

AAINews

APPROPRIATE AGRICULTURE INTERNATIONAL
CO., LTD

1-2-3-403 Haramachida, Machida, Tokyo, 194-0013 JAPAN.

TEL/FAX:+81-42-725-6250 Email: aai@koushu.co.jp

Computer Show in Damascus

From 25th to 30th April there was a computer show called "Shaam '99" held in the International Exhibition Hall in Damascus, Syria. According to the promotional pamphlets it was the fifth time this kind of computer exhibition had been held and, since the first event in 1994, each year had witnessed an expansion in its scale. This time about 170 private companies and government agencies participated, and it was said that the estimated number of visitors was 50,000. There were six rooms in the exhibition hall, where they displayed computer hardware, accessories, software programmes and related publications, and held talks on topics such as the Internet, GIS etc.

Syria has been witnessing a rapid increase in computer use in recent years, and there are an increasing number of shops dealing with assembled hardware, parts and software, as well as a surge in the number of computer training schools. Brand products of IBM, Compaq etc. are available but they are expensive, and here the so-called "\$1,000 computer", i.e. hardware assembled by retailers, is the mainstream. Incidentally most of the software available in the city seems to consist of illegal copies, and they are distributed free of charge upon purchase of hardware. Within the government sector including the Ministry of Agriculture, computers are used every day for preparing documents and statistical tables. At provincial level also, computers are being introduced to the Agriculture Directorate offices of each Province, and it is planned to gradually introduce computers to lower District levels and create an IT network with telephone cable connections.

In general the Syrians seem to be very fond of brand-new machines and fashionable commodities, and this is true when it comes to computers also. However, it is common sense to realize and understand that the introduction of computer technology does not in itself provide a magical solution to every problem. For example, some staffs of the Ministry often fail to keep their hard copy documents and files in order. It seems they are not good at filing, such as classifying documents by subject, placing them in titled files, and shelving the categorical files in chronological order. File management with computers is just the same as handling hard copy documents, and it sometimes happens that staff cannot find files they have created and saved somewhere on their computer.

Also, people often say that they want to learn how to use a computer, but when asked what they want to do with their computer skills afterwards, they fail to give specific answers. Looking at the working attitude of the Syrians, especially those working in government offices, I feel that they lack the mind set to do things on their own, with their own ideas or initiative, whether it is dealing with computers or conducting any of their other daily routines. I cannot give any conclusive observation as there is a big difference in working cultures between Japan and Syria, but I think if individual Syrians can work with more originality and creativity instead of just following instructions from above, the country will make more progress. Therefore, it is an important task in AAI's given field of agricultural staff training to transfer soft techniques, such as "systematic planning and undertaking of one's tasks" and "more proactive attitudes towards one's own work", to our counterpart staff through the programme of technical cooperation. However, in reality there is some difficulty, for instance in that in Syria those in the management level is not willing to educate the staff under them. Indeed they tend to even antagonize capable staff members who they see as their future rivals in the promotion stakes. If one hopes to foster human resource development in Syria, it may also be necessary to enlighten those in the higher levels of the system.

(by Akira Koto in Damascus, August 1999)



Coexistence of Nature and Humans: Towards the 21st Century (6)

Part 6: Visit to Yashiro Village School

In the introductory article of this current series we mentioned Dr. Katsuo Otsuka, a keen promoter of the agricultural life style, who to our great sorrow passed away recently. To pay tribute to him we visited his Yashiro Village School, where 'agricultural lifestyle' activities have been, and are being, practiced.

Yashiro Village School is in Takahata-cho, in the north of Yonezawa, surrounded by the snow-capped Iide and Asahi mountain ranges. Paddy fields cover the plain, and grapes and cherries are cultivated on the mountain slopes. The paddy fields in front of Yashiro Village School had just been planted with young rice seedlings, and cows were lowing inside the stable. It was also the blossoming season for grapes, and despite the huge amount of work this brings, such as pruning vine branches, picking defective fruits and so on, Dr. Otsuka's elder brother and his wife, who have been continuing the activities of the Yashiro Village School in accordance with the late Dr. Otsuka's wishes, welcomed us with great hospitality. The mentors of Yashiro Village School are mainly farmers from the neighbourhood, and the school also receives students from elsewhere in Japan and sometimes trainees from abroad. A farmer who had looked after a Korean couple at Yashiro Village School told us heart-warming stories of his experiences with them. At the Goemon Hall - the hostel attached to the school - visitors can try using various traditional farming instruments. This building used to accommodate long-term visitors from urban areas, and today there are many people who have left the cities and taken to farming in Takahata-cho.

Surrounded by dishes of delicate brackens and konjak, we had a pleasant evening with Mr. and Mrs. Otsuka and the other members of the school. Japanese ginger and butterburs were also brought to the table straight from the garden, and we were reminded of the beautiful taste of fresh vegetables and of the richness of a self-sufficient lifestyle with food supplied from the locality. Such richness may be what we have lost in the process of rapid economic development. It is an important role of Yashiro Village School to make visitors realize this fact through experiencing agricultural life. However, it is also true, as Mr. and Mrs. Otsuka pointed out to us, that it is no easy task to keep Yashiro Village School running, and that the future of Japan's agriculture cannot be guaranteed simply by the promotion of 'hobby-style' farming.

While working in the field of technical cooperation for developing countries, we AAI staff experience both lives in the developed countries in which we are losing something important, and at the same time fully enjoying the convenience of high technology. We also experience life in developing countries where we can feel a richness of quality of life despite a certain degree of inconvenience. We think that the present civilization paradigm with its high levels of energy consumption is far from sustainable, and we doubt the wisdom of developing countries aiming at attaining such a style of civilization. The real way of survival for us may be found in the co-existence of nature and humans and in the search for sustainable ways of resources use. Keeping in mind the notion of 'co-existence of nature and humans', we would like to continue contributing to various activities aiming at achieving such a co-existence in Japan, as well as contributing to sustainable development in developing countries.

Lastly I would like to pray that the soul of Dr. Otsuka is at peace.



Yashiro Village School



Paddy fields and vineyard



Goemon Hall

Agriculture and Forestry in Pakistan (6)

Part 6: Future agriculture and forestry in Pakistan and technical co-operation of Japan

With a view to considering how agricultural development should be achieved in arid lands, in the last five articles of this series we have discussed various forms of agriculture in Pakistan, which make use of the natural environmental characteristics of different areas. The table below summarizes problems and current measures taken against such problems in each area discussed.

	Problems	Measures taken
Irrigation farming in the plains	Water logging and soil salinization due to the wearing out and decline in efficiency of irrigation facilities	Repair work on irrigation facilities and a nation-wide project to improve drainage systems
Flood farming at the foot of the mountains	Soil erosion and depletion of pasture and farm lands due to overgrazing and flooding	Comprehensive river basin management by introducing water harvesting agriculture and improving vegetation cover
Karez farming in Baluchistan	Dying out of traditional irrigation techniques due to decline or depletion of water in Karez	Introduction of well irrigation and dam construction for groundwater conservation
Forestry in Punjab	Increased demand for forest resources and decrease in riverine forests due to flood control	Conservation of the remaining forests, plantation and introduction of alternative fuels

As seen above, different regions have different problems, and different measures are being taken accordingly. Moreover, there are some problems that occur in several regions at one time. A typical example of such a problem is the destruction of irrigation systems in the plains due to floods in the mountain foot areas. In this case, effective use of rainfall in the upper basin would serve to prevent the destruction of irrigation systems downstream. What is necessary for dealing with such various problems within and between regions is the introduction of carefully planned farming schemes and fostering agricultural engineers who can sustain such schemes in the long term.

Pakistan is quite advanced in terms of community participatory farming schemes, the most well known of which is the Aga Khan Village Support Project. This project is often cited as a pioneering and successful example of a rural development project with its focus on the aspect of social development. Here the main actors in the project are the beneficiaries themselves: the project can be started only with the consent of the beneficiaries, and it has to be moved forward with their full involvement in activities such as construction, management and repair work etc. This imbues beneficiaries with a strong sense of involvement, which leads to their willingness to bear costs and provide labour. Moreover, today the project is getting some good staff members who are capable of coordinating community activities in the beneficiaries' local languages, and at the same time producing project reports in English. In the river basin conservation pilot project in Mithawan (see AAINews Vol. 21), staff members who have gained experience in the Aga Khan Village Support Project are playing an important role. The excellent contribution of Pakistani forestry staff to plantation projects in the Middle East also suggests the availability of highly skilled technical staff in Pakistan.

The issues of sustainable use of natural resources in arid and semi-arid lands, as well as the improvement of the local environment for living and production activities, are likely to become more and more important in the future. At the same time, with regard to Japan's technical co-operation, issues such as participatory development, environment and WID (Women in Development) are being seen as increasingly important. There are calls that Japan's technical co-operation should change its orientation from the mere investment in infrastructure to the development of human resources. Pakistan has problems which are peculiar to dry areas, and the training and education of farmers and agricultural project staff is seen as a major task in order to counter such problems. Therefore, it is meaningful to have Japanese experts working for technical co-operation in rural development with capable local staff who have field experience, for the development of technologies applicable to dry lands, as well as for advancement of participatory development schemes.

Mini-Series: Vegetable Cultivation in Oman (1)

Part 1: Vegetable farming in the Nejd

We will introduce some examples of vegetable farming in the Nejd area in southern Oman. Let us first provide a briefing on the climate in this region. The lowest average monthly temperature is 22.7oC which occurs in February and the highest is 32.0oC which occurs in August. The average relative humidity is 45%, while the difference between the highest and lowest humidity levels during a year is about 10%. The annual rainfall is 0 to 150mm and there is a great fluctuation in the rainfall as sometimes it does not rain at all during a whole year, while the annual evaporation level is very high; 4,200 mm per year. The natural climatic conditions here are very harsh, but despite this in the 1980s farming were started in this area by using ground water. According to a 1994 survey the number of farms in the Nejd was 155, of which 28 were engaged in pasture cultivation and the rest in vegetable and fruit cultivation. The total area under cultivation was 1,337ha (608ha for pasture and 729ha for vegetable and fruit).

The vegetable cultivation in this area can be classified in three types according to the different irrigation methods used. All the irrigation here utilizes ground water through pumps, but there are three types of irrigation method used in different farms, namely furrow irrigation, center-pivot irrigation, and drip irrigation. The most common system being used by farmers is furrow irrigation. The center-pivot irrigation method is adopted by those who used to be engaged in pasture cultivation but later switched to vegetable cultivation as the former requires large machines and a lot of manpower. The drip irrigation system is used by only a handful of farmers, as it requires a significant amount of initial investment when compared to furrow irrigation. However, considering the high irrigation-efficiency of the drip irrigation (about 85%), this method should be adopted by more farms in the future.

Let us now turn to the types of vegetables grown here. These are mostly common vegetables such as watermelon, melon, cucumber, tomato, okra, squash, eggplant, green and chili peppers, etc. The sowing seasons for these vegetables vary significantly. Watermelon, melon and squash are sown from late July to early September and from February to March of the following year. Cucumber and tomato are sown in October and November. Okra is sown in August, and eggplant, green and chili peppers are sown from September to October. If vegetables were sown in May or June the whole growing process would have to go through the hottest period of summer, which would result in poor harvests. The farmers' wholesale prices of the vegetables also vary depending on the season, but the rough figures would be about BZ700 per kilo (BZ100 = approx. JPY 30) for cucumber, which is relatively expensive as it is susceptible to pests and diseases, BZ200/kg for watermelon, melon, squash and eggplant, BZ100/kg or sometimes as cheap as BZ50/kg for tomato, and BZ500/kg for okra, green and chili peppers. Thus the vegetables are very cheap, and the prices are determined by weight irrespective of the quality. On the other hand, in supermarkets you can find high-quality vegetables imported from Europe, which are priced several times higher than the produce of Oman. Therefore, if the prices are determined according to the quality of the crops and superior produce can fetch better prices, the farmers will become more motivated to improve their cultivation techniques and their farming will develop further.

The main problems pertaining to the development of dry-land agriculture using ground water are salt accumulation and the depletion of ground water, and the Nejd is not free from such problems. On the other hand, here the sun light, which is crucial for crop cultivation, is in plentiful supply throughout the year. Therefore, if sustainable agricultural development is to be achieved in the Nejd region, more consideration should be given to tasks such as the assessment of the availability of usable water resources and the assessment of the size of areas suitable for proper development using available resources, as well as development and proliferation of cultivation methods which would enable the efficient utilization of the limited water resources and which would make the most of the plentiful sunshine in the region.

