



UNDRR
UN Office for Disaster Risk Reduction

Disaster Risk Data Governance and Policy Design

APDIM Governing Council and Regional Expert Group Meeting
Dushanbe, 7-8/11/2023
Dr Carlotta Rodriquez

Disaster Risk Data Governance and Policy Design in the Asia-Pacific region

Scope of the study

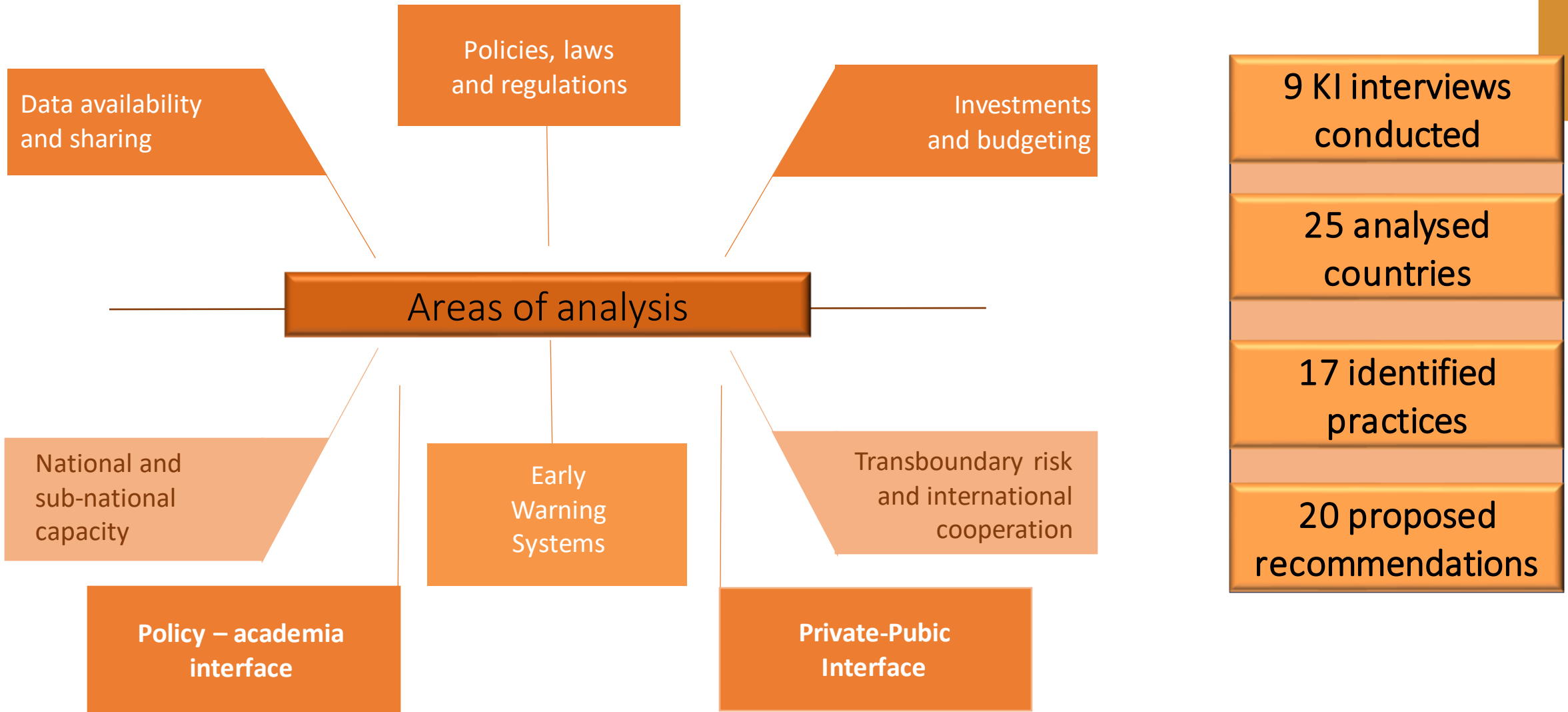
Analyze common
focus areas
to the integrations
of disaster risk data
and information
into policy-making

Identify countries'
priorities
for action with
respect to
data driven
policy-making

Share
**emerging
good practices**
from the direct
experience of the
countries

Present
recommendations
and potential
improvements for a
more effective and
efficient data-driven
DRR policy and
decision making

Methodology



Countries' priorities for action

Countries seem to be tackling similar **priorities**, which can be summarized as:

- Need to **explore formal or informal arrangements to collect, share, and manage data**, investigating in particular the coherence of data formats in collection and storage;
- **Moderate digital transformation**, which might prevent countries from making the most of the latest technologies;
- **Uneven distribution of focus and resources** within the country, with often inhomogeneous data collection, and distribution of funds, showing differences between urban and rural areas, or between coastal and mountain areas, affecting the consistency in DRR approaches and measures throughout the country;
- Generalized need to **boost investments in DRR**, with dedicated budget lines, and to ensure the long-term sustainability of ongoing and future projects;
- Need to **increase the DRR capacity** of the country, with respect to both technical staff and policy makers, to harmonize the decision and policy-making process.

A glimpse of the emerging good practices in the region...

Nepal

Building Information Platform Against Disaster (BIPAD). Example of platform interface.

BIPAD Portal National

232 Rain watch | 122 River watch

1 HR | 3 HR | 6 HR | 12 HR | 24 HR

BASIN	STATION NAME	DATE	TIME	RAINFALL	STAT
Gandaki	Gurjakhani	2023-08-18	22:30:19	33.257mm	BELOW WARNING LEVEL
Koshi	MulGhat	2023-08-18	22:30:27	-	BELOW WARNING LEVEL
-	Dhandbas	2023-08-18	22:30:16	11.8mm	BELOW WARNING LEVEL
Koshi	Duwachaur	2023-08-18	22:30:17	0.8mm	BELOW WARNING LEVEL
Bagmati	Khumaltar	2023-08-18	22:30:24	0.4mm	BELOW WARNING LEVEL
Bagmati	Marin Khola at Kusumtar	2023-08-18	22:30:27	22.4mm	BELOW WARNING LEVEL
Kankai	Kanyam Tea Estate	2023-08-18	22:30:23	0.8mm	BELOW WARNING LEVEL
Narayani	Pokhara_AWOS_04	2023-08-18	22:30:30	-	BELOW WARNING LEVEL
-	Rami Danda	2023-08-18	22:30:30	-	BELOW WARNING LEVEL
Churiya	Dhangadhi airport	2023-08-18	22:30:16	-	BELOW WARNING LEVEL

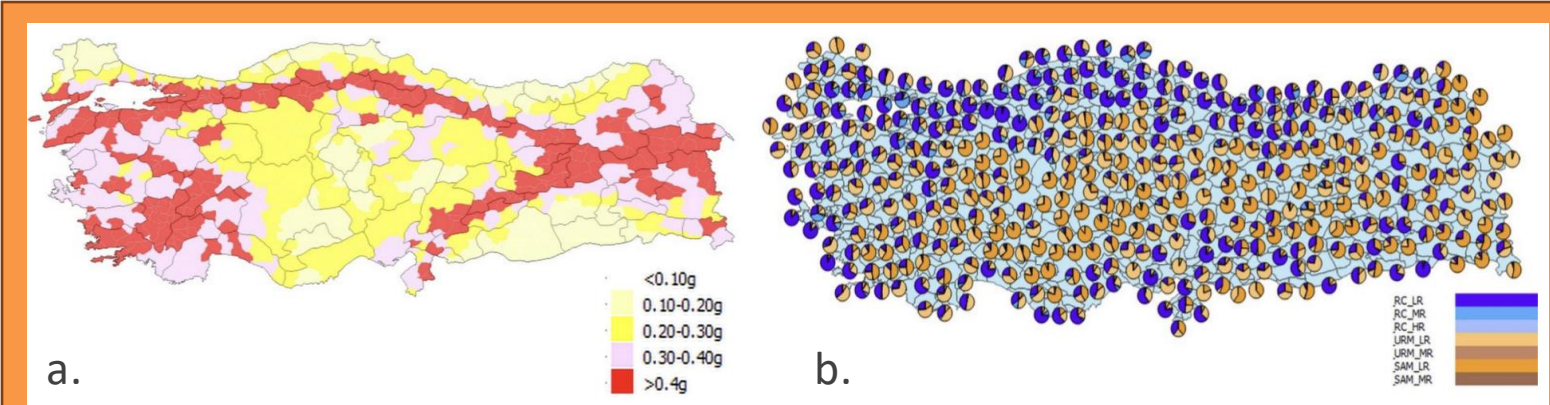
Map Legend:

- RAIN**
 - > 140mm
 - 120mm - 139.9mm
 - 100mm - 119.9mm
 - 80mm - 99.9mm
 - 0.5mm - 79.9mm
- RIVER**
 - Below Warning Level And Steady
 - Below Warning Level And Rising
 - Below Warning Level And Falling

Source: Department of Hydrology and Meteorology

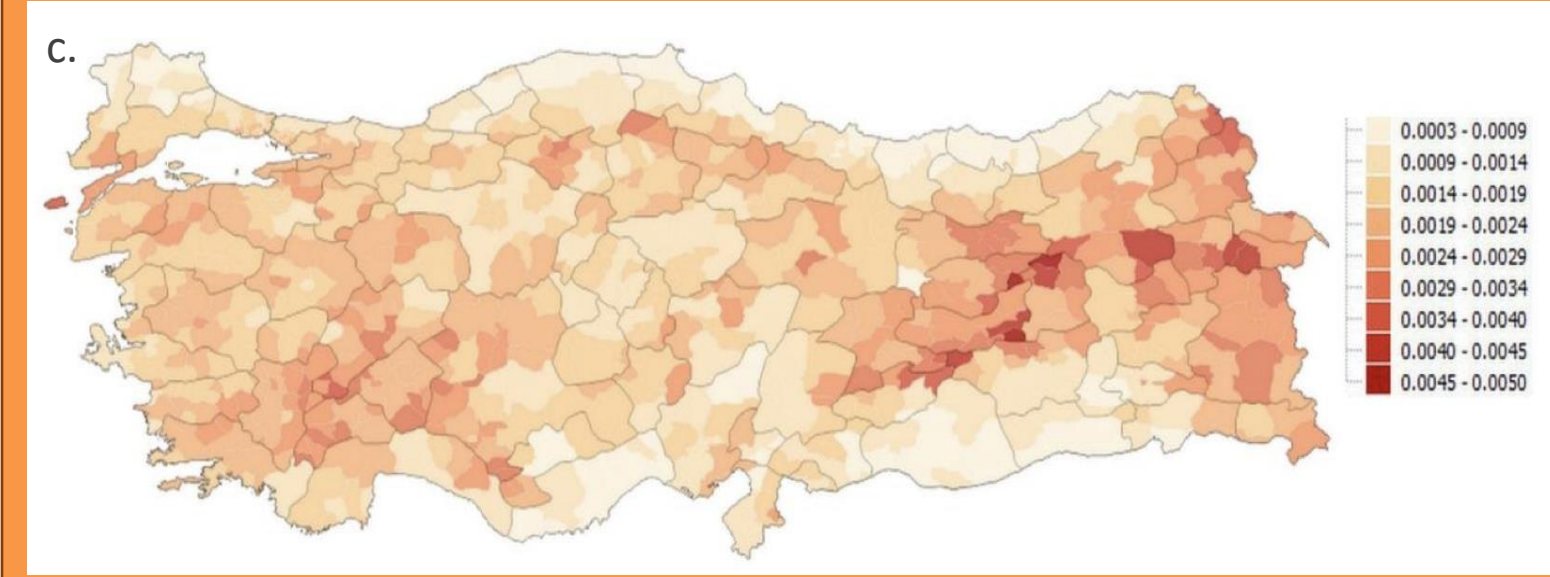
Mapbox © OpenStreetMap

A glimpse of the emerging good practices in the region...



Türkiye

- a. Mean seismic hazard map in PGA (g) for a probability of exceedance of 10% in 50 years
- b. Distribution of RC and URM residential buildings at sub-province level
- c. Average annualized loss ratio (AALR) at the sub-province level.



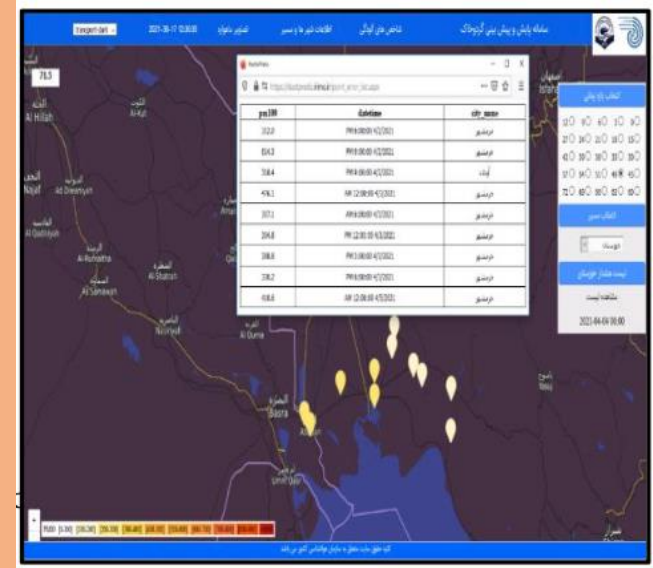
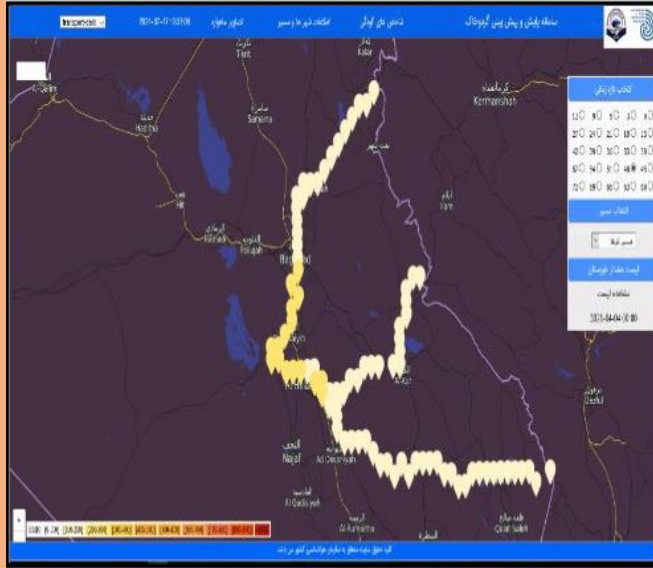
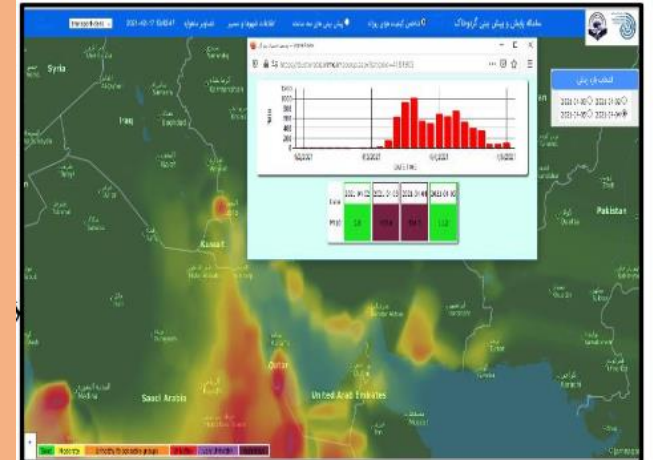
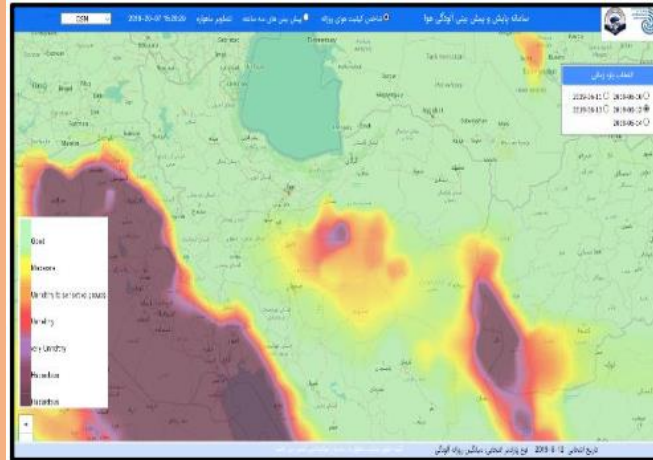
A glimpse of the emerging good practices in the region...

Islamic Republic of Iran

Outputs of the dust forecasting and warning system.

The Sand and Dust Forecasting and Warning System can predict the concentration of dust particles in the atmosphere that affect the occurrence of dust events in Iran at the level of Iran and neighboring countries, for up to the next 72 hours.

The outputs of the dust forecasting and warning system at two levels of general use and specialized one, the air quality in terms of the amount of dust in the atmosphere at the six levels: clean, medium, unhealthy for sensitive, unhealthy, very unhealthy, and dangerous.



Key findings and recommendation

Data availability and sharing is the key

Break down institutional silos between all ministries and departments collecting data and information related to disaster management would help increase the gaps between availability and use

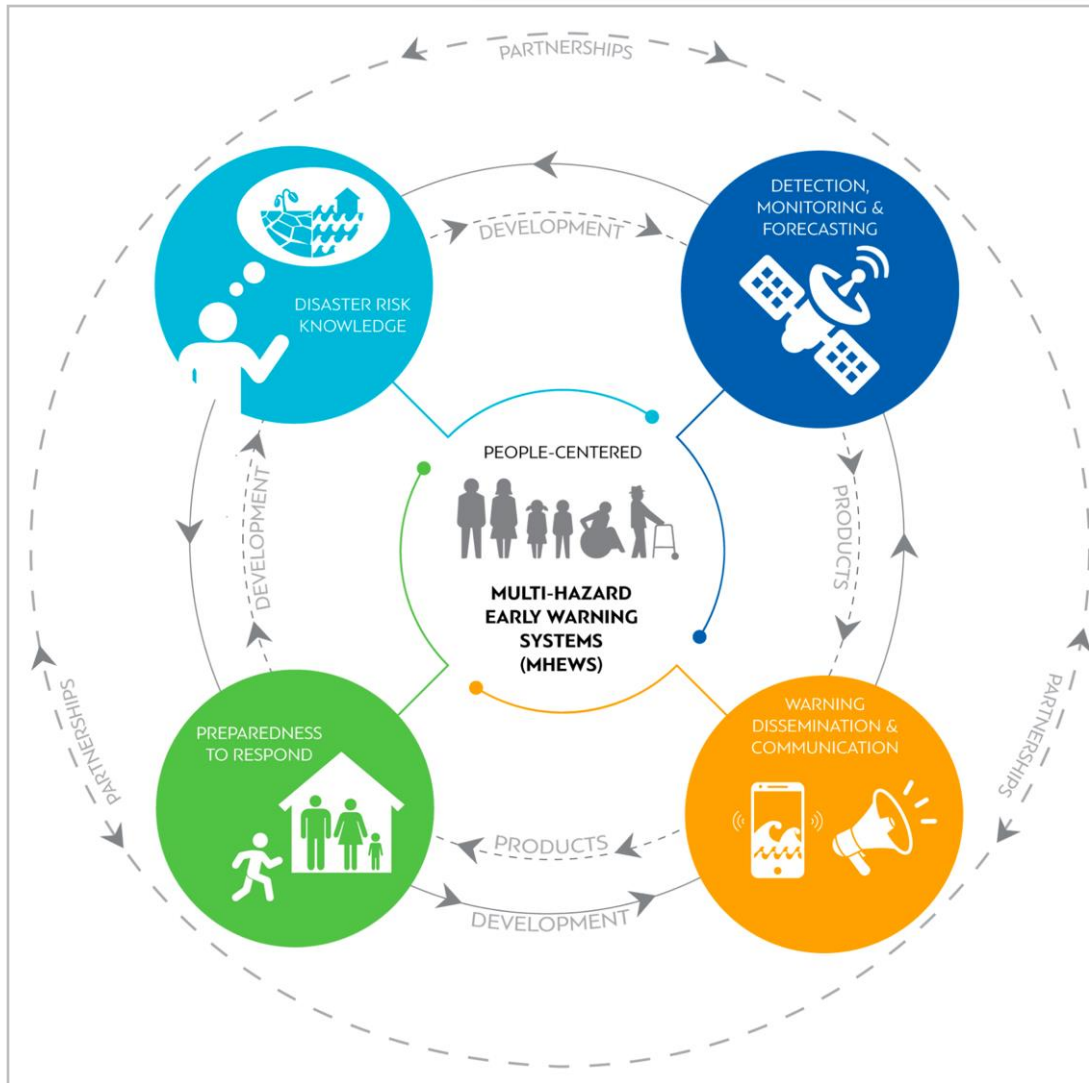
To make risk informed policy making more effective and efficient, it would be beneficial to:

- Broaden data collection
- Bottom-up approach
- Plan data collection contextually to the policy-making process
- Mainstream DRR
- Include DRR in the national legal framework (SD and CCA)
- Turn risk maps into figures describing Annual Average Loss (\$) and the economic benefits of reducing risk
- Community-based vulnerability maps to target response
- Sustainability of every project
- Boost the involvement of Academia and the private sector
- Capacity development and knowledge transfer

Enablers

Actions

Key findings and recommendation



Early Warning centered approach

Approaching DRR policy-making through an EW-centered approach can be a great asset to identify gaps and areas of improvement, considering that all the four components can effectively function only when appropriate risk data and information are integrated and used

Some examples of the key findings and recommendations related to Early Warning Systems are:

- Incorporating all forms of knowledge into risk maps
- Solid monitoring network for real and non-real time
- Bulletins and warning Standard Operating Procedures
- Codified and validated response plans

Thank You!