

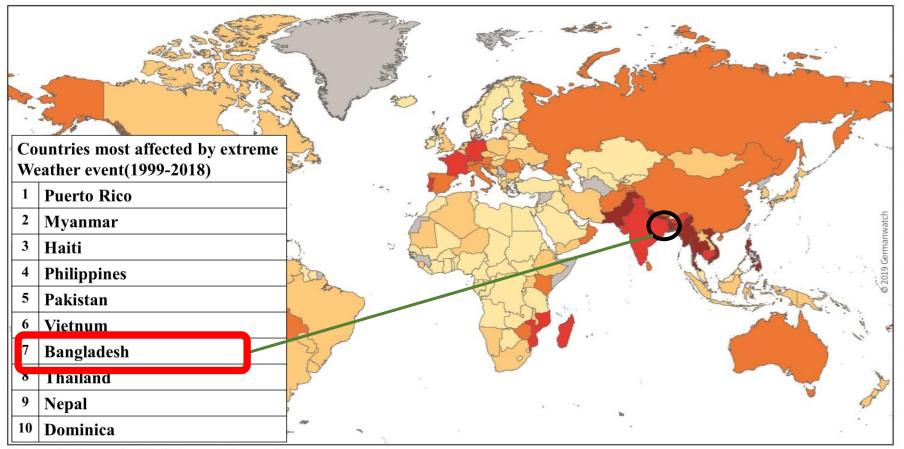
22nd Meeting of Technical Working Group (TWG) on Disaster-related Statistics

Tanvir Al Nasif Senior Assistant Secretary Ministry of Disaster Management and Relief Government of the People's Republic of Bangladesh

Major Hazards and Risk Profile of Bangladesh

Vulnerability	Hazard Type						
	Flood	Flash Flood	Cyclone & Storm Surge	Drought			
	%	%	%	%			
Land Area	61	23	32	46			
Population	71	24	27	46			
			Sou	rce: MoDMR (2021)			

Bangladesh Climate Risk Index Ranking (1999-2021)



Italics: Countries where more than 90% of the losses or deaths occurred in one year or event

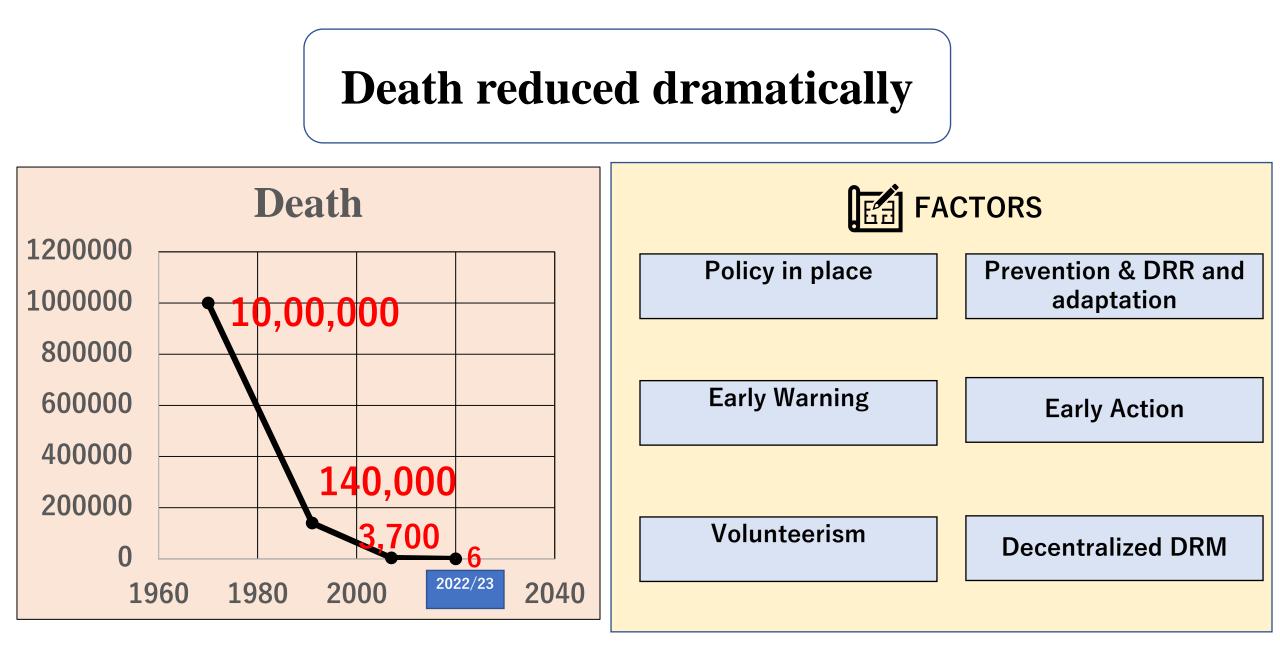
Source : Germanwatch "Global Climate Risk Index (2022)"

3 Basic stages of Disaster Data/Statistics usage by MoDMR

- Disaster preparedness: By using disaster statistics such as most disaster prone areas in the country, percentage of affected people, percentage of non working days of poor people; we have made short term and mid term objectives for field level officers to build preparedness, engage community volunteers, develop shelter centers, infrastructures for evacuation.
- Response: Instant supply of resources to different government agencies has been done during emergency operations like flash flood, land slides, cyclones. National disaster risk reduction control room(NDRCC) reports on daily basis generates disaster statistics which helps to allocate resources in affected areas.

Post disaster relief, shock responsive program and rehabilitation:

• Post disaster statistics gives relative illustrations of loss and damage of households, agricultural production, health, sanitation, vulnerability of women and children, percentage of local displacement in the affected area. By analyzing these data a short term relief program has been developed by me. Different kinds of assistance like cash,kinds, shelters have been engaged in those areas on program basis.



Economic losses are increasing

Policy enablers for prevention, mitigation and Recovery

Policy, plan and institutions

- Disaster Management Act, 2012 is basic for regulatory framework
- National Disaster Management Policy, 2015 addressing all hazards
- Standing Orders on Disaster (SOD)2019 ensured whole of society approach and facilitate loss and damage assessment (D-Form)
- National Plan for Disaster Management (2021-2025) aimed to 'wining resilience against all odds/disasters'



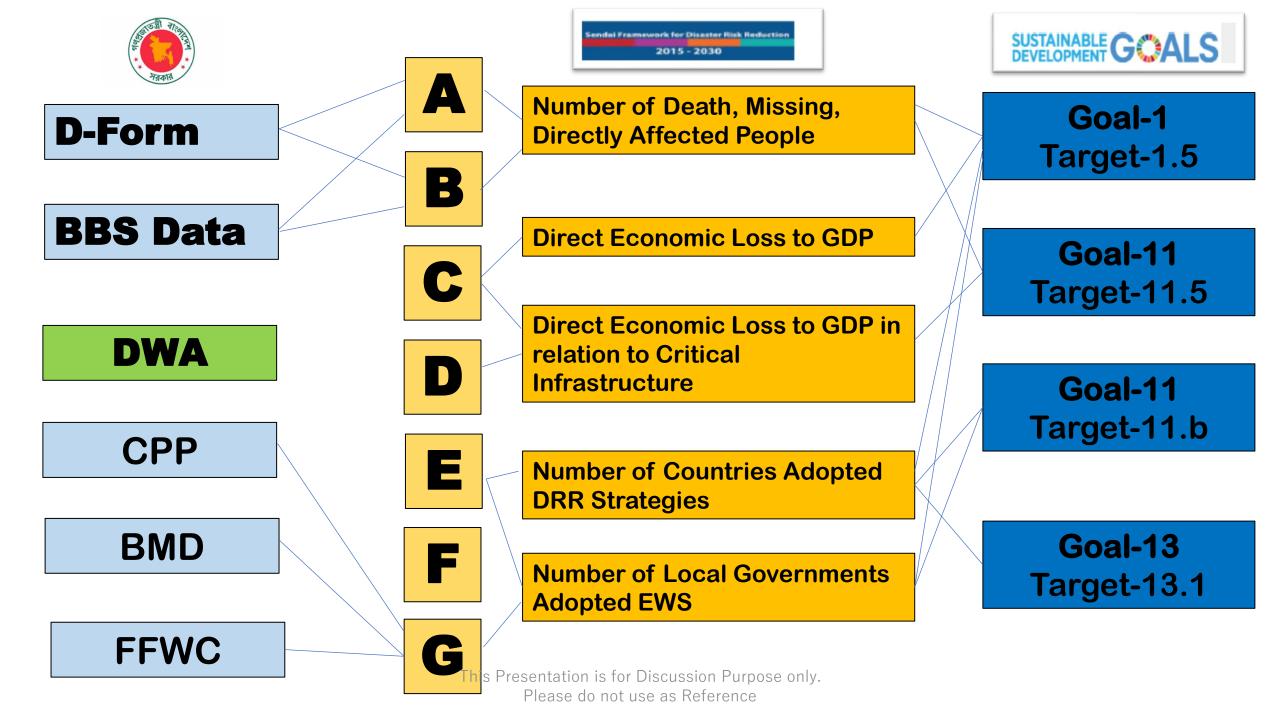
Most Traditional Damage Assessment Tools in SOD • SOS Form

(within one hour after the disaster event)

\circ **D-Form**

(within two weeks of disaster event maximum by three weeks)

Currently both the form fills up manually and it takes time!!!



Key Features of Loss Assessment Tools

- D-Form (damage and loss assessment) is long practices tool for bottom up approach assess the economic loss
- SOS FORM- Uses for approximate damage and urgent needs: disaster affected people, search and rescue, medical service, emergency shelters, food and non-food item requirement
- Information provides by the UNO (sub-division admin) to the Deputy Commission (district admin) to provide SOS generated information to the national level (NDRCC) in urgent to save the lives
- Local Disaster Management and Response Committee play critical role to collect and validate the information/data for quick actions

Key Aspects and Methodology: Damage and Loss assessment

- D-Form (loss and damage assessment) is the comprehensive tool which collect data from disaster affected areas (Union –local administrative unit)
- The format **covers 28 areas**/field of assessment and major areas are:
- Affected areas (geographical) ranked as intensity -most severe affected
- Affected population (sex, age, persons with disability disaggregated data SADD)
- Number of death, missing, injured people
- Affected houses (critical aspects of vulnerability and quick recoveryapproximate that also provide the economic loss and its repairing cost)
- Affected areas of crop and number of livestock/poultry dead-washed away (key components of rural livelihoods)-converted into economic price
- Critical infrastructures and services affected (damaged power lines, telecom, roads, bridge/culvert, embankments, tube well, academic institutes etc)

D-Form (Damage and Loss Assessment)

APPENDIX 6: D FORM – DAMAGE AND LOSS ASSESSMENT

Upazila Nirbahi Officer/Chairman of the Municipality will fill the form after collecting information from the Chairman of all Union Council/ward and officials from different departments. The complete form will be sent to the respective Deputy Commissioners. The Deputy Commissioner will compile the information of all upazilas under the district and send to the Emergency Response Coordination Centre (ERCC) at the Department of Disaster Management within three weeks. Department of Disaster Management will compile all the information of affected districts and send to the National Disaster Response Coordination Centre (NDRCC) at the Ministry of Disaster Management and Relief.

	1 2		3						
Name of Upazila/Municipality		Total Union/Municipal Ward (Number)		Total Area (sq. km)					
				Urban	Rural	Char	Hilly	Haor/Beel	Total
				Area	Area	Area	Area	Area	
Name of affected		Affected Union/ Municipal Ward							
Upazila/Municipality and type of Disaster		(Name/ Municipal Ward Number)		Affected Area (sq. km)					
Name	Type of Disaster	Name of the Union/Municipal Ward Number	Seriously Affected Union/Municipal Ward, mark (√)	Urban Area	Rural Area	Char Area	Hilly Area	Haor/Beel Area	Total

Key Aspects and Methodology: Assessment and data validation

- Sectoral data on loss and damage assessment by the respective department
- Local level lead by the local government institutions and disaster management committee (UDMC)
- The data compile and validation at sub-division level (UzDMC)
- Compile and validation of data at the district level (DDMC)
- District level data are compiled by the sectoral ministry/division and agency and shared to DDM/MoDMR/NDRCC
- The damage information converted into economic losses
- The approximate total damage figure (BDT)
- The Department of Disaster Management will update the form time to time as per need

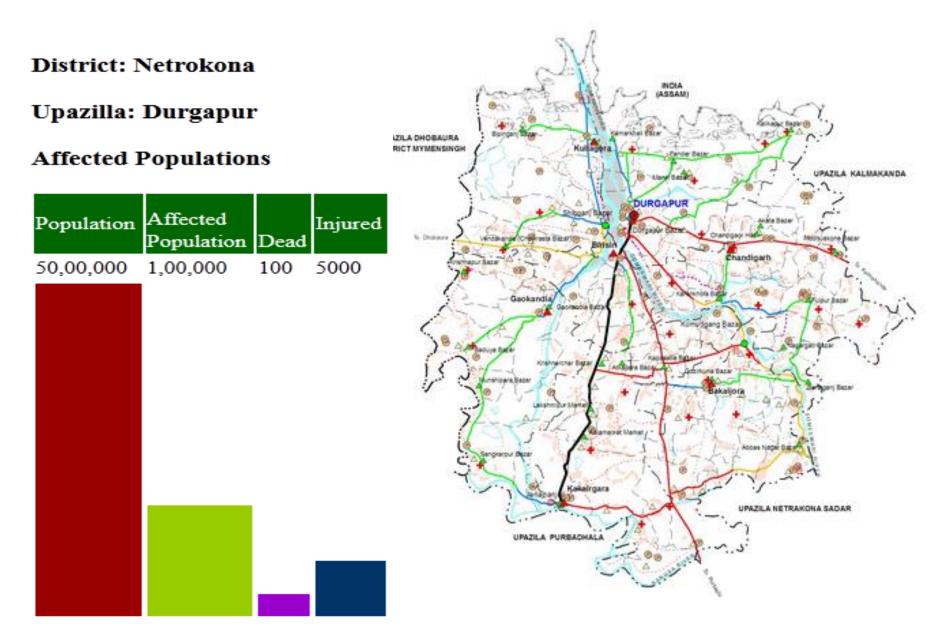
Developed Online DNA Tools

- Customized Software for Management of Damage and need Assessment
- ✓ Web Based Hazard , SOS and D-Form Based Information
- Entered data will be stored on database with Geocode of each administrative unit (Division, District, Upazila and Union)
- ✓ User interface forms developed page by page with integrated data validation system
- ✓ Picture uploading option provided in each type of form
- Calculate Damage and Loss with providing option of present valuation of goods, properties etc
- Report Generation with Graphs and Pictures
- ✓ Provide site map (architecture) of the total system

Emergency Operational Dashboard (EOD)



Reporting in Graphs



The national level validation and action plan and way forward

- The sectoral damages data and economic loss presented to the Inter-ministerial Disaster Management Committee for validation
- The sector also present the short, medium and long term recovery, rehabilitation plan
- The meeting provides decision and policy decision for recovery
- The recovery some how silos that need to be integrated plan and resource for effective recovery and enhance community resilience
- The capacity building on loss assessment is important areas need to be addressed

Thank You