



**Chengdu Forum on UN-GGIM
Global Map for Sustainable Development:
Development and Applications in Urban Hazard Mapping
15 – 17 October 2013, Chengdu, China**

Conclusions on Urban Hazard Mapping for Sustainable Development

The Chengdu Forum on United Nations Global Geospatial Information Management, with the theme “Development and Applications in Urban Hazard Mapping” was held in Chengdu, China, from 15-17 October 2013. More than 180 experts from 40 countries met to share experiences and methodologies in the production, management, analysis, modeling and dissemination capacity of hazard related geospatial information. The following reflects the main conclusions of the participants.

Context:

1. The United Nations initiative on Global Geospatial Information Management (UN-GGIM) provides an inter-governmental mechanism to make joint decisions and set directions on the production and use of geospatial information within national and global policy frameworks, and plays a leading role in setting the agenda for the development of global geospatial information, infrastructure and its management.
2. The United Nations Conference on Sustainable Development (Rio+20) outcome document “The future we want” recognized the importance of comprehensive hazard and risk assessments and knowledge and information sharing, including reliable geospatial information, and urged Governments and organizations to commit to disaster risk reduction in order to enhance the resilience of cities and communities to disasters.
3. The Doha Declaration (6 February 2013) affirmed the importance of having a stable, credible, and reliable national geospatial information infrastructure in each country built on internationally recognized standards that will integrate, manage, and deliver geospatial information for timely, evidence-based and authoritative decision making and policy formulation on location-based development issues, including disasters and humanitarian needs.
4. The Asia-Pacific region, home to almost half of the global urban population, is urbanizing faster than any other region, resulting in an unprecedented growth in densely populated megacities, and an increasing vulnerability to natural disasters.
5. Geospatial information has a vital role to play in all phases of hazard and disaster risk management and reduction, and it extends the ability for nations to not only map their geography and topography, but also those areas that are vulnerable to natural hazards, particularly in urban environments.

Conclusions:

1. Consider establishing a Working Group to enhance the capacity of countries in disaster preparedness, mitigation, response and recovery taking full advantage of geospatial technologies and expertise.

2. As global geospatial information experts, consider how we contribute to the post-2015 sustainable development agenda, particularly in the areas of: disaster risk reduction and mitigation; sustainable development; and the global trend towards urbanization.
3. Many decision makers and disaster managers still do not understand the value and role of geospatial information. There is a need to strengthen the relationships between the National Disaster Management Agencies and the National Geospatial Information Authorities so that this understanding is increased.
4. Coordinate our strategies to provide leadership and raise the awareness of our governments so they understand the importance of geospatial information in disaster preparedness, mitigation, response and recovery, sustainable development and safeguarding life.
5. In order to better understand the role of standards and metadata when using geospatial information in disaster phases, we need to include standardization and related terminologies across countries to ensure interoperability and consistent data models.
6. Establish cooperative mechanisms so that the international community is able to make use of global resources and expertise to combat hazards and assist disaster prone countries. The cooperation should cover risk management, early warning, damage assessment, rescue, analysis and recovery.
7. Disasters require a data driven and a geospatial approach – risk, hazard, exposure, vulnerability, communities, infrastructure at risk, etc. It is also a statistical approach – populations, addresses, postcodes, census boundaries, villages, etc. This requires integrated population and economic data being made available to understand exposure and vulnerability.
8. The growing requirements for combining authoritative information, including its access and coordination, with response information from the crowd and citizens, particularly as it applies in rapid response situations, need to be addressed and met.
9. Geospatial information contributes to building resilience and disaster preparedness. It is an education and communication tool that brings the science and the hazards together. A defined set of hazard and risk geospatial data themes are needed to communicate, understand and map the hazards.
10. Existing institutional and policy barriers to data sharing fall away in response to disasters. At other times there are data silos and security concerns. These concerns need to be balanced with the need to make more data available. Mature SDI's can meet the need to making more data available.
11. There are challenges in providing timely, reliable and accurate information in all phases of disasters. Typically geospatial information is only called for during the response phase. This is too late and reflects a lack of information preparedness for effective response.
12. Urban hazard and disaster mapping should be a key input into the development of a Global Map for Sustainable Development (GM4SD) by UN-GGIM.
13. Increase training, communication, participation in simulation exercises, and exchange of information, including expertise and best practices through conferences, exchange of visits, joint research and other means to enhance our capacity.