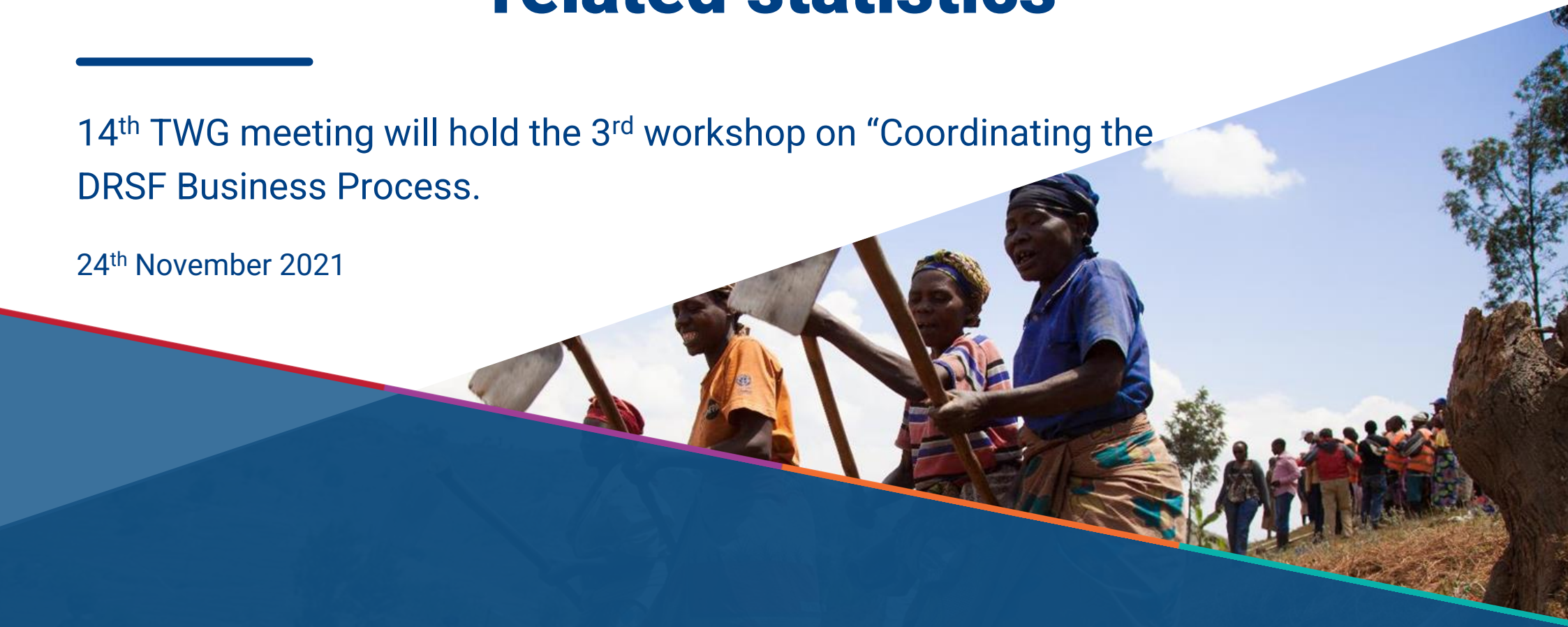
Country coordination for Disaster – related statistics

14th TWG meeting will hold the 3rd workshop on “Coordinating the DRSF Business Process.

24th November 2021



UNDRR
UN Office for Disaster Risk Reduction

SENDAI FRAMEWORK
FOR DISASTER RISK REDUCTION 2015-2030

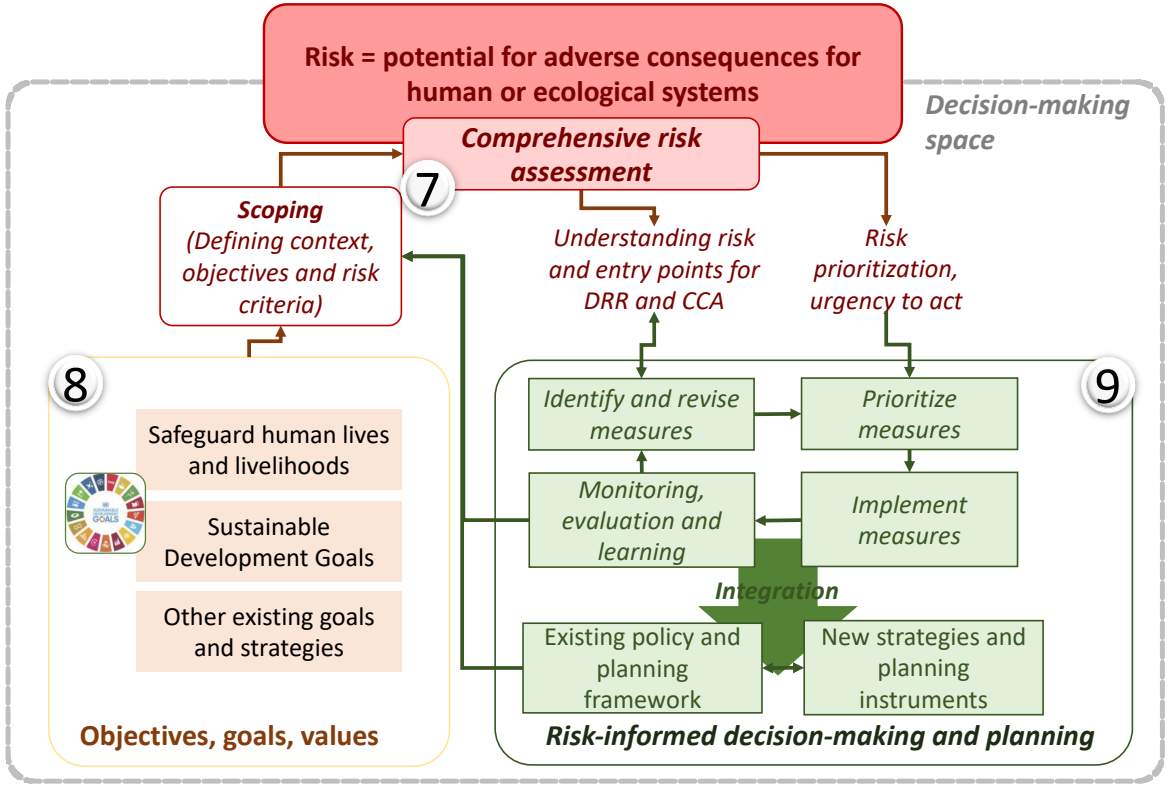
Addressing disaster-related data governance

1. Disaster risks - Component 1 of the DRRSS

Risk is the combination of **hazard, exposure vulnerabilities and capacities**

Governance structure for risk assessment and analysis

1. Lead agency
2. Multi stakeholder coordination body (e.g. National DRR platform)
3. Technical committee



Governance mechanism is defined based on the high-level objective of risk assessment process and analysis system. A system of institutions, operational modalities, policies and a legal framework to guide, manage, coordinate and oversee implementation is required.

What are the analytical uses? – essential for scoping the input data and analytical outputs expected

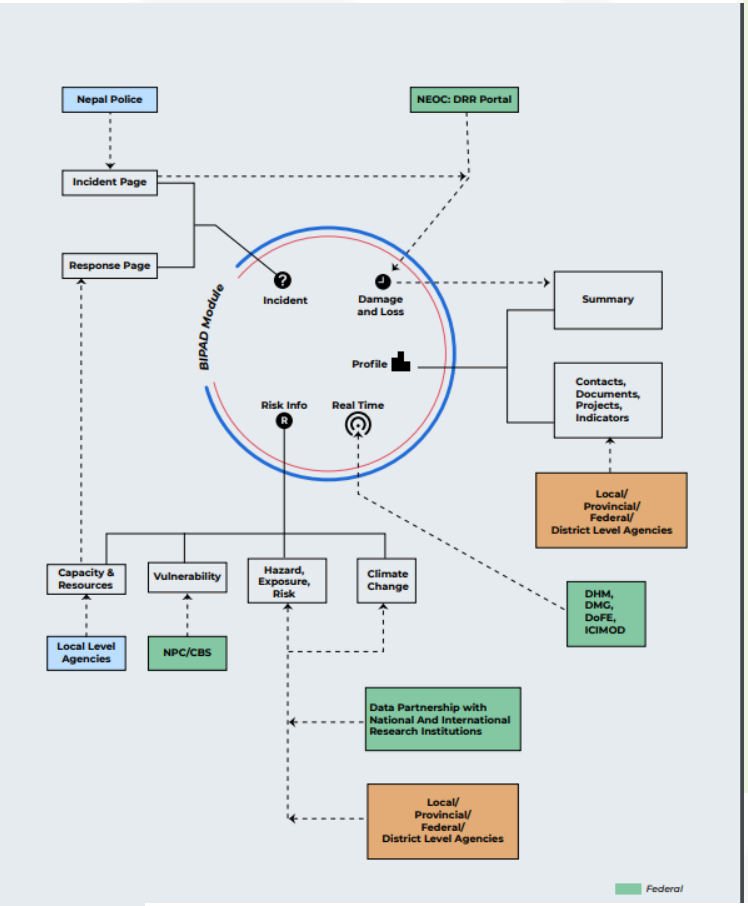
Good practices – coordination for disaster risk analysis

1. **Standards** – Pakistan policy guidelines to conduct multi hazard vulnerability and risk assessments (MHVRA)

2. SoP for local risk assessment – (under development – Fiji)

3. **Information platform – geospatial database initiative** in conjunction with a disaster risk management capacity development. – Nepal **BIPAD** (Building Information Platform Against Disaster)/ Implementation of their national DRR strategy and decentralization of DRRM governance

- *Mapping data sources for different modules*
- *Identifying use cases*



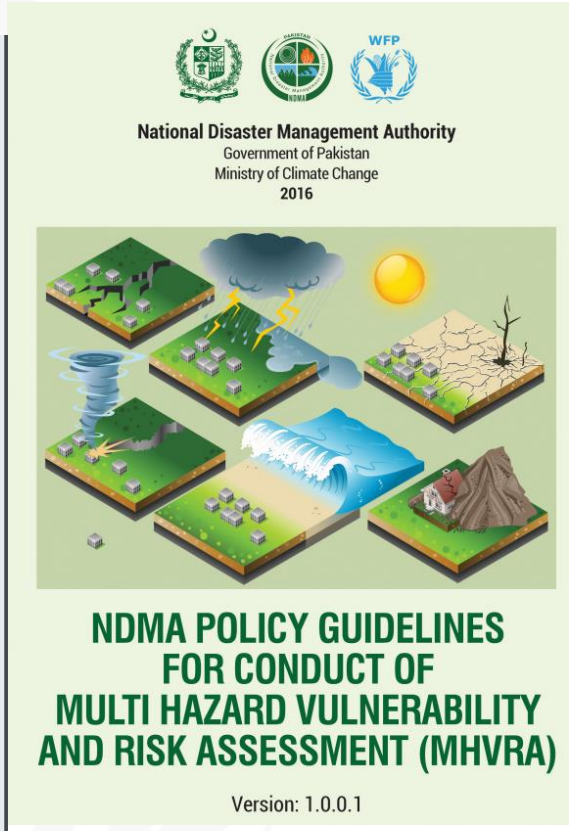


Table 2 Dimensions for Use Cases

	Risk Reduction	Early Warning	Response	Post Disaster Analysis	Risk-informed development/ DRRM governance
Local (*Government actor, non-government actor, Civil society, Researcher*)	Risk Info, Damage and loss	Real Time, Dashboard	Dashboard, Incident	Damage and Loss	Risk Info, Profile
Provincial (*Government actor, non-government actor, Civil society, Researcher*)	Risk Info, Damage and loss	Real Time , Dashboard	Dashboard, Incident	Damage and loss	Risk Info, Profile
Federal (*Government actor, non-government actor, Civil society, Researcher*)	Risk Info, Damage and loss	Real Time, Dashboard	Dashboard, Incident	Damage and loss	Risk Info, Profile

Addressing disaster-related data governance at country level

2. Disaster impacts - Component 2 of the DRRSS

Human impact, Loss and **damage** is the function of the context of hazard, exposure and vulnerability

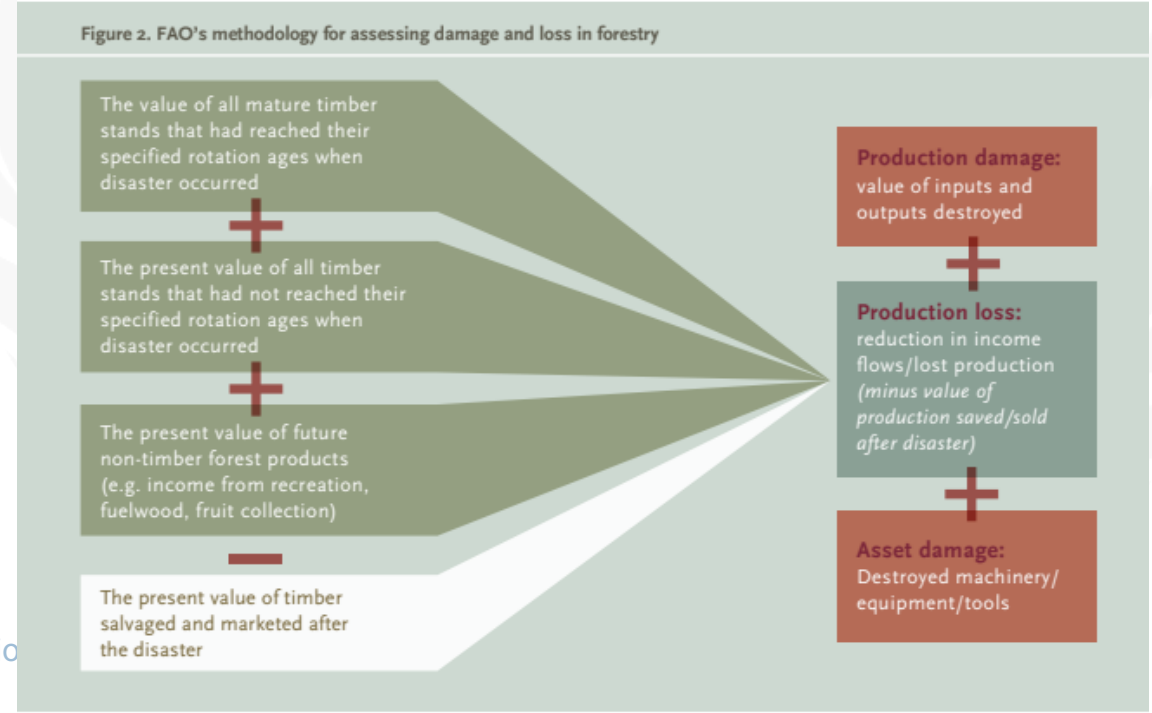
Institutionalization of disaster loss accounting systems

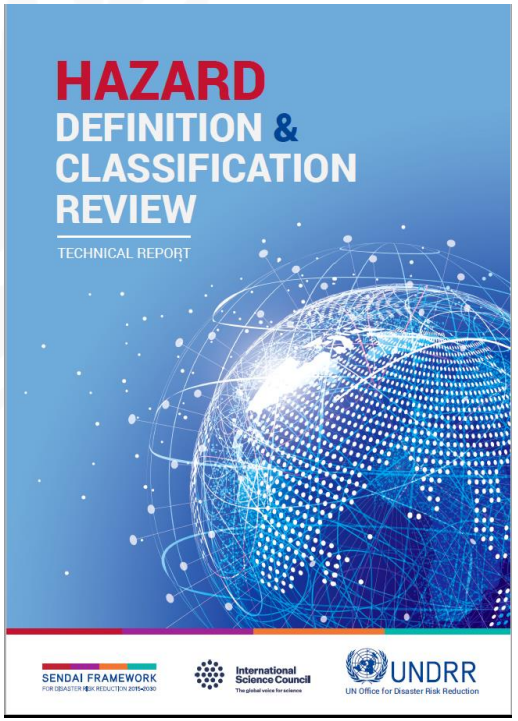
- **Agreed terminologies, hazard classification, minimum variables on impact and event description to be recorded, disaggregation level, metadata.**

  E.g. Adopting national data glossaries, hazard and disaster classification – UNDRR/ISC

- **Developing standards forms and tools, handbooks for data collection**
- **SoPs for data collection from sectors/administrative levels, compilation, aggregation, visualization and analysis**

Identifying baseline information and standard methodologies for loss estimation (e.g. agriculture damage and loss methodology, iPDNA (ITC enabled)





Addressing disaster-related data governance at country level

2. Disaster impacts - Component 2 of the DRRSS (continued)

Institutionalization of disaster loss accounting systems

- **Agreed terminologies, hazard classification, minimum variables on impact and event description to be recorded, disaggregation level, metadata. E.g. Adopting national data glossaries, hazard classification**

Hazard Information Profiles

- Meteorological and Hydrological
- Extraterrestrial
- Geohazards
- Environmental
- Chemical
- Biological
- Technological
- Societal

Hazard Information Profiles - Supplement to UNDRR-ISC Hazard Definition & Classification Review - September 2021

MH0015 / METEOROLOGICAL AND HYDROLOGICAL / Lithometeors

Dust storm or Sandstorm

Definition

A dust storm is an ensemble of particles of dust or sand energetically lifted to great heights by a strong and turbulent wind (WMO, 2017).

Reference

WMO, 2017. Dust Storm or Sandstorm. International Cloud Atlas, World Meteorological Organization (WMO). https://cloudatlas.wmo.int/dust-storm-or-sandstorm.html Accessed 19 November 2019.

Annotations

Synonyms

Not available.

Additional scientific description

Dust storms or sandstorms generally occur in areas where the ground is covered with loose dust or sand. Sometimes, after having travelled great distances, they may be observed over areas where no dust or sand covers the ground. The forward portion of a dust storm or sandstorm may have the appearance of a wide and high wall that advances fairly rapidly. Walls of dust or sand often accompany a cumulonimbus that may be hidden by the dust or sand particles. They may also occur without any clouds along the forward edge of an advancing cold air mass (WMO, 2017).

Metrics and numeric limits

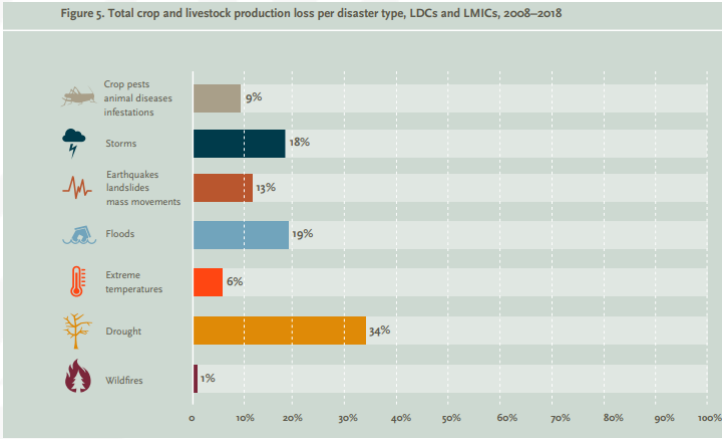
Emissions of sand and dust particles in the air typically have a wind threshold value ranging from about 4 m/s in desert areas to close to 10 m/s in semi-arid regions. As a first approximation, and being fully aware that visibility in sandstorms and dust storms may be influenced by the optical characteristics of the aerosols (chemical composition, particle size spectra) and lighting conditions (solar azimuth, background luminance, presence of medium or high cloud), the following thresholds, which are familiar to human observers and automated systems alike, are recommended (ICAO, 2009):

VIS <3000 m visibility and gusts of >=20 kt	'light' sandstorm or dust storm
VIS <1500 m visibility and gusts of >=30 kt	'moderate' sandstorm or dust storm
VIS <500 m and gusts of >= 40 kt	'heavy' sandstorm or dust storm

Key relevant UN convention/multilateral treaty

The UN Sand and Dust Storm (SDS) Coalition includes the World Meteorological Organization, United Nations Convention to Combat Desertification, United Nations Development Programme, United Nations Environment Programme, Food and Agriculture Organization, World Health Organization, World Bank, etc. and was launched at the United Nations Convention to Combat Desertification (UNCCD) Conference of the Parties on 6 September 2019 (United Nations, 2019).

- **Unique ID to link effect/impact information to event characteristics (e.g. HydroMet catalogues)**
- **Identify analytical functions** (trends, seasonal patterns, hotspots, etc.)



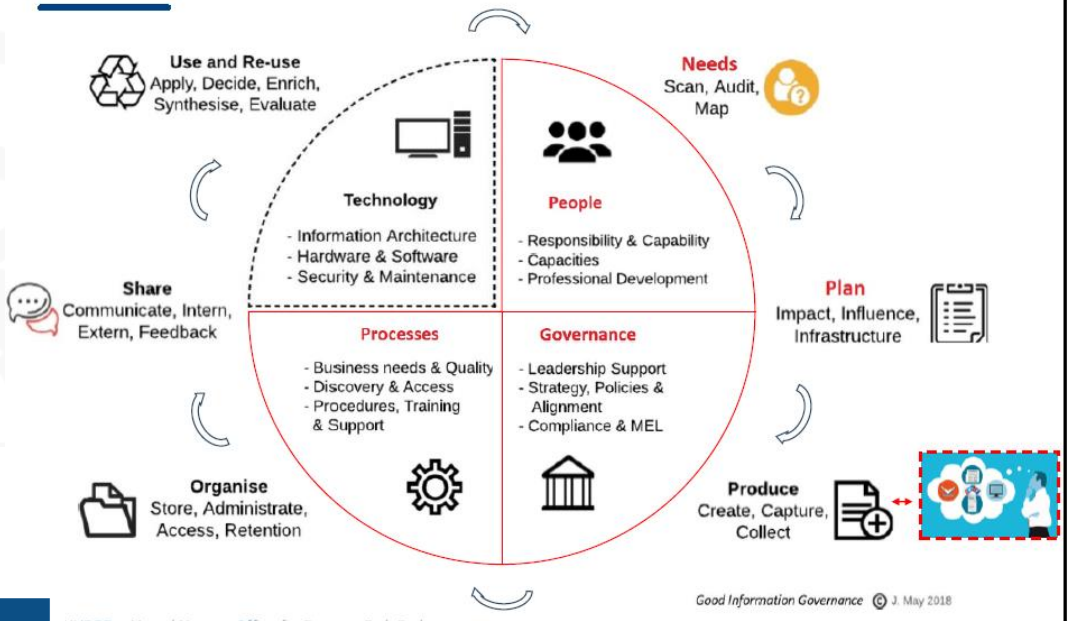
Source: FAO

Addressing disaster-related data governance at country level

2. Disaster impacts - Component 2 of the DRRSS (continued)

- **Data readiness analysis / against some indicators**
- **Maturity analysis**
- **Information and data governance analysis**

Information & Data Governance



Selection: Disaster Loss Data – Needs

IDG	Needs – What we learned	How to address
People	Dedicated and skilled capacity for disaster data and information.	Check and collaborate with Statistics, Planning, M&E, Records Management, Library, Archive, IT, … Make the case! See Skills Framework for the Information Age (SFIA)
Governance	Linking loss data to development and political priorities to create incentives and support.	Collaborate and research to bring disaster data together across government. Identify and agree on priorities – and benefits. Map development plans to demonstrate synergies – local to national to global – action and reporting. Explore standards – government regulations etc.
Process	Using loss data is tricky. Diverse & priority stakeholders, users, producers (+/-30 agencies)	Needs: Who, what, why, how, when and where. Plan: Use cases and scenarios with stakeholders – users and producers of data, information and knowledge. Map: End to end processes with inputs, outputs, roles etc. Test & trial, monitor & evaluate, learn & improve, repeat …
Technology	User centred / user friendly … Automation, machine learning, AI, …	Get the right capacities in place to establish prerequisites and processes. Everything / Anything as a service (XaaS)

Source Jutta May, consultant to UNDRR Disaster loss discovery need analysis

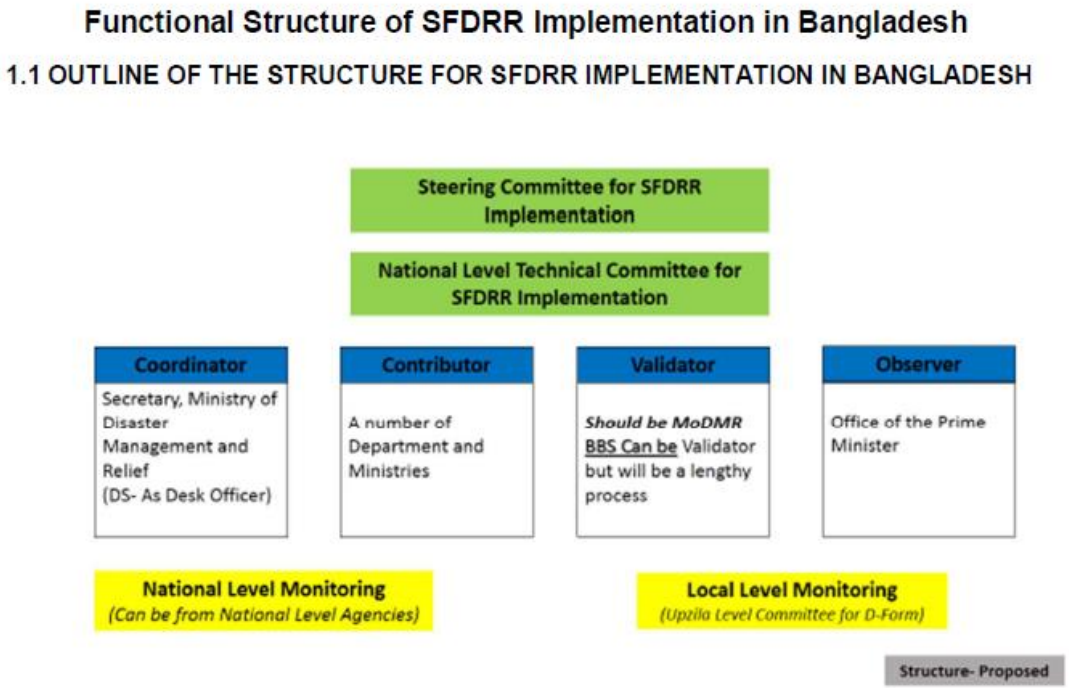
Good practices on disaster loss data coordination at country level

- **NDIMS India – capacity development and roles distribution along with database creation.** Unique event ID, protocols and responsibilities among the different levels (states, districts, central/national) and sectors, identifying relevant categories of assets by sector, units of measurement, capacity development. Incentives for data reporting – assessment report completeness triggers disbursement of some relief and rehabilitation funds

- **Bangladesh / assessment of capacities for Sendai Framework Monitoring reporting, Bangladesh IMWG/HCTT and BBS**

REPORT
SFDRR Monitoring and Reporting Capacity: Bangladesh Perspective

Contributor for the Field of Indicator	Name of the Organization	Areas of Assessment[2]				
		Is the Organization formally Established for carrying out the Activities? (Yes/No)	Do the Organization Collect the data for disaster risk management purpose? (Yes/No)	Is there a specific desk or unit to deal with Disaster issues? (Yes/No)	Do this organization possess technical skill for adopting SFDRR? (Yes/No)	Is this organization Aware about SFDRR? (Yes/No)
B: SUBSTANTIALLY REDUCE THE NUMBER OF AFFECTED PEOPLE GLOBALLY BY 2030, AIMING TO LOWER THE AVERAGE GLOBAL FIGURE PER 100,000 BETWEEN 2020-2030 COMPARED WITH 2005-2015						
B1: Number of directly affected people attributed to disasters, per 100,000 population	Department of Disaster Management (DDM)	Yes	Yes Through D-Form	Yes		
	Fire Service and Civil Defense (FSCD)	Yes	Yes	Yes		
	Bangladesh Bureau of Statistics (BBS)	Yes	Yes	Yes		
B2: Number of injured or ill people attributed to disasters, per 100,000 population	Department of Disaster Management (DDM)	Yes	Yes Through D-Form	Yes		
	Fire Service and Civil Defense (FSCD)	Yes	Yes	Yes		
	Bangladesh Bureau of Statistics (BBS)	Yes	Yes	Yes		
B3: Number of people whose damaged dwellings were attributed to disasters	Department of Disaster Management (DDM)	Yes	Yes Through D-Form	Yes		
	Bangladesh Bureau of Statistics (BBS)	Yes	Yes	Yes		
B4: Number of people whose destroyed dwellings were attributed to disasters	Department of Disaster Management (DDM)	Yes	Yes Through D-Form	Yes		
	Bangladesh Bureau of Statistics (BBS)	Yes	Yes	Yes		
B5: Number of people whose livelihoods were disrupted or destroyed, attributed to disasters	Bangladesh Bureau of Statistics (BBS)	Yes	Yes	Yes		
C: REDUCE DIRECT DISASTER ECONOMIC LOSS IN RELATION TO GLOBAL GROSS DOMESTIC PRODUCT (GDP) BY 2030						
C1: Direct economic loss attributed to disasters in relation to global gross domestic product	Thematic decision requires to identify the contributor	NA	NA	NA		



Source: UNDP Bangladesh

Good practices on disaster loss data coordination at country level

- **Bangladesh / Information Management Working Group - HCTT and BBS**

Anticipated value

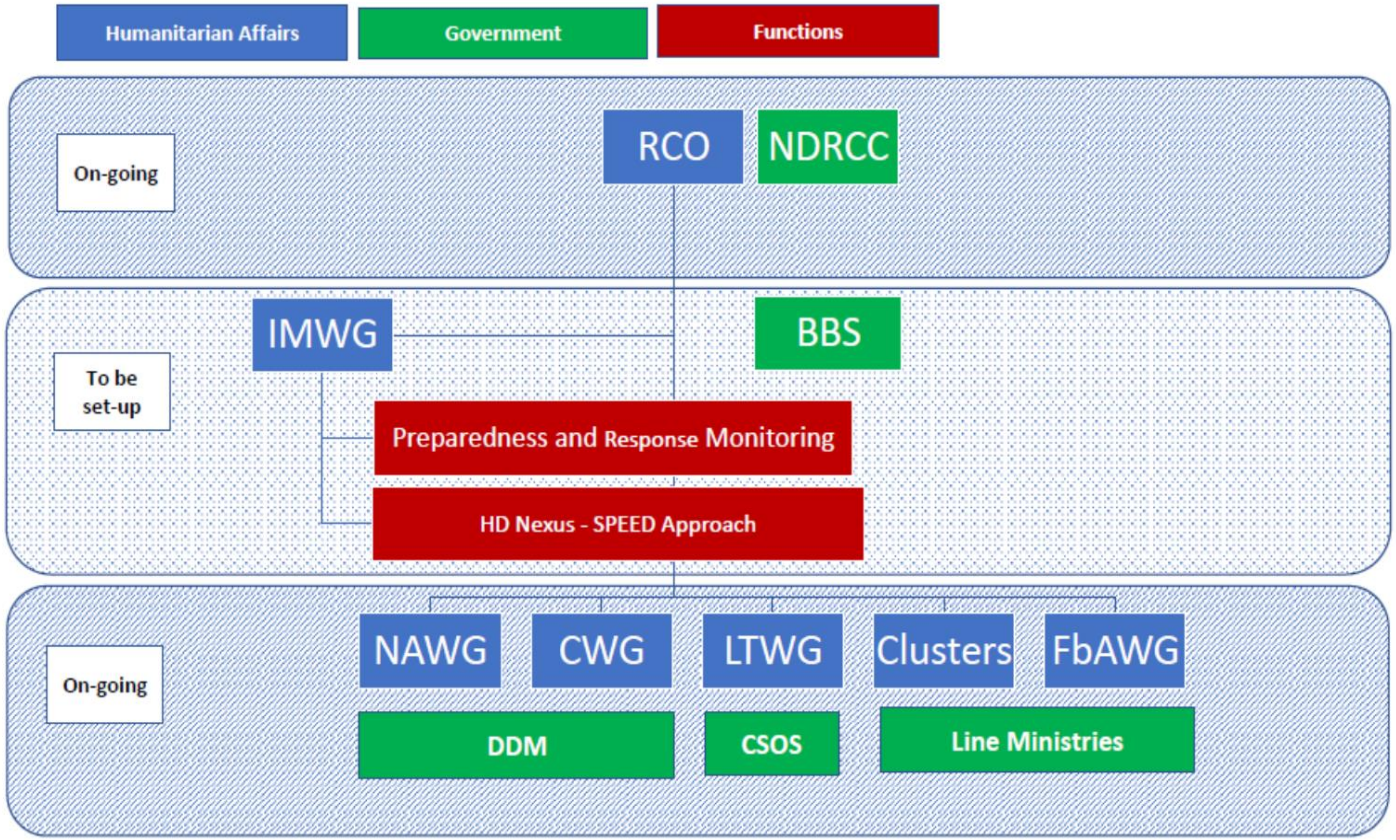
- The IMWG will complement the Bangladesh Bureau of Statistics in collecting, compiling, analyzing data, especially on demographics in the context of disasters, and disseminating disaster-related data and information to those that need it--for timely, informed and evidence-based humanitarian action.
- Facilitate national and sub-national level information coordination and inform forecasting, disaster preparedness, crisis response and resilience.
- Support field data collection, data analysis, mapping, visualization and facilitating learning through capacity building

Strategic linkages

Outputs to date

Data/Datasets Inventory: The IMWG initiated an activity to prepare a dataset inventory—a list of the available datasets as reported by IMWG/Clusters/TWGs.

The Survey of Surveys / Assessments Registry: The IMWG initiated an exercise to establish and document the metadata and pointers to the known surveys/assessments that have been conducted in Bangladesh



Key messages on coordination and governance for Disaster related statistics

1. Institutionalization requires clear roles and mandates from legal and policy frameworks to be further details through directives, SoP and technical guidance
2. Mapping of data producers, custodian organizations and their capacities to manage data is a very important steps
3. Visualization data flows and process helps in identifying gaps, overlaps ,fragmentation and interoperability needs.
4. Use cases and analytical aims to be built from the design phase
5. Anchor data governance in key process for strengthening disaster risk governance and ensuring risk-informed development
6. Look comprehensively at all key components of disaster-related statistics not only on the disaster impact, DRR relevant activities are very important, expenditure tagging and tracking systems are very relevant

SUSTAINABLE DEVELOPMENT GOALS

Thank you

For more information, please contact iria.touzoncalle@un.org

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