water harvesting terraces. From the following year, we sought farmers to bear part of the cost through the cost-sharing method.

It is believed that the demonstration fields should not be used for technical demonstration only, during the cooperation period, but must be sustainable and replicable for recipient governments and farmers. If the State Ministry of Agriculture and the farmers bear mutual costs, which would lead to the stability and sustainability of the service, it will obviously be advantageous. In the demonstration fields of K-Top, rather than ending with one lucky farm, we aimed at a solid participatory model that would create the next "demonstration field".

## Explore the world of beekeeping <Part 3>

### Apiculture in Mozambique and its challenges

The author was a member of the Japan Overseas Cooperation Volunteers (JOCV) in the southeastern part of Mozambique from June 2012 to February 2015. At that time, I had an opportunity to receive guidance from a Japanese-Brazilian apiculture expert and extend the learned technique to the local farmers. In this article, we would like to describe the current situation and the issues facing apiculture in Mozambique.

The land faces the Indian Ocean and is not only blessed with marine resources, it is also a country where palms and mangoes grow, and citrus fruits such as oranges can be harvested in the south. With such an environment as a nectar source, traditional honey collection is performed in many places. As seen in some African countries, beehives with hollowed out trunks covered with bark are found from the central to the northern part of Mozambique. Palm trunks are the main materials used for this. In addition, there are some farming families performing apiculture using large pots normally used for storing water. The traditional beehive made from the bark of the “Tambeira” tree, cut into strips 150 cm long and 50 cm wide, is common in the Inhambane province in the Southern part of the country. The bark strips are bent to form cylindrical stakes and the fragrance of this bark is said to attract bees. Many traditional apiculture methods rely on installing beehives on top of trees and waiting for bees to naturally arrive. But it is interesting to note that this Tambeira beehive is placed on the ground covered by tree bushes so that it will not get wet easily. Farmers said that this method has been used for a long time because there are few large mammals inhabiting this environment and there is no fear of hives being destroyed, and also because the method is simpler and safer. For both beehives, smoke is used when collecting honey, which may cause a fire, and it is unlikely that bees will enter and settle, and the overall yield is around one-tenth of that of modern beekeeping boxes.



Tambeira beehive

In this way, the form of the beehive varies from region to region, but information and experiences are not exchanged between farmers. Although the importance of

apiculture is recognized at the district level, it is not shared enough to cross between agriculture department of each province. On the other hand, various beehives are currently being donated by different donors. In addition to the modern beekeeping box, the beehives called bar type and Kenyan type are often found in the southern part of the country. It is possible to get a yield close to that of a modern beekeeping box depending on management, but there are many farmer groups that simply leave the box and wait for bees to enter in the same way as in a traditional beehive without applying any technologies. In order to improve this situation, some members of JOCV working on apiculture and community development extended knowledge of honey bee habits and techniques such as the capture methods of a queen bee and shifting of bees from traditional beehives to these new beehives is being performed.



Kenyan type beehive

Among Mozambicans, as in Japan, honey is said to be good against colds and sore throats, but despite its popular demand the manufacture of honey is still largely undeveloped commercially. Individual farmers or groups may sell it in whiskey bottles in local markets or along the national highways to generate a small cash income but there is no such thing as setting up a shop for retail. In that case, it may only fetch around half of the price it would if sold in the capital. Another problem is that many farmers accept modern beekeeping boxes and the Kenyan type beehives which are distributed by donors such as aid agencies but install them without applying the necessary techniques to maintain them. Recently some farmers groups have begun to hold study sessions and have started to make the beekeeping boxes and smoke devices necessary for management and honey collection. If such conscious farmers can take the next step and acquire the knowledge and techniques to increase the colony from the modern beekeeping boxes, instead of moving the colony from the traditional beekeeping boxes, apiculture will grow as one of the fields of livelihood improvement including forest management.

## AAI and Me – Yoshihisa Zaitso <Part 3>

### Future of AAI

More than 30 years have passed since I entered AAI in 1989. Although AAI now has 12 staff members, it was founded by Onuma and was originally operated by just the two of us sharing a desk in one corner of the office of FAI (Fisheries and Aquaculture International Co., Ltd.). Over the years of our operation, some of our colleagues have left to operate farming activities, aiming to pursue organic agriculture. I have already left AAI to find a living in my home country. AAI is approaching a period of major change in the coming few years. Hasegawa, who has been in charge of training activities at Tsukuba International Center, retired in 2019. Onuma and Koto, who have led AAI, are also about to retire.

AAI is like a cooperative of solo business proprietors each individual using our organization to the mutual benefit of their own project and AAI as a whole, and I think AAI has grown to be recognized for that within the consultant world. We have mutually evolved by trying to share our individual expertise and knowledge as much as possible. We also tried to improve ourselves by asking our acquaintances in universities, research institutes and other consultant groups for their assisting even in fields that were unfamiliar to us then applied newly acquired technology in projects, learning more as we did so through repeated trial and error. AAI is an organization that places a high priority on sharing the "I want to try..." approach and keeping the "... what will be necessary for future activities" in mind. This awareness is an important feature of AAI. AAI aims to improve the ability of individuals while ensuring the freedom of each, and staff members are constantly engaged in field activities by creating roles, sometimes individually, sometimes collectively, where they can make the best use of their skills.

I liked this about AAI. The issues to be resolved are judged in the context of each situation and approaches modified accordingly. By necessity, there are no rigid or detailed company rules, and everyone utilizes the company's assets while at the same time being involved in the management of the company and proactively raising company funds to acquire commonly shared knowledge. It has been done by mutual, one might say, unspoken consent. This approach may not be workable at all in a normal company, but it was possible in AAI, and the employees operated the organization by adjusting the work

load in such a way as to make results attainable. That was the spirit of AAI, and I liked it! Larger organizations tend to neglect face-to-face communication and justify this by citing workload and busy-ness. AAI consciously avoided becoming such a larger company, and deliberately set out to create a space for staff to 'hang out' within the company in the form of regular video conferences so that face-to-face communication and discussion can take place as much as possible. It is natural that the position of employees will be changed in the future and the activity strategy of the company will also be changed accordingly. However, I hope that this kind of awareness of organizational management will be continued. I would like the successors to continue the management by all employee while being aware of why the current AAI exists in the form it does.

The development consultancy business is completely unknown in my rural area. And even when I talk about such business, despite the fact that we now live in an era where technology allows almost instant communication and information access no matter where one is, people still think that these events occur on a distant planet. The world of overseas development consultancy is an attractive business where you can connect with a wide variety of people and experience new encounters with nature and life that you cannot experience normally in Japan. I hope many local people will benefit from, and feel, this fun and charm.

Finally, to the colleagues who will be responsible for the future AAI; Even if the staff come and go in the future, please do not forget the idea of "think globally, act locally" as used by AAI, and keep looking at, and learning about, the people, nature and habits of each project site, and take part in international cooperation activities in accordance with the local environment. It is in AAI that the staff share their ability improvement in a flexible system of organization. I want you to enjoy your activities by ensuring a free life, and do not forget to give back information to me who now lives in a rural area!



First overseas activity  
(United Arab Emirates, 1978)



Latest overseas activity  
(Sudan, 2019)