

# International Trend on Disaster Management Assistance and Japan's Future Prospects of Disaster Management Assistance

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## 1. Introduction

The United Nations World Conference on Disaster Reduction will be held in January 2005 in Kobe. Japan needs to address clearly its assistance policy regarding the disaster management as one of the major donors in the context of the international assistance to society. However, the effort have not been realized as an organized the international trend for disaster management assistance.

This paper represents the survey results of the current international trend on disaster management assistance by major developed countries and related international agencies. Also, Japanese past assistances in this field are reviewed. Based on the results, Japan's future prospects of disaster management assistance are addressed.

## 2. Current Situation and Future Trend on International Disaster Management Assistance

The survey was made in regard to 36 agencies by reviewing existing information (documents and Internet), and 25 agencies out of 47, mainly UN agencies and development banks, were directly interviewed to clarify the policies in detail. As a result, current situation of the international society on disaster management assistance has become evident and is summarized in Table 1.

One of the main issue discussed in the review is that major developed countries and international agencies have realized the importance of further investment in the disaster preparedness/prevention which consists of both structural and non-structural measures, and some agencies have already prepared the strategic policy for disaster preparedness/prevention programs in their assistance. However, most of the disaster management activities by international agencies are mainly focused on non-structural measures (social component), especially to the community based activities. Moreover, their assistances are still largely spent on emergency relief, and the portion of assistance in disaster preparedness/prevention remains very small.

Figure 1 describes the positions of major countries and international agencies based on their activities and their assistance policies (vertical line as disaster stage and horizontal line as disaster target). In preparation of the figure, these international situations were taken into account.

Under these circumstances, some agencies have established the unit for the disaster management (prevention) or relief operation, and have started reviewing their past assistances. For instance, the UNDP developed a disaster and vulnerability index, and the WB has started an effort for setting up economic evaluation method of the disaster prevention/preparedness investment.

Figure 2 shows the assistance targets by incorporating disaster management activities in structural and non-structural measures. Different activities and measures will be required during different stages. Recently, non-structural measures of capacity building or community based activities have more attention/interest than the structural measures such as constructing dykes and dams as shown by red arrow in figure 2.

Table 1 Current Situation of Disaster Management Assistance

- The definition of disaster has been expanded from natural disaster to conflict and even epidemic disasters (e.g. SARS) depending on the agency's field of interest.
- The classification of disaster management stage is not as simple as classified in the disaster cycle, but diversified to combinations of emergency relief and preparedness or recovery and prevention.
- As the scope of disaster management varies, responsibility of the agency has diversified to cope.
- Addition to emergency relief operation, preparedness/prevention activities is emphasized.
- Disaster management assistance has shifted from the relief operation as humanitarian aid to development of framework.
- Building community based disaster management and the strong social systems have been emphasized.
- Further coordination among related agencies and other areas has been essential and important.
- Disasters in Mega cities are getting attention.
- Some agencies have started selecting the target countries and areas and concentrated their assistance to ensure their presence and effectiveness.
- Many agencies have started reviewing past disaster assistance experiences and planning to apply the best practice to the future disaster management assistance.

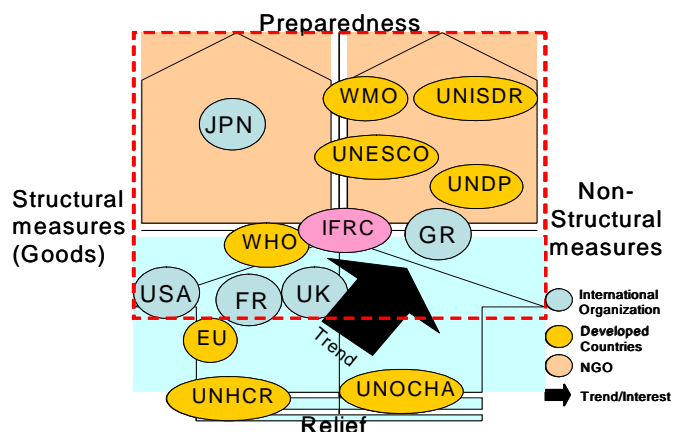


Figure 1 Trend of Disaster Management by Agencies

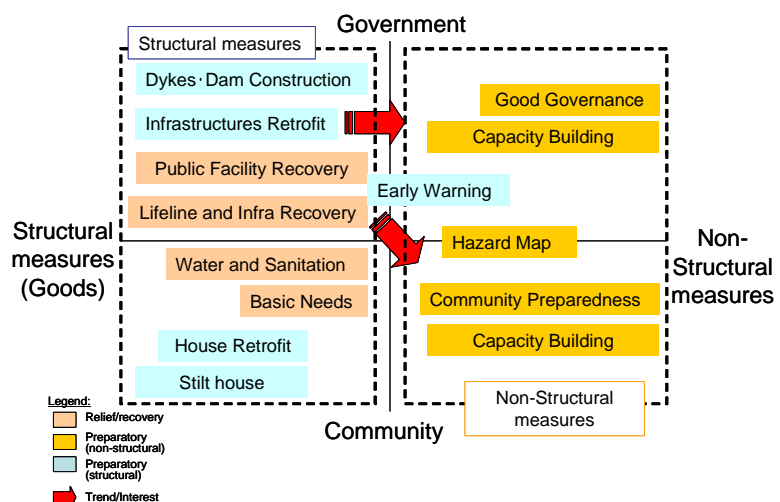


Figure 2 Trend of Disaster Management by Measures

Keywords: Disaster Management, International Cooperation

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### 3. Characteristics of Japanese Assistance

Japan has been implementing the project-based disaster management assistance by taking structural measures through JICA and JBIC scheme. At the same time, to improve the capacity of the developing countries' government officials, Japan has been offering many training programs and sent experts to the developing countries through the JICA's fund.

It can be said that many of these efforts have been conducted to developing countries, mainly in Asian region, by applying past Japanese engineering practice mostly acquired from flood control/flood fighting related activities in Japan.

Since Japan's assistance system is the request-based, the assistance has been done without a sound assistance policy in this field, and Japan is not able to transfer Japan's strong disaster management system (including social system of Japan) in its entirety. This situation may have resulted from ineffectiveness of Japan's assistance.

The characteristics of Japan's assistance are summarized based on the interview surveys and brainstorming meeting with field specialists and academic experts shown in Table 2. In order to improve Japan's assistance, there is necessity of cooperating with other areas, revising and analyzing the past assistances, reviewing Japanese experience, and formulating the strategic assistance policy as pointed out.

### 4. For Better Disaster Management Assistance in Asia

Kobe has suffered from the Hanshin-Awaji earthquake in 1995 and its experience made clear the importance of the disaster preparedness/prevention activities such as retrofitting of buildings, strengthening the lifeline and community based disaster management activities. In addition, the experience has raised new issues like adding a disaster preparedness point-of-view into the recovery stage, psychological care for the disaster victims, and many efforts in this field have been conducted to date. Such experience learned in Kobe must be shared with participants and people at the Conference.

Japan is situated, not only in the unique Asian monsoon climate region with special geographical features, but also having historical hardship with various kinds of disaster and paddy field culture which are similar to characteristics of other Asian countries. Therefore, Japan has the capability and should play a leading role in assisting Asian countries by introducing good practice, advising based on the lessons learned, applying the combination of structural and non-structural measures, and taking various kinds of disaster management approaches by reserving Asia's locality and diversity. In addition, Japan has conquered many problems that other Asian developing countries might have to face in the course of development such as rapid population growth, urbanization and environmental problems.

The image of relationship between structural investment and prevention effect can be drawn from Figure 3. The required assistance would be different depending on the recipient country's situation, therefore, Japan's assistance should be implemented with consideration of these unique and various situations. Since many Asian countries are considered to be located at the low and medium level of investment in structural measures, the assistance by structural measures as well as community based disaster management approaches are expected to be effective. For disaster management assistance, a cooperative approach would be effective; therefore, Japan should coordinate with other international agencies if necessary.

### 5. Conclusion

The paper made clear the international trend and the characteristics of Japan's assistance with visual presentation, and also suggested the future direction of Japan's disaster management assistance. As tasks for the future, Japan should discuss and address a strategic policy considering the strength of Japan's disaster assistance and international trend of disaster management. Therefore, Japan needs to take further effort to evaluate their intended focus and approach to other countries and agencies, and locate each agency's position shown in Figure 1 by using quantitative indicators. Moreover, to conduct better disaster assistance in Asia, Japan should also evaluate the developing country's levels and conditions of disaster management.

Table 2 Characteristics of Japanese Disaster Management and its Assistances to Developing countries

	Japanese Disaster Management	Assistances to Developing countries
Technical advantage	<ul style="list-style-type: none"> <li>Knowledge of flood control, erosion control</li> <li>Volcanic disaster management</li> <li>Earthquake damage simulation, retrofitting</li> <li>Weather forecasting, early warning techniques</li> <li>Advanced technology</li> </ul>	<ul style="list-style-type: none"> <li>Knowledge of flood control, erosion control</li> <li>Volcanic disaster management</li> <li>Earthquake damage simulation, retrofitting</li> </ul>
Social advantage	<ul style="list-style-type: none"> <li>Social system for disaster preparedness is build up (Legal frame work, administration, education, community, etc)</li> <li>Historical experience coping with urbanization and environmental problems</li> <li>implementing different disaster preparedness approach at the city and regional level</li> <li>Emergency disaster planning</li> </ul>	<ul style="list-style-type: none"> <li>Capacity building for National government level (Dispatching experts and offering group training course)</li> <li>Legal system (partially)</li> </ul>
other	<ul style="list-style-type: none"> <li>Asia monsoon area study</li> <li>Combination of structural and nonstructural measures</li> </ul>	<ul style="list-style-type: none"> <li>Asia monsoon area study</li> <li>Financial assistance to disaster mitigation</li> <li>Leadership with Asia region</li> </ul>

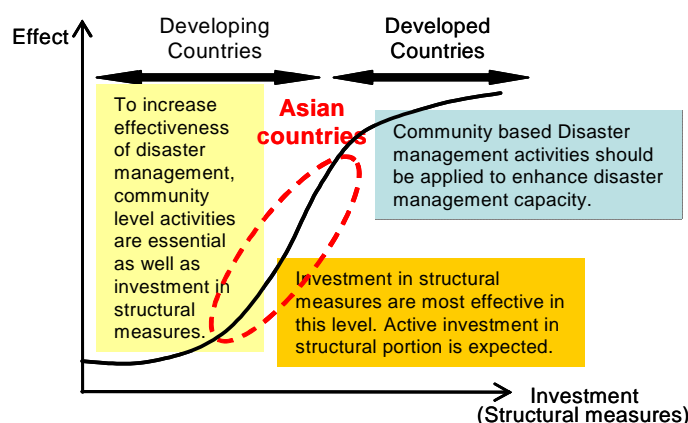


Figure 3 Images of Structural Investment and its Effect

### Acknowledgement

The result presented in this paper is partially drawn from the "The Study on Policies and Current Assistance at Disaster Management Field in Developed Countries and International Agencies" submitted to Ministry of Foreign Affairs of Japan. The authors would like to acknowledge the Economic Cooperation Bureau for giving this opportunity.