

APPROPRIATE AGRICULTURE INTERNATIONAL CO., LTD 1-2-3-403 Haramachida, Machida, Tokyo, 194-0013 JAPAN. **APPROPRIATE AGRICULTURE INTERNATIONAL** 

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

### Irrigation project takes off in the arid land of south-eastern Sri Lanka

I visited Sri Lanka after a three year interval in January 2002. More precisely, my destination was Hambantota Province in the arid region of the south-eastern part of the country. I was to work on the agricultural component of Walawe Left Bank Upgrading and Extension Project, which was being undertaken by the Mahaweli Authority. In recent years Sri Lanka has received less rainfall, which has resulted in constant shortages of water deposits in dams. In this season scheduled power cuts lasted for three hours every day, and this province has suffered from agricultural damage due to drought for the past three years.

Walawe River runs through the centre of Hambantota Province, some 240km away from Colombo. The history of the Walawe basin development dates back to the end of the eighth century, when the first water reserve (irrigation) system was formed by connecting small reservoirs, known as tanks, within the Walawe water system. Hydrological activities within the river basin up to the 12<sup>th</sup> century were mostly related to improvement of this system. After the 13<sup>th</sup> century most of the population in the area moved to the south-western mountain region, leaving the irrigation system to rot and collapse, and the deserted land to be covered by jungle.

In the 1960s the government of Sri Lanka initiated a project to promote resettlement and to improve the existing irrigation system in this area, and main (irrigation) canals were constructed along the entire right bank and the upper part of the left bank. In the 1970s the Asia Development Bank (ADB) started providing loan aid to the project, a move that was subsequently followed by the EU and the IWMI (International Water Management Institute, then known as the IMMI) in the1980s. As a result an beneficial area on the right bank was increased, while slash-and-burn cultivation was still being conducted in the downstream basin of the left bank. Japan's loan aid began in the 1990s to assist with the rehabilitation and construction of some new canals in 4000ha of the upper basin of the left bank (Phase I), as well as help a new development project in 8000ha of its lower basin (Phase II). Construction of a reservoir system in Phase II began in January 2002 by the ordinary method of connecting existing small to medium-size reservoirs.

This project consists of several components apart from the engineering component to build up canals. There is an environmental component to monitor the conflict between humans and wildlife, such as elephants, as well as an agricultural component in charge of extension and training about agriculture for new settlers. The agricultural component is run by myself, together with two Sri Lankan colleagues. During my visit this time we conducted a benchmark survey by randomly selecting 335 farmers among over 1,800 already practicing agriculture within the project area. Also we were involved in preparation for the training of settlers and a demonstration farm, both of which are to start next year. The demonstration farm will be operational from this coming October. We three are determined to work hard to help realize smooth progress in canal construction and resettlement activities.

While I was in Sri Lanka, on 22<sup>nd</sup> February a truce agreement was hammered out between the government and the "Tamil Tigers"(LTTE), and peace negotiations were started. The long-term conflict may be finally coming to an end. This was a very impressive event for me, since I have been associated with this country for a long time, first as a JOCV (Japan Overseas Cooperation Volunteer) and later as a JICA agricultural expert. From now on the eastern and northern parts of the country will see further development, and vegetable cultivation in the north will start again. It may be also possible that our agricultural support activities in the south-eastern part will have to compete with those in the north. Though, of course, we still do not know to what extent the LTTE will make compromises in the peace negotiations. (By Ono, in Sri Lanka)



Interviews conducted by 15 local surveyors



Construction of canal (main 19km, tributaries 24km)

# Grassroots Collaboration, AAI's approach

#### Part 3: Collaboration between experts and JOCV – experiences from Syria

Since 1965, some 2,000 young Japanese volunteers have been sent every year to developing countries through the Japan Overseas Cooperation Volunteers (JOCV), aiming to contribute to development through working at the grassroots level with local people. There are over 140 categories of activities, including agriculture, forestry, fisheries, civil engineering, health and welfare, education, culture, sports etc. While working in their respective fields, young volunteers live under the same living conditions as the local community. Another main purpose of the JOCV scheme, apart from the technical aid, is to provide young Japanese with opportunities to expand their worldview, experience and understand the reality of developing countries.

While staying in Syria as a long-term expert from JICA, I had opportunities to discuss various issues regarding international cooperation with other experts and volunteers. These discussions included the concerns and complaints we had, and suggestions for improvements in the future, etc. A voluntary "ODA Study Group" was started from such informal discussions, in order to discuss and take some actions on such issues as 'self-support and aid' and 'collaboration between experts and volunteers'. Since its establishment in July 2000, the group held meetings once or twice a month. The group decided to take up some specific actions, and started to try 'horticultural therapy' at a nursing institute (see Vol.32) in Kodseiya. Since then, several other activity groups were set up by the member in the same activity fields, or by those who can work in the common field with different expertises. These groups included, for example, horticulture group, UNRWA group, music group, sports group, etc.

One main topic of discussion at the ODA Study Group was the old and new problem of the 'disparity between aid requests and the reality'. What is behind this problem is not unrelated to the way the JOCV scheme operates. No generalisation can be made as the situations vary depending on specialized fields and host countries. However, it seems that at the bottom of the JOCV scheme there is a notion that it is one way of educating Japanese young generations, and that their 'growth' (as a human and as an upright citizen) itself is the expected major outcome as opposed to the actual contribution the volunteers can make with their activities in the field. When JOCV was first started, it was considered good enough as long as the volunteers returned home alive, irrespective of their actual activities. This was probably due to the more difficult conditions in recipient countries and to the nature of activity fields, most of which were primary industrial activities (agriculture, forestry and fisheries). However as the years passed by, the types of activity fields have become diversified and an increasing number of volunteers are working in urban areas, and the situation surrounding JOCV volunteers is today very different from that in earlier days. There might be a need to diversify the volunteer scheme according to recent diversified needs and conditions, rather than grouping all the volunteers under the umbrella of JOCV.

At the same time, from the viewpoint of 'grassroots development aid' or 'visible cooperation', both of which are often stressed these days in the field of international cooperation, the JOCV scheme has a very significant importance. Under these circumstances, maybe there is a way to make use of the JOCV scheme in a more strategically viable manner. For instance, collaboration between experts and volunteers as seen in the case of the above Study Group seems very effective. In general, volunteers work at the field level and whatever problems they encounter are often not conveyed to the upper level, but experts can provide direct or lateral support in such cases. On the other hand, for the experts it would be useful to have such interaction with the field volunteers in terms of information gathering and other field activities at the grassroots level. Moreover, from the viewpoint of their 'education', collaboration with experts who have much experience and skills in the field of international cooperation would be quite beneficial for the volunteers. It may be necessary to think of some strategy to make full use of the grassroots potential of JOCV, while retaining its positive objectives pursued thus far.



After the preparation of a crop field



Flowers blooming in the garden



Musical gift for children

## **Re-examination of Development Study**

### Part 3: Development Study with pilot studies

One of the recent major trends in development aid is the emphasis of the 'community participation' method in rural development. The challenge is how effectively stakeholders, such as local communities, local authorities and NGOs, can be involved in rural development program for the purpose not only of poverty alleviation but also the establishment food security, social development, education, health and medical services, and environmental attention for sustainable development. In order to cope with such challenges and to demonstrate implementation models, in recent years there have been quite a few instances of 'pilot studies' being employed as part of the development study.

The concept of the pilot study has been around for some time but in recent years the frequency of its application has greatly increased. AAI has taken part in some pilot projects using this approach. These include 'Pilot Project of Agricultural Development in Senegal'; 'Agricultural Development Project in Nejid Region in Oman'; 'Project of the Development of Oasis in Mauritania', etc. In Senegal the pilot study was conducted for the purpose of establishing a model farm applicable to the semi-arid region along the Senegal River. Crops such as vegetables and rice were cultivated in a pilot farm constructed by grant aid, in order to study mainly the water management and cultivation. In Oman the cultivation of pastures and training was conducted from 1995 as a pilot study in a newly constructed 50-ha pilot farm. In Mauritania a pilot study has been on-going since 2001 at some selected oasis in order to draw up a comprehensive rural development plan which aims at establishing a system of sustainable land use and livelihood for oasis communities. The specific fields for pilot studies include vegetable cultivation, cyclic use of regional resources, storage and processing of the harvested vegetables, improved health conditions of the local community through increased vegetable consumption, and so forth.

When previous pilot studies and recent ones are compared, some changes can be observed in their contents. In the previous pilot studies, 'hard' facilities (e.g. pilot farms) would be provided from the Japanese (donor) side and then experimental cultivation and extension of know-how had been conducted. On the other hand, recent pilot studies, aiming at achieving sustainable development, are increasingly based on the target community's needs and locally available resources (manpower, materials, organisations, technologies, information etc.). On the other hand, there

are some distorted cases of pilot studies in which the 'hard' aid approach is forcibly applied where it is not necessarily required. Earlier pilot studies often led to the provision of 'hard' aid such as the construction of various facilities with loaned or granted funds following the survey, but as development needs shift towards more 'soft' matters such 'hard' provisions have become unnecessary. Moreover, 'soft' project plans are harder to be understood and authorised by host governments solely through written reports as there are a number of elements which need to be demonstrated in practice. Therefore, pilot studies are employed more frequently for such projects.

The recent style of pilot study has problems and challenges including the following points:

- 1) Since the content needs to be determined at an early stage of the pilot study, it is uncertain to what extent the opinions of target local communities are reflected;
- 2) Due to limited time availability, the survey content tends to consist only of short-term items which are expected to bear quick results;
- 3) It is not studied and proved well enough how the results of pilot studies can be reflected in development survey.

The content of a pilot study - what needs to be implemented and proved, how and by whom etc. - should be planned and determined based on the local conditions and needs. Enough time should be spared for this process and this time should be additional to the time allocated for the actual pilot study (activity). At present this does not seem to be happening, and there is a need for more refinement and improvement to make full use of the results of pilot studies. One way of doing so may be to see pilot studies not as complementary to development studies only but as a preparation phase of the following activities (such as collaboration with local NGOs, grassroots grant schemes, dispatch of experts and JOCV volunteers, project type technical cooperation etc.). In that way, pilot studies could be treated as complementary to the entire development project itself, and designed with this consideration in mind without having to be completed in a hurry within the limited survey period.



Pasture yield survey in Oman



Draw well in Mauritania



Vegetable farming by a women's association in Mauritania

#### "Arid Land Agriculture and Irrigation" - following a lecture completed at Tsukuba International Centre

As reported in AAI News Vol. 37, AAI organises a training project titled "Special Course on Vegetable Cultivation in Tajikistan" at the JICA Tsukuba International Centre. Apart from this, recently AAI took part in different training courses as an external lecturer on arid land agriculture and irrigation. Our lectures were targeted for two courses: "Vegetable and Upland Cultivation Techniques for Southern Africa" (attended by seven trainees) and "Vegetable Cultivation Techniques" (attended by 11 trainees). The latter course has no particular regional focus, and there were participants from Asia, Africa, and Central and South America. During the lectures AAI tried to draw upon practical experiences from various cases we have dealt with in the field of development assistance rather than referring to textbook materials. We tried to give as directly useful, practical and relevant information as possible for the trainees' work back home. Moreover, We tried to make the lecture as interactive as possible with a lot of discussions. As course aid materials. We made a PowerPoint presentation and a booklet called "Irrigation for Field Crops & Vegetables".

Our lecture consisted of the following four sections, conducted in the morning and afternoon. Prior to the lecture We circulated a questionnaire with ten simple questions in order to understand the conditions and problems the trainees face at home. We made efforts to have the result of the questionnaire reflected in our lecture to meet the trainees' needs.

- 1) Water resources in arid land: characteristics of arid land, development schemes based on such characteristics, and the importance of water resources in arid land.
- 2) Water use in arid land: effects of irrigation, irrigation methods, irrigation efficiency, and water-saving irrigation.
- 3) Sustainable development in arid land: various problems related to irrigation, the concept of, and methodology for, sustainable development in arid land.
- 4) Irrigation development and the role of extension workers: the role of such workers and problems facing extension in irrigation development and agricultural rural development.

The trainees at our lecture showed especially strong interest in topics on appropriate technologies such as water-saving irrigation systems built with locally available materials. Many of the trainees were engaged in development promotion activities at home. While we drew upon some case studies from the Middle East / Syria to discuss the current situation and problems of extension activities, similar problems seemed to be observed in different parts of the world. That was evident from the prior questionnaire, and various opinions and experiences were also expressed during discussion sessions. We hope to improve the teaching materials used this time by incorporating the trainees' opinions and needs as well as the result of the internal evaluation, so that we can conduct even better training courses in the future.

Apart from the above lectures in Tsukuba, we conducted a seminar on the same topics for students at Shizuoka University. We hope to continue these training courses and collaborative activities with universities in the future.



Lecture at Tsukuba International Centre

Seminar at Shizuoka University