



**Asia-Pacific
Economic Cooperation**

2017/SOM1/EPWG/024

Agenda Item: 7.3.1

ICT and Risk Informed Decision Making for Resilient Development

Purpose: Information

Submitted by: ADPC



**11th Emergency Preparedness Working Group
Meeting
Nha Trang, Viet Nam
18-19 February 2017**



ICT and risk informed decision making for resilient development

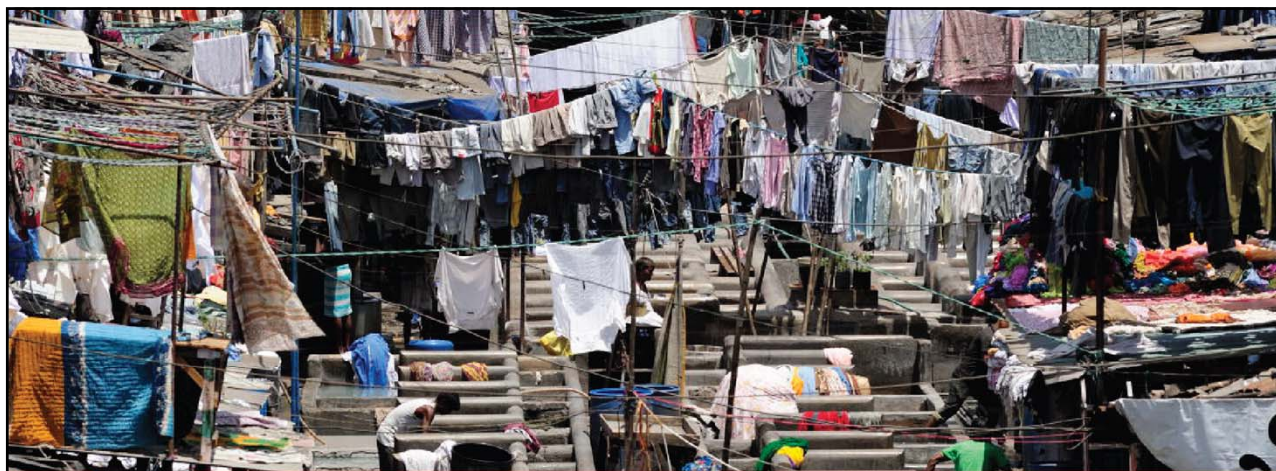
Asian Disaster Preparedness Center



Why focus on development?

- Disasters set back development programming, destroying years of development initiatives.
- Development programs can increase an area's susceptibility to disasters.
- Development programs can be designed to decrease the susceptibility to disasters and their negative consequences.
- Rebuilding after a disaster provides significant opportunities to initiate development programs.





ADPC's work in the region



Sharing risk information in Nepal

<http://drm.moha.gov.np/>

Government of Nepal
Ministry of Home Affairs
Singha Durbar, Kathmandu, Nepal

HOME LAYERS MAPS DOCUMENTS PEOPLE SEARCH

WELCOME TO NEPAL GOVERNMENT GEO-PORTAL

Nepal officially known as the Democratic Republic of Nepal is a landlocked sovereign country located in South Asia. It has an area of 147,181 square kilometres and a population of approximately 2.7 crores (27 million). It is located in the Himalayas and bordered to the north by the People's Republic of China, and to the south, east, and west by the Republic of India. Kathmandu is the capital of the country and the most populous city of the country.

Explore Layers

Explore Maps

LATEST LAYERS

Total: 15

- admin_district_1
Layer from moha, 9 months, 1 week ago
No abstract provided
81 views Average rating (0 votes) Download Create a map
- admin_development_region_1
Layer from moha, 9 months, 1 week ago
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69 views Average rating (0 votes) Download Create a map
- admin_development_region
Layer from moha, 9 months, 1 week ago
No abstract provided

LATEST MAPS

- Nepal Water Area
Map from dema, 8 months, 3 weeks ago
130 views Average rating (0 votes)
Download View



Nepal climate data portal

www.dhm.gov.np/dpc/

Government of Nepal
Ministry of Science, Technology & Environment
Beta
Department Of Hydrology and Meteorology

Home Citizen Charter Organizational Structure Station Network Project Websites Events Publications News Contact

(Tel: +977-1-4486555) for weather updates | Please dial 1618-061-465299 for Updated Daily Weather Data of Western Region

Climate Portal Home User Manual Technical Guides Terms and Conditions Price List

Climate Language Login Help

Layers

- Base Layers
 - Blue Marble Topography (January)
 - Blue Marble Topography (July)
 - OpenStreetMap (Mapnik)
 - OpenStreetMap (MapQuest)
- Overlays
 - Observation stations
 - Nepal development regions names
 - Nepal development regions
 - Query result values

Charts and Downloads (for selected places)

Annual values:

Show chart CSV map data CSV time series Printable Map

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Geo spatial risk information sharing platform in Lao PDR

DMCC
Department of Disaster Management and Climate Change (DDMCC)

Main Menu Search Legend Base Layer Overlayers Print July 2016 Login

Search

Level

- Country
- State/Region
- City
- Township
- Village

Category

- Hazard
- Exposure
- Risk
- Other

Select State / Region

Hazard

Select

Sector

Select

File type

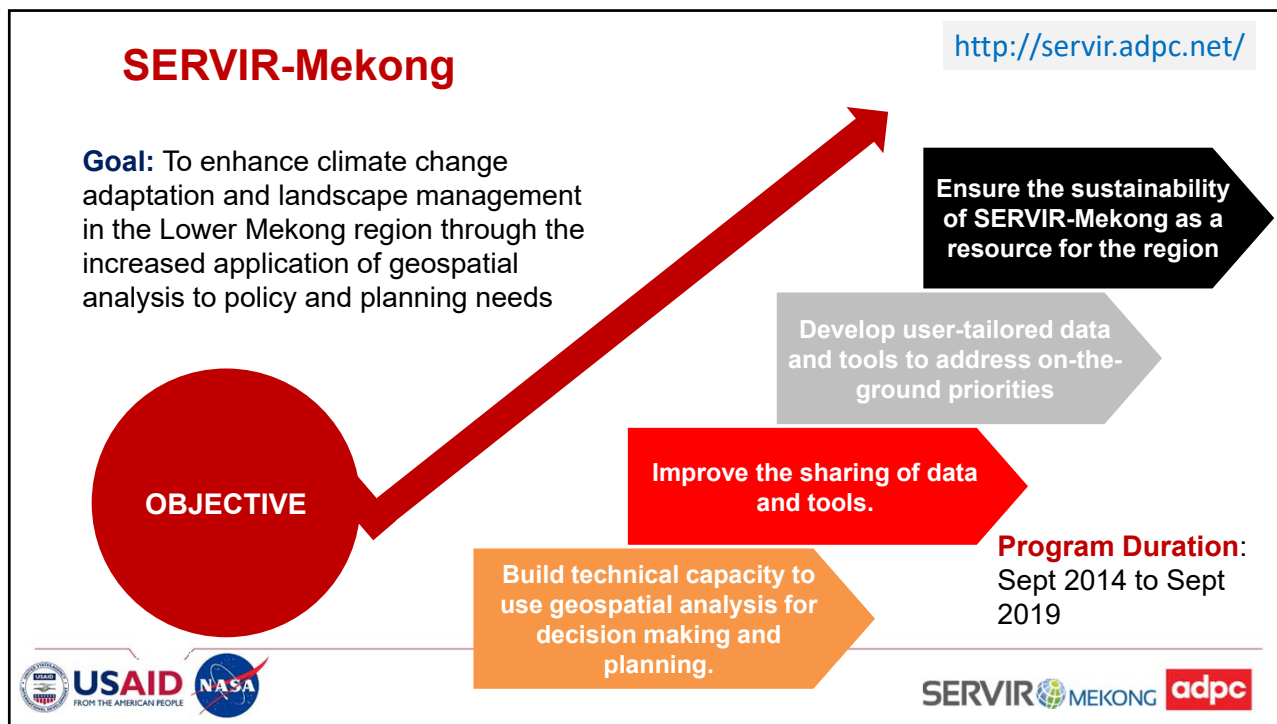
Base Layers

- Google Streets
- Google Hybrid
- OSM

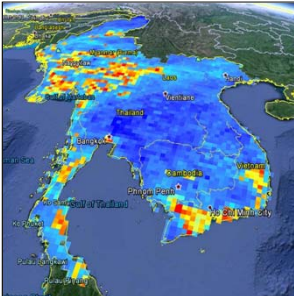
Overlayers

Legend

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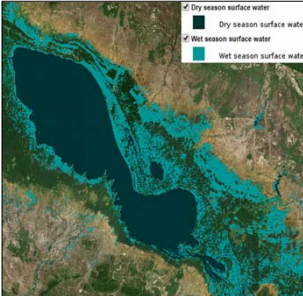


Geospatial Tools/Data for Disaster Risk Management from SERVIR-Mekong




Regional Drought Monitoring

- Monitor and forecast drought
- Estimate impacts on crop yields



Surface Water Mapping

- Analyze trends of wet/dry areas
- Analyze river course changes



Virtual Rain and River Gauge

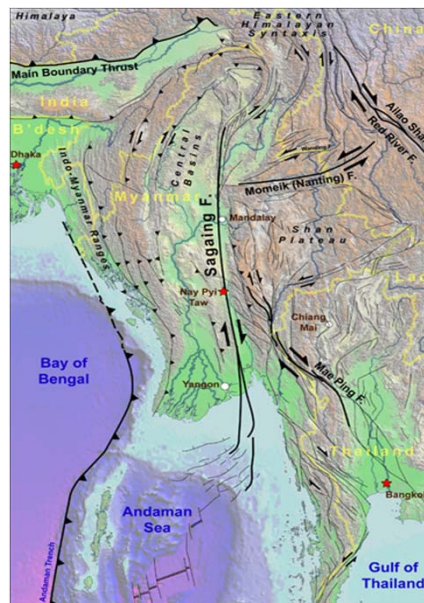
- Provide rain and stream height data
- Improve flood warning

Future Tools

- Real-time flood monitoring
- Severe thunderstorm warning

Earthquake risks in Mandalay

- Mandalay lies along the Sagaing fault in Myanmar
- Sagaing fault was the cause of 13 of 17 major EQs in the past 172 years and has been mostly quiet for the past 75 years
- Pre-1988, most major structures were designed without seismic resistance
- Soil investigation, an initial step in earthquake preparedness, was not mandatory in pre-1999



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Utilizing risk information in Mandalay



- Risk-sensitive land use planning guidelines in Mandalay has been generated for local authority to implement
- City and household-level emergency response planning developed for the authority to reduce community risks
- At risk buildings have been identified to be retrofitted by the local authority

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Challenges and priorities

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Priorities

- Improving understanding of disaster risk
- Provide access to risk information
- Strengthening the ability of governments and institutions to manage disaster risk
- Capacity building of sub-national level officials
- Need for greater gender inclusivity
- Improving coordination among relevant domestic and regional agencies
- More financial resources to ensure the long-term sustainability initiatives
- Fostering greater private sector engagement

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What's next?



- Sharing of risk information through national platform
- Application of risk information into sectoral development plans
- Utilization of space technology
- Use of social media for emergency preparedness
- Private sector engagement





2016 AMCDRR

Adopted 'New Delhi Declaration' and 'Asian Regional Plan for Implementation of the Sendai Framework'

Regional Plan: A Unique Approach



Greater congruence with sustainable development



Regional cooperation



Action oriented



Focus on early warning



Enhanced stakeholder groups engagement



Emphasis on understanding risk



private sector partnerships



Increased participation and leadership of women

ADPC vision:

Safer communities and **sustainable development** through **disaster risk reduction**



Our Locations

- Bangkok, **Thailand**
- Dhaka, **Bangladesh**
- Yangon, **Myanmar**



Our Approach

Science, System, Application



- ADPC uses science-based approaches to **identify, quantify** and **understand** risk
- Strengthening **effective governance** systems for managing disaster and climate risks and **institutionalizing** disaster risk management
- Incorporating disaster risk reduction into **development processes**



Training

- **Over 30 years** of experience
- **Extensive portfolio** of training courses serving **26 countries in Asia-Pacific**
- **Over 14,000 graduates** from ADPC regional training worldwide
- **Alumni network** includes government officials, practitioners, development partners and media professionals



Regional Consultative Committee on Disaster Management

- Established in 2000
- 26 Member Countries
- Leading regional mechanism on disaster risk management in Asia-Pacific
- Provide opportunity for regional and sub-regional cooperation



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THANK YOU
FOR YOUR ATTENTION

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 <http://www.adpc.net>

 <http://www.drrprojects.net>

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