

# Early Warning Capacity in LDCs and SIDS

John Harding, Head, CREWS Secretariat

Stakeholder engagement workshop on Strengthening the capacities for observation and risk assessment in the context of loss and damage associated with climate change  
29-30 October 2019, Bonn, Germany

# CREWS?

- ❑ Significantly increases the capacity to generate and communicate effective, impact-based, multi-hazard, gender-informed early warnings

*What is that?*



*Do I follow them on Twitter?*



**@CREWSinitiative**



Australia



France



Germany



Luxembourg (Chair)



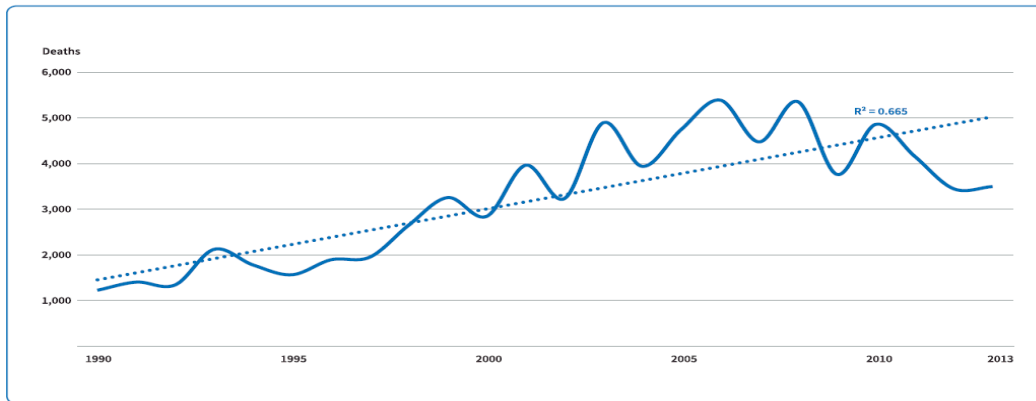
Netherlands



Switzerland



# Casualty risk increasing in LDCs and SIDS

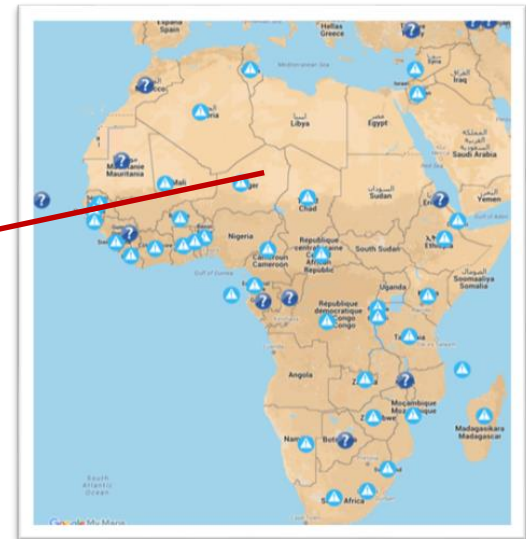


(Source: UNISDR with data from national loss databases.)

## Extensive mortality 1990-2013

In Africa and M-E, 36 INDC over 47 include EWS as a priority

About 80% of Nationally Determined Contributions (NDCs) from developing countries define EWS as a priority for adaptation\*



\*Base on the INDCs published before October 2, 2015

# Where are the needs?

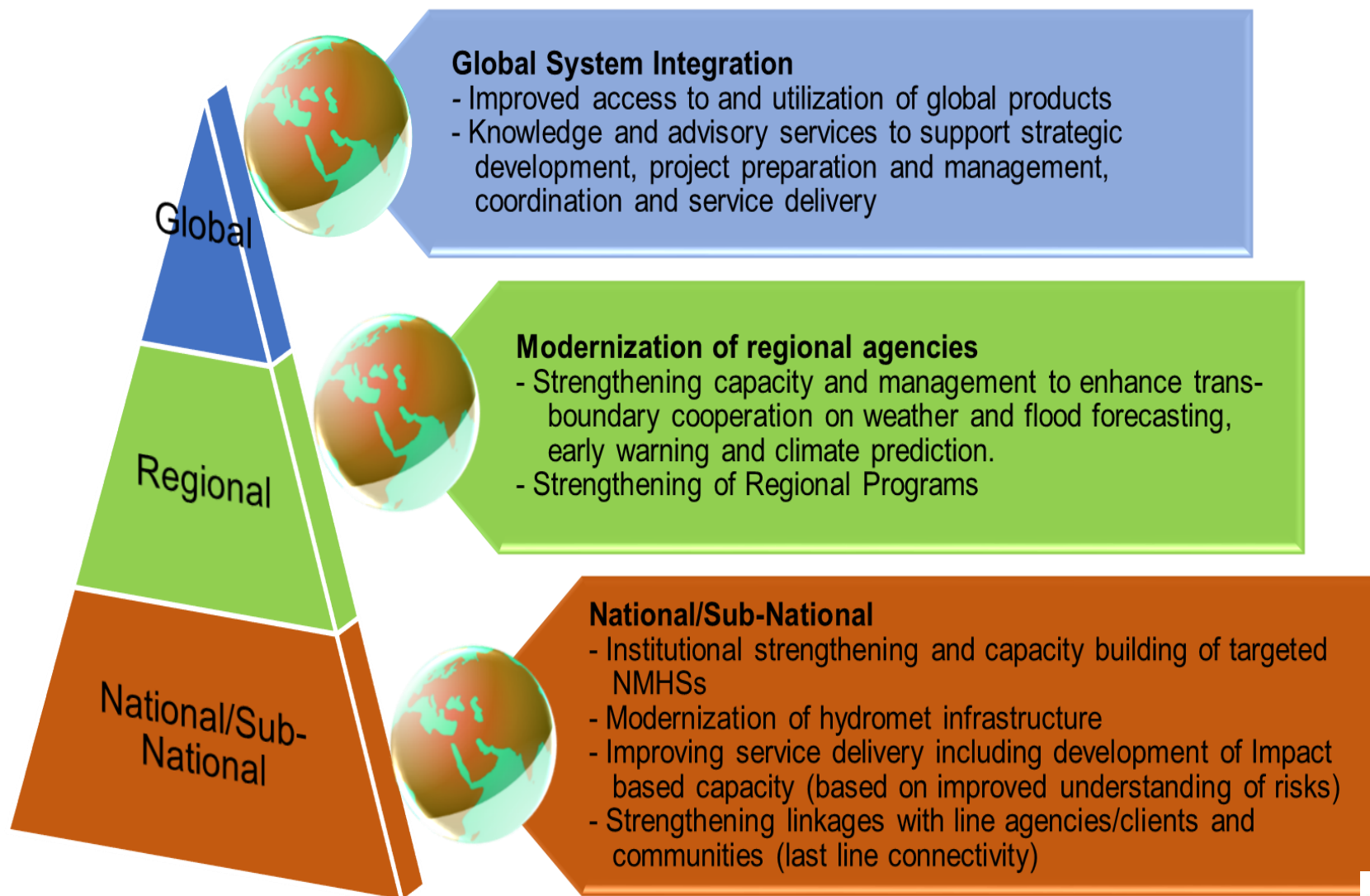
## CREWS Project Countries

- ❑ Afghanistan
- ❑ Burkina Faso
- ❑ Caribbean Region covering CARICOM States and territories
- ❑ Chad
- ❑ Mali
- ❑ Niger
- ❑ Democratic Republic of the Congo
- ❑ Pacific Region covering Fiji, Kiribati, Marshall Islands, Solomon Islands, Tuvalu and Vanuatu
- ❑ Papua New Guinea
- ❑ Togo
- ❑ West Africa Region

## Pipeline Countries

- ❑ Benin
- ❑ Bhutan
- ❑ Curacao
- ❑ Ethiopia
- ❑ Haiti
- ❑ Indian Ocean Region
- ❑ Madagascar
- ❑ Mozambique
- ❑ Myanmar
- ❑ Sierra Leone

# Global to local integration



# Integrating approach within countries

Disaster Risk Reduction

Preparedness and response capabilities

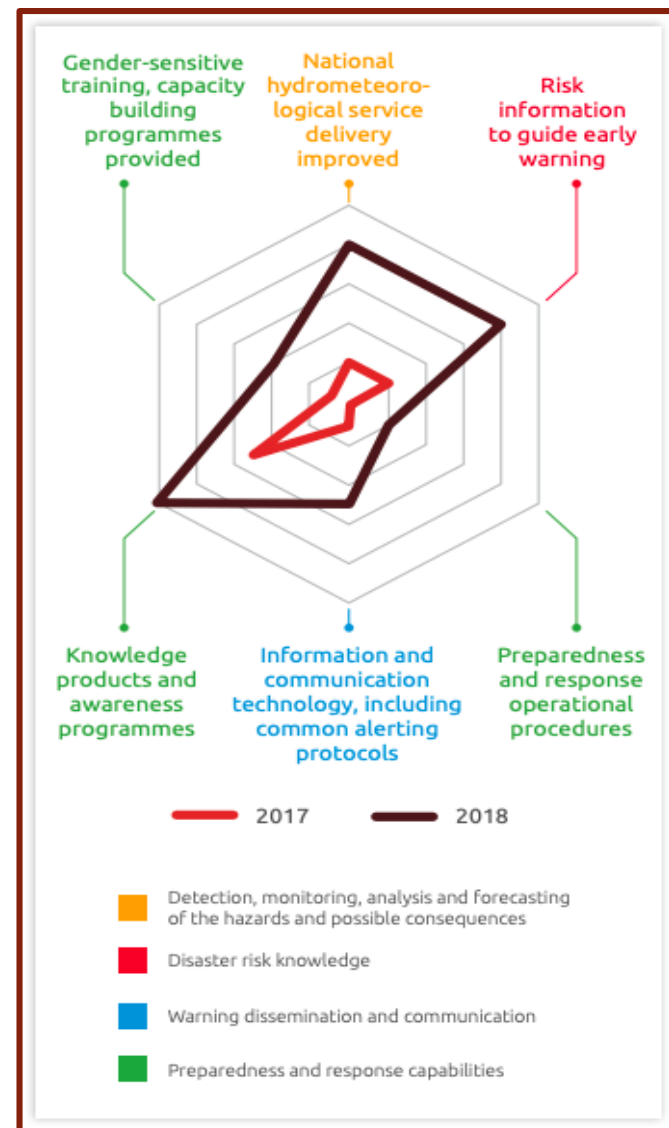


Detection, monitoring, analysis and forecasting of the hazards and possible consequences

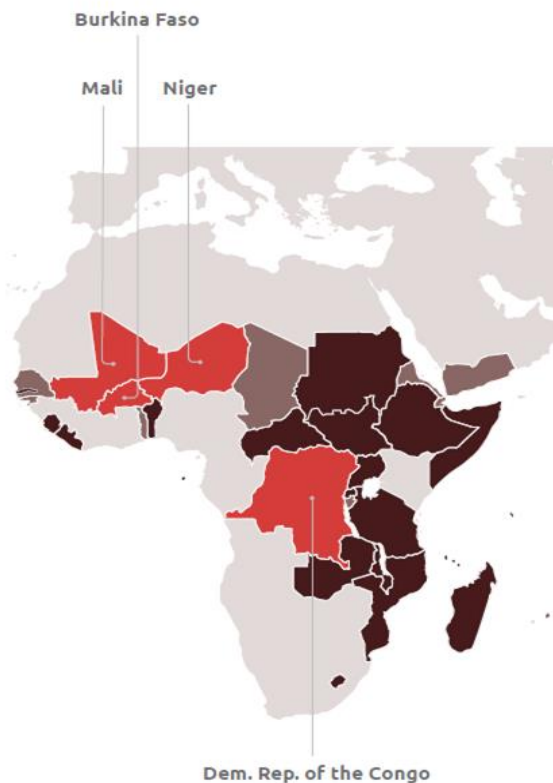
Warning dissemination and communication

# CREWS reviews progress against its Six Program Outputs

1. NMHS's service delivery improved, including service delivery strategies and development plans;
2. Risk information to guide early warning systems developed and accessible;
3. Information and communication technology, including common alerting protocols, strengthened;
4. Preparedness and response plans with operational procedures developed and accessible;
5. Knowledge products and awareness programmes on early warnings developed;
6. Gender-sensitive training, capacity building programmes provided.



# AFRICA



Project	In USD	Leveraging and synergies (in USD)
Mali	3.333.000 (WB, WMO)	<a href="#">GCF</a> 23 million / <a href="#">IDA</a> 8 million / CREWS West Africa
Burkina Faso	2,192,200 (WMO)	<a href="#">GCF</a> 23 million / <a href="#">IDA</a> 8 million / <a href="#">GFCS</a> 300k / <a href="#">GEF</a> 3.6 million / CREWS West Africa
Democratic Republic of the Congo	3,090,000 (WB, WMO)	<a href="#">GFDRR</a> 2.7 million / <a href="#">GEF</a> 5.3 million / WB DRM Urban
Niger	2,740,000 (WB, WMO)	<a href="#">AfDB</a> Met 13 million / WB EWS Hydro 20 million / CREWS West Africa
West Africa (regional)	1,834,555 (WMO)	<a href="#">IDA</a> TBD / ACP-EU 8 million

## Map Legend:

- Receiving CREWS support (Total 19 LDCs and SIDS)
- Identified early warning systems as priority in Intended Nationally Determined Contribution (INDC) or Nationally Determined Contribution (NDC) (Total 40 LDCs and SIDS)
- Indirect reference to early warning systems in INDC or NDC (e.g., disaster risk reduction as adaptation priority) (Total 26 LDCs and SIDS)





# Progress in Africa - by Output

In **Niger**, terms of reference were developed to sensitize women on early and rapid warning systems, in Niamey and 50 locations around.

6  
GENDER

In **the DRC**, a diagnostics evaluation of METTELSAT capacity has been completed by SEPIA private firm. A National Framework for Climate Services is under development, which will lead to production of new user-driven services.

1  
SERVICE  
DELIVERY

In **Burkina Faso**, the development of a meteorological strategic plan was launched, supported by Météo-France and a private firm (WeatherForce)

5  
KNOWLEDGE  
PRODUCTS

2  
RISK  
INFORMATION

In the **DRC**, women in Kinshasa have improved capacity in conducting and collecting household survey information for input into mapping of exposure and vulnerability.

In **Niger**, National Services involved in rapid warning are developing procedures to adopt and roll out the national warning code decree

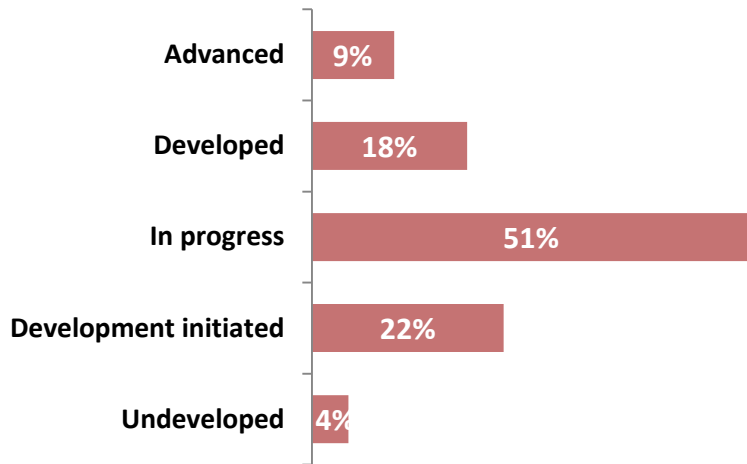
4  
PREPAREDNESS  
AND RESPONSE

3  
ICT

In **Burkina Faso**, new forecasts are now available for sand and dust storm and sub-seasonal climate prediction

# NMHSs Service Quality and Delivery

## Status of service delivery of NMHSs



Of those with “undeveloped” service delivery or “development initiated,” **68% are from Africa and 8% from Asia.**

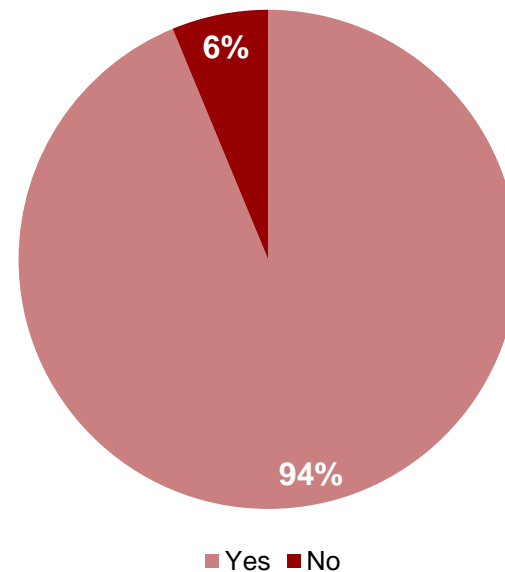
### Based on: 99 Members

Data is missing on 93 Members

Note: based on 2017 data. No survey was conducted in 2018, planned for end-2019

## Number of NMHSs part of an established DRR governance mechanism

Most Members responding have national committees or platforms in place for coordinating DRR activities, including NMHS participation.

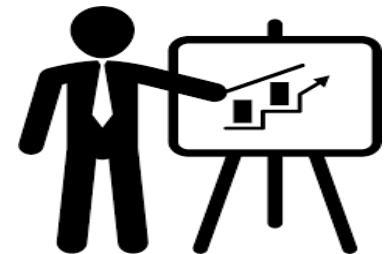


# CREWS – ongoing mapping of EWS

- ❑ **Guide early warning systems investment - both national and ODA – Hydromet Capacity Gap Report**
  - ❑ Strengthen systems and capacity for SIDS and LDCs to measure their systems effectiveness and prioritize their investments – building on body of knowledge showing cost-return of investments in early warning systems
    - *“Investments should be made against a constantly updated and transparent long-term planning process on early warning systems...”*
  
- ❑ **Monitor early warning effectiveness**
  - ❑ Support countries measure the effectiveness of their early warning system against Sendai Framework, 2030 Sustainable Development Agenda and Paris Climate Change Agreements
  
  - ❑ Support measurement of Sendai Framework Target G

# Way forwards

- ❑ Focus on bridging the LDCs and SIDS hydromet capacity gap
- ❑ Systematic approach to assessing early warning gaps and needs – hydromet gap report
- ❑ Accelerate the shift towards impact-based, risk informed, gender-sensitive early warning systems
- ❑ Increase accountability on the effectiveness of early warning systems and the effectiveness of the related multi-lateral aid – measuring ourselves against existing global targets
- ❑ Develop a solutions agenda, compiling good practices.





@CREWSinitiative

# Thank You!

**Contact:**

John Harding

Climate Risk and Early Warning Systems (CREWS) Secretariat

E: [jharding@wmo.int](mailto:jharding@wmo.int) | T: [+4122-730-8373](tel:+4122-730-8373) | M: [+4179-444-4130](tel:+4179-444-4130) | Skype: johnalexanderharding



Australia



France



Germany



Luxembourg (Chair)



Netherlands



Switzerland

