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## Zanzibar- the Spice Kingdom

For the past several years I have been involved in the Development Study for the National Irrigation Master Plan in Tanzania, and to date my work as a study team member has taken me to Zanzibar several times. Having worked in the Middle East for many years, it has long been my dream to visit Zanzibar which has had a close relationship with the Arab region since ancient times due to the trade by Dhow Boats. Zanzibar consists mainly of two islands; Unguja and Pemba. The main town in the western peninsula of Unguja is called Stone Town and there you can find rows of old Arabic houses. Strolling through the town's maze of small streets makes you feel as if you were in a souk in Oman or Yemen. Swahili has a strong Arabic influence in its origins, but here I felt the influence of the Arabic language much more strongly than I did in mainland Tanzania.

Zanzibar has long been renowned as a producer of a great variety of spices. In particular the export of cloves has supported its economy for a long time. In recent years, however, clove production has been rapidly declining due to the severe competition posed by foreign markets, the aging of plants, and damage caused by disease or pests. Moreover, the population increase on the islands has been putting pressure on the limited land resources, leading to soil erosion and the drying-up of catchment areas. These in turn are negatively affecting production of perennial crops including cloves. Given these circumstances, for more than ten years the government of Zanzibar has been searching for alternative cash crops to replace cloves, but so far no significant option has been identified.

Zanzibar has a wealth of tourism resources; beautiful seas with white coral reefs, green forests and various historical sites left by old Arabic conquerors, and historic relics from the slave-trade period. "Spice Tours" that visit spice farms are also organized for tourists. I joined one of these tours and was introduced to more than 30 kinds of spice and fruit tree within just a few hours. In addition to tree spices such as cloves, cinnamon and nutmeg, more common spices like cardamom, anis and turmeric as well as tropical fruits like durian and jackfruit are also grown on the farms.

As a future direction of Zanzibar's agricultural or regional development, collaboration / merging with tourism development will be an important issue. Rather than searching for alternative cash crops to replace cloves for export, it might be better to make more effective use of the historical value of the islands in their role as the Kingdom of Spices. Also, it must be important to ensure an all-year-round supply of fresh vegetables to hotels and restaurants for tourism development. For this purpose some activities may be necessary to provide support for the existing farms to convert the products to cater for the tourism industry. In the Master Plan which is being implemented at the moment, the important role of irrigation development in the joint development of agriculture and tourism was also emphasized. I hope that the livelihood of people in Zanzibar can be improved through the harmonized development of tourism and agriculture, while keeping the landscape and environment of the Kingdom of Spices unchanged.



(By Onuma in Zanzibar, 2003 August)

## Part 1 Introduction

Today, the significance of "human resource development" in developing countries is widely recognized not only in the field of international cooperation but also in the fields of education and industrial development. In the educational field, an increasing number of students from developing countries is being welcomed now in developed countries as a form of intellectual international contribution. In the industrial field, efforts have been made for local human resource development in developing countries in order to ensure proper quality management of overseas manufacturing, which is consequently contributing to improved technical capacity and industrial promotion. "Training" in international cooperation is nothing new, but its importance and necessity are being reaffirmed, and various human resource development activities are being actively carried out these days. Those include the acceptance of technical trainees in Japan, technical cooperation for counterpart entities by OJT (On the Job Training) in the context of development studies or technical cooperation projects, training programmes in a third country, study programmes for young people (to come and stay in Japan) and projects in partnership with NGOs or local governments in developing countries. In addition South-South cooperation is being encouraged by sending those engineers / technicians who received training in Japan to neighboring countries that enjoy similar regional conditions (nature, culture and language) to transfer their techniques acquired in Japan.

What is behind this trend is not only the concept of "nation building through people building", which is a fundamental principle of international cooperation, but also the strategic expectation that training projects will enable more flexible and directly effective assistance. It is also expected that training in Japan will allow the trainees not only to acquire the most updated techniques and new ways of thinking, but also bring their experiences in Japan back to their home countries. Moreover, it is hoped that human interaction through training programmes will help build up friendship between countries and contribute to peace building without resorting to force. Trainees learn various techniques applicable in their home countries and improve their individual skills through the training programmes. On the other hand, those who provide training are enabled to look at their own environment objectively by learning its differences from other countries/regions. They also learn a lot about different lifestyles, culture and traditional techniques from their trainees. Such mutual learning and understanding is highly important for sustainable international cooperation.

In reality, however, there are many cases where training programmes are structured in such a way that they are only convenient for the organizers and do not meet the needs of the trainees. Furthermore, sometimes the contents of the training do not match the background or capacity/ability of the trainees and fail to produce meaningful results. Needless to say, in order to conduct effective training programmes the contents should match the needs of the trainees. To ensure that this occurs, appropriate needs assessments and flexible programme planning and implementation is necessary. While the direct purpose of training might be put as "capacity building" of each participant, "institutional building" of the organizations they belong to is also an important task, to ensure that they can make full use of their newly acquired techniques and knowledge in their actual professional context.

Human resource development has been a major theme for AAI. In this respect we have been involved in various activities such as training programmes at the JICA Tsukuba International Centre, planning and implementation of training programmes in the context of development studies, agricultural training programmes by experts, technical exchange programmes, and third-country training programmes. In this new series we would like to report on the human resource development activities we have experienced thus far, share our joys and discontent, and discuss some managerial problems we have encountered. We would also like to make some suggestions for future training programmes and reflect upon their meaning.



Lecture for trainees from southern Africa at the JICA Tsukuba International Centre



Interview with a progressive farmer (as part of a third-country training programme in Morocco)

## New Series: Lessons Learned from Mangrove Ecosystems

#### Part 1: Mangroves and AAI

Many people seem to think that the word mangrove applies to one individual tree species, but that is wrong. It is a general term covering various highly salt-tolerant plant species which grow in inter-tidal zones, that is to say in the areas which are submerged at high tide and dry at low tide. It is said that there are some 70-100 species of mangroves worldwide. They are widely distributed in Southeast Asia, Africa, the Pacific islands, North America, Central and South America etc. They can be also found in the Arabian Peninsula where a lot of AAI's work is focused. In Japan they mainly grow in the area south of Okinawa, for example on Iriomote Island.

AAI has had a lot to do with mangroves in its work thus far, dating back to the early 1980s when it was involved in the mangrove plantation pilot project led by aquaculture experts in UAE. Later on, together with some researchers, AAI started the MAMAS (Marine Aquaculture and Mangrove Afforestation in Sabkha) project, to gather information and knowledge on afforestation in high-salinity wetlands found in arid countries. Most recently, from April 2000, in response to a request from the Oman Ministry of Regional Municipatities,



Mangrove forest in Sur Region, Oman

Environment & Water Resources (MRME&WR), an AAI staff member has been working as a JICA expert in Oman on the "Mangrove Afforestation Project." His main tasks include technical training (selection of suitable afforestation sites, seedling production, transplanting, cultivation management etc.) for counterparts, as well as policy advice regarding nature conservation and management. Along with this project, also upon request from MRME&WR, in June 2002, JICA started categorization of afforestation, conservation and development activities in major creeks with due consideration given to environmental, social and economic impacts, as well as a master plan survey regarding mangrove restoration, conservation and management to draw up a development project for each creek. AAI has been involved in this latter work as well as being a part of the joint venture.

From the conservation viewpoint, mangrove ecosystems are seen as highly vulnerable just like coral reefs and other wetlands. Many mangrove ecosystems are found in those wetlands which are protected under the Ramsar Convention, and in recent years, like other wetlands, they have been drawing significant attention as biodiversity hot spots. The importance of various other functions of mangrove forests (e.g. protection of coastal regions from natural disasters like cyclones, marine resources nurseries, coastal shields etc.) have gained wide recognition today, and there are many projects going on to conserve or rehabilitate them. On the other hand, loss of a great deal of mangrove ecosystems remains a serious problem today as they are being destroyed for construction of shrimp farms or for other regional development activities.

In this new series we would like to discuss the mangrove's historical, social and economic significance, based on AAI's long-term experience involving mangroves (especially in the Gulf region of Oman, UAE and their neighboring areas). We would also like consider the future to of our relationship with mangrove ecosystems from the viewpoint of environmental conservation regional and development.



Development of aerial roots and mangrove flowers (Shinas Region, Oman)

# Mini-Series: Work and life in farms - Various movements in Japan

# Part 4: Consumer marketing, aigamo(duck)-paddy cultivation, and vitality from rural life...

Along the Den-en-toshi Line in Aoba-ku, Yokohama city, Kanagawa Prefecture, there is a shopping mall that specializes in organic products called "Plant's". The mall contains restaurants, shops and showrooms which deal in organic products while promoting an 'organic' life-style. Here events and exhibitions are also organized on related issues as well. This is a form of disseminating information and marketing targeted to those interested in organic products, and is also designed to stimulate interest in other people. The owner of the mall is interested in an 'organic lifestyle' in every aspect of life, and wishes to share such a lifestyle with others by marketing related products/commodities. In collaboration with organic farmers, the owner wholesales organic vegetables to other department stores and restaurants. Because of its non-sterile connotation, some people might associate the word 'organic' with something that is muddy or crude, but the atmosphere in the mall is very clean and sophisticated. Horticulture products are on sale outside, and inside you can find various selected organic products often get sold out. The restaurant that specializes in organic vegetable dishes is very popular and when I went there on a Saturday people were having to wait some half an hour in a queue to get seated and served.

Mr. Takao Furuno is a farmer in Keisen-machi, Fukuoka Prefecture. He is known as a pioneer of aigamo(duck)-paddy cultivation in Japan. Ducks are freely kept in the paddy field so that they eat weeds and insects while providing organic droppings to the field, stir the mud while swimming and stimulate growth of the rice while picking at the bottom of the paddy with their beaks and webbed feet. He grows 'azora' (a kind of fern eaten by duck) and loaches in the same paddy field, and calls it "azora-fish-aigamo-paddy simultaneous cultivation (aigamo-paddy cultivation for short)". To put it simply, this is a method that involves the simultaneous practice of paddy cultivation, livestock keeping and aquaculture. Mr. Furuno owns paddy fields and a forested hill, and has practiced perfect organic farming with no use of pesticides for over twenty years. His farming is not limited to rice cultivation. He also grows various crops in rotation, such as vegetables, soy and cereals, grows fruits and mushrooms, and keeps chickens for eggs and bees for honey. He processes preserved foods such as miso paste, moromi (unrefined sake) and pickles, and incubates duck chicks. The whole family is happily engaged in this complex farming and they also interact with consumers face to face to sell their products. After the first decade of his farming career struggling with weeds, Mr. Furuno started trying the aigamo-paddy method. Since then he has visited farming villages in various Asian countries. He says that through the interaction with many farmers of different countries he has learned not only about the aigamo-paddy cultivation method but also a lot about many other things. He still travels with Mrs. Furuno whenever he is called for, whether within or outside the country. He also welcomes visitors and trainees at any time, so he keeps himself quite busy everyday. His pickup truck carries a slogan which reveals Mr. Furuno's conviction: "Towards Harmony of Nature and Humans".

What kind of lifestyle is desirable for us to lead a truly rich and spiritual existence? The answer is evident when we see the savage urban cities packed with people and commodities and then see peaceful rural villages deteriorating in many countries in the world, including the US and Japan, where monetary / market-oriented society has been established praising the "global standard". In the field of farming, we should consider small-scale, self-sufficient family farming, where the entire family is engaged in crop cultivation and livestock keeping, as an alternative to large-scale mechanized mono-culture farming which promotes cultivation of cash crops in huge areas of fields to feed into the market economy. Such small-scale farming was a very common farming style all over the world. In Japan also such a traditional style of farming could easily be found until the 1960-70s, forming a very Japanese and beautiful landscape. Such a traditional, wasteless lifestyle, where people are engaged in forestry and fisheries in addition to farming, producing only necessary things using various manual techniques, and supporting and sharing among those involved, seems to be a truly rich, healthy and enjoyable lifestyle. We at AAI would like to keep making efforts to find out how such a desirable lifestyle can be harmonized with modern society. We wish to recover the sort of society where vitality comes from farming villages.



Organic shop "Plant's"

**Ducks happily swimming** 

Left side: duck-paddy field Right side: normal paddy field