RECENT TREND OF RISK COMMUNICATION ON FLOOD DISASTER MANAGEMENT IN JAPAN

SATO Teruko and IKEDA Saburo

National Research Institute for Earth Science and Disaster Prevention (NIED)
Tennodai 3-1, Tsukuba Ibaraki, 305-0006, Japan

Although we have a long history of struggling with flood disasters, our flood disaster management has drastically changed during the last century. To meet the growing demand for the flood control by landowners, the original River Law was enacted in 1896. And the central government adapted new modern civil engineering technologies (high banks, large dams, channels, etc.) in place of Japanese traditional measures of flood management. And the River Law was amended in 1964 by increasing demand for developing water resources and making more safer land, it has strengthened the integrated administrative effort to construct flood control facilities throughout the river basins by the government. These have made flood prone areas much safer from flood disasters and local people has began to heavily relay on the power of flood control facilities managed by the government rather than on the traditional measures of flood management that used to rely on their localities and culture rooted in their communities.

However, other difficulties have arisen, for example, (1) Flood damage potential has increased by the development of flood prone areas, especially during the rapid economic growth age since mid-1950s. As the result, for example, in 2000-Tokai Flood a bank failure of even a medium sized river caused one of the highest general economic loss during the last 40 years in Japan, (2) Flood control projects, giving priority to the early completion with economic efficiency have deteriorated the river environments, such as deteriorating biodiversity, shrinking habitats of aquatic fauna and flora, deteriorating water environment, and changing in water-soil cycle, etc... (3) Disaster preparedness by local residents has been weakened by the decline of traditional local communities resulted from rapid urbanization.

This paper is concerned with how to cope with such vulnerability of the modern urban society and community toward the risk of catastrophic flood disasters by introducing a new type of integrated framework on flood risk management together with the provision of risk communication. Our framework is consist of: (1) integration of structural and non-structural measures to mitigate flood damages by having the direct participation of stakeholders, in particularly, local people, NGO groups, etc. in the processes of disaster risk management, (2) strengthening the capacity of local communities to make their own choice of risks for disaster management, and (3) promoting the participation of stake holders in the design and planning processes in flood risk management.
A type of risk communication between the government and stakeholders was first placed in Japanese by getting 1997 River Law which takes into consideration local people's participation as well as the preservation of the river environment in their planning processes of river improvement projects. Since then, several attempts of developing new methods to support participatory flood risk communication have begun in risk research fields. This attempt will be shown in the presentation.