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UN-SPIDER
Technical Advisory Mission
Bhutan
2-6 June 2014
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1. Bhutan at a Glance

- Area: 38,394 sq.km
- 170 KM north-south and 340 KM east-west
- Altitude: 100 to 7500 m above sea level
- Population 634,982
  - (Population & Housing Census 2005)
- Forest cover: 72%
- Country is divided into:
  - 20 Dzongkhag (Districts)
  - 205 Gewog (Blocks)
2. Technical Advisory Mission (TAM)

Background

The DDM, MoHCA requested UN-SPIDER to organize TAM in Bhutan. The TAM visited Bhutan from 2-6 June 2014.

TAM mission team comprises members from:

1. UN-SPIDER/UNOOSA,
2. UNDP, Bhutan
3. International Centre for Integrated Mountain Development (ICIMOD)
4. National Disaster Reduction Centre of China (NDRCC)
5. University of Salzburg, Austria
6. Asian Disaster Preparedness Centre (ADPC)
3. Objectives of the Mission

i. To review policies, procedures and mechanisms of geospatial information and make recommendations.

ii. To engage key stakeholders in the disaster risk management.

iii. To develop an institutional strengthening strategy for stakeholder agencies (individuals, institutions and infrastructure).

iv. To develop a long-term association with UN-SPIDER to take advantage of outreach activities, institutional strengthening programmes and resources available through the UN-SPIDER network.
4. Mission Activities at a Glance

i. Conducted meetings with the key government agencies/institutions (10 agencies) and UN agencies on their role in DM and use of space-based information and challenges and constraints in using space technology.

ii. Organized workshop on Space Technology Application on DRR in Bhutan.
5. Observations and Assessment by the Mission

i. Policy and coordination

ii. Data availability and information sharing

iii. Capacity building and institutional strengthening

iv. Space-based information in preparedness, early warning and emergency response for better DM
6. Recommendations

i. Policy and coordination

ii. Data access, availability and sharing

iii. Capacity building and institutional strengthening

iv. Strengthening DRR Decision making

v. Strengthening early warning and preparedness

vi. Strengthening emergency response
7. Follow-up Activities

i. Preparation and implementation of geospatial strategy and NSDI

ii. Institutional capacity development strategy

iii. Develop risk, hazard and vulnerability mapping methods appropriate for different scale levels in Bhutan

iv. Get coverage of remote sensing data for entire country on adequate resolution and use it for generating baseline and operational geospatial data required for disaster management and development in line with GNH

v. Seek high-level intervention to establish mechanism for data sharing for the purpose of
8. Impact of the TAM

- CGISC drafted National Geo Information Policy of Bhutan 2015
- Capacity building:
  - Training on Earth Observation for Disaster Response and Recovery Preparedness, IIRS, Dehradun, India, 13 to 17 April 2015
- Landslide risk assessment training in Bhutan – Landslide Technical Working Group under IMTF is formed
Thank You