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On Return from UAE, a nation of migrant workers

It has been two months since I returned from UAE, and I would like to write about what I feel now. What I think about the most is not the desert, Arabs, religions nor the tree planting program I was involved in, but about migrant workers. The culture of UAE at present is characterized more by its multinational element comprised of workers from various countries lured there by oil dollars, rather than by Arabic and Bedouin culture. On a daily basis I communicated with people from countries such as India, Pakistan, Egypt, the Philippines and Syria, and even more so in my social life. The oil dollar has brought people from all over the world, out of the estimated population of 2.4 million, only 400,000 to 500,000 people, or about 20%, are said to actually be UAE nationals. Non-UAE nationals are mostly migrant workers, engaging in all sorts of occupations. They (including women) work in all levels of society and assiduously send their earnings to their families back home.

What surprises me is their cheerful attitude. From their faces, it is very difficult to imagine their difficult situations. Many of them came to the UAE, leaving their families behind. It is not hard to find people who have been working in the UAE for periods of 10 or even 20 years. It is not at all easy for those of them who come from societies which strongly value family ties; often more so than in Japanese society. They must have had the choice of staying in their home countries and supporting their families by doing traditional work in the fields but as the world economy encroached even into the rural agricultural areas of their home countries and raised the financial burdens on farmers to the degree that it became almost impossible to even send their children to school, they must have decided to go to Dubai, thinking it more realistic to earn real money in a relatively short time. I am sure that if they had an alternative which enabled them to stay with their families, very few of them would go to work in UAE by themselves. They must have had no choice. This “not having any choice” is an important factor to remember. In their home towns there are many people who are prepared to go to work abroad should they have sufficient funds to travel. Many of them are farmers without land and are earning a living through temporary agricultural work.

The UAE is not alone - many wealthy countries have a demand for cheap labour. The low cost of employing people from developing countries is due to the low economic status of these nations. The reason why these developing nations economies are weak is that these countries do not have strong industries capable of competing in the world market. However, it should not be the case that all nations should achieve economic development in the same way. Each nation must have its own shape of development. The economic status of a country tends to be used to evaluate the country and even individuals from that country. Many would deny this, however,as far as labour costs go, the “value” of the migrant workers is very small.

(Reported by Abe)

Plantation workers from Pakistan (right) and Bangladesh (left): The plantation owner lives in town and the daily work is done by these workers. Their monthly salary is about DH 500 (15,000 yen).

A worker from Afghanistan on a government farm: Government pay workers around DH 1,500 (45,000 yen) per month. The salary is much better than on private farms although the duties are very similar.

Past Technical Assistance for the Gulf States and Future Challenges (2)

Part 2: Demonstration experiment by the Desert Development Institute, Japan

In 1971, the Desert Development Institute, Japan was established with the aim of conserving the global environment, with particular regard to the prevention of desertification and the promotion of methods of greening the desert. In those days, a large quantity of asphalt was produced by the process of oil refining, and the laying of underground AMB (Asphalt Moisture Barrier) was developed as a means of effective utilization of excess asphalt. The AMB was recognized for achieving a great improvement in desert agriculture by making it possible to conserve irrigation water and by preventing salt rising from underground. A demonstration experiment of the AMB started in Al Ain, UAE.

In the first four years the experiment proved that using AMB efficiently kept irrigation water in the soil and significantly increased crop yield. This experimental farm was later transferred to the local government authorities, however, salt contained in irrigation water started to accumulate in the soil. This prevented the agricultural practice being sustainable. Agricultural research inherently takes a long time, especially in arid zones with severe climatic fluctuations. This is even more the case regarding research into salt accumulation which originally requires a long-term period of continuous observation. When the AMB experimental farm was operated under Japanese supervision there was also another experimental farm set up by the French Oil Corporation. Their compound was equipped with tennis courts and a swimming pool which showed their determination to make their assistance a long-term priority. By contrast, the Japanese assistance looked somehow “kamikaze”-like.

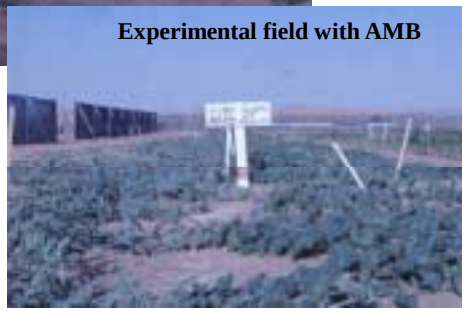
In order to scientifically elucidate the effectiveness of the AMB, the Japanese project had a laboratory. In those days there were no other facilities in Al Ain to analyze soil and water and there were many requests for analysis from various people such as Spanish and Italian afforestation teams. The laboratory was also in charge of analysis in the joint experiment with a compost factory which was newly established in Abu Dhabi. Presently, the laboratory has expanded and new analytical equipment has been installed. It plays an important role as the analysis center in the government¬s agricultural bureau. This is the most important effect brought by the project.

The lesson learned from this project is the importance of an attitude that develops technologies in the countries concerned according to local needs, rather than by applying technologies developed in the assisting countries. The Gulf States possess severe climatic conditions that are shared by developing nations which are affected by desertification. However, these Gulf States are generally affluent and can offer desirable conditions for researchers to engage in their work over the long term. In the future, attention should be given to those projects that are only possible to execute in such environments as those found in the Gulf States.


At the beginning of the project


At the end of the project


Experimental field without AMB


Experimental field with AMB

Agriculture in the Dhofar Region, Oman (2)

Part 2: Agriculture in the Salalah plain

Farming in the Salalah plain mainly occurs around Salalah city, which is the capital of the Dhofar region, and in Taqah in the east. As can be seen in the satellite image, the cultivated area is divided into two kinds: traditional fruit and vegetable farming (indicated in mosaic red along the coast), and new large-scale grassland (shown in clear red patches in the interior). In traditional farming areas, farmers grow fruit such as bananas, coconut palms and papayas (which are the main produce of Oman), and vegetables such as radishes, tomatoes, cucumbers and mint. Fodder is grown for household consumption. Water is brought by basin irrigation using irrigation channels.

Satellite image (false color): Distribution of cultivated areas around Salalah city. (The red parts are cultivated areas.)

Irrigation water is pumped from shallow wells 5 meters underground and brought to the crop land using channels. Much of the fruit grown in this area is shipped to Muscat and lots of other produce is consumed in and around the Dhofar region. These farms are generally owned by Omanis, but the daily work and management is entrusted to workers from Pakistan and India.

Large-scale grass farms popping up in recent years aim to produce fodder for milk cows and are run as national policy corporations. Water is piped from deep wells dug around the farms and distributed by devices such as center pivot sprinklers and rain guns.

However, there is a downside to this. As the large-scale grass farming expands using a large quantity of water, the problem of sea water intrusion has become obvious. Moreover, because of their coastal location, it is the traditional farming areas that are affected by the sea water intrusion which follows the lowering of the water table. An investigation by the water resource ministry also revealed that between 1974 and 1992, the percentage of areas with good quality underground water (0~2,000 ppm) had decreased from 42% to 23% of the area concerned (About 50km to the east and west and around 10km to the north and south from Salalah city). This tendency is prominent in areas around newly developed farms that use a large quantity of water.

Traditional cropland: There are three levels - coconut palms in the highest level, fruit trees such as bananas and papayas in the middle, and vegetables or grass at the ground level.

Fruit shops which sells directly from farms.

Plant in Oman and UAE: Part 2 - Samar and Ghaff

The two typical leguminous trees in UAE and Oman are Acacia tortillis and Prosopis cineraria, locally known as Samar and Ghaff. Samar is very close to the so-called table tree (Acacia radianna) that is wide spread in the Sahel, Africa, and Samar is considered to have evolved from the table tree after the Arabian Peninsula was cut off from the African continent. Ghaff is seen from the arid regions of the Arabian Peninsula to Iran, Pakistan and India. Samar grows in rocky mountain areas with relatively high precipitation and in pebbly alluvial fans. Ghaff mainly grows in sand dune areas closer to the coast. (Refer to Illustration 1)

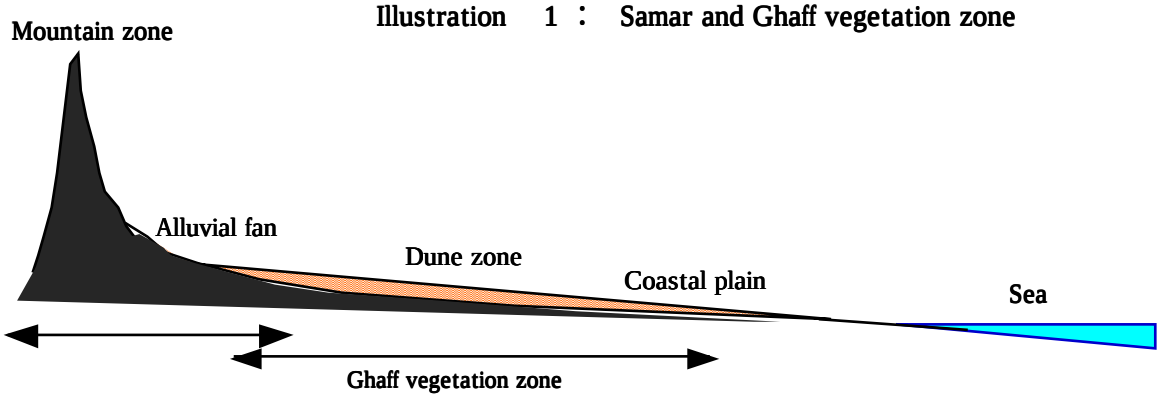
Both Samar and Ghaff are precious tree species that grow in the desert. Ghaff is particularly significant in that it is the only tree that can offer shade in sand dune areas, and the Bedouins have always set up camps by the tree. Samar and Ghaff, as well as date palms and camels, have been important elements sustaining the livelihood of the area. How do the two species adapt themselves to survive in the severe desert climate?

Samar only grows on very hard soil in the mountains and in alluvial fans. In fact, it only occurs where flash floods after rain might wash over its roots. Roots cannot penetrate deep in such hard soil and this is apparent when samar trees are often turned over from their roots after a storm. The shallow root systems of the Samar can only support the tree by grabbing hard soil, therefore this species cannot really grow in dune areas.

New Samar leaves come after winter rain. Samar depends on the winter rain and stubbornly endures the long, hot dry season. By contrast, Ghaff spreads its roots deep in dune areas (as deep as 50 meters has been recorded), and its leaves come in the hottest season - in June and July. It may be that winter rain penetrates underground and finally reaches the dune areas by June and July. It is considered that Samar survives the long, hot dry season by dint of its drought-tolerant character, and that Ghaff survives by developing root systems deep into the ground. This view coincides with research results revealing that the drought-tolerant nature of Samar is much more pronounced than that of Ghaff.

Desert-dwelling trees have different ways of adapting to the environment. Although there are probably no two species with exactly the same characteristics, Samar and Ghaff are two representative types of plant adaptation in the arid regions.

Illustration 1： Samar and Ghaff vegetation zone



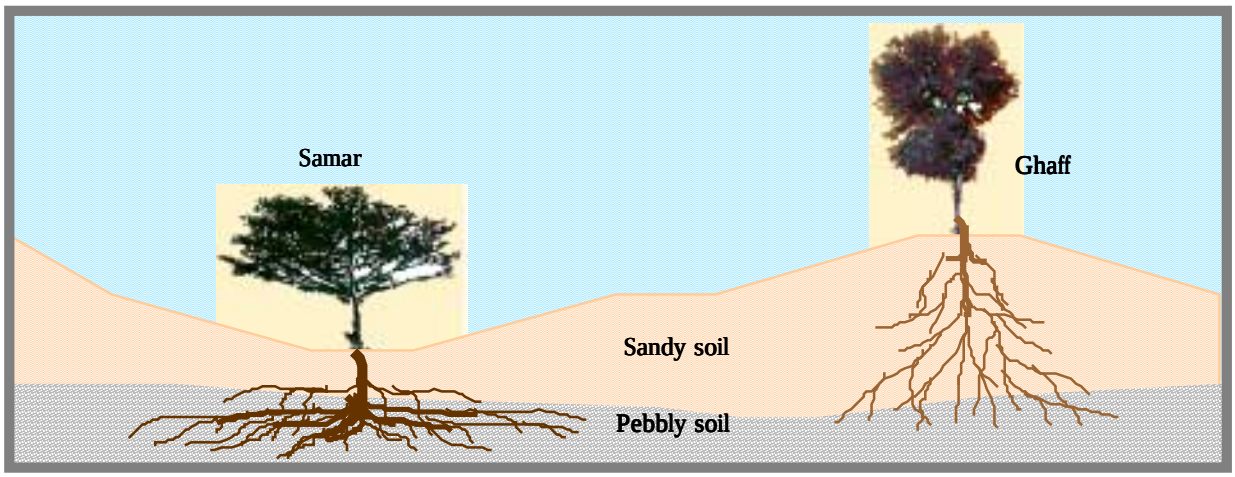


Illustration 2： When Samar and Ghaff cohabit the same area, each is considered to have its ownspreads roots for survival. This division occurs in transitional areas in between alluvial fans and sand dunes