



Connecting people, agriculture and the environment through appropriate technologies

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The website renewal and new vision of AAI

AAI renewed its website in November 2020. The old website was “a piece of handmade work” that the staff built on their own, so we were attached to it, but we decided to renew it because there were issues such as compatibility with the smartphone version. Our new website was created with the support of a web production and design company.

Taking the opportunity of this renewal, we worked on clearly expressing the company's mission and vision, and all the staff discussed our strengths and what we should aim for in the future. As a result, the themes of "About AAI", "Three Key Perspectives", and "Vision" were organized and posted on the same page as the company profile. At first, we selected various keywords relevant to the arid land agriculture that we have been strongly focusing on since our establishment, the agricultural extension and forest conservation work in East Africa and other regions, and the training in Japan at JICA Tsukuba. Then we exchanged opinions on how to put together these keywords from various perspectives. As another result of the discussion, the business fields that we specialize in were classified into four categories: 1. "agricultural technology and community value development", 2. "resource management," 3. "agricultural extension," and 4. "human resources development." In addition, the logo of AAI News magazine, "Connecting people, agriculture and the environment through appropriate technologies" was decided as the company's slogan. Finally, everything we had discussed and decided on was posted on the website. It took time for all the staff to reach a satisfying consensus, but it was meaningful that we could seize the opportunity of website modification to share the foundation of future AAI activities and policies through the discussion of our mission and vision.

The archiving of AAI News articles is one of the roles of websites that we have always emphasized. We place great importance on staff discussions in the process of creating

AAI News articles. This aims to create an opportunity for staff members who have few opportunities to meet each other due to their many overseas business trips to share their experiences, discoveries, and thoughts in the field. We wanted to share these experiences widely to all the visitors who can access them by searching the internet. The publication of AAI News has continued for more than 25 years, and it is also interesting to be able to read the transition of technical cooperation along the way. The articles are not limited to agricultural technology, but have accumulated numerous other topics such as environmental conservation, utilization of information technology, human resource development, local community and economy, and introduction of local culture and plants. This diversity is clearly reflected in the AAI website. In order to make the best use of this feature, we have devised ways such as improving the layout and installing new check boxes so that news articles can be searched efficiently within the site, as well as article category classification and keyword tags for each article. We carried out steady arrangement work such as reviewing the attachments for both the Japanese version and the English version. I think this has become the strength of the new website while still cherishing the role and characteristics of the old website.

In the future, we will keep in mind the need to update the information, further enhance the content, and make it a website that can deliver practical information, beyond simply providing a company profile.



Home page of new website

Comparative analysis of agricultural extension situation in individual countries <Part 4>

Capability of Agricultural Extension Department

In preceding issues, we have discussed individual Agricultural Extension Officers (AEOs). Now we would like to focus on the organization to which AEOs belong - the “Extension Department” (ED). At the beginning, we discussed the similarities and differences of each country in which these are found by discussing the perspectives of budget, human resources, organizational structure and extension planning abilities.

It is common in each country that the ED has branch offices, “Extension Centers” (EC) in rural areas. These centers have been set up to respond to on-site issues, but actually they are often used conveniently for data collection and distribution of agricultural inputs by governments and donors. This is a case in which the network of the ED and systems that could potentially work flexibly in the field, are used only for limited purposes. Because a project must achieve its purpose within a certain period, budgets can be used only in a fixed manner and activities are similarly restricted. Even under such limitations, however, an attitude of facing up to problems in the field is important, and project activities in which the voices of AEOs can be reflected in the extension plans are essential.

It is also thought that a common issue facing each country is the gap that exists between needs in the field and the centrally decided extension plan. We have seen in many countries that AEOs working in the field are tossed into action to fulfil extension plans devised by top-down thinking. A bottom-up system, by contrast, is ideal for making an extension plan that contributes to solving problems in the field. In this aspect, the planning system in Uganda where decentralization has been advanced, is of interest. First, the rural office devises a development plan including an AEO's extension plan, then raises it at the district local government level. The district develops a District Development Plan (DDP) that comprehensively considers the plans of all rural offices in the district. Since a DDP includes other fields such as education and medical care, agricultural extension is not always prioritized. However, at least, it is remarkable that Uganda has a system to build a development plan from the bottom up. In

the agricultural extension improvement project that we were involved with in Syria, we tried to identify problems in the field from farmer surveys and collect on the ground statistical data and develop an extension plan based on this. In the project for capacity development of extension officers that we are implementing in Pakistan, we incorporated farmer surveys and extension activities into the training program so that participants could learn the importance of extension plans that meet the problems in the field.

The shortage of AEOs is also a common issue in each country. This issue may be due to a lack of budget, or the area allotted to each AEO may be too large for them to effectively



Extension activities address farmers' problems (Pakistan)

cover. Regarding this issue, we introduced our effort in Sudan in AAINews110, in which we saw water inspectors working in close proximity to the farmers' fields addressing problems and cooperating with AEOs at the central level to solve them. Maintaining service quality in EDs is also thought to be a major issue. Although AEOs' capacity can be improved through training, if the ED cannot accumulate skills and know-how as an organization, valuable experience and lessons learned will be lost when the AEOs leave their jobs. In this regard, it is noteworthy that in Palestine, some staff with specialized expertise in each field, known as Subject Matter Specialists, were assigned separately from the AEOs working in the field, and the technical backstop was thus guaranteed for the organization.

Each country's ED faces both various common and specific issues, and they operate their own unique organizations and are working on agricultural extension in their own ways. However, the activities that an ED can take by itself are limited. In the next issue, we will discuss cooperation between the EDs/ AEOs and external partners.

Consideration on remote operation <Part 3>

Effect of fostered ownership

With the worldwide spread of the novel coronavirus infection, we have become quite accustomed to remote work, and the implementation and ingenuity of online operations have become well established. In a situation where overseas travel is still difficult, we communicate with local staff using SMS which also has chat and free call functions, and conference tools including videos are used as much as possible in remote operations, in addition to conventional telephone and email. Despite our success, when compared with technical cooperation scenarios where direct contact between people in the real field was commonplace, remote work inevitably feels limited and frustrating.

In implementing a technical cooperation project, it is said that it is important to build a relationship of trust with the local side and foster ownership. But such a good relationship can not be established in a day. By accumulating casual conversations on a daily basis and collaborating on-site, we inevitably deepen our relationships both in work and private life. It will take a certain amount of time to build unwavering mutual trust using any network of layers of communication. Assuming that in the case where a new project is started in a situation where local activities are restricted, building relationships while completing everything with only remote work as a tool seems to be a rather difficult task.

By the way, the Syrian water-saving irrigation extension project that was affected by the civil war and the technical cooperation project in the state of River Nile in Sudan, (mentioned in AAI News No. 108) were both examples of sudden interruptions and an immediate transference from on-the-ground to remote support. However, as in Syria's case, fortunately for the Sudanese technical work, the interruption occurred at the final stage of the project. Within the Sudanese Ministry of Production, which is a counterpart (C/P) organization, the understanding of the project contents has progressed, and each committee for farming and irrigation has been set up for budgeting for the next fiscal year. A committee for cooperation and discussion across the director level, which is important as a decision maker, has begun to function. In technical cooperation, activities are usually started for staff who are active at the field and/or farmer level.

However, due to inter-departmental conflicts in C/P efforts can fragment and in the organizational culture of vertical division within the ministry, coordination between bosses of C/P became a significant obstacle to mutual coordination and obstructed smooth horizontal cooperation. To address this, a cohesive entity called a Committee for Budgeting was formed in this project, in which the director-general level, who is the boss of C / P and others, collaborates beyond departmental boundaries. Therefore, it is probable that the Sudanese side functioned as a team and remote management was facilitated even if Japanese experts were absent due to the unexpected interruption.

In the project, the ownership of the partner country's institution is also constantly required to be fostered in relation to the sustainability after the project is completed. However, this time, it seems that the ownership of the project on the Sudanese side had reached a certain level, so each C/P and staff consciously and autonomously played their own role in the organization. There was no need for detailed remote instructions from the Japanese side. Furthermore, the project management with the absence of Japanese experts seems to have created a sense of unity in the C/P born out of a certain sense of crisis. People who had tended to be passive until then became newly aware of their roles, and became more active. Although it was a completely unexpected chain of events, we really felt we had no option but to withdraw our physical presence and resort to remote involvement. This said, at the same time the withdrawal offered us a glimpse of an interesting aspect of human behaviour. We believe that we have achieved certain results despite the sudden crisis as we implemented a project with a strong element of local ownership.



Discussion among each department for budgeting

AAI and Me – Shigeya Hasegawa <Part-4>

Memories of JICA Tsukuba training and expectations for the future

In the training course for Tajikistan, which was the first activity on vegetable cultivation for me with AAI at JICA Tsukuba, a tomato cultivation training course was organized in which seedlings were planted at the end of August immediately after the participants' arrival in Japan and ripe fruits were harvested by the end of November before their return home. It is necessary to prepare seedlings for which the first flower cluster begins to bloom, and there were concerns about seasonal obstacles such as weak legginess, poor flower bud differentiation, and lack of flower clusters due to raising seedlings in

midsummer. Even though I had experience in growing vegetables in hot and dry areas during my time with the Kashima Oil Corporation, as well as work experience on salinity tolerance tree selection tests, and indoor greening by gravel cultivation, I felt a great deal of anxiety in this case. In order to prepare quality seedlings that would satisfy the participants, who included lecturers and researchers, I was sweating a lot on Saturdays and Sundays to grow the required seedlings for our course. It ended up being a very good memory because my efforts bore fruit and the cultivation training was carried out as planned.



Tajikistan training (2000)

Practical training for participants to experience vegetable cultivation in Japan is an important part of the curriculum for understanding the technique. I tried to convey the standard work of the farmer as much as possible so that participants could experience the technology for the production of high quality and yield. For watermelon seedling raising by grafting, the success rate was improved by introducing closed control at the initial stage. Drip fertigation was introduced to

improve paprika hydroponic cultivation in cases that showed poor growth after the rainy season. For onion cultivation, cell seedling raising and black mulch were introduced to improve the rate of large and sellable fruits in the practical training. Many participants valued the opportunity to witness the uniform raising of seedlings by potting the soil using a mechanical sieve and a speed potter as a starting point for the production of quality seedlings. In the future, we expect the continued improvement of hands on training that will contribute to the development of practical skills that can be used for growth diagnosis, cultivation management, and technology dissemination from the early stage of cultivation through the introduction of IT and utilization of chemical analysis data.

In the training, we tried to improve skill acquisition through the task experiments that stimulated and engaged the thinking of participants. In the experiment of 139 participants from 2006 to 2018, 20 vegetables were tested, and the subjects covered were 19 fields. Among the top 10 items, there were overwhelmingly many experiments related to tomatoes, and after the top ten came melon, cauliflower, corn, broccoli, soybeans, lettuce, green beans, pumpkin, bitter melon, and capsicum. In the experimental subjects, there were many tests to grasp the appropriate amount of nitrogen needed, and in recent years, the evaluation of the application of organic fertilizers and composts available in local areas such as chicken manure has increased.

In order for participants and instructors to continue training to achieve skill acquisition through the process of growing vegetables together, information such as marketing and vegetable functionality should be provided in addition to cultivation techniques. Improvement of growth diagnosis ability for participants and learning through coaching to achieve individual training goals are also indispensable and these should be continued.

