



UNISDR

The United Nations Office for Disaster Risk Reduction

Climate-related Disaster Loss Databases in Selected Arab Countries and Associated Economic Costs

New displacements associated with conflict and disasters in 2015

- Conflict and violence (Total: 8.6 million)
- Disasters (Total: 19.2 million)

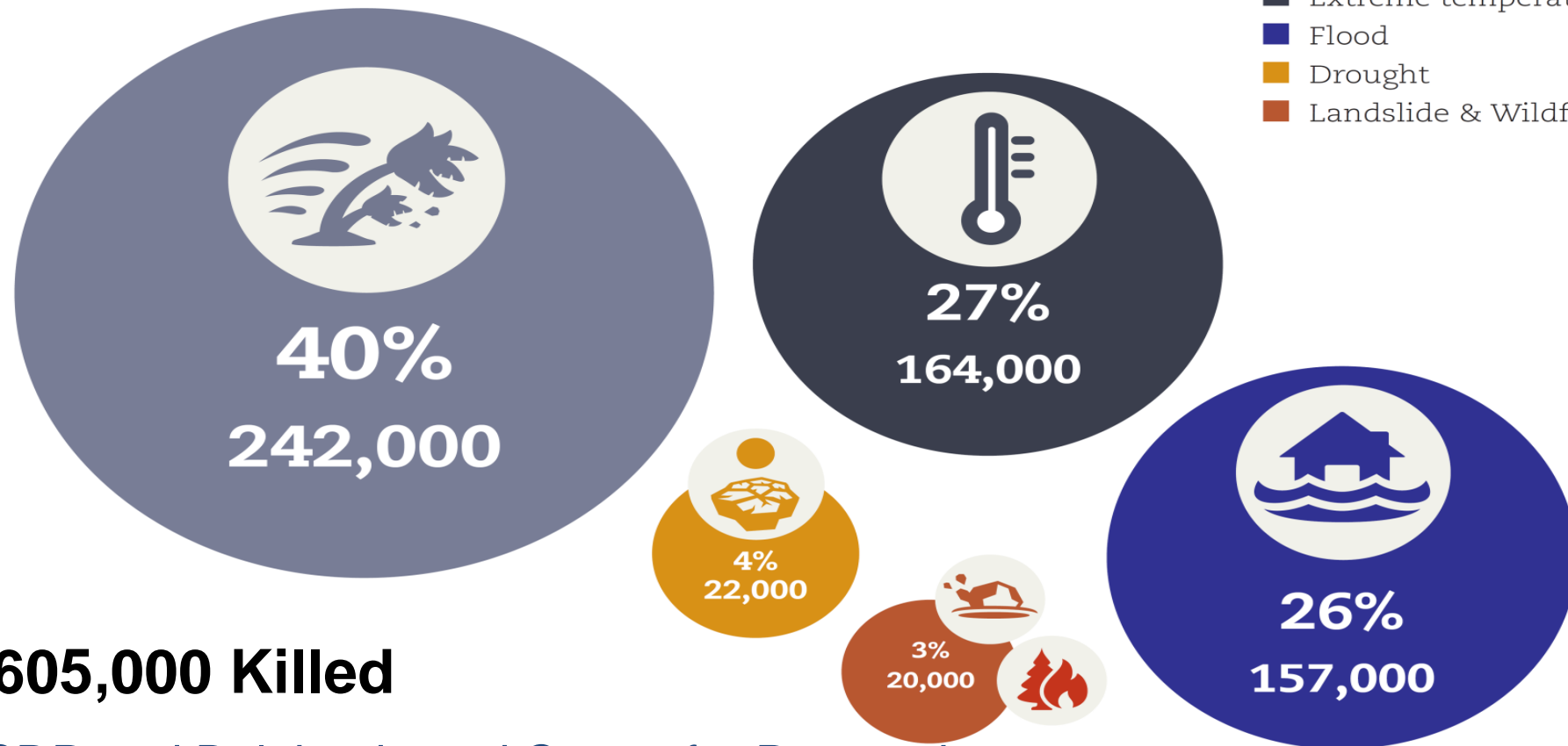


19.2 MILLION PEOPLE IN 113 COUNTRIES DISPLACED BY DISASTERS IN 2015; 8.6 MILLION DISPLACED BY CONFLICT AND VIOLENCE – Internal Displacement Monitoring Centre (IDMC), report published May 2016

The Human Cost of Weather Related Disasters 1995 to 2015

Numbers of people killed by disaster type (1995-2015)

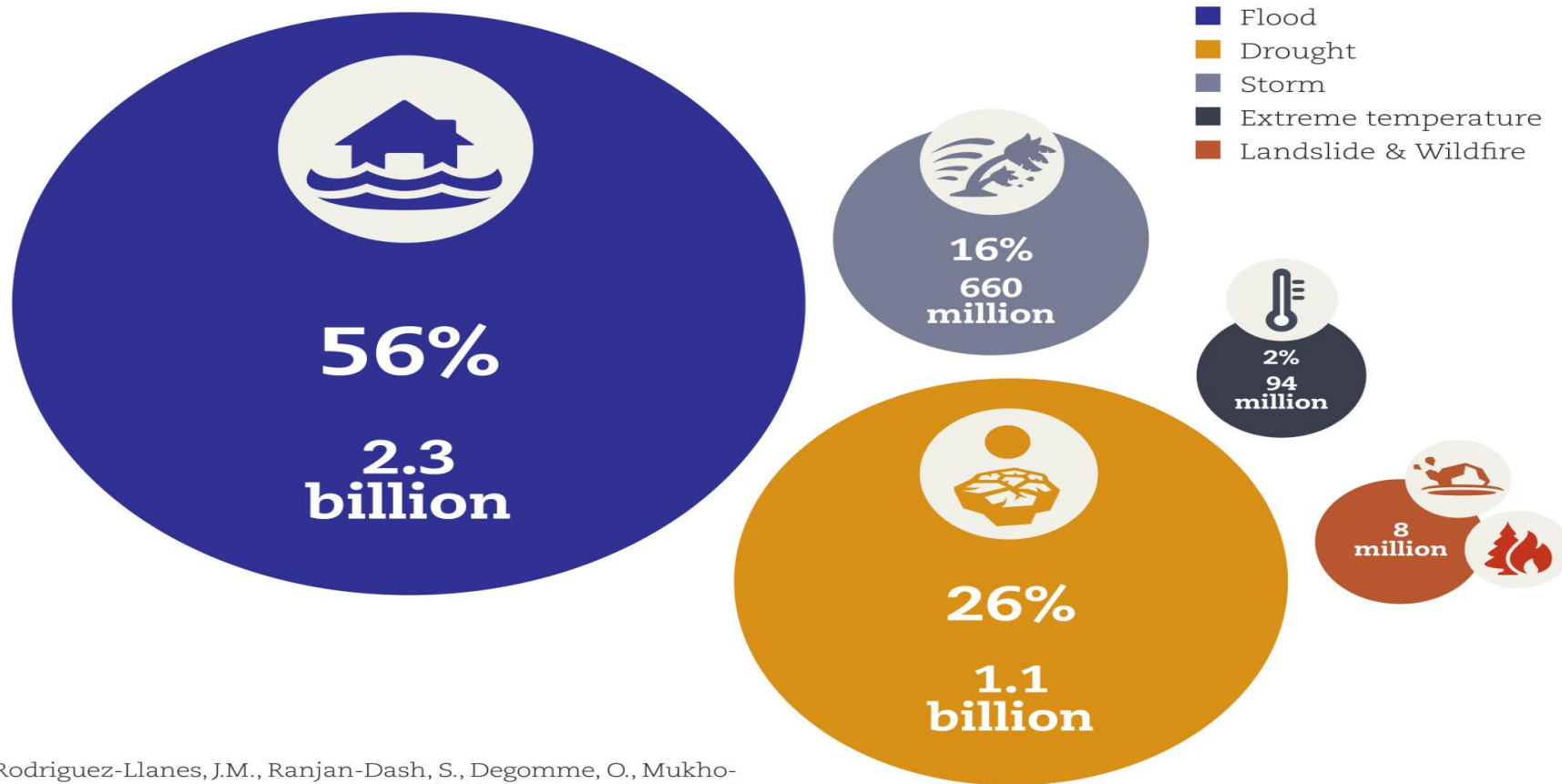
- Storm
- Extreme temperature
- Flood
- Drought
- Landslide & Wildfire



UNISDR and Belgian-based Centre for Research on the Epidemiology of Disasters (CRED) report (2015) shows that since 1995, 90% of major disasters have been caused by 6,457 recorded floods, storms, heatwaves, droughts & other weather events.

The Human Cost of Weather Related Disasters 1995 to 2015

Numbers of people affected by weather-related disasters (1995-2015)
(NB: deaths are excluded from the total affected.)



³ Rodriguez-Llanes, J.M., Ranjan-Dash, S., Degomme, O., Mukhopadhyay, A., Guha-Sapir, D. (2011). "Child malnutrition and recurrent flooding in rural eastern India: a community-based survey". BMJ Open 2011;1: e000109.

4.1 Billion Affected

1980 – 2011

Lebanon

2527 records

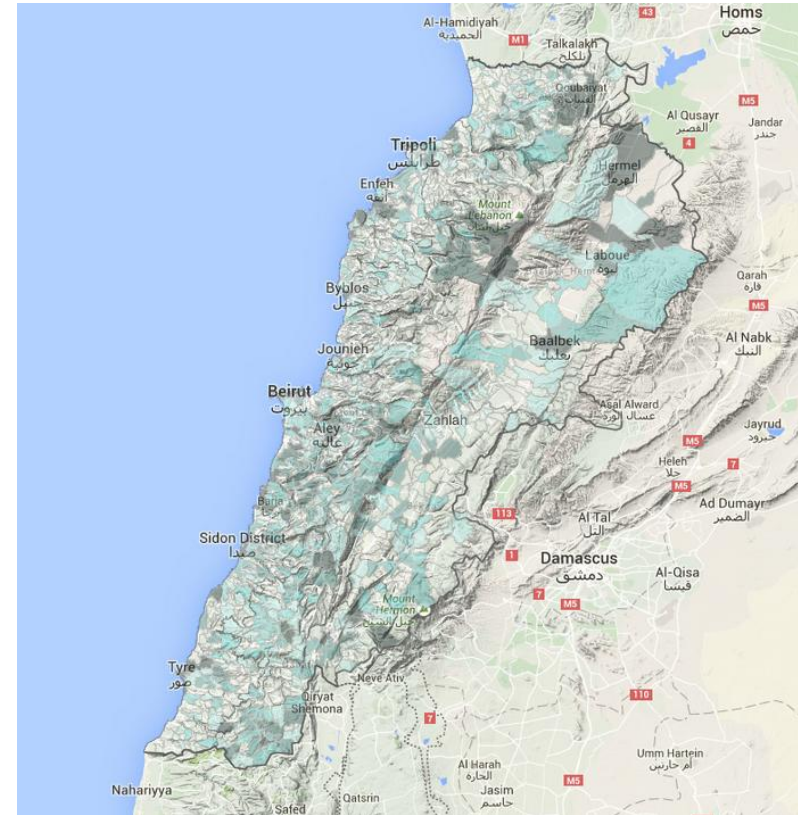
156 deaths

48 million US\$ estimated losses

181 houses destroyed

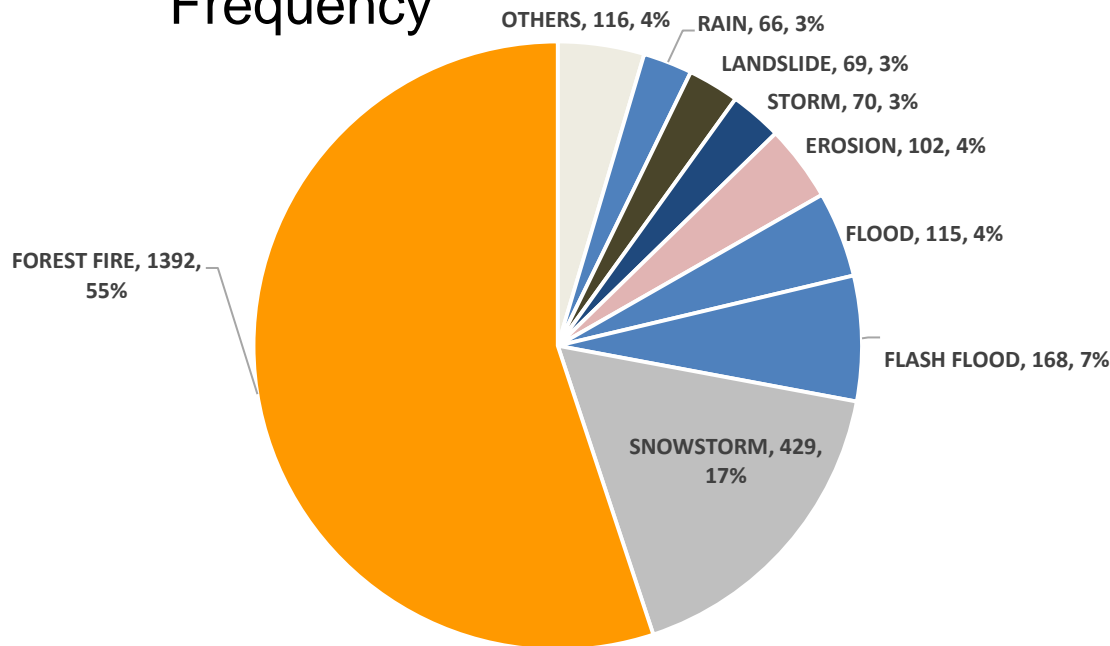
1366 houses damaged

17700 ha of crops damaged



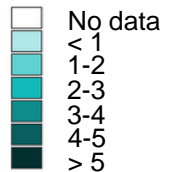
Spatial footprint of frequency

Frequency



Hydro-meteorological related impacts:

75% of all records
100% of mortalities.
86% of economic losses.



1982 – 2013

Tunisia

1918 records

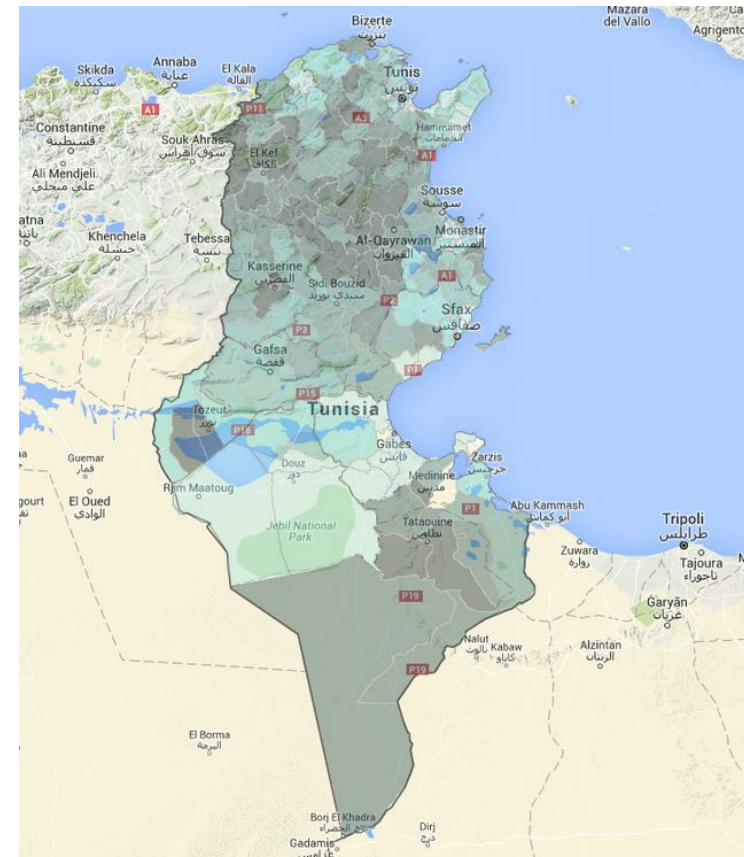
330 deaths

684 million US\$ estimated losses

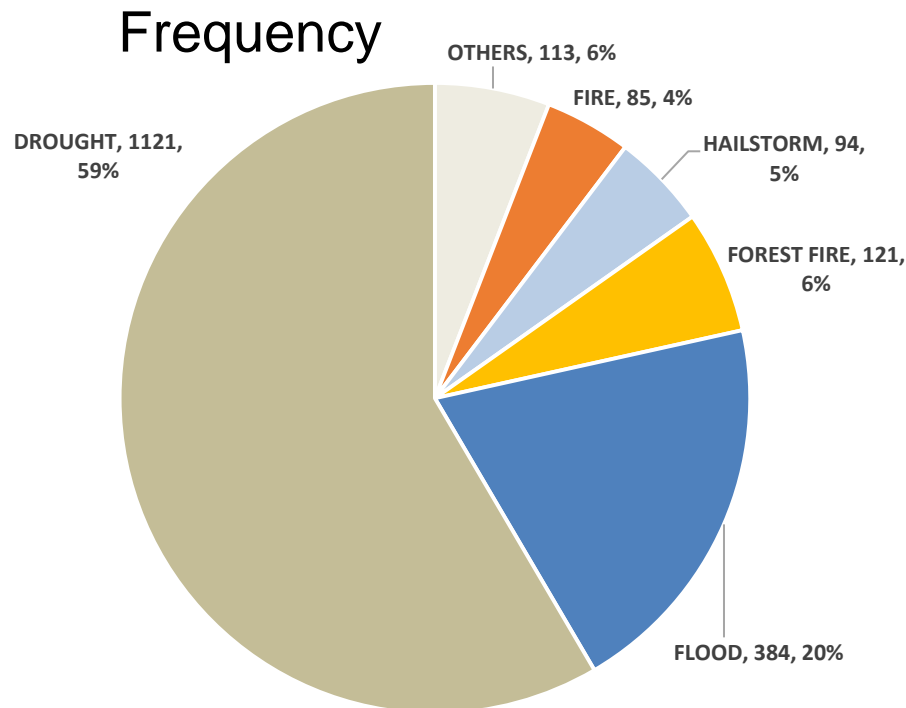
17821 houses destroyed

24728 houses damaged

837000 ha of crops damaged

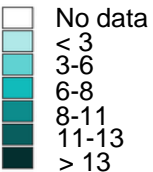


Spatial footprint of frequency



Hydro-meteorological related impacts:

99% of all records
100% of mortalities!
98% of economic losses.



713 records

2165 deaths

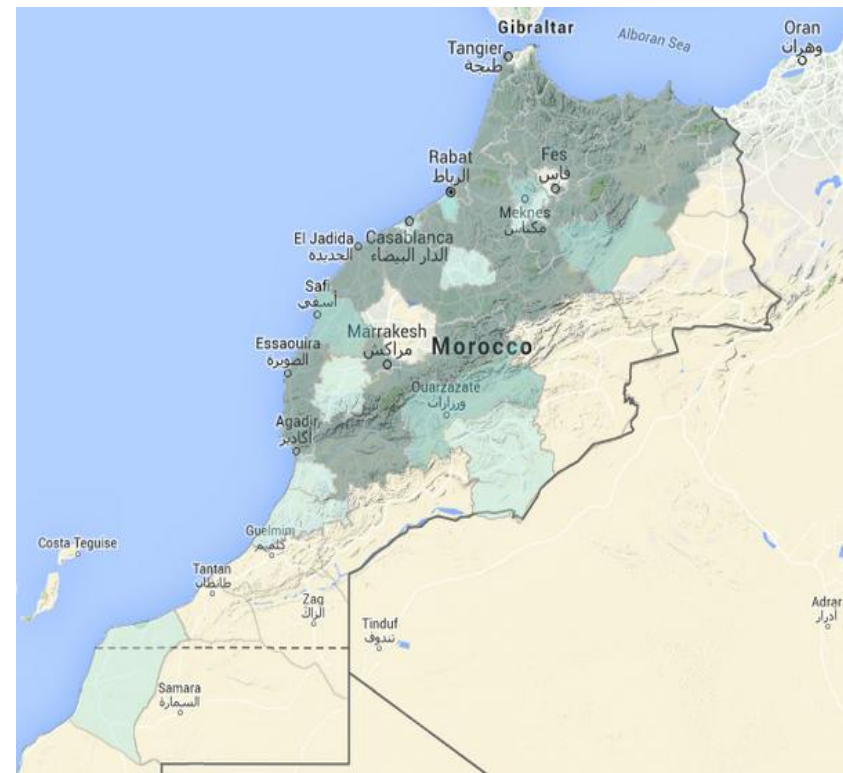
530 million US\$ estimated losses

5109 houses destroyed

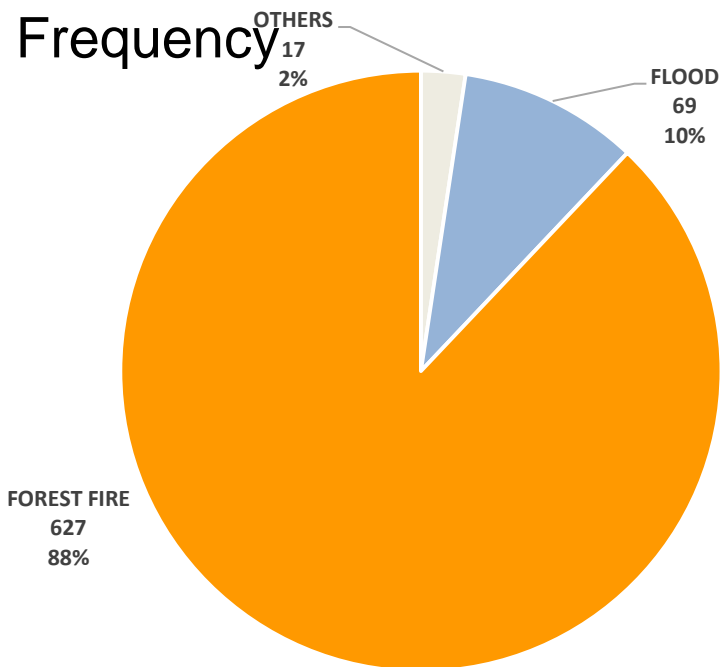
21915 houses damaged

281000 ha of Crops damaged

1990 – 2013 Morocco

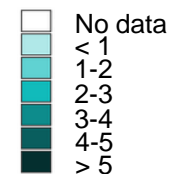


Spatial footprint of frequency



Hydro-meteorological related impacts:

**88% of all records
70% of mortalities
75% of economic losses.**



1981 – 2012 Jordan

593 records

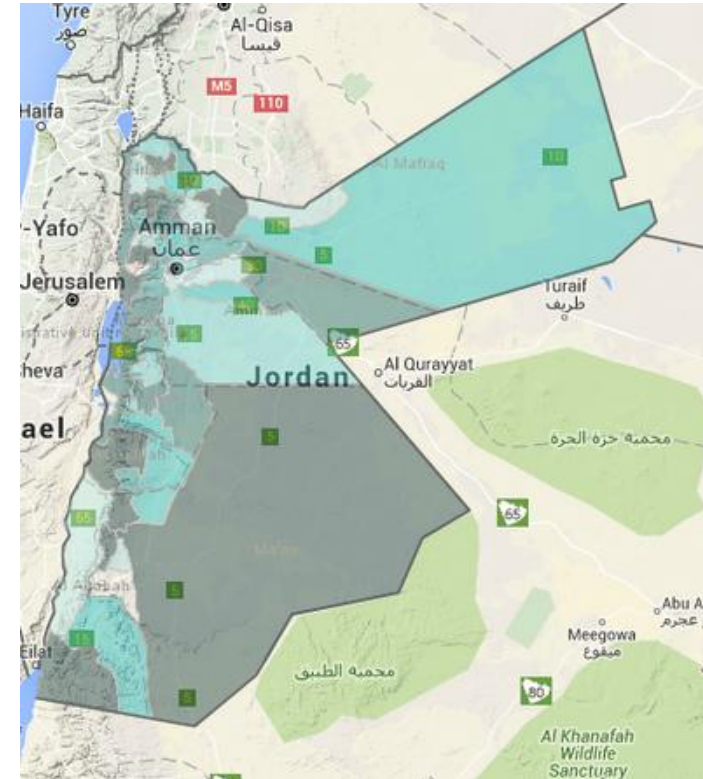
145 deaths

29 million US\$ estimated losses

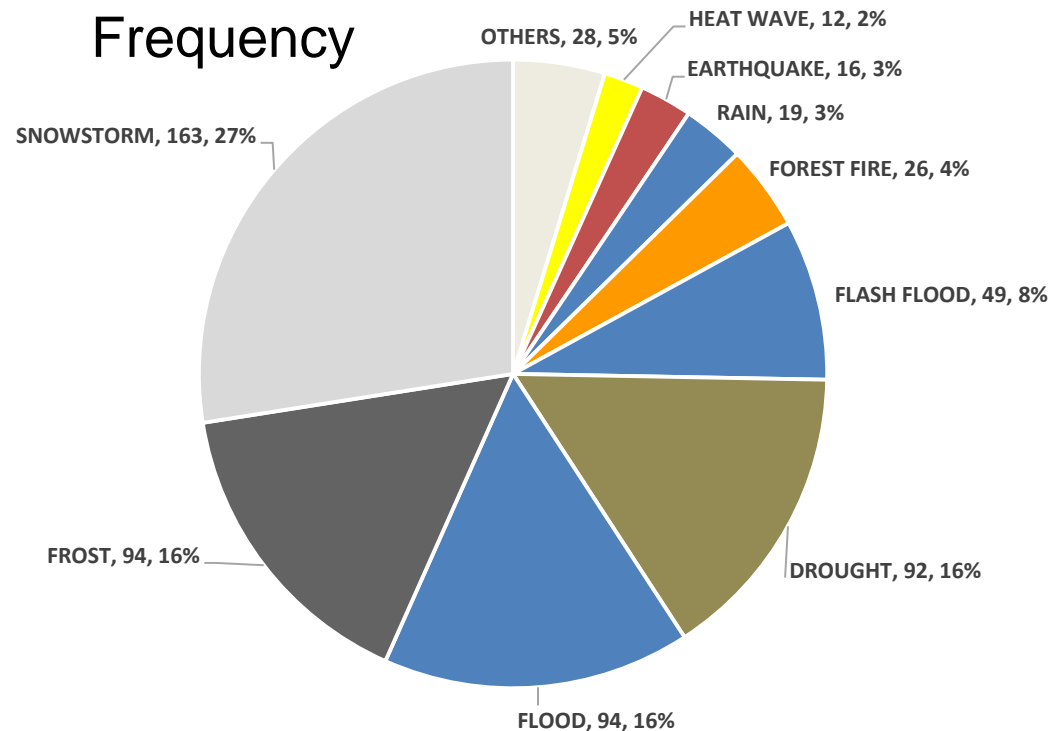
83 houses destroyed

594 houses damaged

840 ha of crops damaged

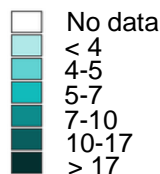


Spatial footprint of frequency



Hydro-meteorological related impacts:

97% of all records
97% of mortalities.
95% of economic losses.



388 records

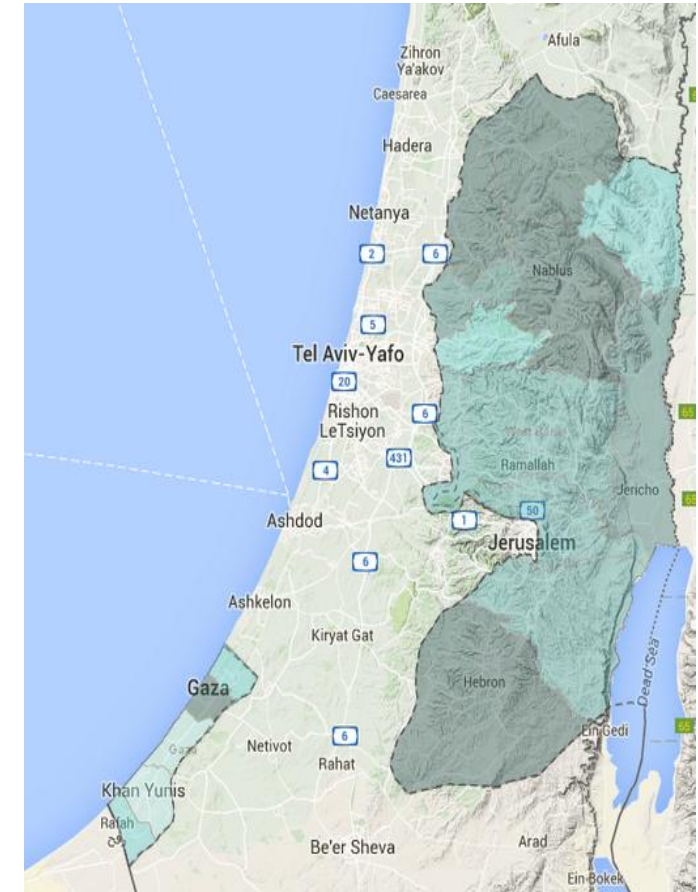
45 deaths

11 million US\$ estimated losses

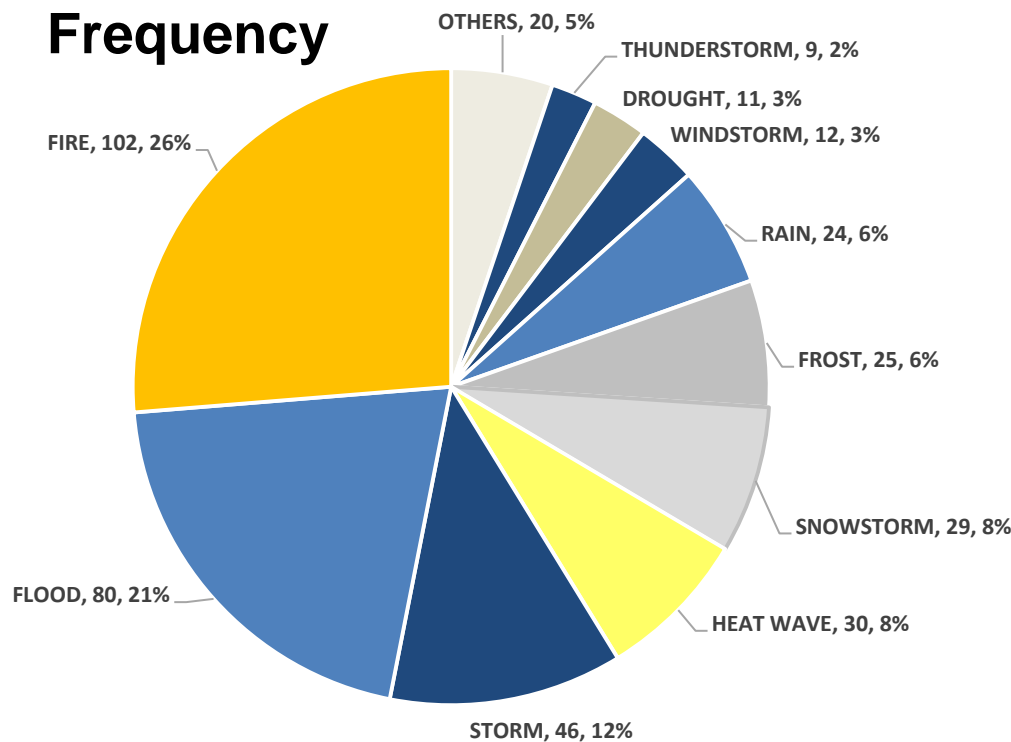
65 houses destroyed

798 houses damaged

1980 – 2013 Palestine

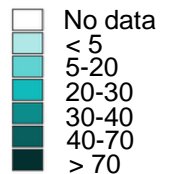


Spatial footprint of frequency



Hydro-meteorological related impacts:

99.23% of all records
69% of total mortality
92% of total economic losses



1971 – 2013 Yemen

1637 records

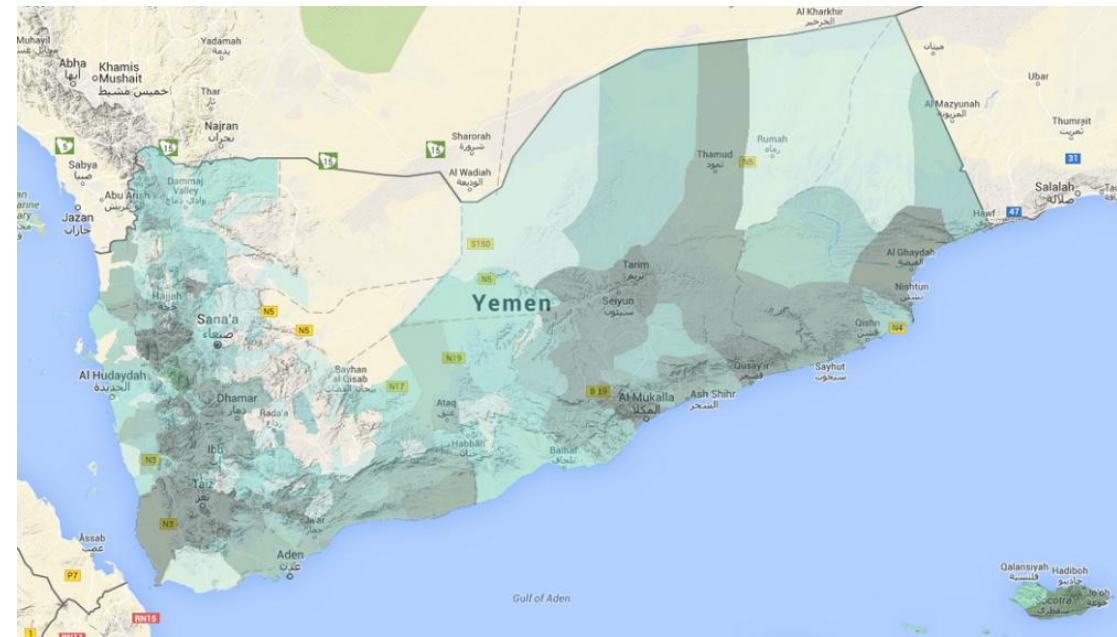
4126 deaths

3 billion US\$ estimated losses

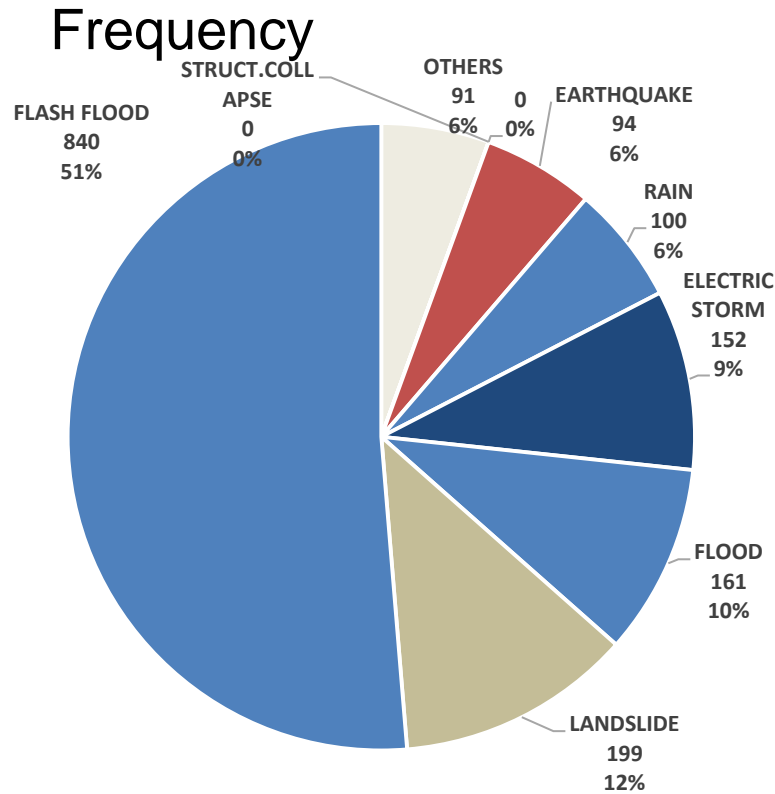
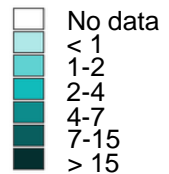
22392 houses destroyed

37311 houses damaged

20200 ha of Crops damaged



Spatial footprint of frequency



Hydro-meteorological related impacts:

95% of all records (out of which 51% of records refer to flash flood)

Flash flood is the deadliest disaster.

97% of 3 billion USD due to flash and flash floods events.

Changing Risk Environment !

- *Intensifying **disasters trends** & more frequent events*
- ***Resource scarcity** and degradation (land, water, food, energy, biodiversity)*
- *Climate change [extreme events, slow onset disasters (drought)]*
- *Increasing risk of «unchecked» urbanization coupled with high exposure of population and assets in high risk areas.*
- ***Increasing governance** challenges, coordination, accountability, legislations, institutional mechanisms, migration, conflict, all affecting human security*
- *Equity, poverty, inclusion – all being fundamental development challenges contributing to vulnerability*
- *Inter-dependency and **complexity of risk drivers***



**Sendai Framework for Disaster
Risk Reduction 2015-2030**

WCDRR Ser

WCDRR Sendai

WCDRR Sendai

7 GLOBAL TARGETS

Reduce

Mortality/ global population

2020-2030 Average << 2005-2015 Average

Affected people/ global population

2020-2030 Average << 2005-2015 Average

Economic loss/ global GDP

2030 Ratio << 2015 Ratio

Damage to critical infrastructure & disruption of basic services

2030 Values << 2015 Values

Increase

Countries with national & local DRR strategies

2020 Value >> 2015 Value

International cooperation

to developing countries
2030 Value >> 2015 Value

Availability and access to multi-hazard early warning systems & disaster risk information and assessments

2030 Values >> 2015 Values

4 PRIORITIES FOR ACTION

Priority 1 Understanding disaster risk

Policies and practices for DRR should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment.

Priority 2 Strengthening disaster risk governance to manage disaster risk

Disaster risk governance at the national, regional and global levels is of great importance for an effective and efficient management of disaster risk.

Priority 3 Investing in disaster risk reduction for resilience

Public and private investment in DRR are essential to enhance the economic, social, health & cultural resilience of persons, communities, countries, their assets, as well as environment

Priority 4 Enhancing disaster preparedness for effective response, and to “Build Back Better” in recovery, rehabilitation and reconstruction

Strengthened disaster preparedness for response, recovery, rehabilitation and reconstruction are critical to build back better

National and local dimensions

Regional and global dimensions

Sendai Framework for Disaster Risk Reduction and Climate Change

- **Offers a great opportunity for integrated approach** to develop sustainably by preventing and avoiding new risk, by reducing existing risk and by strengthening social and economic resilience.
- **Recognizes the importance of addressing climate change as one of the drivers of disaster risk**, while respecting the mandate of UNFCCC on Climate Change. This represents an opportunity to reduce risk in a meaningful and coherent manner throughout inter-related intergovernmental processes.
- **Emphasizes as a guiding principle** that the development, strengthening and implementation of relevant policies, plans, practices and mechanisms need **to aim at coherence** across sustainable development and growth, food security, health and safety, climate change and variability, environmental management and DRR agendas.

Policy Recommendations:

- 1. Invest in improving and sustaining historical loss database:** Measuring the human, physical and economic loss and damage associated with disasters is a critical step towards building a political and economic imperative to manage and reduce risks; setting baselines and achievement of the targets of Sendai Framework for Disaster Risk Reduction 2015-2030.
- 2. Invest in conducting hazard and risk assessment:** To measure the risk in a comprehensive manner, including consideration of all potential disaster events, future scenarios such as climate change impacts and trends in urbanization and population growth, requires use of probabilistic risk modelling approaches and high quality data from scientific and governmental entities on hazard, exposure, vulnerability and resilience data is required.
- 3. Share risk data and information:** The value of investment in data and information becomes magnified when more stakeholders have access to it. Historical loss database and other risk data and information should be shared as wide as possible in an understandable and easy to access format, ideally open to public.
- 4. Build capacity to understand and use risk information in disaster risk reduction:** Risk information can lead to reduction of risk only if it is used by decision makers among stakeholders in various public and private sectors. Education and training in understanding the risk information and how each element of risk information can be used for making a wise decision for designing effective policy and plans is essential to facilitate use of risk information in DRR.

www.wcdrr.org www.unisdr.org

WCDRR
Sambal, 14-18 March 2015
Third UN World Conference
on Disaster Risk Reduction



GAR

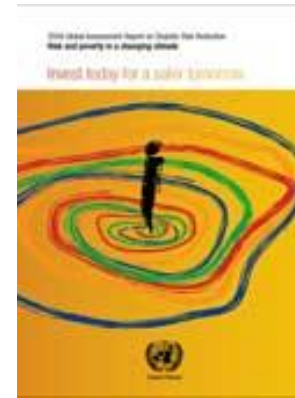
Global Assessment Report
on Disaster Risk Reduction

2015

GAR

Global Assessment Report
on Disaster Risk Reduction

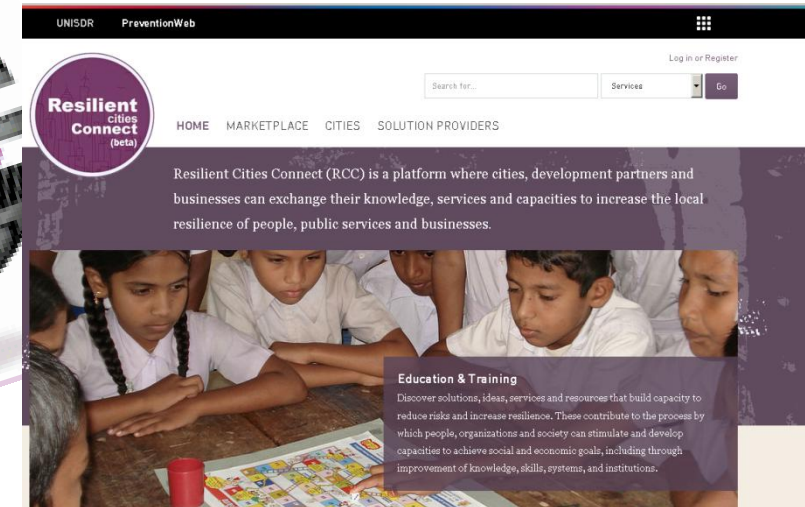
2013



<http://www.preventionweb.net/gar>

<http://www.wcdrr.org/>

Sendai Framework
for Disaster Risk Reduction
2015 - 2030



<http://www.preventionweb.net/rcc/>