

**SUMMARY AND CONCLUSIONS OF MID-TERM REVIEW WORKSHOP:
ASEAN+3 INTERNATIONAL CONFERENCE ON DISASTER MANAGEMENT,
TOKYO, JAPAN**

Date: 31 August 2010

Opening Session

Mr. Hiroki Owaki (Chair), the Deputy Director-General of International Cooperation Bureau from Ministry of Foreign Affairs of Japan, introduced three main themes of the Forum: HFA-MTR, CCA and DRR, and DRR in urban areas and communities. He expressed that he expects useful discussions on the three themes throughout the course of the Forum.

Mr. Hisashi Tokunaga, the Parliamentary Vice Minister for Foreign Affairs of Japan, expressed his appreciation towards the work that went into collaborating to co-organize this Forum as a tool for long-term cooperation within the East Asia Community. He expressed the importance of disaster risk reduction in human security issues context. Preventive measures, preparedness, and capacity development should all be regarded with utmost importance. At the ASEAN+3 Summit, Japan made its commitment to work together with its ASEAN counterparts for urban and community disaster management. This Forum is part of such efforts, and effective measures on disaster management are expected to be discussed. Finally, he expressed Japan's desire to enhance disaster management cooperation in East Asia to mitigate disaster damages based on discussions that will be held during the Forum.

Mr. Kenzo Oshima, the Senior Vice-President of Japan International Cooperation Agency (JICA), also made a speech in the opening session. He spoke of JICA activities in cooperating and working bilaterally and regionally with the ASEAN countries. He expressed the need for strengthened shared practices particularly as 90% of the natural hazards occurring are climate-related. He also suggested that the HFA-MTR will help identify the tasks for member countries to focus for the next five years of HFA 2005-2015 and that the Forum will make contributions to these efforts. He then spoke about the inadequate budget allocation and political attention in many of Asian countries that JICA has been supporting in disaster management using knowledge and experiences Japan has accumulated over the years. He stated that the forum would contribute to the ASEAN Framework by enhancing public attention and political leadership in disaster management and prevention.

Session 1

"Reviewing the progresses and challenges in the first half decade of the HFA in Asia 2005-2010"

After Mr. Owaki's introduction of the HFA adopted at the WCDR and brief explanation of Session 1, Rossano made an introductory presentation on the overall process of HFA- MTR, including the modality of the review, timeline, and its focus and shared initial findings from the literature review. She explained that the HFA-MTR process can help accelerate HFA implementation over the next five years and will be a useful base for discussions at the 3rd session of the Global Platform regarding the next five years. She then shared initial findings from interviews and on-line discussions that was subscribed by over 300 participants, and left the issues raised by other regional workshops for the later wrap-up session.

A speech was given by Presidency of ACDM from the Philippines, Lt. Col. Perfectom Paloma Panaredondo, Military Assistant for Operational Readiness, Office of Civil Defense. He emphasized that disaster management is a shared responsibility, and that there will be a new law to involve entities more cross-sectorally in the Philippines. In the Philippines, Agreement on Disaster Management and Emergency Response was put into effect in 2009, Article 2 of which specifies the aim of the agreement to reduce damage in social, human, and economic losses. In May 2010, 2010-2015 work programme was adopted and launched in Manila. He emphasized that ADMER is ASEAN's legal commitment to HFA, which is the first one of its kind in the world. He stressed that ASEAN+3 will continue to expand collaboration under HFA, AMER in particular to ensure coherence and co-implementation among the participating nations.

- China -

Ms. Guan Yan, the Deputy Director of National Disaster Reduction Center of China, gave the presentation. He presented actions taken in accord with the 5 priorities for action outlined in HFA.

Priorities for Action 2005 – 2015:

1. Promulgated more than 30 laws and regulations concerning disaster prevention and reduction. Institutional arrangements made to strengthen the institutional setup of a national system and mechanism for comprehensive disaster reduction management. Central leadership dedicated to disaster reduction and disaster administrations at local levels have been created. Also, NGO, volunteers, and military personnel has also been involved in disaster reduction efforts. Detailed operation mechanism has been set up in various areas including response, information, relief material reserve, early warning, rescue, and public mobilization.
2. A three-dimensional monitoring system including land monitoring, ocean and ocean-bed observation, and space-air-ground observation has been set up.
3. Education and awareness focused on involving communities.
4. Disaster risks related to changing social, economic, environmental conditions as well as the impact of hazards are addressed in sector development plans and programs.
5. Integrated disaster reduction into the national overall planning of economic and social development. This area has also been addressed through activities that were identified in the other four key actions mentioned above.

- Republic of Korea -

Mr. Kang Byung Hwa, the Director-General of the National Emergency Management Agency, gave the presentation. He first identified the types of natural disasters prevalent in ROK – torrential rain, storms, typhoons, and heavy snow. The annual average property loss and death toll from natural disasters are \$1.1 billion and 129 deaths, respectively. In response to these disasters, ROK spends about \$2 billion for rehabilitation per year. Then the Director-General gave an overview of the organization of National Emergency Management Agency.

Following the descriptions of the country's situation as well as the agency, implementation of the 5 priorities for action in HFA for ROK were outlined.

1. Institutional and operational systems were established including enforcement of existing laws and setting up disaster management organization in both central and local governments. In 2006, Disaster Mitigation and Countermeasures Task Force were established and invited experts to analyze disaster causes and identify challenges. In total, 63 laws and regulations related to disaster management have been either amended or established.

2. In order to improve risk information and early warning, ROK used private telecommunication companies. They are able to disseminate real-time disaster information to more than 30 million citizens by Cell Broadcasting Service.
3. National Disaster Management Institute was established as an educational institution for citizens and officials for both in-class and online learning. School curricula also include disaster risk reduction (DRR) and recovery concepts/practices.
4. Disaster Mitigation Pre-Consideration Regulation has been enforced to predict and analyze disaster potential due to changed land use and development. Natural disaster comprehensive plans are being updated to reflect climate change.
5. Legal backgrounds for disaster insurance programs and regulations were put in place, drills are being performed every year with support from civil society, government, and military, and assessment system for disaster management organization and tasks after major disasters in Korea have been implemented.

Korea seeks to move from current system of central government-driven, response-oriented system to a more community-driven, mitigation-oriented system. In doing so, and also in seeking successful outcome for HFA, it proposes increased funding from various sources, emphasize integration of climate change in DRR, and calls for ISDR to support countries that are behind schedule and provide practical implementation strategies.

- ASEAN Secretariat -

Ms. Marqueza L. Reyes, the Technical Advisor for Disaster Risk Reduction, ASEAN-UNISDR Technical Cooperation on the implementation of HFA in ASEAN from the ASEAN Secretariat, gave the presentation. ASEAN had scored Cambodia, Indonesia, Laos, Philippines, Singapore, and Vietnam on few essentials in each of the 5 priorities for action, and gave a graph comparing the progress in each of the countries.

1. In Priority Area 1, national policy/legal frameworks for DRR, availability of dedicated and adequate resources for DRR, community participation and decentralization delegation of authority and resources to local levels, and functioning national multi-sectoral platform were scored. Singapore and Vietnam seem to be scoring higher for most while Cambodia, Philippines, Laos, and Indonesia seem to be lagging behind.
2. In Priority Area 2, availability of national and local risk assessments, systems in place to monitor, archive, and disseminate data on key hazards and vulnerabilities, early warning systems in place for all major hazards with outreach to communities, and risk assessments take into account regional risks with a view for regional cooperation were scored. Singapore and Indonesia had average better scores, while Cambodia, Laos, Philippines scored poorer. Vietnam scored well for early warning systems, however scored poorly for risk assessments taking regional risks into account.
3. For Priority Area 3, availability and accessibility of relevant disaster information at all levels to all stakeholders, inclusion of DRR in school curricula, education materials, and trainings, development of research methods and tools for multi-risk assessments and CBA, and existence of country-wide public awareness strategy towards a culture of disaster resilience were scored. Singapore and Vietnam once again scored higher than Cambodia, Indonesia, Laos, and Philippines.
4. For Priority Area 4, integration of DRR into environment related policies and plans, land use, natural resource management, and CCA, implementation of social development policies and plans to reduce vulnerability, existence of economic and productive sectoral policies and plans that reduce vulnerability of economic activities, incorporation of DRR and building codes in planning and management of human settlements, integration of DRR measures in post

disaster recovery and rehabilitation processes, and procedures being in place to assess disaster risk impacts of major development projects and infrastructure were scored. Singapore led the pack in this area as well, with Vietnam following.

5. For Priority Area 5, strong policy, technical and institutional capacities and mechanisms for DRM being in place, disaster preparedness and contingency plans being in place at all levels as well as regular training drills being held to test disaster response programs, financial reserves and contingency mechanisms being in place to support response and recovery, and procedures being in place to exchange information during disasters and to undertake post-event reviews were scored. While Singapore still scored highest, Vietnam scored high on disaster preparedness and contingency plans in place at all levels and regular training drills being held to test disaster response programs. Indonesia scored well on having financial reserves and contingency mechanisms to support response and recovery.

Some challenges were identified. At national and sub-national levels: developing institutional and technical capacities, increasing vertical and horizontal coordination, mainstreaming development planning, instituting financial risk sharing mechanisms to protect the poor, and integrating DRR in response and recovery. At regional levels: aligning with national DRR policies, generating and sharing disaster risk information and use it to establish regional mechanisms and protocols, and strengthening regional preparedness for effective and timely response.

'Identifying new challenges in the next half decade of the HFA in Asia'.

- Cambodia -

Mr. Peou Samy, the Secretary General of National Committee for Disaster Management, gave the presentation. First, a background of NCDM was given. Its roles include developing the legal framework for disaster management, capacity development, coordination, cooperation and information sharing. Cambodia's hazard profile was also presented. Major disasters include flooding and droughts, both having major impacts on social and economic sectors. Flooding also affects the public infrastructure. Limited capacity at all levels exasperates the damages. Cambodia has in place a Disaster Risk Reduction Strategy (2008-2013) in order to combat severe disruption caused to the development process by disasters. Some of the challenges include rural migration, rapid population increase, changes in land use, unplanned development, and climate change.

Cambodia is still in-progress for implementing actions in the 5 priority areas of HFA. It recognizes that for all 5 areas, the country is far from meeting the planned objectives. Some of the activities that are being implemented or will be implemented were outlined:

1. Establish a legal framework as basis for disaster-related activities and also to define roles and responsibilities of key actors, strengthening of existing coordination mechanism at NCDM, develop an operational platform for DRR within NCDM, and strengthen capacity of staff.
2. Improve information system, improve early warning system that can be integrated with the traditional way of community, holding workshops and forums to share experiences to identify best practices, and to establish and operate National Emergency Coordination Center to network with regional, national, and international actors.
3. Make disaster management information accessible at all levels, mainstream DRR in school curricula and in health sector, and conduct nationwide public awareness on building a culture of resilience and outreach to both urban and rural communities.
4. Develop preparedness and response plans for all hazards, develop scenarios and conduct simulation exercises, create SOP for emergency response, and build partnerships with stakeholders to focus on capacity building.

5. Build and strengthen capacity of communities to ensure a culture of self-reliance, promote DRR measures through structural and non-structural approaches, integrate DRR and climate change adaptation into national development plan of key sectors, and develop guidelines for integration of DRR into local development plans.

- Lao People's Democratic Republic -

Mr. Sisomvang Vilayphong, the Deputy Director of National Disaster Management Office, gave the presentation. First, an overview of the country was given. Major disaster risks are floods and droughts. The National Disaster Management Framework was described as well.

The National Strategic Plan on DRM in Lao PDR has a few key aims: safeguarding sustainable development and reducing damage, shift strategy from relief to preparedness, building capacity among communities, and to promote protection of natural resources. Some of the implementing approaches include the following: building a Disaster Management Institution in all levels of government, building and improving codes and regulations on disaster management, education and awareness activities for the community, simulation exercises, monitoring enforcement, and increased cooperation.

There are some programs and activities already in progress. Disaster management concept is being worked into other sectors' works and projects, networks with country's stakeholders is being strengthened, and active participation and cooperation with regional and international organizations has increased. Capacity training, public awareness campaigns, resilience building with international agencies, and integrating DRR into sector programs are some of the programs that have already taken place.

Some challenges were identified. There is an inadequate resource of both human and financial support to implement the disaster reduction strategy, confusion from numerous instruments that are tied to various frameworks, lack of investments to support structural and non-structural measures, and disconnect between policies at local, national, and international levels. Lao PDR, therefore, needs to develop a comprehensive national Disaster Management Plan, strengthen disaster management institutions, integrate DRR into urban and rural development plans, and work more closely in cooperation with its international partners.

- Australia -

Dr. Matt Hayne, the Australian Co-Director of Australia-Indonesia Facility for Disaster Reduction, gave a speech as an observer. He began by speaking of Australia's role in supporting HFA implementation in Asia through Australia Aid program. He recognized the usefulness of HFA as an advocacy instrument as well as the need for further implementation. He also emphasized the need for a coherent and coordinated disaster risk reduction and climate change adaptation efforts, and that disaster risk reduction good practices must be an integrated part of climate change adaptation as well as other key issues such as gender and environment. The need for integration of disaster risk reduction into development plans to be scaled up was also mentioned. He presented the examples from Indonesia and Philippines where Australia supported disaster risk reduction and climate change adaptation programs.

- India -

Dr. Matt Hayne, the Joint Secretary to the Government of India of Ministry of Home Affairs, gave the presentation. First, key achievements from the past five years were presented. Legislative, institutional,

financial, and coordination mechanisms were put in place for DRR with a statutory back up, a constitution of funds dedicated to disaster response was established, National Integrated Emergency Operation Centre established, early warning system was strengthened, National Action Plan for Climate Change was developed, mitigation projects are being implemented, and building back better has become the underlining principle of all recovery and reconstruction programs.

There were challenges encountered by the authorities and partner agencies. Resource mobilization, weak local government capacity and need for taking sustainable development and disaster reduction into account, ensuring continued commitment from stakeholders, need for strengthening data sharing protocols, need for significant investments in research, development projects adding to existing disaster risks, reaching out to vulnerable communities in timely manner, and lack of non-structural adaptation preparedness.

Disaster management education was introduced in various schools in order to build human resource capacity. For those who do not attend formal education, they are reached through print, electronic, folk media, and other methods. Regional cooperation was also emphasized to address gaps to mainstream the disaster reduction into development, address issues of uncontrolled urbanization and population growth, and to reiterate the need for vigorous implementation of poverty alleviation programs.

Roundtable discussions

The roundtable discussions facilitated by Rossano and began by her reflection on presentations given during Session 1. One point raised by Rossano was that there is disconnect between international, regional, national, and sub-national levels in disaster management. Another observation made by Rossano is the need for integration of disaster risk reduction particularly in urban areas. And lastly, UNISDR's work with donor countries in regions that have bilateral and development support should further integrate disaster risk reduction issues. As the online discussions organized for HFA MTR also focused on this topic, Rossano shared some of the issues that were raised. For example, whether or not future instrument as a successor of HFA should be a binding document was discussed. Currently, HFA is being treated as a guiding instrument, therefore non-binding/legal agreement. Also, UNISDR is working to look for direction beyond 2015 post-HFA, reflecting on the discussions of HFA MTR.

Following comments were made by participants:

Representative from Malaysia expressed concerns in making HFA binding because depending on the area, the types and frequencies of disasters vary greatly; therefore, making the document binding may not be appropriate in some areas.

Representative from Indonesia mentioned a gap between Indonesia's understandings and what was presented in ASEAN Secretariat's presentation. In response, ASEAN Secretariat's Ms. Marqueza Reyes made clarifications that her presentation is based on Indonesia National Progress Report submitted and made available on PreventionWeb.

Rossano then remarked that HFA had thus far acted as a broader policy guidance tool, and to make the document binding will take time, which would be suited for discussions towards post HFA (2015).

Representative from Malaysia, in response, commented that while HFA provides a general outline, it may lack consideration on challenges and constraints faced by governments for actual implementation. The representative also stated that other competing priorities and resource allocation for disaster risk

reduction remains a major obstacle in furthering implementation, and that international players and platforms should work closely together in a coordinated matter to overcome these challenges.

Representative from Philippines asked a question regarding how UN agencies harmonize and coordinate among each other on DRR/HFA implementation.

Rossano responded that SRSG had approached heads of all the UN agencies for MTR process and requested them to review disaster risk reduction and HFA implementation within each of their agencies.

Velasquez from UNISDR commended ASEAN by commenting that ASEAN is the first region that adopted a legally binding instrument (ASEAN Agreement on Disaster Management and Emergency Response AADMER) along with HFA. He congratulates ASEAN's ambitious commitment and hopes that other regions will learn from ASEAN's AADMER processes. On the other hand, he commented that a binding instrument on a global scale may not be necessary, and a regional one, such as AADMER, may be more appropriate. Responding to an inquiry from Philippines regarding coordination and harmonization among UN agencies, he explained that Asia Regional Platform on DRR under ISDR system has two important programs: Ministerial meetings and Asian Partnership for Disaster Reduction among agencies which support countries on disaster risk reduction who are guided by the outcomes of the Ministerial Conference. The long-term objective for the Regional Platform is a place where all agencies can contribute. He then mentioned that UNISDR is in process of preparation mapping of a number of DRR initiatives in the region what has been presented at prep-meetings towards 4AMCDR.

Representative from Indonesian National Platform commented on the usefulness of safe schools and hospital initiative. Another representative from Indonesia commented that the current challenges exist in securing human resources with regards to quality, quantity, and compensation. A question was then raised as to how to make improvements in such issues.

Representative from ASEAN Secretariat commented that each country has their own regulations and laws in disaster risk reduction, and the major issue is how to enforce those existing regulations and laws.

Rossano suggested that an international level instrument could request its signatories to necessitate a national legislation on DRR in their respective countries.

Session 2

"Adaptation to climate change and disaster management"

- JICA Keynote speech -

Mr. Mikio Ishiwatari, a Senior Advisor of JICA, gave the keynote speech. He stated that climate change is making climate related hazards more frequent and severe; however, there is a lack of established methodology to address climate change adaptation. He began by proposing a method for Climate Change Adaptation (CCA) as flood risks increase around the world making developing countries particularly vulnerable and emphasized the need for acting now preventively. He used the example of Japan to show that the average daily rainfall as well as the frequency of hourly rainfall over 100mm has increased over the years and showed projections of 10 to 30% further increase in the next 100 years which causes decline in flood safety levels, thus making a point that current flood control philosophies would not be adequate for future scenarios.

JICA, therefore, proposes a method to create sustainable society that is resilient to climate change. Some key points include responding continuously to changing climate, plan and implement infrastructure projects through predicting future impacts, and change systems of water management according to developing technology for prediction and adaptation to climate change. Conventional methods of flood control will not work. Instead, multi-layered measures must be taken that include strategic areas that are protected by structures, urban planning and land use regulation for risk areas, and community based disaster management. In order to implement, JICA proposes some adaptation measures. There are few cases that have already adopted this method. Tagoloan River Basin and Cavite in the Philippines are such examples.

Another problem is increasing population that exacerbates the effects of disasters. In Japan, the population is decreasing; however, population is rapidly increasing in developing countries. With such population increase, urbanization is taking place at an unprecedented pace. These factors compound the effects of climate change through increased number of buildings and development in risk areas. Some CCA measures include river improvement works, land use control, and creating retarding basins in urban areas. These should be included in the urban development planning and should be designated ahead of time. Another measure is to create regulation ponds in neighborhoods on-site. Those are some of the structural measures. There are soft measures that can be taken as well. Installing simple river water level indicator for flood warning and evacuation, creating flood hazard maps, and community based disaster management are some of the examples.

From JICA's perspective, Japan has an obligation in flood control based on its experiences as well as advanced technology to contribute to furthering future prediction and continue to provide advice on CCA. JICA also calls for ASEAN+3 countries to share indigenous knowledge and practices in flood control.

- Indonesia -

Mr. Krishna Suryanto pribadi, the Chairman of Indonesia National University Forum for DRR, gave the presentation. He began by explaining the vulnerabilities of Indonesia to climate change. A nation of islands with large portion of the population living in the coastal areas as well as urban areas, water is a dire concern. Amount of rainfall has increased over the years, and the annual trend it expected to continue to shift so that rainy season will get more rain and the dry season will become even drier. Out of all the disasters that have occurred in Indonesia, climate related disasters account for more than half. Since 2002, that percentage has increased to 70%.

In order to adapt to climate change, a strategy must be devised. Some of the immediate concerns include increasing awareness and disseminating information on climate change, increase research in the area of climate change and its impact, and integrating and mainstreaming CCA to infrastructure planning, conflict management, groundwater management, water institution management, including climate change issues in school curricula, and developing a monitoring system of higher accuracy. In the medium term, developing infrastructure and spatial planning would be important. There are some measures that have already been implemented. Regional and urban spatial planning and land use documents in accordance with the law has been reviewed, warning systems have been developed, and community based early warning and preparedness system has been developed.

While Indonesia's approach on CCA is in line with JICA's initiatives, there are some challenges that Indonesia specifically faces. There is a lack of data for climate change prediction. There is also speculated difficulty in promoting institutional arrangement for DRR-CCA.

-Philippines -

Dr. Benito M. Pacheco, Professor and the Director of the Institute of Civil Engineering from the University of the Philippines, gave the presentation. In the presentation, he gave some definitions of key terms in DRR. He defined some hazards, exposure to such hazards and the vulnerabilities in those exposures, and comparison of risk based on those three elements combined. He then proposed adaptation as a continuous mitigation to reduce risk.

He then proposed a R-I-S-K outline of disaster risk management cycle. R is for “Recognize”. This is to recognize the risks. I is for “Impute and estimate”. This is to impute and estimate the risk. S is for “Survey over time”. This is to look at the risks over time and observe. And finally, K is for “Keep within tolerance range”. This is to encourage avoiding, preventing, reducing, and deferring risks, as well as sharing information, retaining knowledge, and enhancing the methods. MAPR outline was also discussed. Mitigate and/or adapt, prepare, respond, and recover. The activities outlined in both of the models were compared in a matrix.

- Republic of Korea -

Mr. Seung-Joon Back, Task Force on 4AMCDR from National Emergency Management Agency gave the presentation on “Summary Road Map and Action Plan for Disaster Risk Reduction through Climate Change Adaptation in Asia and Pacific (2010-2015)”. The objective is to establish climate resilient disaster risk management systems that contribute to sustainable development at regional, national, sub-national and community levels by 2015. The objectives have been divided into 3 themes: raising awareness and building capacities for DRR and CCA, developing and sharing information technology sound practices and lessons learned in climate and disaster risk management, and promoting integration of DRR/CCA into development for “Green Growth”.

Short term and long term goals were set forth as the road map for each of these themes. For raising awareness, promoting research on hazards, vulnerabilities, and risks in at least 5 countries, promoting and supporting training for government stakeholders, implementing awareness raising programs in 20 countries, and promoting understanding of livelihoods supported by ecosystem services for CCA and DRR were described as short term initiatives. Promoting risk transfer and financing systems as well as increased investments on DRR and CCA in at least 10 countries were laid out as the long term goal. For developing and sharing information, strengthening early warning systems in at least 5 countries and promoting communication on lessons learned and sound practices were described as short term goals, while improving understanding on climate induced risk and promoting linkages between DRR and CCA at national levels were described as long-term goals. For promoting integration of DRR/CCA into development for green growth, promoting adoption of standard hazard profiles for 20 countries, integration of DRR and CCA in land use planning in at least 5 countries, and awareness of DRR.CCA and implementing joint pilot DRR-CCA projects in selected countries promoted by partners in at least 2 countries were described as the short term goals, and promoting integration of DRR and CCA into development process in at least 5 countries and decoupling increase of disaster exposure from economic growth in at least 10 countries were described as long-term goals.

Having such road maps considered, some action plans were introduced. For raising awareness, initiating education and training programs for capacity building and exploring existing funds to establish Risk and Adaptation Fund for 10 most environmentally fragile countries were presented. For developing and sharing information technology, establishing a web-based platform and conducting regional and sub-regional high meetings to share experiences were presented. For promoting integration, initiating development of guidelines to integrate CCA and DRR for green growth development was presented.

Roundtable discussions

The roundtable discussion was facilitated by Jerry Velasquez from UNISDR. He pointed out some major elements from presentations by mentioning 1) a new phase in disaster risk reduction was introduced by JICA – to adapt to climate change, 2) Indonesia is making improvements, Philippines is facing challenges on vulnerabilities and hazards, 3) South Korea seems to be shifting from reducing vulnerabilities to reducing exposures. In order to reduce exposure, expertise from social scientists will be needed.

Linking to HFA MTR questions, Jerry introduced two Guiding Questions for this discussion as follows,

- 1) What kind of policy and programmatic linkages have proven to be useful to the integration of disaster risk reduction and climate change adaptation?
- 2) What institutional arrangements at the national level are most conducive in strengthening integration between disaster risk reduction and climate change adaptation?

Australia asked if all the countries have data on their infrastructure according to a national established risk assessment, and pointed out that risk assessment tools cannot be one-size fits all, because it would depend on each country's situations and needs.

Velasquez shared that Vietnam will be launching the National Platform including CCA and DRR on 13 October and Maldives will have national action plan on CCA and DRR as well. Regional and international support will be needed to help move the issues, and a guideline for risk assessment efforts and local efforts for CCA and DRR would be helpful.

Such tools are already available for community level risk assessment at local levels.

Upon question from Rossano to Representative from Vietnam on “How did the national platform come about? What were the difficulties, and what could be expected from implementing the national platform?”, the expert from Vietnam responded. Ministry of Environment and Ministry of Agriculture and Rural Development worked together through a series of workshops with civil society and with support from UNISDR. Roadmap was developed to launch the national platform, which became the guide for the overall process. High level support from the Deputy Prime Minister also helped the process as well.

Representative from Myanmar commented that the national plan had 21 projects including projects related to CCA and DRR, and attempts were made to link those projects.

Velasquez asked how a country could move forward using existing national platforms on CCA and DRR issues, and pointed out that some important stakeholders are not part of the climate change commission, which needs to be linked with DRR action plans.

Representative from the Philippines commented that the most challenges will be faced at the community level, and the formalities of the platforms have many areas of improvement to take into consideration of these challenges at community levels.

Velasquez from UNISDR suggested that a national climate change commission can have a kind of MOU on DRR and CCA, which clarifies what would be done by each of the actors. The key issue would be translating it to day to day practices by each group.

Representative from Singapore stated that while Singapore had not been prone to many disasters, it has been experiencing flash floods. To cope with the current needs, an integrated risk management

framework was adopted. Then the representative inquired what may be the necessary support from other ministries to develop Standard Operating Procedure to mitigate risks together.

Velasquez commented that in Vietnam, a review their action plan among multi-ministries is being conducted annually to make it more adaptable. Velasquez gave an example of a National Action Plan which prioritizes early warning activities, execution of which requires involvement of various ministries.

Representative from Laos commented on the work that is being done in the country. Office handling issues related to climate change is under the Prime Minister's Office (since 2008) and also works with the committee consisting of ministries including the Ministry of Agriculture. Communication among these stakeholders is pertinent in projects.

Representative from Myanmar talked about the situation in Myanmar. Climate change is under the responsibilities of Ministry of Forestry, which has national commissions. They are also a member of national preparedness committee. He mentioned that reforestation and DRR should be linked and part of climate change adaptation discussion (a proper management of trees on mountain areas will be helpful to prevent landslides etc).

Velasquez commented that the examples introduced by countries given highlights the fact that integration of existing mechanisms is useful. He also emphasized the importance of systematic and long-term dialogue among multi-stakeholders.

Representative of Indonesia commented on the importance of links between CCA, water and agriculture. This could be addressed through enhancing early warning systems and greater involvement from the private sector. The representative also pressed for the need for more awareness raising.

Representative from Malaysia suggested that in order to integrate DRR into CCA, DRR groups could sit in on CCA Platforms and CCA groups can sit in on DRR Platforms to exchange ideas and share information. This will address the issue of implementing solid work plans and actions.

Velasquez commented that a common denominator can drive the process, especially when the implementation of DRR and CCA activities sometimes overlap.

Representative from Vietnam spoke of what occurred in Vietnam. Natural disaster risk reduction mitigation and climate change adaptation into the strategy in 2007. In 2008, the government adopted programs for CCA. All the ministries were required to come up with action plans based on these strategies.

Velasquez commented that JICA's ppt has described conventional measures to cope with floods are dead now and "living with flood" is a new way of thinking considering Vietnam case. It was discussed that rather than integration, creating links between CCA and DRR would be key, but the process must be owned by those implementing; therefore, the two communities interfacing with one another would be extremely important. One important goal is to make use of both CCA and DRR efforts to create progressive development plans, especially since the methodology and tools are similar in both areas.

By concluding the session 2, Velasquez pointed out the below elements:

- 1) There are a lot of opportunities to develop new policies building on existing mechanism in stead of developing new institutions.
- 2) Vietnam's leadership and vision is a good example which shows clear steps forward.
- 3) Participating countries highlighted communication among multi-ministries and stakeholders to be a key to success. What are some ways that good communication can be implemented?
 - Indonesia suggested increasing communication rather than changing the institutional

arrangements.

- Malaysia suggested that since there are overlaps that probably exist in the current communication channels, increasing efficiency among private sector, NGOs, and research institutions might be useful.
- 4) Bottom up approach is the key by considering the needs from the bottom/community levels.
 - 5) Goal is not to integrate CCA and DRR. The goal should be maximize the synergy and work in effective manner at both CCA and DRR sides

Rossano wrapped up the session 1 and 2 by sharing issues raised at other regional workshops (there were 8 substantive workshops including this Forum), however other workshops all only had working group discussions.

Main points raised:

- HFA has been a useful policy base
- There is a strong need for coordinating links between the National Platforms
- Need for vertical synergy at national and local levels within countries
- Lack of research data at the national levels
- Need for coordination among UN agencies at the country level as well as the global level

Special Session on Information and Communication Technology for Disaster Management

- Japan -

Mr. Yoishi Iida, Ministry of Internal Affairs and Communications of Japan made a presentation on Information and Communication Technology for Disaster Management as tool for resolving social and economic issues (ppt is attached).

He briefly explained the roles of information technology related to tasks mentioned in the HFA. He highlighted the need of Information and communication technology set up at national levels in order to reach out their citizens. With this background, he explained features of ICT for transmission and sharing information from devastated area and expressed willingness from his ministry to work together to improve ICT for DM in various countries. Mr. Iida's presentation was followed by Mr. Nitta, Director, Public Safety Radio Communications Office, Radio Department, Telecommunication Bureau, Ministry of Internal Affairs and Communications (ppt attached). His presentation is about future direction towards the promotion of ICT utilization for disaster management by illustrating some examples of ICT utilization for disaster management in Japan as well as some efforts being made by international organization such as through APEC process.

- Asian Disaster Reduction Center -

Mr. Atsushi Koresawa, Executive Director of Asian Disaster Reduction Center, gave the presentation. First, he recognized the importance of effective information flow and communication in all phases of disaster management. For instance, in Kobe Earthquake, because the infrastructure was damaged so severely and the government did not receive appropriate information, provision of aid was delayed. In the Western Tottori Earthquake, a revision was made in the local disaster management plan with phone numbers of relevant persons and organizations which helped immensely. In more recent examples, TV broadcasting, telephone, and wireless access were used to acquire information from ground. While such sources can provide immediate information, governments should have their own reliable source of information while still cooperating with mass media, which can also be used for early warning and awareness raising.

Another tool is space technologies. Space agencies collect information and provide to disaster management agencies to be utilized efficiently. Use of such technologies is expanding. ADRC has become the Regional Support Office in Asia of the UN-SPIDER Program.

To move forward, information and communication tools (ICT) must be utilized more effectively. While factual information is necessary, value-added information (i.e. analyzed data, interpretations, GIS) are also required. Also, it would help for further cooperation and capacity development and narrowing information gaps. For example, ADRC has hosted capacity building courses as well as a web-based database of disaster information.

- Malaysia -

Mr. Che Moin Bin Umar, the Deputy Secretary of National Security Council, Prime Minister's Department gave the presentation. He described that while Malaysia generally does not suffer from earthquakes, volcanic eruptions and typhoons, it suffers from floods, man-made disasters, landslides, thunderstorms, and tsunamis.

In Malaysia, National Security Council (NSC) is the principal policy making and coordinating body. It coordinates and plans all disaster related activities. ICT approach has been used in DRR efforts to map hazards and real-time early warning system as well as during the response and relief period. Various types of medium are utilized, from warning sirens, SMS, telephone, fax, web, and mass media. The internet is often utilized by many government agencies to disseminate information. Department of Environment uses it to communicate Air Pollution Index, Drainage and Irrigation Department uses it to communicate near real-time River Level, and so on.

Another tool used is the integrated Geospatial Database and Planning System (IGDP). It was established to overcome constraints by implementing agencies for planning and monitoring of various projects. It utilized GIS, and integrates databases with standardized data for full analysis and fast dissemination. Data collected range from agriculture, forestry, geology, coastal cones, and socio-economic indicators.

Also, National Disaster Data and Information Management System (NADDI) have been implemented. It is coordinated by Malaysia Center for Remote Sensing (MACRES) and NSC. Its objective is to establish a central system for collecting, storing, processing, analyzing, and disseminating value-added data and information. NADDI emphasizes the use of GIC and GPS in this system which helps to provide up-to-date and reliable data in early warning, detection and monitoring, and mitigation and relief. Another ICT tool is the Government Integrated Radio Network. It provides secure digital trunk radio system between government agencies. Shared infrastructure creates economies of scale, digital technology enables sophisticated and integrated audio and data services, and increases in security. Fixed Line Alert System, also known as disaster alert system, will enable the NSC and Malaysian Meteorology Department to disseminate early warning messages. It is currently used in selected communities subscribing to fixed line telephone, and it is now being tested for tsunami warning dissemination. Some advantages include its concise dissemination, fast, 24 hour operation. The system can monitor the dissemination by generating statistics report of successful, unanswered, and failed calls. .

Lastly, Malaysian National Tsunami Early Warning System (MNTEWS), comprised of a few networks including National Seismic Network, Deep Ocean Buoy Network, Tidal Gauge Network, and use of coastal cameras have been installed. In concluding remarks, the vital importance of ICT applications was emphasized; however, some challenges were also recognize. Rapid changes in technology making integration of all stakeholders difficult, increase in cost, questions regarding versatility, and

ensuring security. Therefore, a major challenge for the government is to optimize the usage of technology while reducing the cost of purchase, implementation, and maintenance.

- ASEAN Secretariat -

Mr. Dedy Wiredja, Senior Officer of Disaster Management Division from ASEAN Secretariat, gave the presentation. Agreement of Disaster Management and Emergency Response, adopted in March 2010, builds on previous actions and take on emerging issues such as climate change. It is divided into 2 phases (2010-2012 and 2013-2015).

There are 4 strategic components: risk assessment, early warning and monitoring, preparedness and response, prevention and mitigation, and recovery. There are several building blocks and drivers that were identified: institutionalization of AADMER, partnerships, resource mobilization, outreach and mainstreaming, training, and ICT. This all leads to implementation, monitoring, evaluation of work program. The first phase objectives include establishing and operationalizing of ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA Centre), strengthening ASEAN's disaster preparedness & responsiveness to disasters, establishing ADMER Fund by 2010, regional risk assessment, setting up regional protocols for early warning and monitoring, and developing regional strategies. These objectives are designed to increase ASEAN's regional capacity. There are also guiding principles specifically for ICT. It should provide a clear framework for collaboration and coordinated decision-making among ASEAN members, and empowerment of communities through ICT would benefit to the evolution of DRR services. There are some flagship projects that have been implemented. Satellite-based disaster monitoring system and GIS-based disaster information-sharing platform for early warning are some of those examples.

Wrap-Up Session of Day 1

Prof. Okazaki from GRIPS reported the summary of the Day 1 discussions by highlighting main points raised in a number of presentations; including 1) JICA Mr. Oshima highlighted climate change issues in Asia and the need for cooperation within ASEAN region, 2) HFA is a useful guide, there are some gaps, 3) Philippines reported their institutional reform to include multi-stakeholders, 4) China reported on their regulations and institutional arrangements on DRR, 5) Korea reported on improvements in information dissemination and early warning systems, as well as the shift from single to multiple organizations.

Session 3-1 “Disaster Management in urban cities”

Mr. Ishikane Kimihiro, Chair, Deputy Director General, Asian Oceanian Affairs Bureau opened Day 2 and invited Yuki Matsuoka from UNISDR to present the ISDR Campaign 2010-2011 on Making Cities Resilient (ppt is attached)

UNISDR –

Yuki Matsuoka from UNISDR presented on a campaign undertaken by UNISDR called “Making Cities Resilient – My City is Getting Ready”. The focus of the campaign is the local governments because it is the closest administrative positions to communities, delivers essential services, plans and controls urban development and public works, are at the core of decentralization. Through the campaign, local governments will increase knowledge and awareness of urban disaster risk and roles of local governments, raise political profile, and support HFA implementation. The campaign also focuses on

leadership of local governments to identify champions, role model cities, and other participating cities. In the campaign, mayors and city councils will be asked to make DRR a priority, to recognize the risks and to take action, build understanding and awareness, reduce risks, and to be prepared and ready to act, which are the priority action areas of HFA. A 10 point essentials guideline along with HFA has been developed by UNISDR. Another focus of the campaign is to build alliances of local governments and other stakeholders. There are also a series of related meetings in 2010 to network with international partners. UNISDR will work as a coordinating body and support the cities throughout the campaign. An interactive website, media products, workshops, guidelines, UN-Sasakawa Award, and provide visibility through publications.

UNISDR has conducted campaigns on Safe schools and safe hospitals in the previous years. The current safer cities campaign is built on the previous campaigns. Therefore, “One Million Safe Schools and Hospitals Pledging Campaign” is part of the safe cities campaign.

To be an active participant, country and city government can nominate role model cities and champions, organize activities, raise awareness, and report the progress of 10 essentials outlined in the guidelines. Several case studies have been published in Local Governments and Disaster Risk Reduction on good practices that can be used to learn from their experiences. UNISDR proposes for increased collaboration and nomination of cities from the ASEAN countries. A list of already participating cities in Asia was presented within the presentation. She mentioned that ASEAN secretariat is now in the process of endorsement of this UNISDR campaign by ASEAN.

Malaysia - (speech)

Representative from Malaysia shared situations in Malaysia regarding urban risk, particularly in Kuala Lumpur. He pointed out that the biggest challenges in making cities resilient in mega-cities are the slum areas. Malaysia therefore developed laws and regulations regarding land use planning in risk areas. He also informed that Malaysia’s public works institution was recognized as Center of Excellence at the 1st World Landslide Forum in 2008, which was organized by ISDR Thematic Platform on Landslides (IPL and ICL). He shared an example of Malaysia’s investment for tunnels to address problems regarding flash floods and shared the success story that the flash floods that have been occurring every year has not occurred since the construction of tunnels.

- Japan -

Professor Okazaki from National Graduate Institute for Policy Studies gave the presentation. He spoke about disaster management in urban areas. While technology, commitments by local authorities, and soft adaptation may be essential, they are not enough for risk management. For example, Japan has all three, but Kobe Earthquake’s damages proved that they were not sufficient. Even then, not enough people take appropriate actions or invest in disaster reduction. House owners do not sufficiently invest in their homes for retrofitting, and most people do not evacuate immediately after warnings. The most eminent challenge is, therefore, motivating people and stakeholders to take actions and invest in DRR.

Some of the issue has to do with human nature. People are risk-seekers and future uncertain loss is discounted. They need to be motivated to take action through community-based disaster management and building up an atmosphere where securing safety is encouraged. UNISDR with assistance from Japanese Government ran a program (RADIUS) to develop earthquake damage scenarios and action plans in 9 cities around the world between 1996 and 1999. UNCRD has worked with NSET Nepal to motivate and build capacity. There are also education programs for professionals. RADIUS type initiatives should be designed for urban DRR in different region to assess risk, raise awareness, and involve community. The proposal includes 2 cities focusing on flood risk management incorporating climate change adaptation and 2 cities focusing on earthquake risk management. Technical

assistance will be provided by the developed countries and neighboring countries and financial assistance will be provided as seed money.

- China -

Mr. Guan Yan, Deputy Director of National Disaster Reduction Center of China, gave the presentation. The ASEAN10+3 Seminar on Urban Disaster Emergency Management was held in May, 2010. The focus of the meeting was on fast urbanization globally, increasing urban population, increasing economic activities, more frequent natural disasters, and consequent losses in life and economic assets. The topics include how to strengthen urban disaster risk management at all levels and how to enhance urban disaster resilience.

There are some considerations: comprehensive urban risk governance, disaster information collection, early warning system, coordination, and volunteerism and regional cooperation improvement. Some of the highlights and challenges in urban disaster management at the regional level was then outlined: establishing an office to focus on DRR and clarify responsibilities, overcoming resource constraints, strengthening CBDR, enhancing volunteerism, increasing public awareness, encouraging UNISDR safe cities campaign, upgrading communication systems, and conducting risk assessment.

For ASEAN, he suggests setting up information network and online mailing lists, developing training programs, have China, Japan, and Korea assist the member countries in disaster early warning and emergency assessment, seeking new funding, and carrying out feasibility studies to study needs for stockpiling system at the regional level. The meeting was concluded with key commitments. To promote experience sharing, to reach a consensus on priorities of cooperation on urban DRR, and to further strengthen cooperation. Urban disasters affect Asian countries due to high density of urban population, and urban risk management and risk reduction is a key issue requiring cross-cutting solutions.

Discussion

Discussion was facilitated by Prof. Shoichi Ando, International Institute of Seismology and Earthquake Engineering, Building Research Institute. He introduced a guiding question for the discussion: "Which institutional mechanisms can empower local governments to take actions and create and enforce policies on DRR?"

Representative from Philippines raised questions regarding public and private partnership project. He questioned whether the owner of such project should be a national government or a city government, and which bear such cost of public and private partnership project.

Velasquez responded that for example, Albay province in the Philippines works with mobile phone companies to send typhoon warning messages to community leaders, which cost a total of \$20,000. The issue is not the cost itself, but how to engage other sectors. He explained that Indonesia is more decentralized case. The key issue is which is more conducive in disaster risk reduction and disaster management. Each of the governments has different approaches, but the main concern is how to empower them. Velasquez commented that free standing and embedded investments are the most useful, and investments embedded into development programs are the most efficient.

Prof. Okazaki from GRIPS pointed out the need for vulnerability assessment in cities.

Representative from Malaysia suggested that the population trends in cities should be looked at in order to conduct risk assessments.

ASEAN Secretariat stated that Philippines has adopted Disaster Risk Reduction and Management Law with local disaster management councils as coordinating mechanisms for local levels. This should be useful mechanism to empower local government to take actions.

Session 3-2 “Disaster management in communities”

- Asian Disaster Reduction Center -

Mr. Atsushi Koresawa, Executive Director of Asian Disaster Reduction Center, made a presentation focused on previous disasters experience in Japan. On September 1, 1923, the Great Kanto Earthquake occurred. September 1st has now been designated as Disaster Reduction Day, on which poster contests and disaster drills take place around the country. Since then, casualties due to natural disasters have declined, with the exception of the Hanshin-Awaji Earthquake. In 1959, Typhoon Isewan hit Japan. The damages were catastrophic because of abnormally high storm surges, weak structure and insufficient height of coastal dykes, inappropriate land use, people living in high risk areas, and lack of preparedness. The Disaster (Countermeasures) Basic Act was, therefore, implemented. It outlines responsibilities at various levels, designates a cross-sectoral coordination body (Disaster Management Council) at each level, planning for all phases, and annual publications made available to the public. The Great Hanshin-Awaji Earthquake of 1995 directly hit Kobe and its surroundings, resulting in more than 6000 deaths. Communication and transport networks were paralyzed, which delayed government response. Many of those who died were under collapsed buildings, and those who survived were mainly rescued by family members. There were many lessons learned from this experience. Emergency response system was upgraded, inter-regional support system was improved, building codes were revised, and earthquake research was promoted.

Now, there is a potential for Tokyo Inland Earthquake. Under the proposed scenario, 11,000 people will be killed, 850,000 buildings will collapse or burn, and total damages will add up to 112 trillion yen. The government has been strategizing in order to halve the projected death toll and reduce economic loss by 40% through activities conducted over the next 10 years. However, various scenarios such as influx of evacuees and stranded commuters do not have sufficient countermeasures developed.

Another potential large disaster is flooding. Some proposed countermeasures include effective and timely evacuation, protection of underground space, effective search and rescue, strengthening government response capacity, strengthening coping capacity of businesses and communities, and a comprehensive flood control measures and integrated land use.

Large cities across Asia face special challenges. Many live in informal settlements, which are mainly in hazard prone areas. Many of those cities have become part of the global financial systems, and the ripple effect across the globe may be possible. Therefore, specific policy attention should be given. While good progress has been made through HFA implementation, it has not yet reached local and community levels well. Capacity development at those levels would be crucial. More attention should be paid in particular to urban risks, including land use, linking policy and research, and inclusion of private sector.

- Myanmar -

Mr. Soe Aung, the Director-General of Department of Relief and Resettlement, gave the presentation. The presentation described the experiences from Cyclone Nargis. Nargis struck on May 2nd, 2008.

130,000 are dead or missing, and 800,000 houses were affected. The effects were catastrophic due to high storm surge, weak building and structure, people living in high risk areas, and lack of awareness and preparedness. In response to Nargis, several committees and Ministers were assigned. There are also increased activities of international agencies.

Strong political commitment and organizational structure, better cooperation among stakeholders, international assistance that are complementary to the government's programs, and bottom-up and top-down strategies for coordination, and establishment of local NGOs has been considered to be good practice. There were also some important lessons learned. Preparedness, DRR, emergency response, and community response were all considered needing improvement, and restoration of ecosystem is also weighed. Keeping those lessons in mind, some plans have been devised, capacity building trainings have been conducted, community awareness programs have been implemented, early warning system has been put in place, and shelters and DRR structures has been put into housings. From here on out, the country seeks to continue to implement the HFA, mainstreaming DRR, and increasing community awareness and preparedness.

- Vietnam -

Mr. Huy Quang Bui, an Expert from the General Directorate of Water Resources, ministry of Agriculture and Rural Development, gave the presentation. The presentation focused on community awareness raising and community based disaster risk management. Those programs were initiated in 2001, and now 17 national and international organizations are working in 23 provinces and cities. Trainings and establishment of initial mechanism for implementation for community based disaster risk management has been some of the successes of this program. There are also challenges. Different training materials provided by different organizations are often too generic and not specific to types of disasters. Management of CBDRM has been difficult as well.

Now, there is a National Program on CBDRM. Some specific objectives include complementing the existing CBDRM mechanisms at all levels, provide training for government staff, raising awareness, and including DRR into school curricula. From here on out, it will use guidelines on management and monitoring implementation, training materials for all communities, programs specific to the media, information management systems focused on communities, a comprehensive system for management and monitoring, drills, networking among different agencies, integration of CBRDM activities into policy, and inclusion of DRR and CCA into CBDRM.

- Thailand -

Mr. Anucha Mokkhavesa, the Director-General of Department of Disaster Prevention and Mitigation gave the presentation. Thailand presented on its perspectives on disaster management in communities. Thailand faces various disasters: floods, droughts, and landslides. Also, some earthquakes and tsunamis occur, but less frequent. At the national level, there are legal frameworks and committees that deal with disaster management. On the other hand, disaster management activities at community level are guided by local governments and the district offices.

Since 2003, agencies have been implementing trainings in high risk communities. DDPM alone has trained over 5100 villages. There is also Mr. Disaster Warning, which is having 1 or 2 trained community members who will alert the community using provided tools. Another program is the Civil Defense Volunteer Training. A member of the community can join and be trained to participate in disaster management. International organizations, such as JICA and ASEAN have been active as well. JICA has been active in capacity development, and ASEAN has been working to build capacity in local

government. Further regional cooperation should be promoted through existing mechanisms to involve more cities and communities.

Singapore –

Mr. Chin Lai Fong, the Director of Planning & Corporate Department of the Singapore Civil Defense Force gave the presentation. The presentation focused on regional cooperation to promote disaster management. Singapore is geographically protected from natural disasters, therefore it focuses on man-made disasters such as fires, collapsed buildings, transport incidents, toxic industrial chemical release, and explosives incidents.

In order to address such disasters, engaging the community through strategic partners has been important. Training of the Civil Defense Force while having continued collaboration with foreign and regional counterparts has been successful.

Guiding questions 3-2

Discussion was facilitated by Ms. Marqueza Reyes from ASEAN Secretariat. She introduced a guiding question for the discussion: “How does a government at the national level develop a culture of resilience amongst citizens and communities?”

Reflecting on the presentations and comments, she mentioned that while advocacy campaigns conducted by national governments play an important role in creating a culture of resilience, it is not enough and there are still challenges in convincing people to take action. For example, retrofitting is a very effective way of developing resilience and preventing buildings from collapsing; however, it is challenging to raise awareness among people of the need to retrofit their homes. Risk perception is a difficult concept to convey to citizens because people are inherently risk-takers. Community-based disaster management has been accepted and is considered an effective method of disaster management.

Marqueza informed that ASEAN Day for Disaster Reduction is on 13 October and pointed out that national level advocacy needs to be linked with local level activities, thus local level activities can be used to raise awareness among people.

Representative from China commented that it is important for communities to know their risks and learn to live with those risks in a positive manner. Bottom-up approach and mobilization at the community levels are necessary.

Representative from Laos commented that it is necessary to enhance the understanding of risks among the citizens.

Representative from Malaysia commented that literature and documents should be developed to transfer knowledge to citizens. He also suggested that ownership is crucial because efforts to not forget certain experiences can be embedded into the communities.

Representative from Philippines stated that a multi-sectoral approach is important.

Representative from India commented that hazard risk analysis with local level entities' involvement is crucial, who will be trained by national authority.

Representative from Australia commented that post-disasters, there is an opportunity to raise awareness and build back better, which should be done with involvement of local leaders and medial people. He emphasized that it is good investment to build back better. He also stated the importance of six fundamental rules in rebuilding homes and messages that are simple and action-oriented.

For concluding the session 3, Ms. Marqueza summarized the main points as follows;

- Community based approach and bottom-up approach are effective.
- People have centered disaster risk reduction in the center of ASEAN charter showing commitment
- DRR has taken a societal approach, not individual.
- It is also important to treat community as owners of their actions and empower them, rather than treating them as passive recipients of initiatives and programs.
- Mutual help within the community among the people should be encouraged.
- Community level capacity development, drills, and indigenous knowledge dissemination are important.

Closing session

Professor Okazaki summarized main points and discussions for the two days by highlighting the below points;

- 1) MTR of HFA will most likely show that significant progress has been made in countries that have presented.
- 2) Climate change and other uncertainties increase the need for adaptation measures.
- 3) It is important to take an integrated approach between DRR and CCA.
- 4) Community based disaster risk management can play a significant role in DRR.
- 5) While some ideas were shared for financial availabilities under ASEAN Fund, further discussions are needed to cope with resource scarcity.
- 6) There is a need for greater intellectual transactions among East Asian think-tanks. Japan will lead and set up a new working group on disaster management on cities and communities.
- 7) ASEAN+3 senior official meetings will take from things that were discussed at this Forum for further discussions.

Chair's summary was adopted (attached) as the outcome document of the conference which includes 1) sharing information and technology among ASEAN plus 3 countries to strengthen regional cooperation, 2) conducting a project with DM theme focusing on prevention in urban cities and communities with financial assistance by the ASEAN plus 3 Cooperation Fund, and 3) utilizing ASEAN plus 3 cooperation framework such as the Network of East Asia Think Tanks.

Participants:

Mr. Dedy Wiredja	Senior Officer, Disaster Management Division, ASEAN Secretariat
Ms. Marqueza L. Reyes	Technical Advisor for Disaster Risk Reduction, ASEAN-UNISDR Technical Cooperation on the Implementation of HFA in ASEAN, ASEAN Secretariat
Mr. Peou Samy	Secretary-General, National Committee for Disaster Management, Cambodia
Mr. Ma Norith	Director, Information and External Relations Department, National Committee for Disaster Management, Cambodia
Mr. Krishna Suryanto Pribadi	Researcher, Center for Disaster Mitigation, Bandung Institute of Technology, Chairman of Indonesian National University Forum for Disaster Risk Reduction, Indonesia
Mr. Sutopo Purwo Nugroho	Director for Disaster Risk Reduction, National Agency for Disaster Management, Indonesia
Mr. Sisomvang Vilayphong	Deputy Director, National Disaster Management Office, Department of Social Welfare, Ministry of Labour and Social Welfare, Lao PDR
Ms. Sakdavong Phonekeo	Deputy Director, ASEAN Social Cultural Community Division, ASEAN Department, Ministry of Foreign Affairs, Lao PDR
Mr. Che Moin Bin Umar	Deputy Secretary (Security Management), National Security Council, Prime Minister's Department, Malaysia
Dr. Lee Yook Heng	Professor, South East Asia Disaster Prevention Research Institute, Malaysia
Mr. Soe Aung	Director-General, Department of Relief and Resettlement, Myanmar
Mr. Oo Win	Director, Department of Relief and Resettlement, Myanmar
Lt. Col. Perfecto Paloma Penaredondo	Military Assistant for Operational Readiness, Office of Civil Defense, Philippines
Dr. Benito M. Pacheco	Professor & Director, Director of the Institute of Civil Engineering, The University of the Philippines
Ms. Chin Lai Fong	Director, Planning & Corporate Department, Singapore Civil Defense Force
Mr. Zhou Yansheng	Senior Officer, Singapore Civil Defense Force
Mr. Anucha Mokkhavesa	Director-General, Department of Disaster Prevention and Mitigation, Thailand
Mr. Adthaporn Singhawichai	Director, Research and International Cooperation Bureau, Thailand
Mr. Nguyen Anh Minh	Head, Bilateral Cooperation Division, Ministry of Agriculture and Rural Development, Vietnam
Mr. Huy Quang Bui	Expert, General Directorate of Water Resources, Ministry of Agriculture and Rural Development, Vietnam
Mr. Kang Byung Hwa	Director General, Bureau of Disaster Prevention & Management, National Emergency Management Agency, ROK
Mr. Young Jin, Park	Senior Researcher, National Institute for Disaster Prevention, ROK

Mr. Seung - Joon Back	Task Force for the 4th Asian Ministerial Conference on Disaster Risk Reduction, National Emergency Management Agency, ROK
Ms. Guan Yan	Deputy Director, National Disaster Reduction Center of China
Mr. Ravindra Kumar Srivastava	Joint Secretary to the Government of India, Ministry of Home Affairs, India
Dr. Matt Hayne	Australian Co-Director, Australia - Indonesia Facility for Disaster Reduction (AIFDR), Australia
Mr. Hisashi Tokuanga	Parliamentary Vice-Minister for Foreign Affairs, Japan
Mr. Hiroki Oowaki	Deputy Director-General, International Cooperation Bureau, MOFA, Japan
Ms. Setsuko Kawahara	Director, Humanitarian Assistance and Emergency Relief Division, International Cooperation Bureau, MOFA, Japan
Ms. Wakana Kanikawa	Official, Humanitarian Assistance and Emergency Relief Division, International Cooperation Bureau, MOFA, Japan
Ms. Kanako Sato	Humanitarian Assistance and Emergency Relief Division, International Cooperation Bureau, MOFA, Japan
Mr. Kimihiro Ishikane	Deputy Director-General, Asian and Oceanian Affairs Bureau, MOFA, Japan
Mr. Minoru Fujiyama	Director for Regional Policy Division, Asian and Oceanian Affairs Bureau, MOFA, Japan
Mr. Takaaki Nemoto	Deputy Director for Regional Policy Division, Asian and Oceanian Affairs Bureau, MOFA, Japan
Mr. Seiji Manabe	Deputy Director for Regional Policy Division, Asian and Oceanian Affairs Bureau, MOFA, Japan
Mr. Tatsuya Osawara	Official, Regional Policy Division, Asian and Oceanian Affairs Bureau, MOFA, Japan
Mr. Tomoya Nagai	Director for Disaster Preparedness, Public Relations and International Cooperation, Cabinet Office, Japan
Mr. Masahiro Ito	Deputy Director for Disaster Preparedness, Cabinet Office, Japan
Mr. Kiyoshi Kayashima	Deputy Director, International Office for Disaster Management, Cabinet Office, Japan
Mr. Masayuki Kawasaki	Director, Fixed Radio Communications Division Radio Department, Telecommunications Bureau, Ministry of Internal Affairs and Communications of Japan
Mr. Yoichi Iida	Director for International Policy Coordination, Global ICT Strategy Bureau, Ministry of Internal Affairs and Communications, Japan
Mr. Takao Nitta	Director, Public Safety Radio Communications Office Radio Department, Telecommunications Bureau Ministry of Internal Affairs and Communications, Japan
Mr. Masayuki Hihashi	Deputy Director, International Cooperation Division, Global ICT Strategy Bureau, Ministry of Internal Affairs and Communications, Japan
Dr. Syunsuke Ikeda	Emeritus Professor, Tokyo Institute for Technology Vice president, Federation of Engineering Societies Member, Science Council of Japan, Engineering Academy of Japan
Dr. Kenji Okazaki	Professor, Dr.Eng, National Graduate Institute For Policy Studies: GRIPS, Japan

Dr. Shoichi Andso	Director, International Institute of Seismology and Earthquake Engineering, Building Research Institute (IISEE/BRI), Japan
Mr. Kenzo Oshima	Senior Vice-President, JICA, Japan
Mr. Mikio Ishiwatari	Senior Advisor, JICA, Japan
Mr. Tatsuo Narafu	Senior Advisor, JICA, Japan
Mr. Noriaki Nagatomo	Senior Advisor to the Director General, Global Environment Department, JICA, Japan
Mr. Shiro Nakasone	Director, Disaster Management Division1, Water Resources and Disaster Management Group, Global Environment Department, JICA, Japan
Mr. Shunsuke Sakudo	Planning Division, Southeast Asia Department 2, JICA, Japan
Ms. Mamiko Tanaka	Disaster Management Division1, Water Resources and Disaster Management Group, Global Environment Department, JICA, Japan
Mr. Atsushi Koresawa	Executive Director, Asian Disaster Reduction Center
Mr. Jerry Velasquez	UNISDR Senior Regional Coordinator
Ms. Letizia Rossano	UNISDR, Senior Coordinator of the HFA Mid-Term Review
Ms. Yuki Matsuoka	Officer in charge/Program Officer, UNISDR Hyogo Office
Mr. Craig Strathern	Multilateral Adviser, International Committee of the Red Cross
Mr. Yukiya Saito	Director, Development Cooperation Division, International Department, Operations Sector, Japanese Red Cross Society