5th meeting of the Expert Group on Disaster-related Statistics in Asia and the Pacific and Workshop on Disaster Risks in East and North-East Asia

Incheon, Republic of Korea, 20 – 22 September 2017

Meeting Summary Report

The meeting was opened with remarks from Dr. Ramakrishna Kilaparti, Director of the UN Sub-regional Office for East and North-East Asia, Dr. Romeo Recide, Deputy Director at the Philippines Statistics Authority and Chair of the Asia-Pacific Expert Group on Disaster-related Statistics, Ms. Rikke Hansen Chief of Economic and Environment Statistics at UNESCAP, and Mr. Julio Serje, Head of Sendai Framework Monitoring for the UN Office for Disaster Risk Reduction (UNISDR).

Leaving No One Behind

Session 1 addressed the topic of disaster risks in East and Northeast Asia, under the theme of *Leaving No One Behind.* Participants heard from experts from UNESCAP, Mongolia, National Disaster Management Research Institute Korea, Korean Women's Development Institute and the Hong Kong Polytechnic University on a range of studies focused on an improved understanding of disaster risk in East and Northeast Asia.

The Hong Kong Polytechnic University conducted analyses of potential variables for vulnerabilities to disasters, with a focus on age and location and with reference to ageing population under the high density urban setting. For this research, information was also collected on readiness of the population for disasters and on contingency planning. The National Disaster Management Research Institute of the Republic of Korea prepared research on available statistic on disasters from the past and showed that occurrences of disasters are increasing and failure of sharing information can lead to a failure of disaster management.

Relationships between disaster risk and gender has been a topic of interest but challenging conceptual problem for the Expert Groups since its beginning. During this meeting, the group heard from the Korean Women's Development Institute on an analytical framework and variables of interest for describing this relationship in terms of physical and economic vulnerabilities, for example, statistical differences in health impacts of disasters between men and women.

Case Studies Presentations and Discussion of Draft Statistical Framework

Intensive discussions on the draft content for the Expert Group's Disaster-related Statistics Framework (DRSF) was initiated via an overview and summary presentation by ESCAP on the draft chapters and related materials available for consultation on the Expert Group's website.[1]

The Expert group received 5 presentations on the topic of geographic information systems (GIS) for production and Dissemination of Statistics for Understanding Disaster Risk. These included presentations on a multi-country drought monitoring project of the Institute of Remote Sensing and Digital Earth (RADI) of the Chinese Academy of Sciences. The group also heard about related work, focusing on droughts in Mongolia. The group learned that droughts are important hazards in Mongolia and also can, in many cases, be indicative of increased probability for another related type of hazard, occurring in the cold winter months, known in the Mongolian language as a Dzud.

The Mongolian Dzud is a relatively infrequent hazard but one of the most destructive sources of disasters from an economic perspective, especially because of the extreme impacts they have had in the past to livestock, which are the primary income-earning assets for Mongolia's nomadic or semi-nomadic herder households.

A expert from the Secretariat of the Pacific community presented on use of census data for highly geographically disaggregated statistics in GIS, and the many potential applications, including for assessing risks from a disaster from a product for the Pacific Island States called PopGIS.[2]

UNESCAP presented about outcomes from pilot studies conducted to estimate population exposure to hazards conducted in countries and introduced a proposal for replicating the work in other cases, including at the regional scale. Mr. Ridwan Yunus, of UNDP and the disaster management agency of Indonesia (BNPB), informed the group about the latest progress on the international tsunami risk mapping project, an initiative for World Tsunami Awareness Day. The mapping project overlays estimated areas of potential exposure to Tsunami with point locations for schools and related statistics, which are useful for analysing and enhancing preparedness. Mr. Yunus also presented his work in Indonesia and in several other countries in Southeast Asia to develop central disaster loss databases utilizing DesInventar and other tools adapted from the technologies and experience of DesInventar. DesInventar is a useful resource in the context of adoption of the Sendai Framework, 15-year priorities, for developing disaster statistics at the national level in countries becsuse it contains a software tool for organizing data and a methodology for structuring and defining statistics that are relevant to Sendai Framework targets.

UNESCAP presented the outcomes and proposed future work on pilot testing a methodology for utilizing public ally accessible population census data to estimate population density at a detailed

[1] http://communities.unescap.org/asia-pacific-expert-group-disaster-related-statistics/content/drsf
[2] http://prism.spc.int/regional-data-and-tools/popgis2

level of geographic disaggregation for estimating populations in hazard exposure areas. The method is applicable at different scales and fully flexible to adjustments and calibrations, as needed, the national scale which is important since the availability of data and the context for population density in urban and rural areas varies across countries. The future agenda for this work will include pilot testing application at the regional level.

Further presentations that discussed the roles of geographic information but also more broadly on the topics of organization and planning of disaster-related statistics initiatives within national statistical systems were provided from Mexico and Sri Lanka. In Mexico, coordination of the national system of statistical and geographic information (SNIEG) is coordinated by the National Institutes of Statistics and Geography (INEGI) with four main components: geographical and environmental, economic, demographic and social, government and justice. Included within the demographic and social subsystem, is the census operations and a geo-reference national housing inventory, i.e. maps of the location and characteristics of dwellings across the country. Within the geographical and environmental component, Mexico has nationally comprehensive maps of data on land use and vegetation, among many other variables available as layers in the database, related to water infrastructure, protected areas, climate, and so on. INEGI also maintains geo-referenced statistical information on government administration, e.g. public security, procurement, and justice.

In Sri Lanka, an effort is underway, to utilize census data, according to the location of the residences of households, in GIS, for overlaying with geographic data on hazards, e.g. flood inundation zones.

A household survey conducted for disaster prone areas in Bangladesh was utilized to collect statistics on access to water and sanitation and on selected health indicators, in relation to disaster risks. Several participants from other countries expressed interest in conducting similar surveys of households in their countries. Bangladesh has also developed a framework for environment statistics development 2016-2030, which contains a clear collection of goals for new statistical and outputs and programmes in the country. Descriptions for application of DRSF is included in this 15-year plan.

UN-Habitat described a series of initiatives to collect statistics on cities, which have very important relevance to disaster-related statistics. UN-Habitat has developed several measurement initiatives in relation to the targets under Sustainable Development Goal (SDG) 11 on sustainable cities. These include the city prosperity index (CPI) and research on adapting World Risk Index methodologies to measurement at the city level. UN-Habitat is also developing training materials for statisticians to develop capacities of national agencies to produce statistics related to SDG 11 and the Expert Group was invited to participate in a substantive review of the materials.

Way Forward

In the weeks prior to this Expert Group meeting, the secretariat facilitated a process whereby draft chapters for the Expert Group's framework and guidelines for implementation were posted to website for online consultation and to help the participants to prepare for the meeting. Online feedback surveys were also developed, by chapter, in order to collect and analyse written feedback on the draft text, which could be incorporated into a revision. Several members of the Expert group, as well individuals from the group's broad network of experts and stakeholders have already contributed feedback via the online surveys (or by other means, such as via email).

Based on the discussions held throughout the 3 days of the meeting, a proposal emerged and was endorsed by the Expert Group members for a path to finalize the content of the framework document as follows:

- The current round of online consultation for the draft (chapter-by-chapter surveys) will continue for an additional three weeks (i.e. until mid-October).
- in the surveys is open to all interested stakeholders
- Based on feedback received during the meeting and during the current round of online consultation, the secretariat will conduct a comprehensive revision of the draft text and post a 2nd version (DRSF version 1.2) on the website.
- The secretariat will initiate a 2nd round of online and open consultation for the revised draft DRSF starting from November with a duration of at least 3 weeks.
- The secretariat will keep the Expert group members and other members of the network informed via email notifications and will conduct a final round of revisions and editing of the document, in coordination with members, following the 2nd round of online consultation during December, 2017 and January, 2018
- The final deadline for finalizing the first complete DRSF, with guidance for implementation is March, 2018.

 For the way forward discussion on the third day of the meeting, all national government agencies and the non-government and international agencies spoke of their respective future plans in relation to disaster-related statistics and gave their advice in response to three basic questions that were posed by the secretariat:

1) The expert group is expected to report its outcomes at the Expert Group report to the next Session of the Economic and Social Commission for Asia and Pacific in 2018. What should be the content of this report?
2) What is required in order to implement the draft guidelines of the Expert Group in the future and what other type of inputs or support are needed to attain the goal of improved disaster-related statistics in your countries?
3) What is your advice on the future of the Expert Group after reporting on its outcome to the Commission in 2018?

In addition, future work and opportunities for collaboration between institutions was discussed extensively during the meeting, and especially on the third day, in the context of discussing the way forward for the Expert Group.

The UN Economic Commission for Europe (UNECE) presented the objectives and progress of work of the Task Force on Measuring Extreme Events and Disasters (TF-MEED). This Task Force will meet and also organize a session during the Expert Forum on Climate Change Statistics in October 2017 in Rome…Similar with the Asia-Pacific Expert Group, the Task Force identified a need for developing a framework for disaster –related statistics. The TF-MEED is contributing to the development of DRSF in many ways and the DRSF will have a general relevance not only for Asia-Pacific, but globally.

The Expert Group was informed of the latest status, including a set of draft objectives for the global partnership on disaster statistics, established by UNISDR, UNECE and UNESCAP. UNISDR informed that all types of relevant institutions, including government and non-government institutions, would be welcomed to join, with the requirement that members would be expected to actively contribute to the objectives of the partnership.

The Expert Group also heard about future initiatives from the following participating international organisations and other non-governmental institutions: the Asia Disaster Preparedness Centre (ADPC), the Centre for the Epidemiology of Disasters (CRED), the Hong Kong Polytechnic University, Secretariat for the Pacific Community (SPC), UNISDR.

The group was advised to focus on producing pilot outputs in order to demonstrate what is feasible and how it can be useful. International organizations were interested to see more examples of case studies (or pilot studies), with support, as needed, from the expert group members and through strengthening the network at the regional and sub-regional levels (e.g. in South Asia, Southeast Asia, the Pacific, etc.).

The Chair of the Expert Group summarized the discussion on the Way Forward and also submitted his own views, as follows:

The Expert Group will report, as per its mandate, to the Economic and Social Commission for Asia and the Pacific (ESCAP) at its 74th Session in May, 2018. The Expert Group will report on the results of its work to develop a basic range of disaster-related statics, in particular the completion of the draft disaster related statistics framework (DRSF) and guidelines for its implementation.

The Expert Group will emphasize two key features and reasons for its success in this endeavor:

- Joint composition of the group by National Statistical Offices, National Disaster Management Agencies and international organizations

- Partnership and alignment with other initiatives, including for coherence with requirements set out in the 2030 Agenda and the SFDRR

In its report to the Commission, the Expert Group will also highlight the remaining work that is needed, in particular the application of the DRSF at the national for the production of disaster-related statistics, including for SDG and SFDRR monitoring. This work could entail the following activities: (i) developing case studies or pilot implementation of DRSF, (ii) in-country support by expert group members to assist with pilot implementation and execution of case studies, and (iii) development of training materials as a tool to boost capacities in support of a sustainable international implementation of the framework. Also, members of the expert group network should continue work on methodological development, in alignment with the proposed DRSF research agenda, which is included within the document. The Expert group should also support the dissemination of the DRSF for review and implementation to a broad audience, including in other regions. This should include seeking a path and strategy for raising the substantive statistical development issues to the attention of the UN Statistics Commission.

In order to help ensure an efficient and effective execution of these activities, the Expert Group recommends establishment of a Regional Advisory Group for Asia and Pacific on disaster – related statistics, building on the strengths and outputs of the Expert Group. Subject to further consultations, the Advisory Group could be of a relatively small size, comprising national and international experts that have been involved in the development of the DRSF, and be supported by a broader network of disaster-related statistics practitioners, experts and champions for region-wide DRSF implementation. Following the example of the past 3 years of work by the Expert Group, the Regional Advisory group should:

(1) be comprised of National Statistical Offices, National Disaster Management Agencies and international organizations
(2) report on the progress of its work to the Committee on Statistics and the Committee on Disaster Risk Reduction under the overall guidance of the Commission
(3) Engage with and contributes to the Global Partnership on Disaster-related Statistics