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AAINews

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On the 30th Anniversary of AAI

Thanks to your support, AAI is at a critical juncture celebrating the 30th anniversary since its inception. We have looked back at how our activities have evolved in the last 30 years, reviewing each decade as detailed below. We could observe changes in our work and its development over each period.

1984-1994: Aiming to become experts for arid regions

The early years of AAI saw research cooperation work such as sand fixation and tree planting, crop cultivation, selection of salt resistant varieties, and paddy rice cultivation, with the inter-university research cooperation project called Joint Study Project on Improvement of Arid Land Agriculture in UAE as the anchor project. These activities went on over 10 years with the Gulf War occurring in between. In addition, we participated in activities as long-term and short-term experts in the Middle East and Africa. The main work was limited to cultivation, soil management, land use and environmental protection activities in arid regions. During this period we built a solid foundation for our technical specialization in arid land agriculture and international cooperation, accumulating experiences and developing our technical capacity.

1994-2004: Transition into "AAI of arid land agriculture"

During this period, we established our corporate image as the "AAI of arid land agriculture" among related organizations as our experiences in UAE and other countries began to be recognized. Our technical areas also diversified with foci of work expanding to include agricultural research in Oman and agricultural extension support in Syria. Later on, our activities in Oman led to mangrove afforestation and in Syria to water saving irrigation extension. Furthermore, we also came to be able to participate in activities that required comprehensive technical capacity such as water resource development and oasis development in arid regions. While this was occurring overseas, in Japan, we worked on investigating literature related to desert greening methods and techniques, nature conservation, environmental impact assessment (EIA), as well as running training programs in vegetable cultivation technology at the JICA Tsukuba International Center. Experts whom we met through various work projects started to join AAI too, enriching and expanding our human resource base.

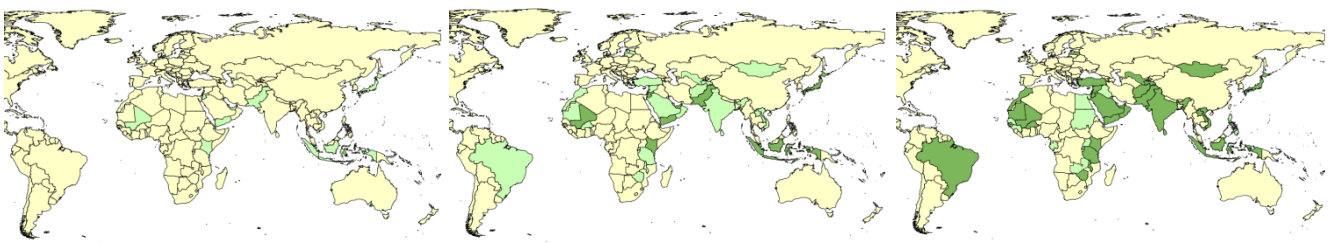
2004-2014: Implementation of our own technical cooperation activities

In this period AAI started working on projects that are actually led by us. For 7 years since 2005, we worked on a technical cooperation project related to water saving irrigation and training extension in Syria. AAI also conducted an agricultural extension project in Palestine and a mangrove afforestation project in Oman. Furthermore, we started to become deeply involved in the NERICA rice promotion project in Uganda. In Japan, we continued to deliver the vegetable cultivation training courses at the JICA Tsukuba International Center. We also started to explore AAI's involvement in supporting Japan's agriculture through collaboration with organic agriculture groups in Satomi, Ibaraki Prefecture and Ushimado in Okayama Prefecture.

As above, when we consider our work in three stages of 10-year periods, our work transitioned from support programs for individual techniques in arid regions to a portfolio of activities based around regional development and technology extension in arid regions and training in Japan, through geographic and work area expansion. This was a very natural progression. Since its inception, AAI has been investing particular efforts in collaboration and joint action with counterparts on project sites, aiming to establish appropriate agricultural technology suitable for arid regions and to nurture human resources through extension activities. We always placed particular importance on relationship building in the field making friends with many colleagues, and treasuring an atmosphere where we could discuss freely and frankly many and various issues with our counterparts. When our counterparts participated in training courses in Japan, we went to meet them as much as possible, and we kept closely in touch with colleagues in the field. We believe that close human relationships became the basis for our long-term involvement in countries such as Syria and Oman which spans over 20 years. Furthermore, we are determined to continue exploring ultimate agricultural techniques and extension technologies that are useful and realizable, working jointly with technicians on the ground.

As international cooperation and technical cooperation modalities have changed over the years, we continue to pride ourselves as being "a team of a selected few", and maintain our priority of achieving our vision of providing technical support that truly contributes to people in the regions, always ensuring collaborative actions with those working on the ground. We hope that you will continue to provide your invaluable guidance and encouragement.

(By Hiroyasu Onuma, January 2014)



pale-green: new places of activity　　dark green: achievements

From the frontline of environmental education <Part 6>

In this series, we introduced various environmental education activities, having visited organizations and NPOs working on environmental education. We learned the mechanisms and innovations to enhance understanding of the people who receive environmental education. We summarized in the table below characteristics of organizations and groups introduced in this series and their various schemes.

Translating knowledge to action

"The impact of environmental education is to make children hopeless for their future." Some cynical people may make this kind of remark. It is true that the more you know, the more you understand how difficult it is to solve environmental problems. But this is why it is so important to put one's knowledge into action, without stopping merely at learning about the issues.

In order to prompt this necessary action, a system is needed whereby target people do not only participate in a single event, but participate in environmental programs repeatedly. The Junior Ranger System run by the Yatsuhigata Nature Observation Center is a good example of a project that nurtures and enables repeated participation. In order to take actions to tackle environmental problems, an effective way is to begin by doing something in your immediate area. Community based activities such as those organized by Groundwork Mishima provide important suggestions of how to think globally and act locally.

Sustainability of activities

Results of environmental education cannot be obtained overnight. This makes it important to have continuous activities. In order to run the organization sustainably, the Whole Earth Nature School relies on revenue from ecotour guiding and some other sources. The KEEP Association also runs a variety of paid programs and residential experience programs. Moreover, Groundwork Mishima maintains sustainability of its work by creating a system whereby residents in the area are proactively involved in their activities.

Roles of interpreters and program design

Environmental education programs have sometimes been described as "engaged pedagogy." Simply stated the teacher aims to learn as much from his/her students as he or she intends to teach. What is important is the connection between people and people and people and nature, and interpreters play the role of establishing this essential connectivity. Therefore the interpreter's quality impacts closely on the quality of programs. In addition to interpreters, program design is also important. Depending on a program's intent and aim, adjusting and improving program structure and flow leads to a better product and result.

Environmental education challenges and future development

Environmental issues are a serious problem; they can affect the very survival of the human race. Environmental education is recognized as one of the most important and fundamental measures to respond to these threats and challenges but environmental issues are highly complicated and frequently involve so many different elements that affect and amplify one another, and it is often difficult to see developments towards definitive solutions. We cannot rely on environmental education alone for solving environmental problems, nor can we expect that citizens' actions alone can solve the problems. However, man-made social and regional problems have to be solved by humans. For this, it is important to develop human resources and nurture them through environmental education programs.

Organizations and Entities	Main Features	Ingenious Actions
Yatsuhigata Nature Observation Center	A visitor center aiming to protect the important tidal flat which survived urbanisation. It is a learning center providing opportunities to observe birds and learn about them.	・Securing repeaters through the Junior Ranger System with different steps for progression ・Citizens participate as volunteers in center's activities
Whole Earth Nature School	Ecotours making use of the location at the base of Mt Fuji, providing programs for people to practice living based on co-existence between people, nature and communities.	・Sustainability of programs assured with guiding and other revenues as the basis for organization operation. ・High quality ecotours offered by interpreters (guides) lead to revenue security.
Groundwork Mishima	Conduct riverine nature conservation and rehabilitation in Mishima which is known as the Water Capital, through coordinating partnerships between citizens, NPOs, private sector companies and government administrations. Community based activities practicing "Think globally, Act Locally".	・Aims at improving environment and society through active participation of citizens and companies. ・Visible daily actions that link with environmental education at school can change knowing into taking action.
KEEP Association	Runs the Yatsugatake Nature Center, providing nature experience programs and nurturing environmental educators. A pioneer for environmental education in Japan.	・Implements tailor-made programs for companies and schools. ・The important role of interpreters is to deliver messages to participants' hearts rather than communicating knowledge.

Water saving irrigation extension tools in Syria <Part 6>

In this series, we have introduced water saving irrigation extension tools which were developed through the Project on Development of Efficient Irrigation Techniques and Extension (DEITEX). Extension tools are distributed to farmers by extension workers when they visit the farmers, with instructions on usage. DEITEX is aimed at enhancing knowledge and awareness about water saving irrigation through the use of the extension tools in daily farming work by farmers.

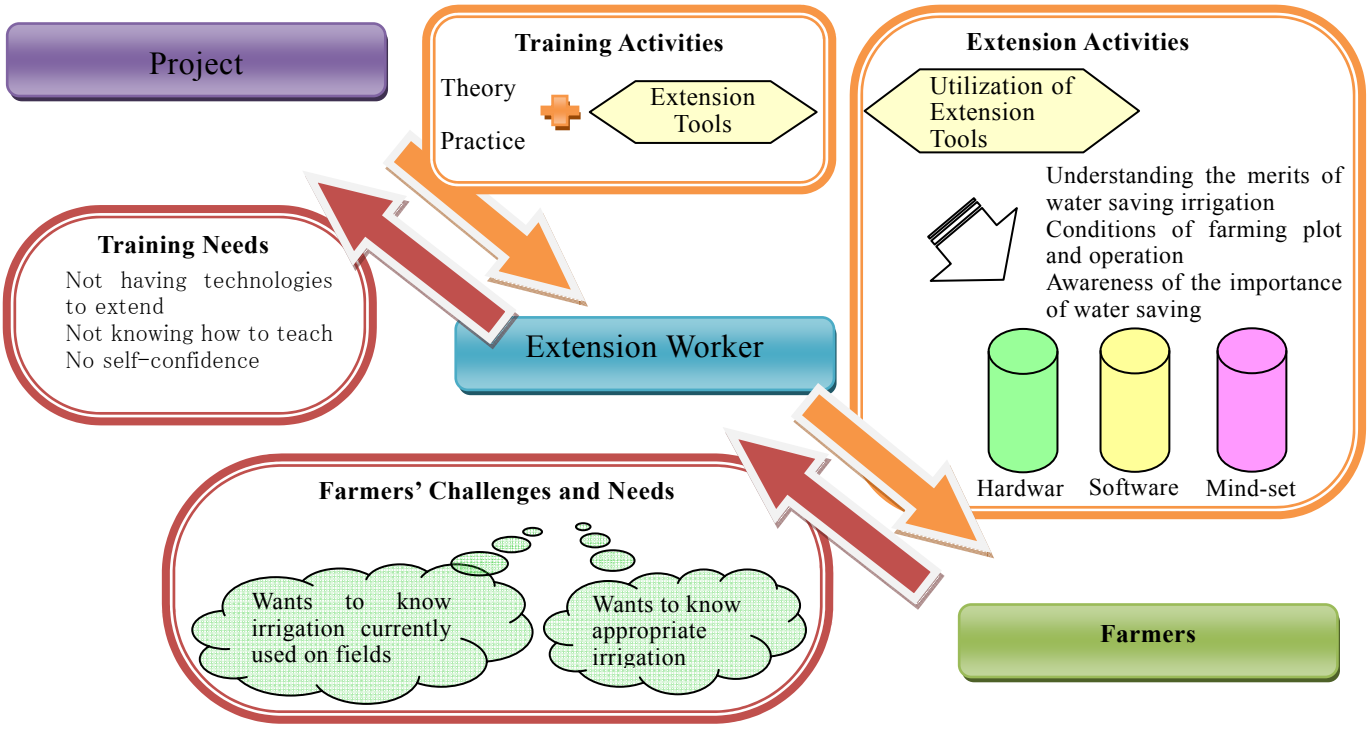
In the DEITEX project we believed that in order to achieve uptake of water saving irrigation practices, it is necessary for farmers themselves to work proactively on it. Therefore we thought extension work has to change the mind-set of farmers rather than simply enhance their understanding of irrigation systems and crop water requirements. We placed hardware, software and mind-set as the 3 pillars of this extension work. In addition, we conducted training of extension workers using themes that directly respond to the needs and issues which farmers face on a daily basis. An integrated Results-Oriented Training and Extension Method (ROTEM) was employed, whereby extension workers go out for extension activities based on the training. (See AAINews No. 68).

The three pillars of extension activities and their relationship with the extension tools

Extension tool	Three pillars of extension activities		
	Hardware	Software	Mind-set
Discharge measurement kit	○	○	
Irrigation calendar		○	
Irrigation notebook			○
Digital irrigation note		○	○

By introducing the water saving irrigation extension tools in extension activities, it became easier to conduct extension in terms of "software provision" and "mind-set change", which had proved very difficult in the past. This also resulted in enhanced understanding and awareness by farmers on water saving irrigation. The farmers who used the discharge measurement kit could understand better the irrigation amount on their farming plots, which made them start fixing emitters' blockage and purchasing appropriate emitters. Those who used the irrigation calendar and irrigation notebook conducted watering experimentation on their own farm plots and enhanced their understanding on appropriate irrigation amounts. Working with extension workers, some farmers even conducted farming diagnosis based on the records they compiled in their irrigation notebooks.

It was felt that by using tools that enable us to respond directly to farmers' needs, we could raise farmers' awareness and proactiveness. These extension tools are also effective as a medium of communication to connect farmers and extension workers. By concretizing issues farmers face through recording information in the irrigation notebook, extension workers' advice can also become more accurate and relevant, which leads to a higher possibility for solving the problems. This will also result in establishment of trusting relationships between farmers and extension workers. By actively employing tools which farmers and extension workers can actually use on their farms in extension activities, rather than passive tools such as posters and leaflets, we feel that we could contribute to improving contents of extension activities and enhanced understanding and awareness on water saving irrigation technologies.



Results-Oriented Training and Extension Methods

Reports on activities of ex-participants from Central America <Part 4>

Over the three reports in this series which started in the AAINews No. 81, we have reported on the survey of post-training activities of Central American ex-participants. In this closing report we would like to summarize the results of the surveys. The surveys yielded the following achievements.

Effectiveness and relevance of training program
We could observe that all the 8 ex-participants whom we visited this time have been using what they learned in the training in Japan. This is evidence of the fact that the training program in Japan is effective and the program contents were relevant to their work.

Possibility for ex-participants to expand their work
Cosme who works at the El Salvador University was selected as the coordinator in the university's investigation and research section because of his experiences at the training in Japan. Luis also from El Salvador is now a researcher and working to solve challenges he faced when he was an extension worker. Leonel of Nicaragua moved job from his researcher position at the national research center to take up technical sales staff work at a private company, providing cultivation advice to farmers. These examples suggest that accumulating a wide range of experiences during training in Japan provides the possibility for expanding participants work areas upon their return home.

Examples of use of Japanese technologies
Cesar from El Salvador and three university lecturers at the National Autonomous University of Nicaragua Leon (Miguel, Jorge and Adrian), provided examples of applying Japanese technologies such as raised planting beds cultivation, steam soil sterilization and Kuntan (rice husk charcoal), in their countries. These examples provide evidence that it is possible for participants to utilize knowledge, technologies and experiences they gain through training in Japan in their respective countries. On the other hand, the following challenges were also observed.

Examining applicability of Japanese technologies in participants' countries
In order for an increased number of participants to be able to apply Japanese technologies in their own countries, it was felt that it is important to hold discussions with participants considering the possibility of achieving this transfer and reflect on the discussions in their training plan.

Necessity of regular reporting to participants' affiliated entities
In order for the participants to be able to fully utilize training achievements, it is necessary for them to be able to obtain understanding and support from their domestic organizations. It is expected that by ensuring reporting on the training contents to theses bodies it will promote understanding and make their post-training activities smoother after their return home.

Necessity of post-training visits and participants' activity survey
Through the three post-training activity visits we have conducted at our own initiative we have obtained much more information on training achievements which could not be seen through traditional means such as questionnaires, reports and email exchanges. If application of knowledge and technologies gained in the training in Japan in their own countries is an ultimate training achievement, post-training visits and activity surveys are essential. Therefore, it should be considered an integral part of the training programs.

Importance of participant selection
Cesar of El Salvador was effectively using what he learned in the training in Japan, as a JICA project counterpart. In addition, the example from UNAN-Leon in Nicaragua taught us that universities can effectively conduct research for technology application and provide educational activities for technology extension. Furthermore, our investigation indicated that it is possible to create synergistic impacts by accepting participants from related organizations on a continual basis. Based on the findings, it is considered effective to select participants taking into account a wide range of issues including their duties and work environment after their return home, in order to increase effectiveness of training programs in Japan.

Necessity of continued support after training
In addition to participant selection mentioned above, it is desirable to have a system that provides continued support for participants after their return to their home countries in order to increase efficiencies of application of training achievements. At UNAN-Leon, we observed that their experiments were hampered by a lack of plastic nursery pots. It is a pity that some good initiatives by ex-participants are stalled because of such relatively small obstacles.

This time, by directly interviewing the ex-participants, we could understand in detail how they are utilizing the outcomes of the training in Japan in their daily work. We could also see their Japanese-like earnest attitude towards their work. We realized that, through the training in Japan, in addition to new knowledge and technologies, we can also pass on to the participants other important qualities for improving their work. And we felt that they had become very fond of Japan. Some ex-participants who reported on their activities were those whom we had never met. Still they welcomed us with open arms as if we were their old friends, and we talked for hours as they reminisced about their time spent in Japan. We could confirm that there is a firm trusting relationship between ex-participants and us. A training program is often said to be about "making people". We felt at first hand that the most important element for "making people" is a trusting relationship that 'makes' everybody involved better at what they do.

For many ex-participants, learning in Japan is a once in a lifetime experience. We will continue to improve training contents so as to offer high quality training for the participants who come to Japan full of hopes and expectations that their experiences will be something which will remain with them for the rest of their lives.