Experience and Lessons Learned in utilizing geo-referenced information in DRM

Country Presentation
Sri Lanka

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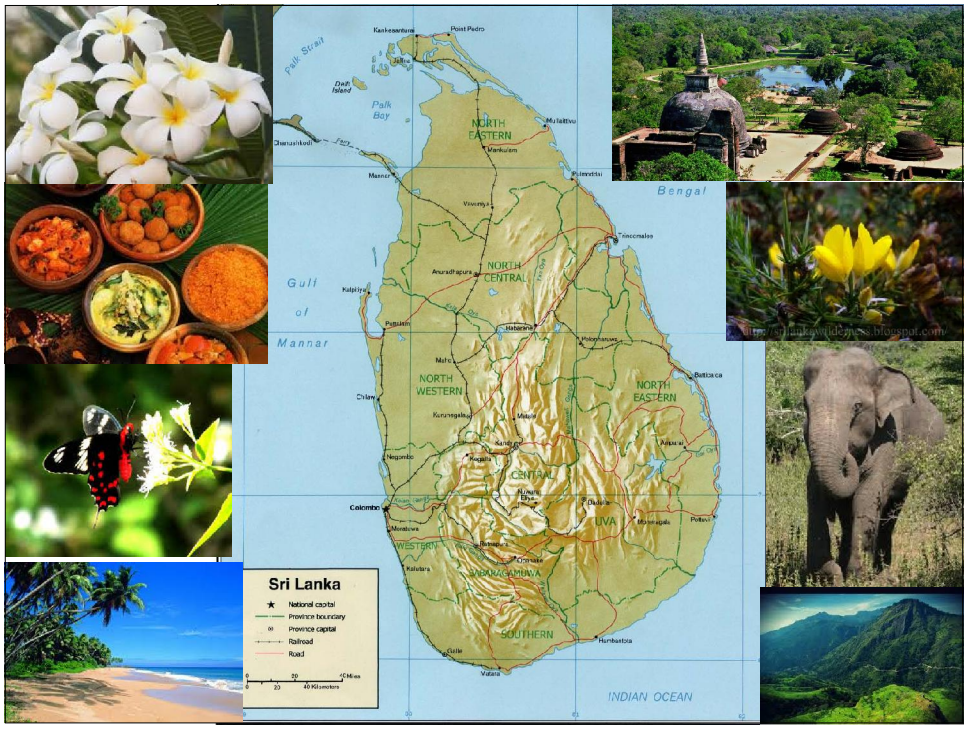
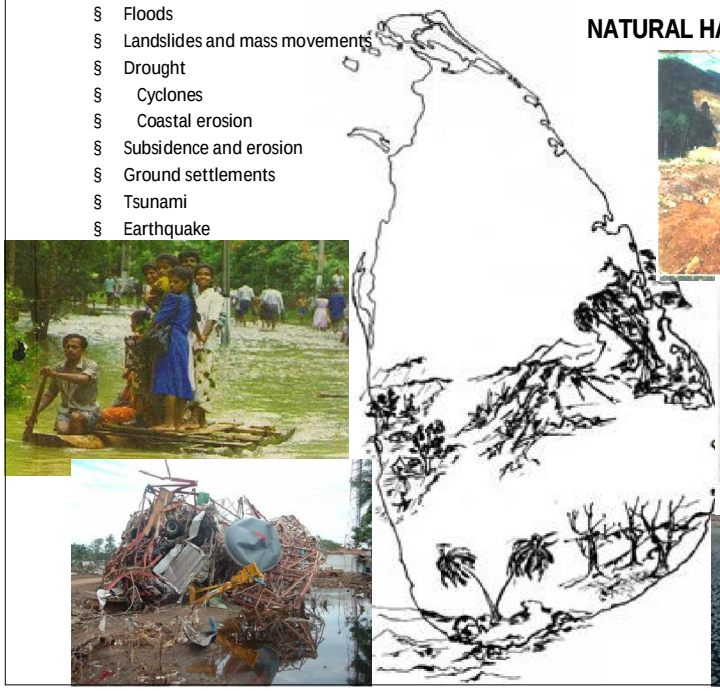


NATURAL HAZARDS IN SRILANKA

- Floods
- Landslides and mass movements
- Drought
- Cyclones
- Coastal erosion
- Subsidence and erosion
- Ground settlements
- Tsunami
- Earthquake



Geo-referenced information are utilized in various ways for disaster Risk reduction and sustainable development in the country

- Studying the distribution of landslide potential in the central highlands of Sri Lanka and landslide hazard zonation mapping
- Identify the areas subjected to flooding and preparation of flood inundation maps
- Study and map the areas subjected to
  - costal erosion
  - Sea level rise
  - Tsunami inundation
- Predict and map the areas subjected to agricultural drought
- Mapping cyclone paths and areas subjected to wind hazard
- and many more

Among the International Cooperation received over the years...

- Sri Lanka was selected as a Pilot Country for implementation of the 5 year Action Plan (2012-2017) formulated by the UNESCAP for developing the capacity of the countries in the region to use space technology applications for Sustainable Development and Disaster Risk Reduction.

- Sri Lanka was also selected as one of the first two pilot countries to implement the UNESCAP project on Regional Cooperative Mechanism for Drought Monitoring and Early Warning .

As a result, Sri Lanka was able to participate in various capacity building programmes organized under the blessings of UNESCAP

- Use of Multi GNSS information in Disaster Risk Reduction, held in Bangkok, Thailand 2012
- Sub-regional training on "Development of geo referenced information system for disaster risk management held in Dehradun, India from 26th – 29th August, 2013
- Capacity building programme on space technology and GIS application for disaster risk reduction, held in Seoul, Korea from 28th October to 17th November, 2013.

Availability of geo-referenced information

- National hazard profile (www.hazard.lk)
- National Risk profile (www.riskinfo.gov.lk)
- Landslide hazard zonation maps (www.nbro.gov.lk)

Cabinet decision has been taken for Development of National Spatial Data sharing Infrastructure (NSDI)

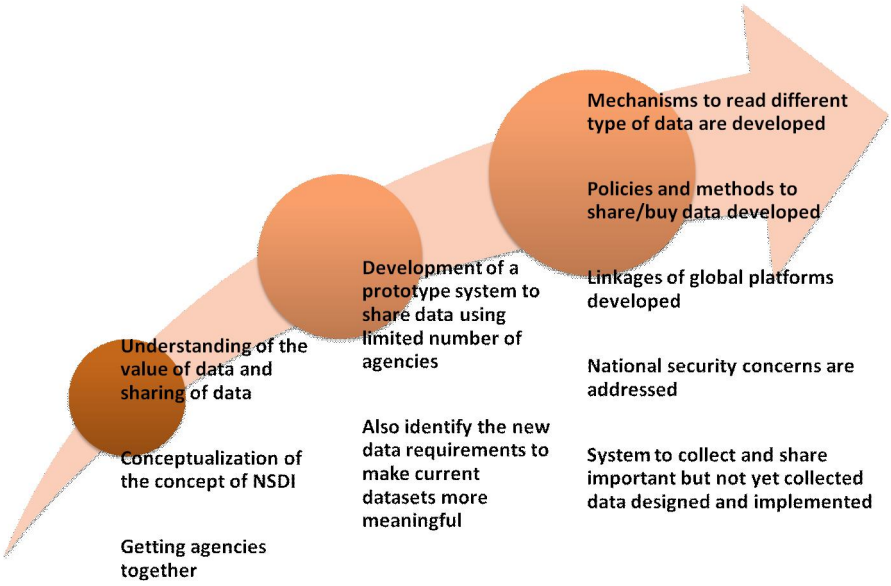
The thematic areas of Disaster Management and Environmental Management are selected for the pilot project

Drafting the spatial data infrastructure road map for the thematic area DM was commenced in mid May, 2014 and is expected to be completed by the end of July 2014.

Testing the road map as a model, fine-tuning it, and using as a basis for building the NSDI will be implemented subsequently.

SLSDI is viewed as the technology, policies, standards, human resources and related activities necessary to collaborate, acquire, process, distribute, use, maintain and preserve spatial data throughout all levels of government, private and and citizens for efficient service delivery

Steps towards a National SDI

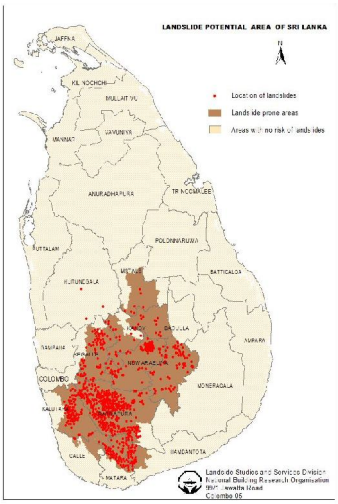


Utilizing geo-referenced information on landslides disaster risk reduction and Experience and Lessons Learned

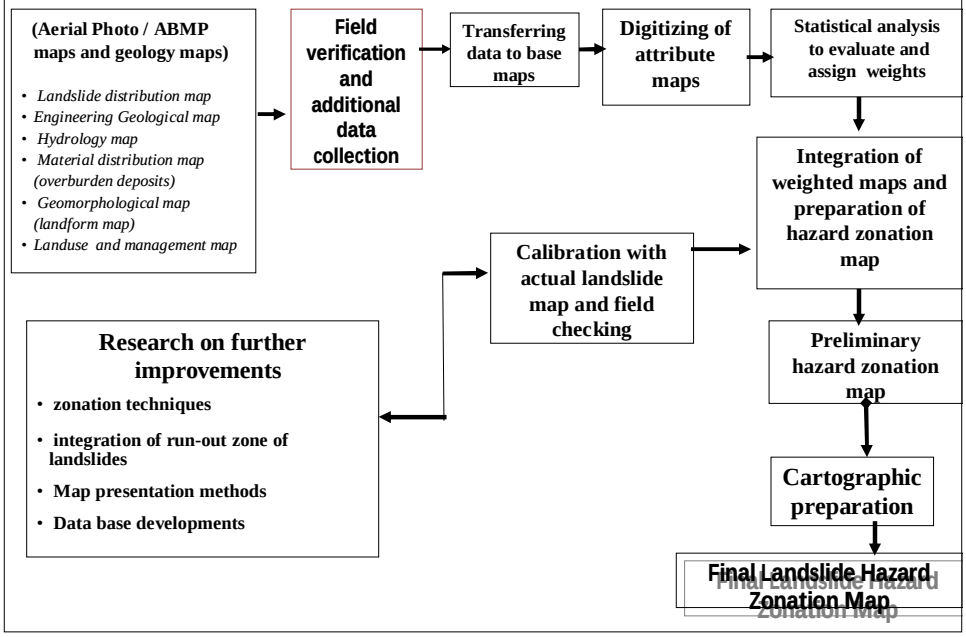
In the past majority of landslides occurred due to natural causes

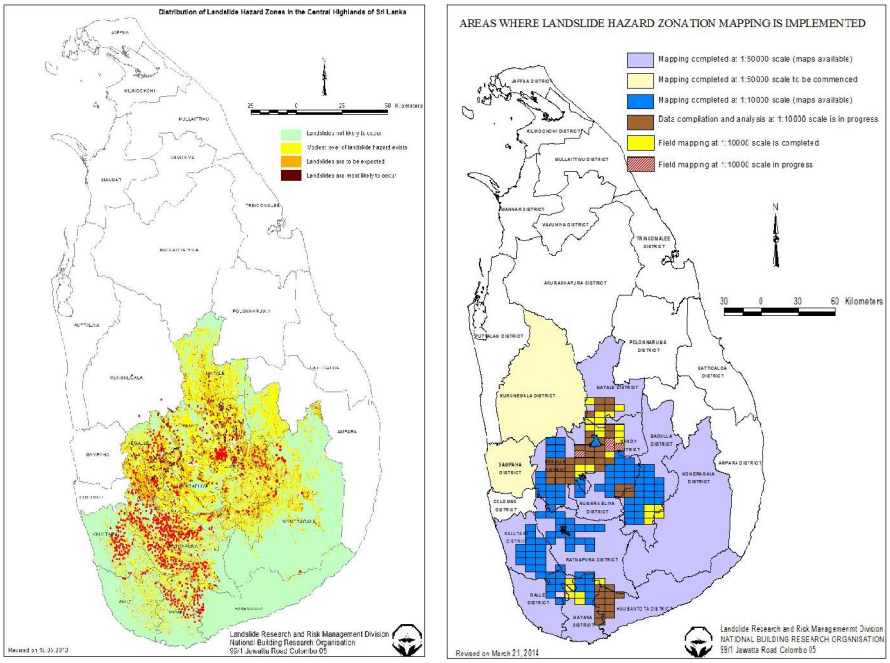
In 1990, 5 year long Landslide Hazard Zonation Mapping project was implemented with the technical and financial support of UNDP for Identification of landslide potential and landslide disaster risk reduction

At the inception, Maps were intended to be used as a tool for development planning



Preparation of Landslide Hazard zonation maps





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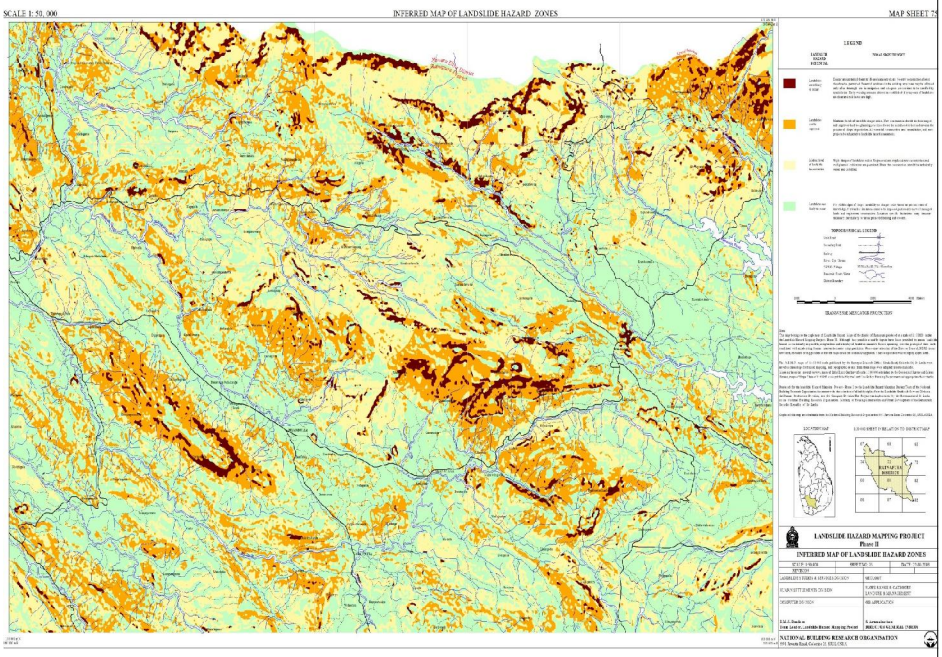

Recommended Land Use Practices for Different Landslide Hazard Zones

Landslides not likely to occur (expect for flood plains)

High & medium density use zones
mixed residential, commercial, industrial etc.

Landslides can be expected

(except for flood plains)
High & medium density mixed residential zone