

APPROPRIATE AGRICULTURE INTERNATIONAL CO., LTD TEL/FAX:+81-42-725-6250 1-2-3-403 Haramachida, Machida, Tokyo, 194-0013 JAPAN E-mail: aai@koushu.co.jp Home Page: http://www.koushu.co.jp

Never Let Consumers Down: visiting the organic farm of an ex-AAI staff member

Our friend Mr. Iiyama lives in Ushimado-cho, the part of Okayama Prefecture that faces the Inland Sea of Japan. He used to work with us at AAI, but he left the company in order to become an organic farmer and contribute to improving food security and safety. Two years have passed since he started farming in Ushimado-cho. His rented farmland is scattered on hilltops and hillsides, some five minutes drive from his house. They are in total one hectare of rented land. He uses the land by rotation, with 6-7 tan (1.5-1.7 acres) used for vegetable cultivation and the rest being left fallow till the next farming season.

No agrochemicals are employed and only organic fertilizers are used in Mr. Iiyama's farm. When I visited there were some ten kinds of vegetables and pulses, such as carrots, eggplants and soybeans. It seems rather many for such small-scale farming, but somehow he manages to sell the products to his customers with whom he has a direct contract. Right after harvesting in the morning he sends or delivers his vegetables not only to individual customers but also to road stations and organic food stores, as well as some delis. Along with vegetables lots of weeds grow in his farm. In fact the eggplants looked to be competing (co-existing?) with weeds. His vegetables did not look as fancy as those on sale in ordinary supermarkets. They had wormholes and rough-looking leaves. However, when I ate some of them for dinner that day, they tasted really good, and when cooked they looked perfectly the same as dishes cooked with supermarket products. The most tedious part of organic farming is weeding and pest prevention (that is, picking off pest insects manually). Ploughing, sowing, fertilizing and harvesting aren't so time-consuming. It also gets labour-intensive at the time of unfavourable weather (like typhoons and droughts), raising seedling, as well as right after the planting.

There are only four organic farmers in this area including Mr. Iiyama, and all of them came from outside. To the organic farmers' dismay, local young farmers show even less understanding and support to organic farming than their grandfathers. Mr. Iiyama doesn't want the young local farmers to see him and other organic farmers and conclude that organic farming is not financially viable. In order to gain their understanding, Mr. Iiyama thinks that the organic farmers need to demonstrate for themselves that organic farming can sustain itself as established business. He strongly believes that, if it proves itself as stable business, organic farming can have convincing appeal as a viable business alternative, which may in turn lead to reforming of the wider agriculture practice of the locality.

Mr. Iiyama said, "Financially, it is still very difficult. This year we were



Mr. Iiyama's active farmland



Washing dirt off the fresh vegetables



Now the time for the delivery round

hit by typhoons one after another, and the pest damage was devastating. As a result we could not grow seedlings and crops as much as we wanted. Some customers even said we could use agrochemicals if in a small quantity. But some other customers of mine are allergic to chemical substances and I would never betray their trust." According to him, it would take at least five years before the business takes off properly, but he sees the coming year as a crucial year for financial stability. He plans to expand his farming by starting rice and poultry farming, and by cyclic (thus more economical) utilization of organic fertilizers. At the same time, he will try to gain the trust and understanding of the local young farmers for organic farming. It is also his strong belief that if people's food consciousness could be changed somehow, for instance in favour of reducing waste food and preferring seasonal products, Japan's food self-sufficiency could be improved even with organic fertilizers and no agrochemicals. Our discussion continued well into the night, with a sense of urgency as we talked about the current situation of food production (excessive inputs and year-round supply) and consumption (which is hugely wasteful) and the uncontrolled import of cheap agricultural products from overseas. But in the early morning he went off for harvesting and delivery as usual.

"Human Resource Development"- Our Challenges in Training Activities

Epilogue: Challenges of Training Activities and Future Directions

In this, the last report of this series, we would like to sum up lessons we have learned through our past training activities, as well as offer our suggestions for future activities. In this series we have discussed some cases of training that we have been involved in. The expected outcomes and challenges of these cases can be summarized as below.

Training type	Expected outcomes/benefits	Main challenges
In-country training	- Improved knowledge and skills through lectures,	- Matching the training contents with trainees'
(cases at the	practical work and field visits	expertise and capability
Tsukuba	- Acceptance of many trainees	- Further consideration of actual situations in
International	- Promotion of Japanese techniques and cultural	trainees' home countries
Centre)	understanding	- Gaps in pre-acquired knowledge and language
	- Active interaction among trainees	skills among trainees
		- Limitations due to climate and seasonal changes
		(e.g. for vegetable cultivation training)
C/P training (cases	- Possibility of judging the training needs properly	- Short training periods
of C/P training as	through information and requests from experts	- Consequently, training schedule tends to be tight
part of development	- Improvement of techniques as a result of	and intensive
study and expert	technology transfer and complementary training	
dispatch)	- Positive contribution to on-going projects	
Third country	- Better possibility of making full use of the	- Sometimes difficult negotiation with host countries
training / technology	lessons from the training in similar environments	prior to training
exchange projects	- Possible to obtain most updated information	- Training themes may be limited
	from the field	
	- When the "third country" is a neighbouring state	
	where the languages are shared, communication	
	tends to be easier	
Common to all the	- Spreading of activities by trainees back home	- Effective follow-up of training projects
above training	- Personal interaction between trainers and	- Local support for trainees back home
-	trainees	- Collaboration between training and other schemes

Selection of trainees, i.e. the very 'entrance' to the training process, is one of the most important things in considering improvement of training activities. In order to realize effective training, mismatching of trainees with training contents should be avoided. For this purpose, we (organizers of training) need to be actively involved in the process of trainee selection. It would be ideal if trainers themselves can travel to interview applicants / candidates, but in reality that is rather difficult. Instead, if somebody who is in the country and knows both the training contents and (the competency and expertise of) candidates could be involved in the selection process. This would help select appropriate trainees from there. Conducting benchmark tests to determine the candidates' competency, purposes and needs for training, or job report (or country report) drafting tests might be effective in selecting trainees. It is also necessary for the host country / organization to screen the candidates who are selected by their home countries rather than accept them without questioning.

Regarding the training contents, so far Japanese techniques and case studies have been the main materials for training. This cannot be helped if training is conducted in Japan. Needless to say, the organizers and trainers know that it is important to teach techniques which the trainees can make most of in their respective countries, and they (we) have been making such efforts. Still, there are cases where what was learned in Japan could not be applied in trainees' home countries due to the large gap between Japan and their countries in various respects, or due to the socio-economic conditions in their countries. To alleviate this problem, it is necessary for trainees to be able to determine whether the techniques they are leaning are really applicable back in their own countries. Also, trainees should be able to build up specific follow-up activities which would be needed to apply and extend the lessons from training in the field. For this purpose, it might be useful to have a sort of excursion to give trainees a chance to observe how ex-trainees are making use of techniques learned from the training back in their countries, or to conduct some complementary training in a third country with similar environmental and social conditions. Also, it might be possible to invite ex-trainees as lecturers during the training to share their post-training experience with the trainees.

Lessons Learned from Mangrove Ecosystems

Epilogue: Coastal Environmental Conservation and Regional Development

In the past five issues we have discussed the importance of mangrove ecosystems and AAI's activities to conserve them. In case of the mangrove species *Avicennia marina* found in the area stretching from India to East Africa, as a timber resource the stems are used as raw material for dhow boats and other constructions, and the leaves as medicines and forage for livestock. As a forest resource it plays an important role not only for the nurturing of marine (aquatic) resources but also for the conservation of the coastal environment and landscape. However, in Oman the mangrove forests have been destroyed by excessive logging and over-grazing in the past years, and today the government is making an effort to draw up an appropriate plan of mangrove restoration, conservation and management. In other countries also the mangrove forests have been shrinking, and the establishment of a management plan for sustainable use of mangrove forests is given a priority.

From the view point of the global environment, the mangrove ecosystem, which is the only ecosystem capable of existing in low brackish tidal wetlands, plays an important role in storing carbon dioxide and conserving valuable biodiversity. Forests play a big role in the global carbon cycle by storing carbon dioxide in the air. Especially in wetland vegetation carbon dioxide gets trapped more in the soil than in the plants themselves. In some parts of mangrove forests an underground peat layer is formed beneath the trees, indicating that the forests are actively trapping carbon dioxide. On the other hand, the sea level rise due to the climate change (global warming) has a big impact on mangrove forests standing between the sea and the land. It can be said that mangrove forests exist in a delicate balance of various environmental changes. Plants, small animals such as fish and insects, as well as larger animals form a food chain completed within a mangrove ecosystem. As a home to a variety of species of fauna and flora, the mangrove ecosystem plays a very important role for biodiversity conservation.

Therefore, mangroves not only support the livelihoods of local people, but also they are important for the global environment. However, in many places mangroves forests are being lost rapidly due to development and other human activities, leading to drastic changes of the coastal environment. Today many countries are trying to restore the lost mangrove forests. What is important here is not only to plant mangroves in order to physically restore them, but also to try to restore the entire natural ecosystem with the plantation activities as just the beginning. For this purpose, it is necessary to study in details the complex ecosystem of the local mangrove forests as well as their relationship with people, so that more effective ways of plantation may be elaborated. Whatever small restoration we may be able to achieve to start with, it will be helped by the power of nature to grow bigger. We do not have to aim at restoring everything by ourselves: we just have to help facilitate the natural restoration process.

Public participation on the part of local people is very important for this sort of activity. As reported in Part 3 of this series, in Oman the plantation is being carried out in collaboration with local people. Some time after planting seedlings, seaweed that got tangled around them need to be removed. Local school children take part in this work, and through this they physically feel the growth of mangroves. After a year from planting seedlings, aerial roots start to grow. Then shellfish appear around them, followed by crabs and small fish. This is an indication that the ecosystem has started functioning, and the plantation ground becomes a wonderful school of environmental education for children. The government of Oman has an idea of establishing a mangrove information centre in the capital Muscat, in order to monitor the process of mangrove restoration as well as raise public awareness on the importance of mangrove forests. Such an information centre may allow more researches on mangrove ecosystems and may provide potential regional development projects including tourism and ecotourism activities. In Zanzibar, walkways through the existing mangrove forest are being built with help from local people to allow close observation of the forest. We hope that the information centre in Oman will exchange information with other countries regarding such existing initiatives, and eventually play a central role in mangrove conservation activities in the range countries all the way from India to East Africa.



Removing seaweed from mangrove seedlings



Observation walkway in the mangrove forest in Zanzibar

"Human Resource Development"- Our Challenges in Training Activities

(Continued from P.2)

Needless to say, the main purpose of training is human resource development, by providing skills and knowledge needed for certain activities. In the case of developing countries, however, provision of new skills and knowledge alone is often not enough. Also the importance is how trainees make use of what they learned from the training back home, or how and what sort of new development projects they will be able to form afterwards. In other words, in addition to skills and knowledge, it is important to monitor what can actually be started on the ground as a consequence of the training, and also to provide support if and as necessary in order to realize that. Therefore, development training should play a role not only as a place to provide skills and knowledge for trainees, but also as a sort of catalyst to promote development activities in the trainees' home countries. For instance, we may expect to see some new projects coming up in trainees' countries making use of lessons from the training at the Tsukuba International Center. We could also modify our training programmes so as to take into account the potential project activities to be started in the trainees' home countries upon completion of the training. We should put more effort to consider and realize such active application of training activities in the future.

AAI's New Management Structure and Homepage

AAI celebrates its 20th anniversary on 14th December 2004. For the past two decades AAI has been working mostly in arid areas of the Middle East and Africa, providing technical assistance for developing countries in the fields of agriculture, forestry, rural development, regional development planning and environmental conservation. We are very grateful to those who have been supporting and encouraging our activities.

On this occasion, AAI will start afresh with a new management structure, which has been adopted at the shareholders' meeting and executive meeting this August as below:

Representative Director:	Hiroyasu Onuma
Managing Director:	Yoshihisa Zaitsu
Managing Director:	Akira Koto
Auditor:	Nobuko Yonekura

Our recent news includes our participation in the Master Plan Study on Restoration, Conservation and Management of Mangrove in the Sultanate of Oman. In Syria we have long been involved in water saving and irrigation projects. Based on this experience we are participating in development project identification activities in the same area in Pakistan and Tajikistan. Furthermore we have put lots of effort into training activities. We participated in the training courses in the Tsukuba International Center such as Country focused group training course on vegetable cultivation for the republic of Tajikistan and Regional focused group training course on vegetable and upland crops cultivation techniques for southern African countries. In addition we carried out lectures on animal fodder production and utilization techniques at the National Livestock Breeding Center. Upon request we have delivered lectures in universities in Japan on arid land agriculture and resource management in order to introduce our activities and to nurture new young technicians who will shoulder the future responsibility for overseas technical assistance.

Also we have established a new homepage, in which you can read the past issues of AAI News from its first issue in 1995. The address is as below. Please have a look.

http://www.koushu.co.jp