



UN-SPIDER TAM Review on
Use of Space-based Technology
for DRR in Bangladesh:
Challenges and Way Forward

United Nations International Conference on
Space-based Technologies for Disaster Risk Management

*“Best Practices for Risk Reduction and
Rapid Response mapping”*

22-25 November 2011

Beijing, China

UN-SPIDER TAM Overview

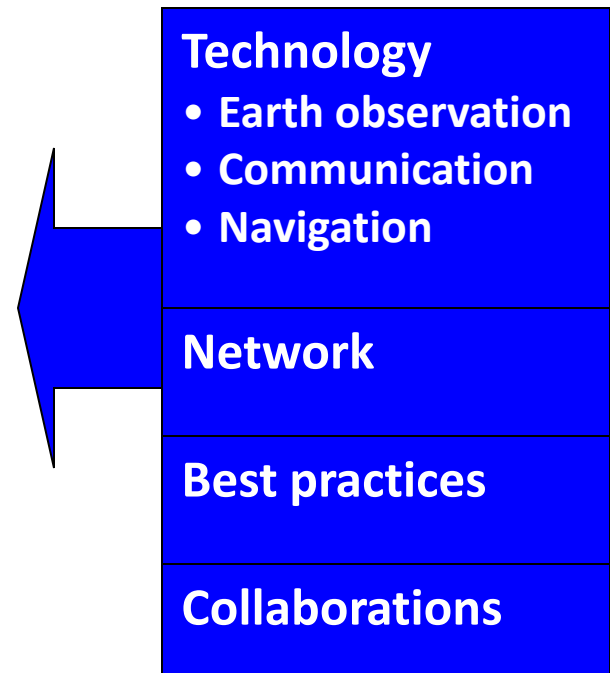
- Mission: 19 – 23 June 2011
- Visits Stakeholders: 14 stakeholders including Govt. Institutions, Programmes and UN Programmes
- Stakeholders Workshop: Participated 30 Govt., Non-govt. and UN agencies/institutions/programmes
- Share TAM findings with stakeholders in a high level meeting chaired by Secretary Disaster Management and Relief Division (DMRD)
- Submit TAM Report to DMRD, M/o Food and Disaster Management, Govt. of Bangladesh

TAM Composition

- UNOOSA/UN-SPIDER Office, Beijing, China
- UN Office for Coordination of Humanitarian Affairs (UNOCHA), Bangkok, Thailand
- Asia Pacific Space Cooperation (APSCO), Beijing, China
- Asian Disaster Reduction Centre (ADRC), Kobe, Japan
- National Disaster Reduction Centre (NDRC) of China
- Centre for Space Science Technology Education in Asia and the Pacific (CSSTEAP), Dehradun, India
- Pakistan Space and Upper Atmosphere Research Commission (SUPARCO), Pakistan

TAM Objectives

- Assess national capacity
- Assist in the definition of risk and disaster management plans and policies
- Provide guidelines to include space technologies into disaster risk reduction and emergency response
- Facilitate access of national institutions to space-based information
- Identify capacity building needs and facilitating
- Identify possible risk reduction and emergency response



Stakeholder Visits

One to one discussions with

- Disaster Management and Relief Division (DMRD)
 - Disaster Management Bureau (DMB)
 - Directorate of Relief and Rehabilitation (DRR)
 - Bangladesh Telecom Regulatory Commission (BTRC)
 - Bangladesh Meteorological Department (BMD)
 - Space Research and Remote Sensing Organisation (SPARRSO)
 - Survey of Bangladesh (SOB)
 - Flood Forecasting and Warning Center (FFWC)
 - Cyclone Preparedness Programme (CPP)
 - Comprehensive Disaster Management Programme (CDMP)
 - CEGIS, IWM, ERF-UNDP
- *Views*
 - *Concerns*
 - *Capacity*
 - *Constrains*

TAM Recommendations

The recommendations focus on the challenges and opportunities in the following specific areas:

- Policy and coordination
- Capacity building and awareness raising
- Information management and sharing
- Data and access
- Emergency communication

Immediate Impacts of TAM

- ✓ Sensitization of key decision makers
- ✓ Awareness generation on use of space tech for DM
- ✓ Identifying missing links
- ✓ Understanding of
 - Current state of space technology use in DM
 - Constraint and challenge
 - Requirements & Way forward
- ✓ Networking & Fostering cooperation (within and outside)

Challenges

- Space-based information and products (specially earth observation) are in at incubation stage. We need to operationalise for DRR
- Satellite images are yet to be used effectively during emergency response and post-damage need assessment (PDNA)
- No provision of Emergency communication system (Satellite Telephone) after devastating nature of disaster
- Early warning (flood and cyclone predictions) needs to be further strengthened by providing better access to the space based information and related Technologies

Way Forward

- Capacity Development of both the organizations agencies responsible for earth observation and end users department
- Ensure coordination and good dialogue between EO organizations and end users
- Building network and platform with related EO organizations outside World
- Avoiding duplication and redundancy
- Incorporation of space technology for DRR to national policy and plan

Further Support from UN-SPIDER

Bangladesh needs UN-SPIDER's support through its network and partners organizations -

- at policy level to strengthen technical capacity of DMRD
- to access remote sensing data available for DRR through international organizations to facilitate recruitment of technical experts
- awareness raising and capacity building for her staff in use of remote sensing technology in cooperation with NDRCC and APSCO in China, CSSTEAP in India and other relevant Agencies

Conclusion

- Space Science and Remote Sensing Technology is still under development stage in Bangladesh, but a considerable progress has been achieved in developing structure and setting of tools and equipments
- The association of DMB/DMRD to the international missions (like International Charter on Space and Major Disaster, SPIDER network of UNOOSA and regional initiatives like Sentinel Asia, ICIMOD, etc.) can help integrating DM programme to the global systems
- International educational institution could help by carrying out disaster related research, by offering higher education and training for Bangladeshi students and professionals, and
- Lastly, Space information should be easily available for developing countries like Bangladesh and distributed in such a format that everybody could use without much effort and technical knowledge.

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Thank You for Patience Hearing