



SADKN AND STATUS OF GEO-REFERENCED INFORMATION IN DISASTER RISK MANAGEMENT IN BANGLADESH



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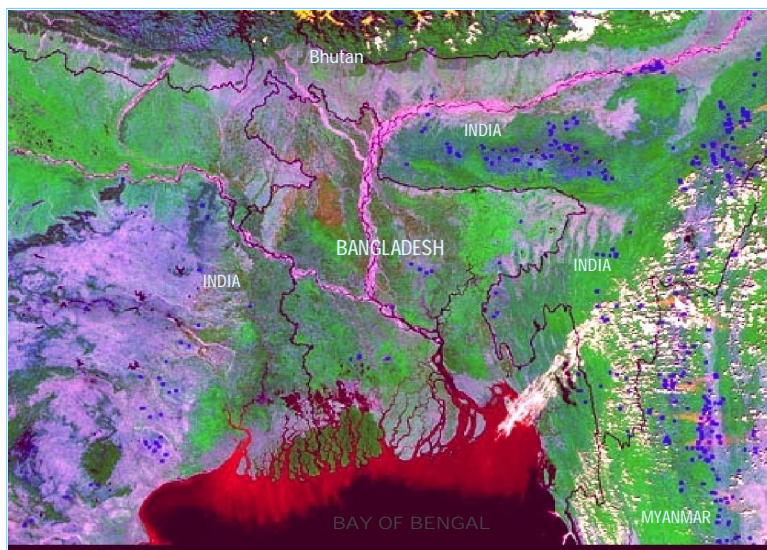
Ministry of Disaster Management and Relief

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Department of Disaster Management

Bangladesh and Surrounding Areas As Viewed in MODIS Image



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COUNTRY PROFILE

- ü Area : 147,570 sq. km
- ü Population : 160 million (Approx.)
- ü Density : 1100 people per sq. km
- ü Floodplains : 82% of total area
- ü 57 Trans boundary rivers (out of 300 rivers)
- ü Coastal area : 710KM
- ü 45 Million peoples are vulnerable to Cyclone and Strom Surge
- ü Literacy Rate : 68%
- ü Average Annual Rainfall : 1429 - 4338 mm

- ü Divisions : 7
- ü Districts : 64
- ü Upazila : 488
- ü Unions : 4,491

- ü Municipalities : 307
- ü City Corporations :9

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KEY FACTORS OF VULNERABILITY

- } Global Warming and Climate Change
- } Geographical location
- } Dominance of floodplains
- } Low elevation from the sea
- } High population density
- } High level of poverty

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GoB VISION

To reduce the vulnerability of people, especially the poor, to the effects of natural, environmental and human induced hazards to a manageable and acceptable humanitarian level and to have in place an efficient emergency response system capable of handling large scale disasters.

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GoB Capacity in Disaster Management

- } Specialized **Ministry for Disaster Management & Relief**
- } Creation of Department of Disaster Management (DDM): shifting focus from relief to disaster management specially to risk reduction culture.
- } **CPP (Cyclone Preparedness Programme)**: building a network of 49,500 trained volunteers across coastal belt
- } Issuance of **SOD (Standing Order on Disaster)**: establishing mechanisms and procedures for effective response at all levels during disaster emergency
- } Established Disaster Management Information Centre (DMIC) down to Upazilla level to support info management & Coordn.
- } Initiate formulation of '**Comprehensive Disaster Management Framework**' involving all disaster stakeholders including donor community
- } The presence of **vibrant NGO communities**, disaster vulnerable people demonstrates strong coping capacity to face the disaster challenges

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MAJOR HAZARDS AND IMPACTS

Hazard Types	Impacts of Major Disasters			
<ul style="list-style-type: none"> u Flood u Cyclone & Strom surge u River bank erosion u Earthquake u Drought u Landslide u Salinity intrusion u Arsenic contamination u Industrial hazards u Fire u Tsunami 	Hazard	Year	Death	Economic Loss (USD)
	Cyclone	1970	500,000	2.40 b
		1991	136,000	1.50 b
	Sidr	2007	3,406	1.7 b
	Aila	2009	190	1.1 b
	Mahasen	2013	17	Not yet completed
	Flood	1987	1470	1.0b
		1988	1708	1.2 b
		1998	918	2.80b
		2004	285	2.3b
	2007	707	1.10b	

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Status of Spatial and Non Spatial Information in Bangladesh

The following organizations have a good spatial and non-spatial Information Management System:

- q Department of Disaster Management(DDM)
- q Survey of Bangladesh (SOB)
- q Space Research and Remote Sensing Organization (SPARRSO)
- q Flood Forecasting and Warning Center (FFWC)
- q Bangladesh Meteorological Department (BMD)
- q Bangladesh Bureau of Statistics (BBS)
- q Local Government Engineering Department (LGED)
- q Institute of Water Modeling (IWM)

Continued....

- } **Center for Environmental and Geographic Information Services (CEGIS)**
- } **Water Resources Planning Organization (WARPO)**
- } **Bangladesh Agriculture Research Center (BARC)**
- } **Soil Resource Development Institute (SRDI)**
- } **Roads and Highways Department (RHD)**
- } **Bangladesh Forest Department (BFD)**
- } **Directorate of Land Records and Surveys (DLRS)**
- } **Dhaka Water Supply and Sewerage Authority(WASA)**
- } **Bangladesh University of Engineering and Technology(BUET)**
- } **Dhaka University**

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STATUS OF USING SPACE INFORMATION IN DRM

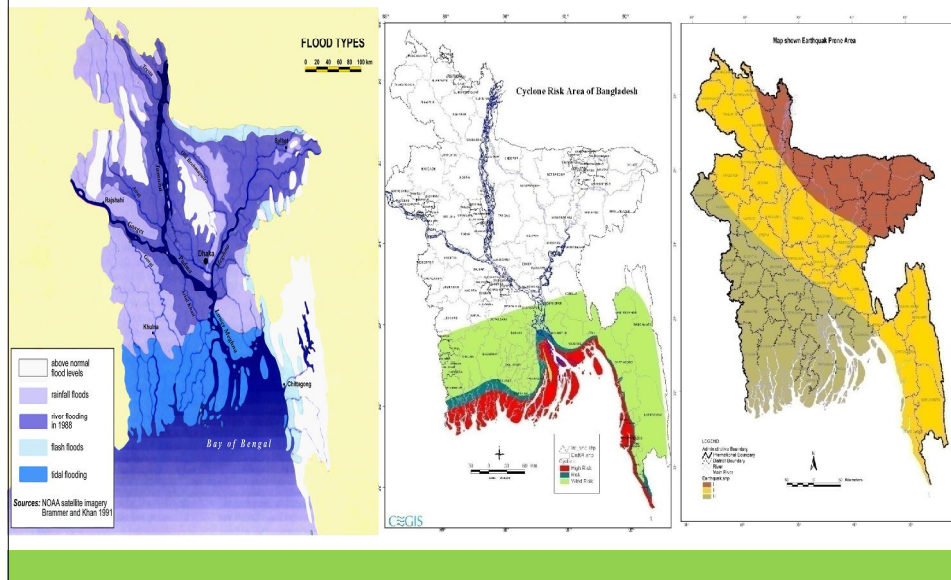
STRENGTH

- q Institutional framework and structure is well established
- q Excellent capacity to use space technology exists in BMD, SPARRSO, CEGIS, SOB, FFWC, IWM etc
- q Proven and effective example of employing space based information in cyclone prediction
- q Geospatial databases exist
- q Operational data on disaster risk is available

OPPORTUNITIES

- q Satellite images are yet to be used effectively during emergency response and damage assessment
- q Early warning (flood and cyclone predictions) can be further strengthened by providing better access to the space based information and related Technologies

Flood, Cyclone and Earthquake Hazard Maps



PRODUCTS AND SERVICES

- } **Community Risk Assessment(CRA)**
- } **Hazard Mapping**
- } **Disaster prone Area Mapping**
- } **Strom Surge Inundation Mapping**
- } **Seismic Micro Zonation Map has prepared for Dhaka, Sylhet and Chittagong city**
- } **Early Warning Disseminating Though Mobile Phone using IVR (Interactive Voice Response) and SMS**
- } **GIS based Cyclone Shelters Information Management System**
- } **Web Based Application for Post Disaster Damage and Loss Assessment**

Multi Hazard Risk and Vulnerability and Assessment Modeling and Mapping (MRVA)

Strengthening and Enhancing DDM capacity for the Systematic Identification, Quantification and Monitoring of Multi-Hazard Risks and Vulnerabilities

üDDM is going to establish a 'Multi-Hazard Vulnerability and Risk Modeling and Mapping Cell' under project supported by World Bank

üADPC, Thailand is providing consultancy service

üMRVA's Capacity Building and strengthening for consolidating and maintaining hazard risk information at central (national) and disaggregated (district) levels.

üThe project will be ended on 2014

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MAIN OBJECTIVES(MRVA)

- } To map out all hazard prone areas of Bangladesh specifically district, City Corporation, municipality, upazila and unions covering geological, hydro-meteorological and technological hazards.
- } To assess the exposure of people, property, infrastructure and economic activities to these above mentioned hazards.

预览已结束，完整报告链接和二维码如下：

https://www.yunbaogao.cn/report/index/云报告?reportId=5_6847

