International Conference on the Implementation of the Health Aspects
of the Sendai Framework for Disaster Risk Reduction 2015 – 2030
10 – 11 March 2016,
The Royal Orchid Sheraton Hotel, Bangkok, Thailand

Chair's Summary

OVERVIEW

1. The International Conference on the Implementation of the Health Aspects of the Sendai Framework for Disaster Risk Reduction 2015-2030 was organized by the Royal Thai Government, United Nations Office for Disaster Risk Reduction (UNISDR) and the World Health Organization (WHO) on 10-11 March 2016, in Bangkok, Thailand. The Conference was attended by over 230 participants from around 50 countries, as well as representatives of key regional and international organizations, civil society groups, UN agencies and other stakeholders.

2. The Conference was the first forum that focused on the health aspects of the Sendai Framework for Disaster Risk Reduction 2015-2030. It also marked the first anniversary of the adoption of the Sendai Framework for Disaster Risk Reduction. The Conference provided the opportunity for participants to discuss the implementation of the health aspects of the Sendai Framework, including strengthening multisectoral disaster risk reduction (DRR) with the aims of building resilient national health systems as a key element of disaster risk reduction, enhancing emergency and disaster risk management and capacity-building with a focus on strengthening prevention and preparedness measures, inclusive policy and social safety-net mechanisms for disaster risk reduction, and cooperation and partnerships among relevant stakeholders.

3. The Conference addressed the seven global targets of the Sendai Framework, particularly the four targets that have direct links to health in reducing mortality and the number of affected population, increasing availability and access to multi-hazard early warning systems and promoting the safety of critical health infrastructure and facilities. Biological hazards such as epidemics and pandemics were also addressed in the conference as they are now covered under the Sendai Framework in addition to other natural and man-made hazards as a key area of focus for disaster risk management.

4. The Conference was held with the objective of assessing the current status and gaps for the integration of the health sector and the disaster risk reduction community; discussing different approaches and best practices of affected countries and identifying appropriate measures for the implementation of the health aspects in the Sendai Framework in a comprehensive, multi-disciplinary, multi-sectoral and all-hazards approach for disaster risk; and drawing recommendations and guidelines on how to implement the health aspects in the Sendai Framework.

OPENING CEREMONY

5. **Ms. Pornprapai Ganjanarintr**, Director-General, Department of International Organizations, Ministry of Foreign Affairs of Thailand, emphasized in her welcoming remarks that the Conference was very important and timely. The topics of the Conference addressed the implementation of both the Sendai Framework and the 2030 Agenda for Sustainable Development. As the current Chair of the Group of 77 in New York, it was timely for Thailand to share its experiences and best practices in disaster risk reduction and health. In particular, the country adopted the people-centred approach and empowered local community to reduce risks and uncertainties as well as increased self-protection, as guided by the Sufficiency Economy Philosophy of His Majesty the King of Thailand.

6. **H.E. Dr. Piyasakol Sakolsatayadorn**, Minister of Public Health of Thailand, opened the Conference by stressing the importance of integrating the health aspects into disaster risk reduction national policies and strategies. All relevant ministries and stakeholders need to understand disaster risks and health impacts resulting from unexpected disasters so as to be better prepared and respond. He also urged governments to invest more in strengthening their country's capacity to manage disaster risks for health, promoting public and private investment in disaster risk prevention in health facilities and infrastructure and life saving measures. He further emphasized that the health sector cannot work alone to tackle all challenges posed by disasters. All stakeholders at all levels, from the local, national, regional and global levels, have significant roles in ensuring the success of disaster risk reduction towards sustainable development.

7. **Mr. Robert Glasser**, Special Representative of the Secretary-General for Disaster Risk Reduction, head of UNISDR, reiterated that the Sendai Framework aims to achieve a substantial reduction of disaster risk and losses in lives, livelihoods and health. He indicated that the implementation of the Sendai Framework has at least two key challenges. *First,* is to bring about a paradigm shift from managing disasters to managing the underlying risk factors which drive those disasters, including technological disasters such as nuclear accidents and biological threats. *The second challenge* is bringing a change in the traditional perspective on disaster management so that health becomes a key area of focus for disaster risk reduction since a poorly protected health system can multiply the impact of disaster on exposed and vulnerable populations. The Sendai Framework calls for a breaking down of existing silos between sectors, stakeholders and levels. He emphasized the important opportunity presented by the Conference to examine in detail what the practical implications are for disaster risk managers of engaging in actions to strengthen public health measures against emerging diseases and the threat of epidemics, in a consistent and regular way.

8. **Dr. Bruce Aylward**, Executive Director, a.i., Outbreaks and Health Emergencies, WHO, expressed the view that health is a precious, yet fragile, commodity which is often the

first priority of a disaster-affected population. Risks to health are greater than ever with more than 125 million people affected by emergencies last year, while risk drivers, such as unplanned urbanization, continue to put increasing pressures on health. He reflected on the wisdom and timeliness of the Sendai Framework that puts health and health outcomes at the centre of multi-sectoral action on disaster risk reduction and resilience, and directly within the remit of national disaster management agencies. Going forward, the Sendai Framework provides global policy direction for multi-hazard, multi-sectoral action that is community and population-focused. Future action will need to focus on high-impact investments, such as early warning systems, incident management systems, safe hospitals and risk communications. This Conference will also inform the ongoing reform of WHO's emergency programme, as well as how we can bring more coherence to the different related frameworks, including the International Health Regulations, the Global Health Security Agenda, the World Humanitarian Summit, the Sendai Framework and the Sustainable Development Goals.

PANEL DISCUSSIONS

9. The Conference was chaired by H.E. Mr. Thani Thongphakdi, Ambassador and Permanent Representative of Thailand to the United Nations Office and other International Organizations in Geneva. It presented participants with a valuable opportunity to discuss and exchange views on how to enhance disaster risk reduction and management in national health sectors, enhance collaboration and capacity building of public health preparedness and response, and strengthen social safety net. In this connection, four panel discussions were held as follows:

10. **Panel One: Implementation of the Sendai Framework for Disaster Risk Reduction - strengthening multisectoral disaster risk reduction to address the risks to people's health.** Participants emphasized the importance of multi-sectoral approach for implementing disaster risk reduction as well as the integration of health in disaster risk reduction national plans and strategies and the inclusion of disaster risk reduction in national health programs and plans and vice versa. The experiences and lessons learnt from disaster affected countries, i.e. Thailand, Indonesia, Nepal, Japan, were discussed. Collective actions for effective implementation before, during and after disasters, and the challenges with regard to clarity of roles and responsibility of actors involved were highlighted. The participants suggested key actions such as building capacity at all levels, sharing of information and best practices, enhancing partnership with relevant stakeholders, and strengthening the role of communities, promoting R&D innovations, use of technology and appropriate financing preparation. Participants also emphasized that the small and medium scale events such as seasonal small scale floods cannot be ignored as the accumulated loss can be significant. The detailed summary of the discussion can be found in annex 1.

11. **Panel Two: Capacity building of public health preparedness and response.** The meeting was briefed about experiences and lessons learned from dealing with health emergencies such as MERS, Ebola and avian influenza (H5N1, H1N1), and natural disasters from representatives of countries and two regional organizations -- the European Centre for Disease Prevention and Control (ECDC) and the Association of South East Asian Nations (ASEAN). They highlighted the need to better equip health facilities including laboratories to detect and diagnose at the early stage, enhance early warning systems and risk assessment and promote transboundary cooperation. They called for leveraging of the significant role of regional organizations to promote policy and programme coherence. Participants concurred that investment in prevention and preparedness is among the best solutions to minimize impacts and economic losses resulting from disasters. The detailed summary of the discussion can be found in annex 2.

12. **Panel Three: Strengthening the design and implementation of inclusive policy and social safety-net mechanisms for disaster risk reduction.** Participants highlighted the impact of climate on health, including climate change and the El Nino impact on vector-borne diseases such as zika virus, dengue and others. Participants emphasized the need to empower and promote the role and active involvement of communities in disaster risk reduction process in an inclusive manner, with special attention given to at-risk groups. Participants emphasized the need for flexible social safety-net mechanisms, including health insurance and Universal Health Coverage that ensure everybody has access to basic and quality healthcare services before, during and after disasters. Prevention measures and contingency planning comprising stockpiles of vaccines and antivirals, and enhancing the capacity of health workforce are vital to reduce disaster risks and loss. Understanding the nexus of migration, health and disaster risk reduction is also key to providing tailor-made solutions with and for migrants in various situations especially during crises. The detailed summary of the discussion can be found in annex 3.

13. **Panel Four: Partnerships and the role of stakeholders**. The meeting highlighted that the Sendai Framework is the first to explicitly recognize the role and diversity of stakeholders in disaster risk reduction. It also emphasized that while states have the primary responsibility to reduce disaster risks, they cannot act alone. Collaboration and engagement with stakeholders, through a people-centred, all-hazard and multi-sectoral based approach at all levels, is necessary. Participants also highlighted that collaboration across levels and sectors contribute to the successful implementation of disaster risk reduction plans and policies. Additionally, effective cross-border collaboration can lead to improved health activities and impact. Implementing the International Health Regulations (2005) is essential in this regard. Institutional arrangements are also necessary to ensure adequate engagements of partners. It was highlighted that while a lot of partnerships take place during emergencies, there is still limited cross-sectoral partnership in disaster risk prevention, preparedness recovery and reconstruction phases. The detailed summary of the discussion can be found in annex 4.

14. The Conference also discussed the lessons learnt from a table top exercise held one day prior to the Conference between Thai and Japanese disaster relief teams in response to a hypothetical pandemic outbreak.

CONFERENCE OUTCOMES

15. **Based on the above-mentioned discussions, the Conference recommended the "Bangkok Principles for the implementation of the health aspect in the Sendai Framework for Disaster Risk Reduction 2015-2030".** The Bangkok Principles open up opportunities for collaboration among all relevant sectors on implementing the health aspects of the Sendai Framework and position health as a key area of focus for disaster risk reduction. See annex 5 for more details and key actions under each principle. (also available at http://www.preventionweb.net/files/47606_bangkokprinciples.pdf)

The seven "Bangkok Principles" are as follows:
- o Promote systematic integration of health into national and sub-national disaster risk reduction policies and plans and the inclusion of emergency and disaster risk management measures in national and sub-national health strategies.
- o Enhance cooperation between health authorities and other relevant stakeholders to strengthen country capacity for disaster risk management for health, the implementation of the International Health Regulations (2005) and building of resilient health systems.
- o Stimulate people-centred public and private investment in emergency and disaster risk reduction, including in health facilities and infrastructure.
- o Integrate disaster risk reduction into health education and training and strengthen capacity building of health workers in disaster risk reduction.
- o Incorporate disaster-related mortality, morbidity and disability data into multi-hazards early warning system, health core indicators and national risk assessments
- o Advocate for, and support cross-sectoral, transboundary collaboration including information sharing, and science and technology for all hazards, including biological hazards.
- o Promote coherence and further development of local and national policies and strategies, legal frameworks, regulations, and institutional arrangements.
16. The outcome of the Conference will be presented to relevant regional and global health and disaster risk reduction processes, such as the "Asia Regional Plan for the implementation of the Sendai Framework", UNISDR Regional and Global Platforms for Disaster Risk Reduction, and the ongoing review process of the IHR 2005, which will be considered at the 69th session of the World Health Assembly in May 2016.

17. The participants expressed their appreciation to the Royal Thai Government for its initiative in hosting the Conference and for the warm hospitality extended to all participants.

Summary of First Panel Discussion

<u>**Topic**</u>

Implementation of the Sendai Framework for Disaster Risk Reduction - strengthening multi-sectoral disaster risk reduction to address the risks to people's health.

<u>**Moderator**</u>

- Dr. Suwit Wibulpolprasert, Advisor on Global Health to the Office of the Permanent Secretary, Ministry of Public Health of Thailand

<u>**Panellists**</u>

- Police Lieutenant General Nadhapit Snidvongs, Vice Minister for Interior, Thailand

- Dr. Bagus Tjahjono, Director of Training Centre, National Disaster Management Authority, Indonesia

- Mr. Krishna Raut, Joint Secretary, Ministry of Home Affairs, Nepal

- Dr. Maria Guevara, Regional Humanitarian Representative (ASEAN), Medecins Sans Frontieres (MSF)/Doctors Without Borders

- Prof. Shinichi Egawa, Disaster Medical Science, Division of International Cooperation for Disaster Medicine at Tohoku University of Japan

<u>**Summary of Discussion**</u>

1. Consensus emerged from the discussion on the need for more whole-of-society, multi-sectoral and multi-level disaster risk management. In particular, health aspects should be integrated into disaster risk reduction policies and plans at all levels, and vice versa, in order to enhance disaster preparedness, ensure effective emergency response and strengthen post-disaster recovery.

2. Participants highlighted the importance of capacity building for emergency and disaster risk management for health of all relevant stakeholders as a way to reduce risk and strengthen community resilience, and the need to increase public-private partnership and investment in disaster risk reduction, including in resilient health facilities and other life-saving and harm-reducing measures.

3. They also recognized the important role of local communities, especially in the implementation of disaster risk reduction measures on the ground. It was stressed that a people-centred partnership approach will help reduce disaster risk in a more sustainable manner. Gaining trust is critical. Effective communication before, during and after

disasters is need to counter stigma and suspicion concerning populations at risk and to improve risk perception and positive risk behaviour and practices.

4. Participants also emphasized the need to ensure the coherence of policies, plans and strategies across sectors and at all levels and highlighted the challenges with regard to clarity of roles and responsibility, including civil-military coordination.

5. Multi-sectoral collective actions and collaborations are needed from all levels in policies and legal frameworks and in real implementation before, during and after disasters (health in all policies and disaster risk reduction in health policies).

6. Lessons learned from past disasters (flooding, tsunami and earthquake, emerging diseases, etc.) indicated the need to further strengthen disaster preparedness for response of countries. It also highlighted that small scale disasters should not be overlooked. Climate change is adding further complexity to both risk and adaptation measures, including disaster risk management. There is a need to plan for short, medium and long term measures. For sustainability of disaster risk management efforts, financing is crucial for both preparedness as well as for response and recovery.

7. The need for research and development and to enhance the use of technology and innovations in disaster risk reduction are important to improve the evidence base for decision-making and to assist effective and efficient policy and practice.

8. Promoting functioning multi-hazard early warning systems, risk assessment and information, and health-related innovations at all levels for risk-informed resilient health systems and integrated national risk profiling was underlined. In addition, participants noted that innovative communication methods, coordinated by multi-sectoral approach, can play a critical role in disseminating early warning messages.

9. The importance of the sharing of information, experiences and lesson learnt from disaster risk management was underlined.

10. The need to enhance the safety and resilience of health infrastructure and facilities was also raised. It is important to ensure that health systems continue to function properly during and after disasters.

11. Humanitarian organizations such as MSF have traditionally concentrated on conserving life, mitigating the suffering and protecting human dignity. They also focus on improving better understanding of humanitarian concepts and health innovation in humanitarian related sectors. They are also increasing their investment in risk reduction measures, including preparedness.

12. The understanding of hazard risk from nuclear and technological hazards and action to manage these risks should be given greater attention among partnerships for disaster risk management.

* * * * * * *

Summary of Second Panel Discussion

<u>**Topic**</u>

Capacity building of public health preparedness and response

<u>**Moderator**</u>
- Dr. Bruce Aylward, Executive Director *ad interim*, Outbreaks and Health Emergencies, World Health Organization

<u>**Panellists**</u>
- Dr. Donghyok Kwon, Deputy Scientific Director, Center of Disease Control, Republic of Korea

- Dr. Supamit Chunsuttiwat, Advisor, Department of Disease Control, Ministry of Public Health, Thailand

- H.E. Ms. Yvette Stevens, Ambassador and Permanent Representative of Sierra Leone to the United Nations in Geneva

- Dr. Massimo Ciotti, Head of Section Country Preparedness Support, European Centre for Disease Prevention and Control (ECDC)

- Mr. Vongthep Arthakaivalvatee, Deputy Secretary-General for the Socio-Cultural Community, Association of South East Asian Nations (ASEAN)

<u>**Summary of Discussion**</u>

The four main points of discussions included the following:

1. Biological hazards are here to stay. They are part of the "New Normal". They often result in huge social, political and economic impact in addition to their health impact. It is critical that these hazards are better managed.

2. Successful management of biological hazards should form part of the core work of national disaster management agencies as well as health sector coordinating bodies. This approach requires a multi-sectoral response that includes the anthropological perspective and the action of agriculture, media, private sector as well as various other sectors. This approach needs to be inter-operable and be backed up by a coordinated communications strategy.

3. A set of core capacities are essential. These include early warning systems, surveillance, incident management, safe hospitals, and risk communications. Within these broad principles there will be elements specific to the context. In addition to such capacity there

has to be the capability to utilize it. This requires training, simulation, and scenarios to ensure competence.

4. Trans-boundary cooperation needs to be strengthen. This is vital because of the cross-border nature of infectious diseases that do not respect national frontiers. This aspect requires regional entities to have a strong role. In disasters, communities and countries look towards the familiar for help, i.e. their neighbours. Such regional cooperation can include the sharing of research and development, diagnostics, and specialized supplies. Shared risk assessments, legal agreements, joint action plans and joint activities are other areas that can strengthen health resilience.

Other Key Points of Discussion

- The participants emphasized the importance of learning lessons from past health emergencies as their impacts are huge. For instance, the 2003 SARS outbreak was relatively well contained in Thailand. Yet it had a huge economic impact with travel and tourism hit for a year afterwards. Lessons learnt then were useful for subsequent H5N1 and H1N1 outbreaks and to a degree helped to avoid social breakdowns. The 2011 floods in Thailand illustrated the importance of resilient and non-exposed health facilities after many were closed because of inundation. Patients with chronic disease suffered and surveillance systems broke down. The experience from all of the above helped Thailand to successfully monitor and contain the MERS outbreak.

- Thailand's public health disaster risk management plan 2015-19 embraces multi-sectoral cooperation (including with the military) and community participation. It has been developed through experience gained the hard way from disasters that should have been better prepared for. It draws on the Sendai Framework and will be 'instrumental' to develop and maintain preparedness. It needs to sit within a context of cross border cooperation and indeed this is growing.

- Observations on the Ebola outbreak revealed that no one was prepared. A huge cost occurred in terms of lives lost and economic losses. It occurred nearly 40 years since the disease was first discovered. When it spread in West Africa, nobody knew how to stop it from spreading. Artificial and porous borders; movement of many people; a lack of medical facilities; and today's interconnected globalized world helped the spread. Even though flights were suspended to the region, the disease spread to other countries around the globe.

- Among the main lessons learnt was the need for: equipped facilities to be working from an early stage; better early warning; intensified R&D to produce vaccines and treatments; a timely international declaration of an 'extraordinary event' to prompt global action; and more standby capacity for speedy response, community mobilization and public awareness.

- Participants agreed that the Sendai Framework's four priorities are all critical to building health resilience: understanding of disaster risk; governance of disaster risk; investing in disaster risk reduction for resilience; and strengthening preparedness and response and building back better. The priorities can be achieved by closing key gaps including in cultural understanding, collaboration, communications, performance management and resilience. One of the key partners in this process is the private sector: even more business continuity planning (BCP) will contribute to health resilience as it is in companies' interest to maintain the health and productivity of their workforce.

- Blind spots persist and there is a need to develop competencies, including how to enable the generation of real-time evidence (clinical, anthropological, epidemiological, etc.) during a health emergency. Learning 'deficits' persist after each crisis. Consistent lessons are that community partnership is essential for disaster risk management, including preparedness. Not everyone is equally at risk so it is important to focus on where the real vulnerabilities lie. A balance needs to be achieved whereby preparedness planning is flexible enough, while still adhering to certain core principles (see above).

- ASEAN has played a leading role in several aspects of hazard management. It is the only region in the world to have a legally binding agreement – the ASEAN Agreement on Disaster Management and Emergency Response (AADMER) – on hazard management, which entered into force in 2009 provides the backbone for regional cooperation on hazard management. AADMER is a comprehensive agreement that covers various aspects of disaster and it complements the Sendai Framework. ASEAN has several mechanisms working in support of a more integrated approach to hazard management, including the ASEAN Regional Capacity on Disaster Health Management. The significant role of regional organizations to promote policy and programme coherence and coordination at operational level needs to be leveraged.

- Participants agreed that risk assessments have to be more accessible and evidence based. Yet it is consistently more difficult to fund prevention than response. Maintaining momentum for epidemic and pandemic preparedness during non-crisis time is challenging; forgetfulness and complacency is natural for individuals and communities. More public awareness via better communications remains vital. Investment in prevention and preparedness is the best solution to minimize impacts, including in Emergency Operation Centres (EOC) and incident management system, surveillance and early warning system, simulation exercises, and ensuring updated legal frameworks and policies.

* * * * * * *

Summary of Third Panel Discussion

<u>**Topic**</u>

Strengthening the design and implementation of inclusive policy and social safety-net mechanisms for disaster risk reduction

<u>**Moderator**</u>

- Mr. Elhadj As Sy, Secretary General, International Federation of the Red Cross

<u>**Panellists**</u>

- Dr. Raul Latorre, Director General for the Development of Health Services, Ministry of Health, Paraguay

- Mrs. Netnapis Suchonwanich, Deputy Secretary General of the National Health Security Office (NHSO), Thailand

- Mr. Baltz Tribulano, Chief of DRRM, Cebu, Philippines

- Dr. Nenette Motus, Regional Director (ad interim) and Regional Migration Health Adviser, International Organization for Migration (IOM)

<u>**Summary of Discussion**</u>

- This panel illustrated the importance of social safety-net mechanisms for disaster risk reduction and the flexibility required to prevent prepare and respond to disasters more effectively. Evidence from Paraguay has indicated the effectiveness of community involvement in vector-borne diseases control. Universal Health Coverage is an example of an effective safety net mechanism to ensure access to basic health services during disaster in Thailand. Essential health services, such as anti-venom, and supplies for dialysis, can reach those in need during disasters through collaboration with other sectors. Participants also underlined the importance of migrant sensitive policies to ensure that essential health services are accessible by migrants. Safety net mechanisms need to be designed inclusively and flexibly to ensure disaster affected people are protected before, during and after disasters.

- Experience from Paraguay on disaster risk reduction and health according to the priorities of the Sendai Framework for Disaster Risk Reduction:
  - To prepare and respond to the current El Niño phenomena, a review of all floods in the past 100 years was done, including the worst El Niño phenomena

in recent decades during 1997-1998. According to forecasts, the current El Niño phenomena will continue and reach its maximum intensity in January and last until June this year. This is similar to the one in 1997-1998.

- o A multi-sectoral contingency plan was developed for the current El Nino, including improving surveillance and action across sectors.
- o Dengue, chikungunya and zika have been complicated by current floods. As flood waters retreat new breeding sites for the vector have emerged. Differentiating each of the three diseases needs to be mapped out for health workers and needs to be understood by the community. The involvement of scientific societies is essential.
- o Integrating the community in the response is key -- including vector control and the monitoring of pregnant women. Although training for health workers, improving logistics and technical capacities of the workforce, stockpiling of necessary materials within reach of communities and cooperation between the relevant sectors are very important, the most important factor is empowering people in this complex emergency. For this, a social communication and educational strategy was developed.

- Experience of Thailand on inclusive policies and social safety net/health insurance:
    - o There are different coverage schemes in Thailand – civil servants scheme; social security scheme and universal coverage scheme. Long staying foreigners in Thailand (with ID) also have a coverage scheme.
    - o Every scheme has its own regulations and disbursement and reimbursement processes.
    - o All schemes aim to ensure that members can access effective health care services when needed and be provided with effective protection in case of impoverishment or expenditures from catastrophic illness in the beneficiaries' household.
    - o During emergencies the schemes are flexible. Harmonization among the three schemes is done under the concept of "medical emergency care for everybody, everywhere", implemented since 2012.
        - Financial support is provided to hospitals so that they can handle the sudden surge of extra services required.
        - Outreach services and support are provided to homes, especially to elderly and those with chronic diseases (eg. asthma) through qualified networks.
        - Delivery of essential supplies (anti-venom) for medical services are provided at home (eg. kidney dialysis)
        - Distribution of "orphan drugs" to hospitals (eg. antidotes) is ensured; a good supply management system is put in place to manage pre-positioning and inventory.

- - Penalties are waived for delay in release of information; processes are re-organised.
    - Communication and dissemination of information is also done through village volunteers.
  - More needs to be done to ensure long-term disaster preparedness plans for the National Health Security Office and ensure preparedness for disaster management of other parts of health system.

- Bringing global, regional frameworks to the community - experience from Cebu, Philippines:
  - Setting-up a formal office/institution building for disaster risk reduction with clear vision and mission at the local level is key. This is organized down to the sub-district level with a formal organizational structure -- from provincial, village and down to sub-village. Formally connecting communities inclusive of all populations (e.g. children, people with disabilities) is also essential.
  - Risk assessment as the basis of contingency planning is important. The DRRO–Cebu covers various risks (eg. cyclone, El Nino) and communities are trained around contingency plans.
  - A network of local disaster risk reduction officers is created for cooperation and exchange of information across the island/ province.
  - Experience from Yolanda or Haiyan that badly hit the 16 northern towns of the province showed that most hospitals or health care services systems were partly, if not totally, paralyzed except for five Local Government Units (LGU) whose Risk Assessments Results in 2009 were used as reference in their development planning, which includes contingency and DRRM planning, and local climate change action plans. The Towns Comprehensive Development Plans also includes agriculture and other livelihood-related programs.
  - Community-based information and data banks developed by the Local Health and Social Welfare Offices were useful as immediate reference after each disaster while the rapid assessment was being conducted.
  - The Purok-system using the sub-village approach is more practical and faster since they know best their constituents in terms of vulnerabilities and capacities. Cebu's experience of having CSO's participation in development councils at all levels also promoted transparency and accountability.

5.1 Migration, mobility and the health aspects in the Sendai Framework - ensuring capacity-building and service delivery in migration-affected communities:
  - Migration Mega-trend: 1 in 7 of the population is on the move (1 billion migrants internally or outside their countries). The majority of international migrants originate in the South (at least 69%).

- Disasters are one of the main drivers of migration. Many of the same inequalities that drive the spread of diseases also drive migration. Disasters often result in population displacement. Migration increases vulnerability to ill health – access to health is difficult as migrants are mobile and usually hidden
- WHA Resolution on Health of Migrants 61.17 is the basis of good policy and legal frameworks. Having good information and data is important. This will eventually feed into migrant-sensitive health systems and key partnerships at the local level.
- Key areas of focus/services of the IOM include migration health assessment; health promotion and assistance to migrants in crisis; health of migrants in crisis; data tracking and monitoring; border management; integrating disaster risk governance; and augmenting health services delivery in disaster situations.
- Return and recovery, if properly managed, have the potential to create more prosperous communities that are less vulnerable to hazards and displacement.
- The IOM Migration Crisis Operational Framework (MCOF) responds to the Sendai Framework's call to mainstream disaster risk reduction in health (para 27a), with 15 integrated sectors of assistance, health and psycho-social support, DRR and resilience-building as key components.
- Addressing the nexus of migration, health risks and DRR is critical. Reaching out to migrants and mobile populations and including them in national health and DRR strategies is needed. Capacity strengthening of migrant-inclusive health and DRR systems and disaggregated data to support evidence-based policies and strategies are vital.

- Special intervention from Mr. Steffen Helbing, Manager of the Centre for Culture and Visual Communication in Berlin and Brandenburg and Director of the Association of Deaf People in Berlin & Brandenburg presented project Jerome, which consisted of four components:
  - A mobile phone application (app) for emergency calls for the deaf, blind and other disabilities which contains various information such as numbers, early warning, videos with sign language, and weather reports.
  - Information – barrier-free homepages or videos provide information on disaster risk reduction.
  - Prevention - provision of interpreters that educate people at risk on the prevention of accidents.
  - Sustainability – there is a need for more funding although human resources are available.

Key Messages

- Understanding and communicating risks is a key step in engaging communities. Through risk assessments, this understanding is made more precise and is used as the basis of capacity development, including contingency planning and training. The availability of simple risk assessment tools will be helpful in engaging the community in the risk assessment process.
- Being cognizant of and respecting cultural beliefs and values of communities are an asset rather than a barrier in working with people in the emergencies.
- Empowering people is key to achieve the goals of Sendai at the local level; involving them formally as best as possible before, during and after different types of emergencies (eg. zika, dengue, floods) can help achieve the goals of the Sendai Framework at the local level.
- Safety-net schemes that are harmonized and systems for health services that are adaptable for emergencies ensure that affected people have access to health care and life-saving measures.
- Coordination and collaboration among sectors is needed to provide essential health services and reach disaster-affected people.
- Understanding the nexus of migration, health and disaster risk reduction are key to providing tailor-made solutions with and for migrants in various situations especially during crises.
- Disaster risk reduction approaches should be inclusive, covering all of the vulnerable population and sub-populations, such as people with disabilities and by their inclusion effective design and delivery of solutions for disaster risk reduction will be achieved.
- Approaches to health and disaster risk reduction should take account of gender and the specific needs and capacities of women and girls, and men and boys).

Recommendations

- Concrete evidence is needed to develop disaster risk reduction measures.
- There is a need to invest in the development of human resources, including training, for early response to disasters.
- It is essential to integrate life-saving measures in disaster risk reduction.
- It is also important to promote coordination/collaboration among sectors to provide essential health services to disaster affected people.

* * * * * * *

Summary of Fourth Panel Discussion

Topic

Partnerships and the role of stakeholders

Moderator

- Ms. Margareta Wahlström, Former Special Representative of the Secretary-General for Disaster Risk Reduction

Panellists

- Mr. Azizul Haque, Deputy Chief (Planning), Ministry of Disaster Management and Relief, Bangladesh

- Dr. Roderico Ofrin, Director Health Security and Emergency Response, Regional Office for South-East Asia, WHO

- Dr. Dennis Carroll, Director, Global health Security and Development, U.S. Agency for International Development (USAID)

- Mr. Thavirap Tantiwongse, Director of Public Affairs, GlaxoSmithKline (Thailand), Ltd.

- Dr. Herath Hema, National Coordinator for Health sector disaster management, Sri Lanka

Summary of Discussion

Participants highlighted that the Sendai Framework recognizes the role of stakeholders in Disaster Risk Reduction (DRR). It also emphasized that while States have the primary responsibility to reduce disaster risks, they cannot act alone. Collaboration and engagement from stakeholders at all levels is necessary. Such collaboration could enhance innovation and new ideas. Moreover, it must be done through a whole-of-society, people-centred, all-hazards and multi-sectoral based approach.

Participants highlighted the need for responsibility and institutional arrangements in order to enable the relevant personnel and bodies to act in an organized manner in disaster risk management at all levels. Also, training, simulation exercises and drills are important to maintain competencies of stakeholders for effective coordination.

Panellists highlighted that collaboration across levels and sectors can contribute to successful implementation of DRR plans and policies. Additionally, effective cross-border collaboration

can lead to improved surveillance activities. Nevertheless, it was noted that sometimes there could be difficulties arising from differences among stakeholders. The biggest risk emerges between sectors when it is not clear who is responsible. Also, while a lot of partnerships are forged during emergencies, especially at the national level, there is still a lack of partnership in disaster risk prevention and reduction and preparedness and during the recovery stage. It can also be less cross-sectoral.

Participants noted that strategic public-private partnership can be of mutual benefit. Also highlighted was the importance of multi-sectoral partnership for successful preparedness for effective response, which requires comprehensive preparedness addressing all hazards, and should be accompanied by systems, human resources and research capacities as well as sustained financing during peacetime.

Experiences of partnerships including with the private sector point to the need to understand gaps that have to be addressed, identify clear roles and responsibilities of partners and to develop more cross-sectoral partnerships and partnerships at the sub-national level for disaster risk prevention, recovery and reconstruction.

The discussion was elaborated around 4 issues through the presentations made by the panellists;

1.1 Strengthen cross-sectoral coordination, including civil-military coordination for reducing and managing health disaster risks

The importance of multi-sectoral and multi-stakeholder DRR platforms, supported by legal framework, written guidelines and appropriate institutional arrangements was highlighted. Identification of all hazards and risks is critical. It is also essential to identify clear roles and responsibilities as well as authorities of agencies and stakeholders to work together before, during and after disasters. Regular capacity building of human resources through training, exercise/drills programmes is important for developing and maintaining competencies of stakeholders for effective coordination. EOC systems should also be put in place to ensure common understanding of procedures and effective coordination during an emergency. Engaging communities and volunteer groups is essential for early warning, planning and implementation of effective preparedness and response at the local level. Each stakeholder group has their own risks, capacities and interests. Therefore, analysis of stakeholders' interests, mandate and comparative advantage is important to develop shared goals and mutual benefits. National planning and mechanisms for achieving health goals of Sendai Framework are instrumental in this regard.

1.2 Lessons learned and areas for strengthening partnership including Public-Private Partnership

Experiences from partnerships show that there are more partnerships at national rather than sub-national level. Partnerships should focus more on prevention, recovery and reconstruction than preparedness and response. More partnerships across sectors are needed which require the health sector to work more closely with the disaster risk management community. Strengthening partnership requires trust building, measuring partners' strengths and gaps objectively and engaging other expertise formally. Improving evidence through research and enhancing cooperation across similar hazards are important areas require greater attention and investment.

The private sector plays an important role in disaster risk management. They do not just provide goods but work with governments and other stakeholders to ensure correct use of their products, and train frontline workers to help save lives. For private sector partnership, for example in vaccine development, long-term commitment and planning versus ad-hoc approaches is important. Understanding the needs and identification of the partners is critical.

1.3 The importance of multi-sectoral partnership for successful preparedness

Threats from health emergencies, especially infectious diseases such as Ebola, MERS, and SARS, have increasing global impacts. Effective response requires comprehensive prevention and preparedness that addresses multiple hazards. It should be accompanied by systems, human resources, research on anticipated disasters and have sustained financing during peace time. Multi-sectoral partnership and engagement of stakeholders therefore are critical for successful preparedness.

1.4 Strengthen transboundary collaboration and information sharing for all hazards, including biological hazards

The management of biological hazards such as epidemics and pandemics must be cross-sectoral and is very often, cross-border. Information gathering and sharing is needed and this should be done with cross-sectoral and cross-border cooperation as shown in the example of polio-free certified region in the borders of India with neighbouring countries. Successful collaboration mechanisms at national and district level as well as among countries, involving health authorities, local governments, border authorities, foreign affairs as well as international organizations led to effective exchange of information and high vaccination coverage on both sides of the borders.

Standby agreements, such as under the ASEAN Disaster Management and Emergency Management Agreement (AADMER) to deploy personnel and materials to respond to crisis, cluster approach or networks of experts and supplies are important for successful preparedness. Written agreements are required for clear roles and responsibilities and mechanisms. Such agreements should correspond to each country's plans and policies which can be national, local, sectoral, or hazard-specific. Technology and tools can be useful in managing information flow and products tracking/replacing (like the system used by Thailand's medication tracking and replacement).

Key Messages

- A strong partnership is based on trust which can be built through shared vision, mutual interest and clear roles and responsibilities based on partners competencies.
- The Sendai Framework makes it clear that progress cannot be made if we keep working in our own systems and siloes. Human resources need to be strengthened and capacities built to work across sectors and communities, including for surveillance and immunization at national and sub-national levels.
- Effective cross-border collaboration leads to improved surveillance and immunization especially for infectious diseases.
- Health facilities provide critical services. However, they may create risk to the environment from wastes if not managed properly. Therefore they have an important responsibility for reducing and managing those risks.

Recommendations

- Emphasize the role of multi-sectoral and multi-stakeholder DRR platforms with enhanced collaboration between the health sector and disaster risk management as well as climate change community
- Strengthen partnerships that focus more on prevention, recovery and reconstruction, especially at sub-national levels, as well as cross-sectoral and cross-border collaboration
- Faith-based and indigenous groups should be included in disaster risk management.
- Strengthen partnership with the private sector, including on research, health promotion and preventive medicine
- The capacity of nurses and nursing schools should be tapped on for DRR, especially, for health emergency preparedness and response.

* * * * * * *