

# AAINews

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## On the Banks of Lake Lubana

This April, I had a chance to visit Latvia, one of the three Baltic States, as part of a JICA Project Formulation Study team. Latvia is located on the eastern side of the Baltic Sea and it enjoys a relatively mild marine climate despite its high latitude. The old part of Riga, the capital, which is designated as a UNESCO World Heritage site, retains those attractive features which earned the city the title 'Paris of the Baltic'.



Old town of Riga

Latvia's largest lake, Lubana, lies in land 170km east of Riga. When we were there in early April the lake was still covered with ice. Surrounding the lake is a mosaic of various biotopes - forests, marshlands, farm lands and fish-farming ponds all combining to form a complex ecosystem. For this reason the area is very rich in biodiversity, with a number of precious species of fauna and flora occurring around the lake. In particular, here one can find the largest

number of bird species in Latvia. In the early spring some 2,000 swans were resting on the lake, and in the seasonal marshland flooded with water from the lake we could see white-tailed sea eagles and greater spotted eagles. Also, willows were vigorously thrusting out their buds among the dominant red pine and white birch. Bunches of young shooting willow branches were being sold in the town market. It seemed they were used as a kind of offering. The most magnificent views were afforded by the huge European oaks, the characteristic features of which could be seen everywhere like a landmark of the area. As soon as the long dark winter is gone and the sun starts shining brightly, children would go and play in the river, hand in hand. Then, you would hear, though from where you couldn't tell, their mother calling them back: "My dears, the water is too cold still! Wait until the oaks turn green!"

Although this wetland area seems very peaceful, I learned that during the former period of Soviet rule the environment was badly polluted due to agricultural activities that used a great amount of chemical fertilizers and pesticides. Intensive fish farming operations were also contributing to the pollution. However, after Latvia achieved independence from the Soviet Union, and following the increasing cooperation among the countries around the Baltic Sea as well as the further integration of the European Union, there have been a number of anti-pollution environmental projects taking place in Latvia. The Scandinavian countries are assisting. Also nowadays NGOs are actively taking part in nature conservation, in order to reflect upon and not to repeat the environmental tragedy of the Soviet era. I hope that the nature of Latvia, which beautifully marks the passing and coming of seasons as exemplified by the mother's warning for her impatient children, can be preserved for ever.

(By Onuma in Latvia)



Swans resting on the lake



Willow shoots of early spring



Oak and storks

## Past Technical Assistance for the Gulf States and Future Challenges (6)

### Part 6: Epilogue - Tasks for the future

In the last five issues we have discussed some activities and achievements in the field of technical assistance for the oil states in the Gulf region. This region is about to be removed from the status of being a Japanese ODA recipient. From now on co-operative activities on a more equal (as opposed to top-down or lop-sided) footing between donors and hosts need to be promoted, likewise more initiatives by the private sector in technical assistance. Also, with movements such as Omanisation in the background, it will be an important task of future technical assistance to foster manpower among the nationals of each country. Furthermore, the future direction of technical assistance for these countries should focus more on what this oil producing gulf region can do that no other region can.

With their harsh dry climatic conditions, all of the Gulf states enjoy a great and changeable variety of natural features such as the mobile dunes of the Rub'al Khali Desert, the highly saline region called Sabkha, mountain ranges and adjacent rocky plains, as well as oases with flourishing date palms. Also, from time immemorial this part of the world has always been a trade centre between the East and the West. Still now dhows sail between Africa and India. These Gulf states are not only full of wealth derived from their oil, but are also some of the world leaders in the field of information technology. Projects which make the most of these regional characteristics will be required in the field of future technical assistance in this region. For example, the fact that there are such diverse natural dry land features means that technical assistance in this area may contribute to the development of technologies which can be applied to various types of dry land in many other parts of the world. The close relationships with neighbouring regions from Africa to west Asia create favourable conditions for gaining information from, as well as for transferring technologies to, countries in these regions. If the wealth and information accumulated in the Gulf region can be used also for the development of the neighbouring regions which suffer the same development-related problems, this can be called 'international cooperation' in the real sense of the words.

We would like to conclude the current series by proposing the following two projects as examples of technical assistance which take full advantage of the particular conditions prevailing in the oil states:

#### **Aridland Agriculture Research Station**

This centre would aim at developing useful technologies for agricultural development in dry land environments and at training researchers from many concerned countries. Taking the diverse and changeable natural environment of the Gulf region as its background, the centre could offer technologies applicable to countries which are suffering from the problem of desertification. Also, the abundant financial resources and information availability will provide a favourable environment for researchers and trainees from surrounding countries to stay for a sufficient period of time and allow them to concentrate on their work. There could be a whole range of different training programmes for dry land agricultural development, but specific technologies to be taught at the centre might include dry land afforestation, dune fixation, crop cultivation, salt damage prevention, development and efficient use / management of water resources, and the introduction of salt- and drought tolerant plants.

#### **Plant Resources Research Institute**

(Dry Land Plant Theme Park)

This theme park would serve as a place for collecting, displaying and preserving the genetic resources of plants, demonstrating how to utilize dry land plant resources, and holding exhibitions on plant species useful for dry land agriculture as well as explaining their uses. For many years people have used dry land plant resources in their daily lives as aromatics, dyes, or medicine. However, today the wave of modernization is causing drastic changes in people's lifestyles and is sweeping away traditional cultures and customs. Thus, this kind of theme park on plant resources could also be useful for preserving local traditions and cultures as well as enhancing agricultural productivity in the future.

## Agriculture in the Dhofar Region, Oman (6)

### Part 6: Future tasks and directions for agricultural 'development' in Dhofar

Nowadays maintaining self-sufficient economic and agricultural communities is almost impossible in most areas and Dhofar is no exception. History has proved that it is difficult for self-sufficient forms of agriculture to endure, particularly so in the face of current systems which are characterized by large scale intensive forms of agricultural production (exploitative agriculture). It may sound an exaggeration, but it is true to a great extent that the farming activities in Dhofar, developed and practiced over hundreds of years, are facing extinction as a result of the drastic social changes of the past two decades. It is too grave a task to come up with all the solutions here, but I would like to examine the current agricultural problems and potential solutions in Dhofar, as well as make some personal observations.

In the Dhofar region the traditional form of agriculture (sustainable, but limited in terms of productivity due to natural / environmental restrictions) is being over taken by more modernized forms of agriculture (problematic in terms of sustainability, but with a productive capacity greatly expanded due to human technology). The following table is a summary of the current problems, challenges and measures being taken. It also shows the environmental conditions and perceptions of the local people in the region.

Region	Environmental changes and conditions	People's social perceptions	Measures currently taken
Salalah	<ol style="list-style-type: none"> <li>1) Lowering ground water level due to water pumping for recently created pasture land</li> <li>2) Increasing salt levels in ground water</li> </ol>	<ol style="list-style-type: none"> <li>1) Consumers are happy with milk (supply)</li> <li>2) Farmers are in trouble, but other people (not personally experiencing any injuries or facing risks) have little concern</li> </ol>	<ol style="list-style-type: none"> <li>1) Investigation into ground water quality</li> <li>2) Transfer of existing pasture land to Nejd (plan)</li> </ol>
Jabal	<ol style="list-style-type: none"> <li>1) Increasing number of cattle</li> <li>2) Decline in forest areas</li> <li>3) Illegal logging for fuel wood</li> <li>4) Shortage of natural pasture</li> <li>5) Increasing amount of harmful plants</li> </ol>	<ol style="list-style-type: none"> <li>1) Local people do not see the increase of cattle as a problem</li> <li>2) Decreasing forest areas and shortage of pasture are seen as a problem in terms of how they diminish cattle feed</li> </ol>	<ol style="list-style-type: none"> <li>1) Establishment of natural vegetation reserve for seed production</li> <li>2) Consultation / guidance for the locals</li> <li>3) Elimination of harmful plants</li> </ol>
Nejd	<ol style="list-style-type: none"> <li>1) Lowering water pressure in the third aquifer (Lowering ground water levels)</li> <li>2) Increasing salinity of pasture land soil</li> <li>3) Lack of machine maintenance capacity</li> </ol>	<ol style="list-style-type: none"> <li>1) The number of local people is small</li> <li>2) There are few local farmers (those who are engaged in agriculture are workers brought in from other countries)</li> </ol>	<ol style="list-style-type: none"> <li>1) Restrictions on opening up new farmland</li> <li>2) Restrictions on digging new wells</li> <li>3) Establishment of pilot farms</li> <li>4) Investigation of ground water resources</li> </ol>

It can be seen from this table that clear problems and challenges exist. Sufficient counter measures, however, are not being taken. The reasons for this in turn can be summarized as follows:

- 1) Lack of personnel who could plan and undertake projects. In other words, the problems are perceived but cannot be quantified due to the lack of capable manpower, and this leads to a situation where the real dangers are neglected.
- 2) Lack of communication and information exchange between relevant authorities and other concerned parties. The information owned by each organization involved is not being made full use of. Even within the Ministry of Agriculture and Fisheries, different sections are not aware of each other's on-going agricultural projects.
- 3) The authorities are not willing to be actively involved in development programmes for the Jabal region. This is because, due to past civil war experience, apparently the central authorities tend to avoid contact with the mountain tribes or turn a blind eye to matters which are likely to cause controversy among the Jabal locals.
- 4) The local people's sense of values ( in this case relating to cattle and farmland) are very different from ours. For them, cattle are not merely an income source but are also valuable property in themselves. Therefore local people believe it is important to invest fortune to increase the number of cattle even if they know they may not be able to sell them in the long run.
- 5) Whatever measures may be offered to alleviate their problems, local people tend not to co-operate unless they are first shown visible achievements and the benefits they can derive personally.
- 6) People in the Nejd region still seem to believe that there are inexhaustible amounts of water. Also in this region water resources are not investigated sufficiently (partly for reasons related to 1).

With the current situation described above in mind, then, from now on what kind of ideas and actions are necessary? In order to discuss the future of agriculture in Dhofar taking into account the above problems and the various local conditions, it is inevitable that we consider not only agricultural development but also the issues relating to the environment and resources conservation. (P.T.O)

## Agriculture in the Dhofar Region, Oman (6) - Continued from the preceding page)

What I would like to urge here is that the following points should be considered before discussing the problems of agriculture in Dhofar:

- 1) The technologies available in Oman are still at the developing stage and there is a significant manpower shortage. This can be strongly felt in the technological sectors in the fields of agriculture, cattle farming and fisheries. Under such circumstances, it is very difficult to realize a rapid Omanisation (the employment of more Oman nationals as opposed to foreign workers) in the technological sectors. It is necessary to forcefully improve the level of Oman national's technological capabilities by introducing good technicians and technologies.
- 2) It seems necessary to specifically draw up development plans (including those for environmental and resource conservation) sector by sector, embracing all the relevant sectors. Within the comprehensive development plan, sub-plans can be drawn up and carried out in each geographical region (such as the coastal, mountain and Nejd regions) as well as under each sector. It is also necessary at the same time to create a coordinating body, under which relevant authorities can be systematically positioned and their roles in the development plan be made clear.
- 3) It is difficult to convince local farmers to co-operate with the measures imposed upon or explained to them by using words alone, as they tend to respond defensively to outside forces. Even if the objective is said to secure assets for their future, they tend to oppose any restrictions on their vested rights which may be required to achieve the objective. Therefore, it is necessary to consider ways to satisfactorily demonstrate the benefits of planned measures in a way that satisfies and convinces them of their necessity when seen from a longer term perspective.

My conclusion is that, in considering the agriculture of Dhofar, not only agricultural issues but also more fundamental problems have to be addressed. This might be a very personal, biased view, however, I cannot help but feel that what can be realistically achieved will only solve a very small portion of the many problems which I feel need to be addressed if sustainable agriculture is to be achieved in the region.

To be honest, it is difficult to think of concrete solutions. From the viewpoint of those who investigate the region in the hope of planning a development path, it is, firstly, very important to grasp the quantity and the scale of the demand-supply cycle of agricultural products within the region (as discussed in the previous issue). This is a precondition before pursuing sustainable agriculture within the context of the limited water and other environmental resources of Dhofar. Also, it is necessary to devise methods to give incentives for technicians to venture into research by providing with them some new technologies and machines. It is also important to demonstrate the result of research in a way that is understandable to everybody. Moreover, what is important from the standpoint of local farmers is to have somebody (or some organization) who can be trusted and who can mediate between technicians and developers and themselves. I think they would like to have some reliable people who could participate and work with them rather than merely provide support.

What is clear is that, in search of sustainability, local farmers should also understand that they have to be ready to sacrifice something among themselves. However, I think that the burden of such a sacrifice may be alleviated by adjusting their sense of values (for example, suggesting they reduce the number of camels which are less useful in an economic sense today and increase the number of cows) or introducing new technologies and government subsidies. This is not a satisfactory summary of the entire series, but what I would like to add in conclusion is that the major actors here have to be Oman nationals. The precondition for any action should be that Oman nationals themselves perceive and become concerned with their problems. Outsiders are never anything but supporters and cannot take real actions in their place.



**The Jabal region**



**The Nejd region**



**Traditional farming in Salalah**



**Large-scale pasture cultivation**