

# AAINews

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## Mauritanian Oasis in Need of Improvement in the Living Environment

The plane from Paris was gradually losing altitude yet the view from the window still comprised only sand dunes interspersed with mud houses. Having been informed that the Mauritanian capital Nouakchott had a population of some 500,000 to 600,000, I had expected to see some tall buildings and tarred highways. But such expectations were completely belied by the approaching view below. I got the opportunity to visit this country for JICA's study starting from this June and although I had visited desert countries in the Gulf region many times, the desert state of Mauritania gave me a very different impression.

The study site is an inland oasis region, extremely arid land with an annual rainfall of less than 100mm. Once the wind starts to blow, ones eyes suffer from the continuous assault of sand. The heat was not so severe. The site needs to be approached by no less than two 4WD cars, to be prepared for any accidents while passing through the dune area. The cars have to travel where there is no road, sometimes on dangerously precarious cliffs, and just as the travelers are beginning to wonder what sort of oasis could possibly exist in such a desert country, villages with several thousand people finally appear.

The study started just before the rainy season set in. This is the time when the life of oasis residents becomes poorest. There were almost no green vegetables in the souk (market). The only items on sale then were small amounts of rock salt, potatoes, cereals, dry carrots and onions. Some villages have no midwives, doctors or pharmacies. The only means of transportation is by 4WD vehicle. These serve as both taxi and truck, traveling between villages a few times a day. During our field visit one of the study members brought a pregnant woman who had fallen into a critical condition to a hospital in the city. Later I was told that she did not survive. I then severely felt the indescribable difficulty of people's lives here

In such a difficult environment people are making every effort for survival. They cultivate dates and keep livestock with the limited water that is available from the wells, and grow vegetables in the tiny fields around the wells. There are lamps and pumps driven by solar energy. Everything is utilized with good care and without waste. I also saw tree plantations here and there to protect farmland from wind and sand.

In other desert countries in the Gulf region I could always find people driving in expensive cars, a good deal of tarred roads, cold Coke and air-conditioned rooms. However, that is not the case with Mauritania. People leading a harsh life in this country put forward a number of requests to the study team. The purpose of this study activity was to find a way to improve people's life in the oasis region. What could and should be done by making the most of the region's limited resources and helping people to support themselves, while maintaining the local traditions? While contemplating this I felt tense and was keenly aware of the significance of this task and of the seriousness of our responsibility.

(By Zaitsu at an oasis in Mauritanian, June 29, 2001)



Items on sale in the souk  
(rock salt, beans, onions etc).



Meeting with the oasis association (the person in  
blue is the head of the association).

## *In Search of the Blue Bird – What Is It that You Have Been Looking For?*

### **Part 5: For what use? And how about the children's future?**

“This is revenge! Revenge! Revenge! This is revenge against the evil acts the humans have inflicted upon us since old times!”

“This program is being closed due to improper treatment,” “ A Type XX error has occurred....” Apart from these two examples, I suppose you also have the experience of being at a loss because of various errors for unknown reasons while using a computer, such as sudden freezes, incompatibility of application software, etc. Computers were supposed to be a tool for human beings, a means to work more efficiently, but before being aware of it humans are having to take care of the machines, which seem to control / dominate their daily life.... --- **Efficiency for what?**

Serial murders, killings of parents, bus jackings etc., all committed by teenagers.... Recent years have seen such incessant crimes by mad 17-year-olds. What is really frightening is the fact that such incidents are not felt to be unusual these days. What is happening among the underage? Does the cause of criminal acts by teenagers lie with their parents? TV games? Or in the highly spoilt condition of our society? What have we got from the education system, which was called the ‘exam hell’ .... What sort of ‘good generation’ has such education been longing to see? Inside the schools those who get higher marks in exams are seen as good students, while little importance is given to linking school life with outside society, and the teaching aims at an increase in material gain in the future. At home where the father seldom comes back, children grow up without much conversation. In such circumstances, how can children learn how to judge good from bad? --- **Education for what?**

According to the book *The Elephant's Time and the Rat's Time* (Zou no jikan, nezumi no jikan), as a result of examining their life expectancy and the pulse rate, it was found that the number of pulses beating in a lifetime is almost the same among most mammals. That is, time seems to run faster for those animals with greater energy consumption. Today the average Japanese is said to be consuming some 40 times more energy than necessary just for biological living as a human being. In other words, could this mean that we are promoting aging by consuming energy excessively? What can be seen behind the excessive energy use by the Japanese, while somewhere on the same earth there are people who cannot get even the minimal amount of food... ---**Energy Over-consumption for what?**

After the death of a civilization all that remains is a desert. Is it an inevitable fate, or an avoidable consequence? What happened in ancient Egypt, Mesopotamia, on the banks of the Indus and the Yellow River, where old civilizations once flourished, and then faded out? With limited resources and unlimited human greed, will globalization (which aims to make the market economy system prevail on the global scale by completely liberalizing the movements of people, goods and information), really work for better? Wouldn't it just lead to an increasing gap between the powerful and the weak (the rich and the poor) and more environmental destruction...? ---**Globalization for what?**

The ‘sense of stagnation’ which seems to envelope the whole of Japan today, is not unrelated to the collapse of the ‘growth myth’ of an unlimited economic boom, or to a loss of goals in society. Was our goal always materialistic richness? No, mere material abundance cannot make people happy – it has been a while since such a statement started to be heard. But, what do we see in reality? Where is the happiness which is supposed to exist away from the materialistic satisfaction? At a recent meeting on climate change, the US, which saw possible negative impacts on its economy, decided not to ratify the Kyoto Protocol which calls for cooperation in reduction of greenhouse gases. In Japan, which suffers from the 10-year-long economic recession the ‘structural reform with pain’ has been repeatedly called for. However, isn't it still the same society with material abundance as its vested right, which is anticipated to thrive after such pains? If humans continue with their endless greed for material gains and with the development beyond nature's carrying capacity, the final consequence can be expected more or less. Probably it is high time we reconsidered more seriously the education system for the future generations as well as the desirable social system to be built up.



### **Part 5: Improvement of agricultural extension staff training in Syria**

As mentioned in the last issue, between 1994-1997 and 1995-1997 JICA experts on agricultural extension (crop cultivation and livelihood improvement) were sent on long-term missions to the Syrian Directorate of Agricultural Extension of the Ministry of Agriculture and Agrarian Reform. During this work it was felt necessary to increase the quality of the extension workers, and it was proposed to provide technical support to the extension staff training center which worked with the Training Directorate. Consequently an expert was sent to the Training Directorate for two years from 1999. His main task was to improve the training for agricultural extension staff at the training center. Specific instructions were given for review and improvement of curricula and training materials, as well as for training of trainers of extension staff.

As a result of reviewing the existing training courses, some problems were pointed out, which were also mentioned earlier in this report (Part 3). Based on the analysis of the current problems, the following suggestions were made in order to improve and make the contents of the training course more effective.

- 1) Training according to the different levels of trainees: The training course should have different contents and levels according to the ability and amount of experience of individual trainees. Also, in order to deal with varied and specific needs from the farmers' side, high-level extension staff, such as SMSs (Subject Matter Specialists), should be trained with specialized knowledge and techniques.
- 2) Organic linkage of training between the center and local areas. The role of, and linkage between, different trainings at the center (national level) and the local (prefectural / provincial level) should be clarified. For example, the TOT (Training of Trainers) can be conducted to foster high-level extension staff, who could engage themselves in training ordinary-level extension staff at the local and provincial level.
- 3) Dissemination of new research findings and information: One of the roles of agricultural extension is to disseminate new research findings at research institutions to farmers, so that they can improve the current farming techniques. To do this, the Agricultural Extension and Training Bureaus need to constantly liaise with other related organizations and maintain a smooth flow of new information. This should be reflected in their training courses as well.

Based on these suggestions some new training courses were drawn up and conducted in an effort to make them more practical and meaningful. As computers have started to be used more and more widely in Syria, there was strong demand for computer training related to agricultural extension activities. Therefore, a new training course was carried out with the counterparts, focusing on using statistical data, making promotional pamphlets and creating simple databases etc. Moreover, for a country with a vast portion of semi-arid land, sustainable agricultural development, which considers environmental conservation, is a very important theme. Therefore, a training course on environmental conservation was also conducted. Also as the first stage of the SMS training course, a new course was established with support from short-term experts focusing on cultivation of fruit trees, one of the most important agricultural products of the country.

Though the two-year mission was very short, what we tried to stress to the counterparts and training participants throughout the planning and implementation of new training courses was the importance and joy of thinking with their own heads and hands. One of the immediate future tasks may be to consider introducing some evaluation system and certification system, because at the moment the quantity (e.g. the numbers of training session conducted, of number of days they lasted and the number of participants) rather than quality (specific achievements) is more appreciated. Also, in order to encourage the staff's active participation and to increase the effect of training, it is important to create some sort of incentive. For this purpose, for instance the salary scheme may be reviewed to allow pay rises for those who received certain certificates after training. It is also necessary to assess the very needs of such training, which is linked to the basis of the training planning, asking why certain training is necessary. Therefore, workshops or training courses are also needed on conducting such needs assessment / surveys with the PRA method.



Using computer for agricultural extension activities



SMS training course by a fruit tree cultivation expert



Making a map for a better understanding of the region

## *Mini-Series: Efficient Use of Water Resources in Arid Land*

### **Part 1: Introduction of water-saving irrigation in Syria**

The 21<sup>st</sup> century has been dubbed the “century of water”. At the beginning of such a century, I got a chance to be involved in activities to consider the future technical assistance in promotion of water-saving irrigation in Syria. For about one year from autumn 1996 AAINews carried a series of articles on farming and irrigation in arid land (from the viewpoint of sustainability). In this series the importance of the traditional farming schemes, problems of modern irrigation development, the future direction of arid land agriculture etc. were considered, with reports on the reality of water harvesting, oasis farming and rain fed farming. Subsequently, partly due to the recent abnormal climatic events worldwide, the importance of water-saving farming is becoming more crucial in many parts of the world. In this new mini-series, we would like to report on efficient use of water resources in arid regions and provide the latest information from various places.

Across Syria the amount of available fresh water from all sources, such as springs, wells and rivers, is decreasing drastically. On the other hand, demand for water is rising sharply, as the per capita demand increases and the country becomes more industrialized. Furthermore the population is increasing at an average rate of 3.5% a year and people’s lifestyles are also going through changes. As a result most of the water systems in the country are experiencing definite water shortages. Therefore, it has become a highly crucial task to introduce water-saving irrigation technology in order to save water in the agricultural sector, which is using up nearly 90% of water in the country, and to allow other sectors to use more water. The government of Syria is trying to set up various types of legislation to encourage water-saving farming. Some legislation is directly related to modernization of the traditional irrigation methods, while some other prescribe rules related to improvement of the agricultural finance system, the establishment of a domestic production system of irrigation materials, the digging of new wells and so forth. Modernization of irrigation systems is also being promoted through research and PR activities under the Irrigation Directorate of the Ministry of Agriculture and Agrarian Reform. Moreover, international organizations and other donors are supporting such activities as water resources development, modernization of irrigation systems, utilization of treated water etc.

However, the legislation is not proving effective in reality so far, due to the insufficient penal regulations etc. Also, the research and PR activities have not produced such positive results as had been expected. In order to realize the modernization of irrigation systems, it is necessary to take a holistic approach, which considers both the natural and social conditions of the targeted locality. It is particularly important to reduce the amount of water use in irrigation, and at this moment such water saving should be limited to the areas with relatively abundant water resources. Modernization of irrigation systems in the areas where there is already a water shortage often does not result in water saving. In such cases, modern irrigation facilities tend to be used only as the last resort to lead the already limited amount of water across the entire field. In addition, the unclear economic rationality is also a major restrictive factor for ordinary farmers to introduce modern irrigation facilities. In this situation, what is needed to be done from now on it seems, is first to classify regions based on various indicators such as climatic conditions, water resources availability, land ownership and major crops in the locality, and then to analyze the priorities and feasibility of water saving in the differently classified regions according to such criteria as possibility of water use, anticipated effects of water saving and profitability etc. And specific modernization plans should be drawn up based on the result of such analysis.



Farm deserted due to depletion of water resources



Pilot farming with various irrigation methods



Cotton farming with newly introduced drip irrigation