

INTEP NEWSLETTER

INTERNATIONAL ENVIRONMENTAL PLANNING CENTER (INTEP)

-New Focal Point Established at the Department of Urban Engineering, the University of Tokyo-

FROM THE EDITOR : SPECIAL EARTHQUAKE ISSUE May Japan's Sad Experience Contribute to the Preparedness for Water Supply and Sanitation Systems

"Disaster comes when the previous one is out of mind", uttered a famous Japanese scientist a century ago. Japanese people were reminded of the saying when the quake destroyed Kobe this January. However, even before the victims could assuage their grief, another killer earthquake took place in the northern part of Sakhalin, Russia on May 28 1995, which completely destroyed Neftegorsk and killed two thirds of the population. These earthquakes serve as a stern warning to all nations that such a disaster can take place anywhere and at any time.

As time passes, more detailed information about the damage has come to light. In earthquake-stricken areas, the damage caused by the quake was estimated to be more than 10 trillion yen (approximately ¥85=US\$1), which is more than 2 % of the annual gross domestic product of Japan. As of April 5, damage to the water supply, sewage works and solid waste/nightsoil management systems in Hyogo Prefecture, in which Kobe City is located, were approximately \$4.1, \$9.6 and 4.4 billion yen, respectively.

The earthquake taught us many lessons; some were depressing but some were consoling. As large municipalities had made agreements with each other before the quake, unaffected municipalities could help the stricken areas by rapidly sending officials and aid equipment. The Self Defence Force, gas/electricity companies, NGOs, numerous volunteers etc. helped the area in various ways. The government is now considering how to improve the command system of emergency relief operations so that quick measures are taken even if communication systems are not working perfectly.

From the Department of Urban Engineering, including INTEP, a number of water supply and sanitation experts and student volunteers helped the stricken areas. Although a quick report on the quake was already made in the previous issue of the INTEP Newsletter, more detailed information is reported here from their experiences.

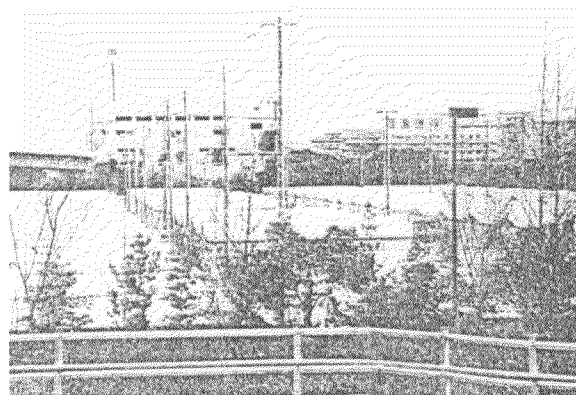
I think that Japan, as an earthquake prone nation, has the responsibility to disseminate information on this disaster to developing countries for the strengthening of preparedness, with which many lives will be saved. When we consider applying the experiences of this disaster to developing countries, we should take

into account the similarities and dissimilarities between Japan and developing countries. For example, the availability of help such as equipment, or manpower from other municipalities, availability of advanced technology to check damage to sewage pipes etc.

At the same time, there are also many things Japan should learn from the world community. For example, measures taken at refugee camps may be applicable in such an emergency. When I heard of the initial measures that were taken, I was impressed that some were similar to what is happening in developing countries. For instance, public standpipes were used to secure water for as many people as possible at the earliest stage. Pit latrines were built as a temporary measure. In such cases, knowledge about public health in hot climates and in developing countries and know-how about appropriate technology for water supply and sanitation may help people survive emergencies.

The real challenges have just begun. A lot of difficulties are foreseen in the reconstruction process, which may last more than ten years; Modern water supply and sanitation systems, which had not anticipated damage on such a large scale, may suffer from unexpected aftereffects. Japan should keep other countries informed of the lessons learned from the quake and the reconstruction process. INTEP wishes to keep readers of the newsletter informed of the ongoing activities in Japan for preparedness against earthquakes.

by Hidetoshi Kitawaki, Editor-in-Chief



The aftermath will torment relocated people for years
-Shelters for Evacuees