

Visiting Yeosu Expo in Korea

I visited the Oceanic Expo that was held in Yeosu in the southern part of Korea. It was held from May 12 to August 12 in 2012. 104 countries and 10 international organizations including the United Nations participated in the Expo and the visitor number was estimated to be around 8 million. The theme of the Yeosu Expo was "The Living Ocean and Coast", with the sub-theme "diverse resources and sustainable actions." The Expo aimed at exploring responses to global oceanic challenges such as ever worsening oceanic pollution, marine biodiversity loss and sea level rises.

Classification of Expos: According to the BIE (Bureau International des Exhibition) Convention, expos are largely categorized into two: International Registered Exhibitions (or World Expos) with general and comprehensive contents; and International Recognized Exhibitions (or International Expos) with specialized and technical contents. The former is usually held at 5-year intervals and the duration is limited to 6 months maximum. The latter is held with a duration of within 3 months between registered expos. Yeosu expo is a recognized expo with a specialized theme; oceans. The Shanghai Expo by contrast which was held in 2010 was a registered expo.

Although the main theme of the Yeosu expo was marine conservation, an emphasis was also placed on utilization of oceans as sources of energy and as a resource base. The words "technology and innovation" and "solutions" were often used in relation to counter measures for global warming, sea level rise and resource depletion.

Main exhibit facilities included Korea's largest mega-aquarium that harbors many rare species from around the world, and the Sky Tower that includes a pipe organ made of recycled cement silos. Another symbolic facility was Big-O, as well as the marine park with a variety of events, international pavilions and corporate pavilions, and many restaurants serving dishes from Korea, as well as Japanese, Chinese and western foods.



Large tunnel shaped water tank in the aquarium

Expo mascots Suny and Yeony

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My main reasons for visiting the Yeosu Expo were to learn exhibition methods of various pavilions and visit the Oman pavilion with its mangrove exhibit. There were many interesting exhibits. At the Germany pavilion, the visitors could listen to calls of whales and other marine species. The Ocean Best Pavilion provided an opportunity for learning using a quiz and interactive hands on experiences. At the Oceanic Life Pavilion, a variety of exhibits were seen including a diorama of artificial tidal flats. In the Oman Pavilion, there were sea turtle and mangrove exhibits. Visitors were attracted by the exhibit of mangrove seeds and leaves in plastic display boxes.



Hearing animal calls (Germany Pavilion)

Quiz style exhibit (Ocean Best Pavilion)





Artificial tidal flats (Oceanic Life Pavilion)

Mangrove exhibit (Oman Pavilion)

The significance of this kind of expo is that it exhibits newly developed technologies and ideas that may be put into practice in future. In addition, expos provide opportunities for many people to present their thoughts on common themes through a "playground" of different events. This time, it was a little worrying that the number of foreign visitors was rather small at around 400,000. However, many Korean children were visiting the expo. This expo is expected to have provided a good opportunity for them to think about the ocean and the environment. (By Koto July 2012)

How to get to Yeosu: By air, fly to Yeosu Airport from Seoul Ginpo airport. By land, the Korean bullet train (KTX) was extended to Yeosu at the occasion of the Expo. During the Expo, there was also a high speed boat from Hakata Seaport.

From the frontline of environmental education <Part 1>

Introduction

In recent years, abnormal climatic phenomena such as record rainfall, frequent heat waves and super typhoons seem to have become normal. What is happening with our environment?

Origin of Environmental Education:

It was around 1970 when people started using the term "environmental education". In 1962, Rachel Carson published "Silent Spring", a book that rang the alarm bell about the dangers of agrochemicals. Since then awareness about environmental issues such as water pollution has risen dramatically, and in the United States, the Environmental Education Act was promulgated in 1970. In 1975, the international workshop on environmental education was organized by UNESCO. Building on the outcomes of the workshop, the Tbilisi Declaration on Environmental Education was agreed in 1977.

Table: Categories of environmental education objectives as per the Tbilisi Declaration

Awareness	To help social groups and individuals acquire an awareness and sensitivity to the total environment and its allied problems
Knowledge	To help social groups and individuals gain a variety of experiences in, and acquire a basic understanding of, the environment and its associated problems
Attitude	To help social groups and individuals acquire a set of values and feelings of concern for the environment and inspire motivation for actively participating in environmental improvement and protection
Skills	To help social groups and individuals acquire the skills for identifying and solving environmental problems
Participation	To provide social groups and individuals with an opportunity to be actively involved at all levels in working towards resolution of environmental problems

Necessity of Environmental Education:

There are largely two categories of environmental education; pollution related environmental education as a measure to deal with pollution issues, and nature conservation related environmental education which is propelled by the sense of crisis caused by nature destruction. In Japan, environmental education started with a pollution focus. However, there are now environmental educational activities aiming to augment insufficient knowledge and recognition of the importance of the environment through outdoor education and nature education.

On the other hand, higher consumption of individuals and increased production activities around the world have resulted in various environmental problems and nature destruction. In addition, there are a multitude of other global environmental issues such as global warming, ozone layer destruction, extinction of wildlife, and desertification that make environmental education particularly important.

Nowadays, environmental issues, which originated from concerns about pollution and nature conservation issues, have been increasingly recognized as problems that threaten the survival of the human race. Given this, environmental education in recent years has developed to be an essential education tool for achieving sustainable development (ESD; Education for Sustainable Development). It is recognized that one of the ways for solving environmental problems is to build human resources with rich sensitivity and sound knowledge and views. Environmental education and learning as a delivery mechanism for nurturing human resources are in increased demand.

New Series:

In this new series, we will visit organizations and NPOs that implement environmental education activities and we wish to learn their approaches, discuss the state of environmental education and challenges and to explore future potential in this field.

Themes of environmental education vary from the large scale such as global environmental issues to activities to get to know plants and animals in neighborhoods. The important thing is to be able to think about problems in distant places as issues that have relevance to ourselves, which would lead to resolving global level problems.

In Japan, for example, in the 1950's and 60's, nature was something more closer to most children. In modern days, the natural environment seems to have become something of a different world. One of the roles of environmental education in modern society is to bring back nature and make it close to them. This is expected to lead to enhanced ability to live and deal with environmental issues.

Also, in conducting environmental education activities, participation and action are important. This is because environmental education aims to nurture knowledge and techniques for problem solving by enhancing understanding through entertaining activities. It is also essential that knowledge is translated into action in order to solve problems. Therefore there are many systems and schemes to promote understanding rather than simply having fun. We would like to explore examples of these schemes and ideas in this series.



Water saving irrigation extension tools in Syria <Part 1>

As introduced in past AAINews editions, AAI has been working on water saving irrigation agriculture extension in Syria since 2005 (see AAINews No. 78). In the Syria project, we promoted the results-oriented training and extension method (ROTEM), conducting training and supporting improvement of extension activities undertaken by extension staff (AAINews No. 68). Extension staffs are often characterized as having "insufficient technologies and knowledge to promote", "no idea about the extension method", and "no confidence to teach". Given these concerns the ROTEM, which we used in our project in Syria, tried to ensure that trainees acquired water saving irrigation knowledge and techniques, and learned practical skills for extension activity planning and operation. The ROTEM linked training and actual extension activities following the flow – understanding of needs \rightarrow selection of learning themes \rightarrow extension staff training implementation \rightarrow extension activities by trained extension staff \rightarrow resolving farmers' problems.

In the ROTEM, one needs in principle to clarify "what" and "how to" communicate to farmers at the initial stage of the training for extension staffs. Given this we devised the development of four extension tools, after contemplating how we could arouse the interest of farmers in the concept of water saving. And how we could communicate in a comprehendible manner to farmers who have a low level of knowledge on irrigation and awareness of the necessity of water saving. These tools are a "discharge measurement kit", an "irrigation calendar", an "irrigation notebook" and a "digital irrigation note". Extension staff can communicate essential knowledge and information on water saving irrigation by explaining the use of the four tools and by distributing the material. Farmers will improve their awareness on water saving and farm management as a whole by using these tools.

The discharge measurement kit enables farmers to easily measure irrigation water amounts on their farming plots. By using this tool, farmers can understand the amount of water they are using for irrigation. The irrigation calendar is a tool that shows the necessary duration of irrigation for different crops. The irrigation notebook can be used as a cultivation record with notes and one can identify inefficiencies by recording daily farming activities. The digital irrigation note is the PC version of the irrigation notebook. It can automatically create graphs based on the data in the notebook for visual information presentation. By combining these four tools, farmers are able to know their own farming management in an objective manner, leading to increased awareness of the necessity of water saving.

In the next part of this series, we will introduce the inspiration of each of these tools, and describe what challenges occurred and what innovations were made to lead to the development of all these tools and outline the results obtained through the use of the tools to date.



Reports from JICA Tsukuba ex-participants <Part 1>

Since 2001, AAI has been conducting a number of training courses at JICA Tsukuba in Tsukuba, Ibaraki Prefecture in the field of vegetable and upland rice cultivation. Since the training courses on vegetable cultivation started in 1970 in the Uchihara International Agricultural Training Center, JICA, in Uchihara, Ibaraki Prefecture, the total cumulative number of participants has reached 900. As of October 2012, out of the 900, 149 participants have participated in our vegetable cultivation training and 61 have participated in our upland rice cultivation training. In the series "Close Friends from Far Countries" (AAINews No. 70-72), we reported on post-training activities of our African ex-participants in their own countries. Based on the communications and photos from ex-participants, we would like to continue to report on their activities from time to time.

Mr Emmanuel Odama (Uganda):

Emmanuel, who completed the Area-focused Training Course on Upland Rice Variety Selection Techniques for Africa in 2010, works as a researcher at the Abi Zonal Agricultural Research and Development Institute, a regional institute in the north western part of Uganda. The area covered by the institute includes 8 districts (15,903 km²) with 4.5 million people. According to the 2002 national census, 88.6% of the population is working in the agriculture (81% of women and 68% of men). Emmanuel's main duties are adaptive research on NERICA varieties and their multiplication, and promotion training on rice cultivation targeting farmers. He was also involved in cooperation with the projects by JICA Uganda, prior to his participation in the JICA Tsukuba training course. After returning to his home country, he has also been working on the Promotion of Rice Development (PRiDe) Project to the regions and has been conducting adaptive research on upland rice varieties and new lowland rice varieties in the north



Joint meeting with PRiDe Project

Drying for crop cut survey



Sampling

Measuring the grain weight

western region.

Rice production and quality have improved significantly on the western bank of the Nile in Uganda's north west. Rice is beginning to be accepted as an important crop by the local farmers.

Mr Amjad Hussain Shah (Pakistan):

Amjad, who completed the Group Training Course on Vegetable Cultivation Technology II in 2006, has been working as the seed certification officer at the Federal Seed Certification and Registration Department of the Ministry of National Food Security and Research. Up to 2009 since he returned from the training at JICA Tsukuba, he was working on test cultivation of tomato, cauliflower, cabbage, carrot, cucumber, watermelon and pumpkin that were imported by the National Agricultural Research Center, to evaluate them for genetic resources and adaptability. After that, he became head of the Central Seed Testing Laboratory as the technical manager, and has been working on various seed quality tests (seed purity test, germination test, seed-borne disease test etc.).



Seed certification based on the ISTA standards



Seed Purity Testing

Facility visit

The Federal Seed Certification and Registration Department was established in 1976 based on the Seed Law. The main function is to conduct quality testing of crop seeds in Pakistan, and register varieties raised by government and private entities. The Central Seed Testing Laboratory is a member of the International Seed Testing Association (ISTA), testing seeds of crops grown in Pakistan. What Amjad is most interested in is to be able to issue the international seed certificate based on the International Rules for Seed Testing of ISTA, and he is in the process of obtaining the endorsement as an internationally accredited laboratory of the ISTA, aiming to realize this by December 2013.

(By Ono)