

ABSTRACT

“Country Profiles” and “TDRM-Good Practices-”

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Both “ADRC Member Country Profiles” and “TDRM-Good Practices” booklets were edited and compiled by Asian Disaster Reduction Center (ADRC) on the occasion of the Asian Conference on Disaster Reduction 2006 in Seoul, Republic of Korea, aiming to propose guidelines and tools to assist disaster risk reduction in the context of the HFA in the Asian Region.

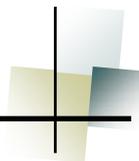
The first issue of “ADRC Member Country Profiles” booklet includes the following information from the 25 ADRC member countries*:

- 1-1. Natural hazards likely to affect the country
- 1-2. Recent major disasters
 - (1) Description of recent major disasters and response activities
 - (2) Activities for recovery and reconstruction after major disasters
2. Disaster Management system
 - (1) Administrative system
 - (2) Legal system, legal framework
 - (3) Structure of disaster management
 - (4) Priority on disaster risk management
3. Disaster management plan
 - (1) Sort of plan
 - (2) Legal basis
 - (3) Date of creation of the plan
 - (4) Content
4. Budget size on national level
5. Progress and Situations of the Hyogo Framework for Action (HFA)
6. Projects on disaster reduction headed by the Ministry in the last 2 years.
7. Counterpart of ADRC

Total Disaster Risk Management (TDRM)

Along with the introduction of “ADRC Member Country Profiles”, the presenter will also recap the importance of TDRM (Total Disaster Risk Management) concept.

ADRC, in cooperation with UN-OCHA (Kobe) and other organizations/countries, has developed Total Disaster Risk Management (TDRM) as an effective and strategic approach for disaster reduction, based on many years' experiences of coping with disasters in the world and Asia in particular.



The conceptualization of TDRM centers around two crucial principles. They are "involvement of all organizations and individuals" and "implementation during all phases of disaster," i.e. prevention/mitigation, preparedness, response and rehabilitation/reconstruction. Since damage stems from numerous hazards and develops from unexpected weak point, holistic approach which covers relevant stakeholders and all phases, TDRM, is quite essential in disaster risk management.

The implementation of TDRM in disaster risk management can be illustrated as follows: Risk identification and risk assessment with a strong initiative are expected as a first step to recognize possible damage induced by hazards and its influence on the society. Based on the assessment, a policy specifying target risk to manage, e.g. kind of disaster, area to be protected, is invented and a plan to take effective countermeasures is formulated. The important thing in this process is to review the risk identification and assessment constantly in order to take proper countermeasures against the frequent transformation of environment, geographic features, social structures, and locality.

Countermeasures for the disaster risk management consists of four items, i.e. risk avoidance, risk reduction, risk transfer and risk retention. Among these items, Risk Reduction would be the pillar of the countermeasures. Risk reduction measures against earthquakes are, for example, aseismic design, retrofitting of buildings and housings and development of early warning system, emergency drill by relevant organizations and general public. As is commonly known, disaster risk management demands a certain amount of cost. However, it must be much less than the one to recover and/or reconstruct an affected area.

The five fundamental strategies for TDRM approach are considered as follows: (1) collaboration among stakeholders, (2) coordination mechanism, (3) public awareness and support, (4) information sharing, (5) investment for disaster reduction.

Good Practices towards TDRM

In order to ensure the effective application of the TDRM approach, it is essential to learn lessons from the good practices around us both nationally as well as internationally.

Highlighting such practices are vital for making decisions that involve prime decision makers including politicians, financial administrators, planners in the national coordinating body in every country to emphasize the "culture of prevention" for disaster reduction and sustainable development of the society. The presenter will describe the rational and process of publishing "TDRM Good Practice" the first edition and the supplement version.

ABSTRACT

"Disaster Reduction Hyperbase" Project: International Framework for Development of Disaster Reduction Technology List on Implementation Strategies

Hiroyuki Kameda

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A project entitled International Framework for Development of Disaster Reduction Technology List on Implementation Strategies, was conducted in the period of April 2005 - March 2006. Its ultimate goal is to establish a web-based facility disseminating disaster reduction technologies under implementation strategies. It has been named "Disaster Reduction Hyperbase" by the participants in the project. The project (DRH Project) was sponsored by the Japanese government under the funding mechanism of MEXT's Special Coordination Fund. The project was operated under close collaboration with UN-ISDR Secretariat and other international agencies as well as experts from various regions of the world.

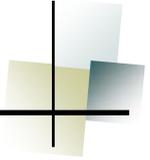
The project has been designed on the basis of several background efforts to pursue implementation oriented technologies and transferable indigenous knowledge that are deemed truly useful for disaster reduction. These efforts include:

- EqTAP project (Earthquake and Tsunami Disaster Mitigation For the Asia-Pacific Region): (April 1999 - March 2004) / APEC framework
- UN World Conference on Disaster Reduction, Hyogo-Kobe, January 2005
- Hyogo Framework for Action (HFA) 2005-2015 / Japanese government's proposal "Portfolios for Disaster Reduction: sharing information"
- "Disaster Reduction Technology List on Implementation Strategies" - a Japan's pilot project as a basis for internationalization (submitted to the UN-WCDR)

The objective of the DRH Project 2005 was to establish an international framework as a basis for conceptual developments and actual production of the Disaster Reduction Hyperbase in the years to follow. For this purpose, three regional meetings (CMM: core member meeting / Geneva (Europe/Africa), Kathmandu (Asia/Pacific), Costa Rica (Americas)) and an International Workshop (CMM-Final: Tsukuba) were held. In the CMM-Final (27-28 February 2006), the following resolution was agreed.

1. Development of the Disaster Reduction Hyperbase (DRH) is a significant contribution to reducing vulnerabilities and enhancing integrated disaster risk management.
2. DRH will be an open and interactive database of implementation technologies, will provide a forum for facilitating collation, testing, dissemination of mitigation models, and will link with relevant initiatives.
3. Within a scheme of coordination, development and information nodes, participants will mobilize resources (organizational, fundraising, and in-kind) for contributing to successful achievement of the DRH Mission.
4. DRH development activities contribute to the implementation of the Hyogo Framework for Action 2005-2015 adopted in the UN-World Conference on Disaster Reduction, January 2005
5. We will meet in 2007 to continue further development of DRH

The presentation will include rationale, activities and action plans of the project. It is intended to facilitate discussion in the session by introducing an example of actual actions.



ABSTRACT

Sentinel-Asia Project
for establishing the Disaster Management Support System in the Asia-Pacific Region

Kazuya Kaku
JAXA Satellite Applications Center

The 'Asia-Pacific Space Agency Forum – APRSAF' was established in 1993, in response to the declaration adopted by the Asia-Pacific International Space Year Conference (APIC) in 1992, to enhance the development of each country's space program and to exchange views toward future cooperation in space activities in the Asia-Pacific region. APRSAF was originally designed to provide opportunities for regional space agencies and associated governmental bodies to exchange technical views, opinions and information on national space programs and space resources.

APRSAF is now moving to a more proactive regional caucus, developing a range of specific projects that show clear regional benefit, and pragmatically implementing these on a 'best-efforts' basis by member countries.

One of these, "Disaster Management Support System in Asia-Pacific Region (DMSS) " for

- Construction life-first society by IT & Space technology
- Improvement speed and accuracy for disaster preparedness and early warning
- Minimizing victims and social economic losses

was discussed and a stepwise approach for implementation was proposed by JAXA, where:

- STEP1: Establishment of Sentinel Asia (SA) (2006 - 2007)
- STEP2: Combines Earth Observation and Satellite Communication Systems (2008 - 2009)
- STEP3: Establishment of a comprehensive DMSS (2010-)

Up to ten countries in the region and their respective space agencies now operate satellite-data reception facilities, some of which also have their own earth observing spacecraft, or are planning to launch new systems in the near future. These agencies have traditionally provided satellite imagery after disasters to their own relevant country agencies, and in some cases posted it on their own websites.

"Sentinel Asia", the first step of DMSS, was initiated in Feb. of 2006 aiming to expand such efforts and make such data available to all countries and many more peoples in the region by delivering more quickly via the internet as easy-to-interpret disaster-related information. This information could be delivered through the 'world-wide-web', even outside national borders, in 'real-time' or 'near real-time', and used as early-warning, or as post-disaster information by various countries and relevant end-user agencies.