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OUTLINES

- Introduction
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INTRODUCTION

Disaster damage and loss databases : **a key importance**

- Guiding relief, recovery and reconstruction programs
- Assessing risks of future disasters
- Calibrating the cost-effectiveness of investments intended to reduce losses
- Tracking loss patterns and trends, including progress towards achieving the HFA
- Performing thematic analysis (e.g. gender differences in morbidity and mortality, assessing sector-specific losses);
- Tracking, monitoring and evaluating the outcome indicators on loss and damage



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OBJECTIFS

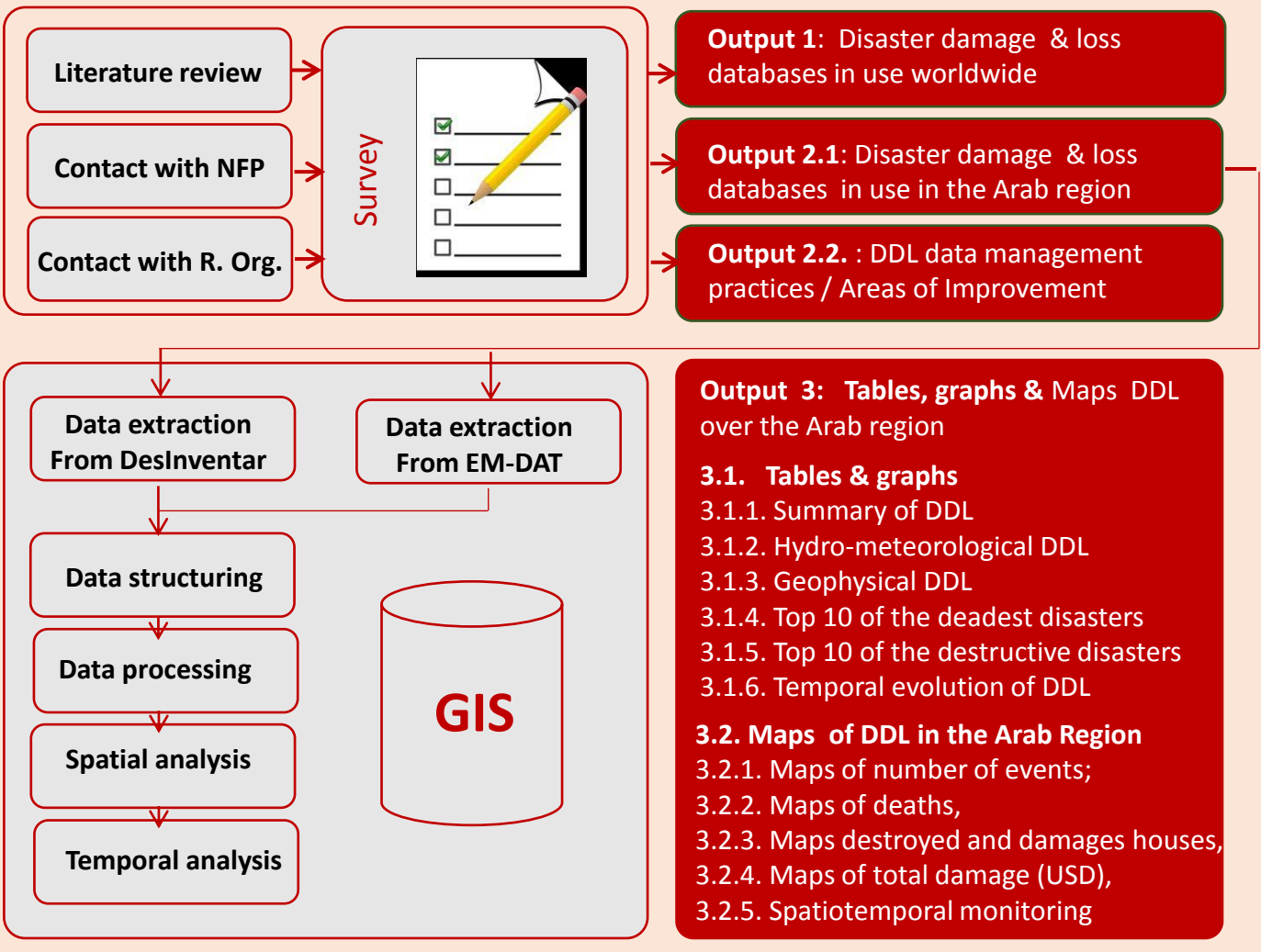
Draw a clear picture on the **practices, methodologies and the process in use** for disasters damage and loss data management in the Arab Countries.

- Review of disaster damage and loss data management in the Arab Countries and in the Arab region
- Analysis of spatial and temporal distribution of damages and losses in the Arab region
- Analysis and compare impact of hydro-meteorological and geophysical hazards.
- Identification of the risk profiles of each country and of the region and highlight the hot spot.



METHODOLOGY

REVIEW OF PRACTICES, METHODOLOGIES AND THE PROCESS IN USE FOR DISASTER DAMAGE & LOSS DATA MANAGEMENT





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DISASTER DAMAGE AND LOSS DATABASES



DISASTER DAMAGE AND LOSS: SUMMARY (10 COUNTRIES)

Summary of Disaster damage & loss in the Arab Region (10 Countries)						
Countries	Covered period	Number of events	Number of deaths	Houses destroyed	Houses damaged	Houses damaged & destroyed
Comoros	-	162	902	760	921	1681
Djibouti	1944 - 2012	1308	1859	0	0	0
Egypt	1980 - 2010	83	102	1329	1885	3214
Jordan	1981 - 2012	665	165	91	596	687
Lebanon	1980 - 2011	2521	151	178	1342	1520
Morocco	1960 - 2014	732	14197	5122	21920	27042
Palestine	1980 - 2013	461	83	67	798	865
Syria	1980 - 2009	7326	679	468	1311	1779
Tunisia	1982 - 2013	2167	541	17821	24728	42549
Yemen	1971 - 2013	9023	9825	23327	37626	60953
Total		24448	28504	49163	91127	140290

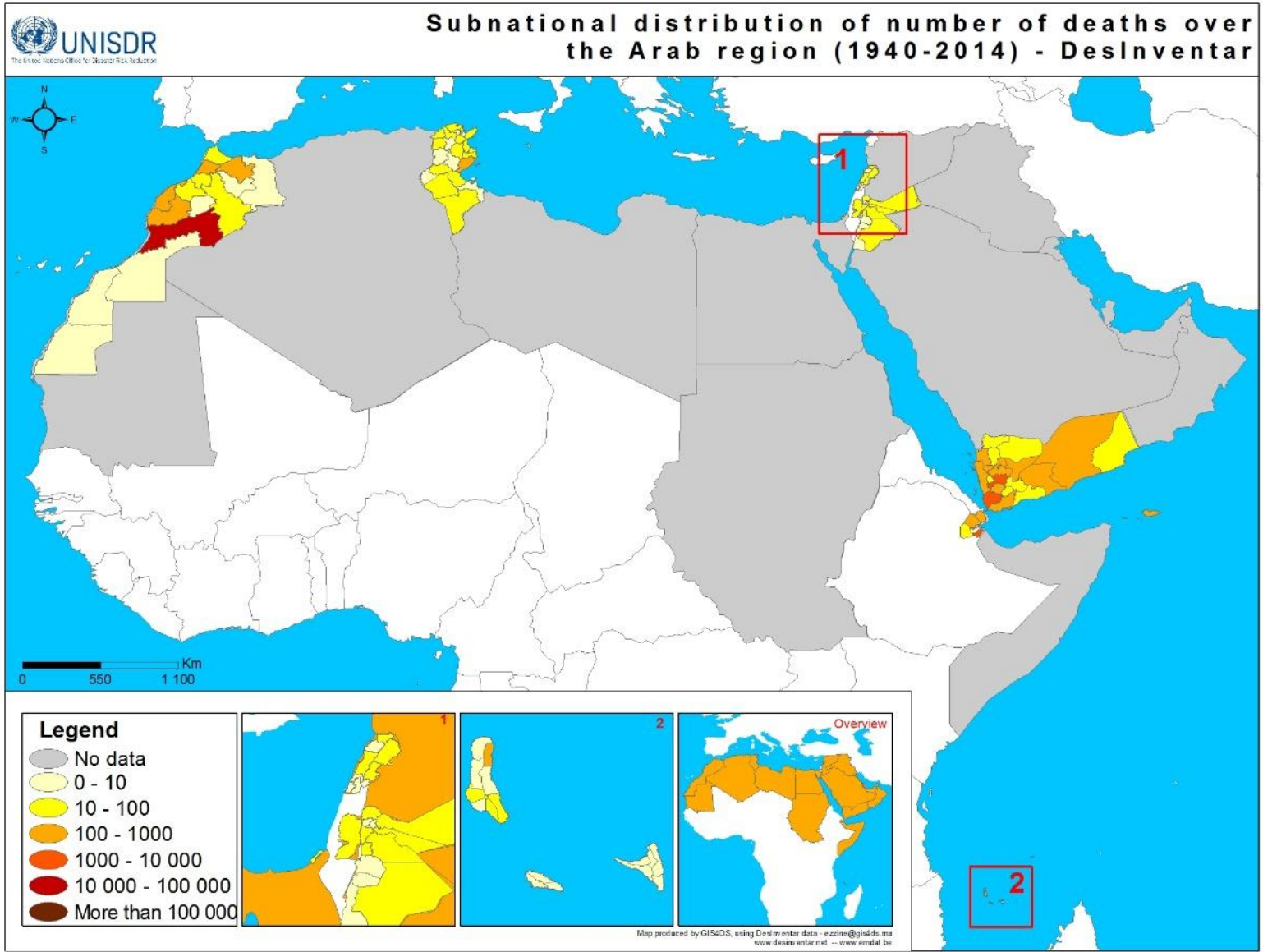


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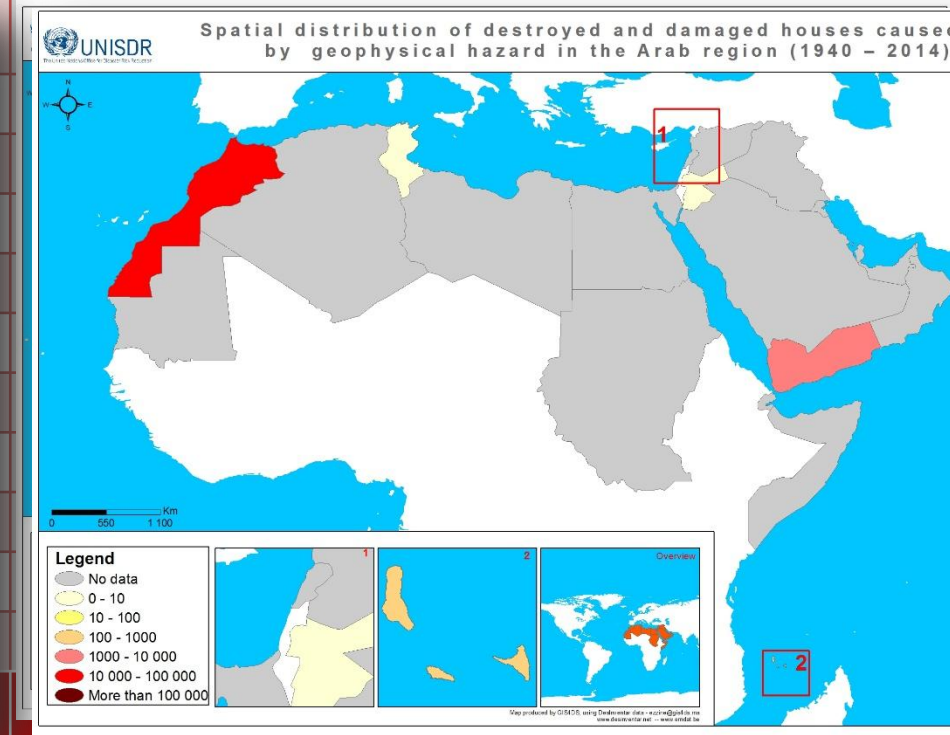
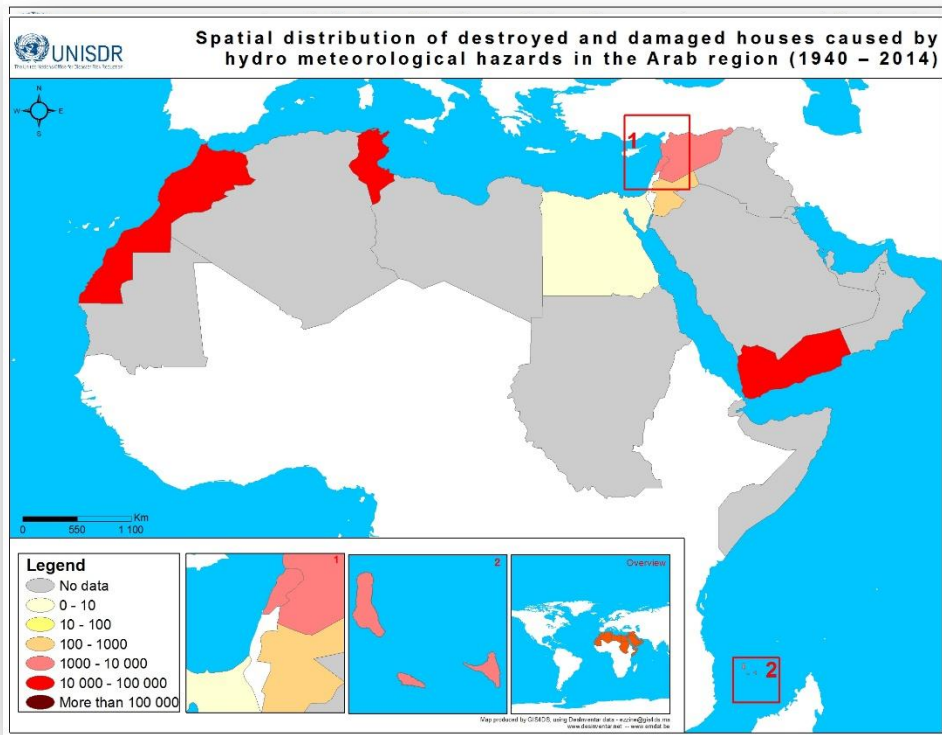
HYDRO-METEOROLOGICAL VERSUS GEOPHYSICAL

Hydro-meteorological events

Countries	Number of events	Deaths	Destroyed houses	Damaged houses.	al destroyed damaged
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Geophysical events (DesInventar)

Countries	Number of events	Deaths	Destroyed houses	Damaged houses.	al destroyed damaged
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DESINVENTAR SUPPLEMENTED BY EM-DAT

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Summary of disasters damage and loss in the Arab countries

Arab Countries	Event	Deaths	Total damages ('000\$USD)	Houses destroyed	Houses damaged	Houses damaged & destroyed
Algeria	128	12837	12 614 846	-	-	-
Bahrain	7	356	0	-	-	-
Comoros	162	1440	87804	760	921	1681
Djibouti	1308	1859	5719	0	0	0
Egypt	202	17477	1 381 000	1329	1885	3214
Iraq	44	3040	61 300	-	-	-
Jordan	665	768	404 400	91	596	687
Kuwait	3	46	0	-	-	-
Lebanon	2521	849	165000	178	1342	1520
Libya	21	1472	55600	-	-	-
Mauritania	53	582	59500	-	-	-
Morocco	732	16466	1 751 659	5122	21920	27042
Oman	11	355	4 951 000	-	-	-
Palestine	461	83	0	67	798	865
Qatar	3	61	0	-	-	-
Saudi Arabia	64	4999	1 650 220	-	-	-
Somalia	101	29929	100020	-	-	-
Sudan	196	172760	558 200	-	-	-
Syria	7326	679	89000	468	1311	1779
Tunisia	2167	1689	440 800	17821	24728	42549
United Arab Emirates	11	380	7000	-	-	-
Yemen	9023	9825	2 022 700	23327	37626	60953
Total	25 209	277 952	26 405 768	49163	91127	140290



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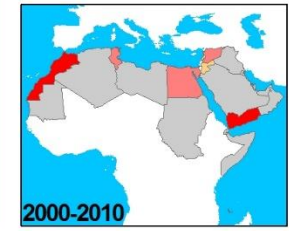
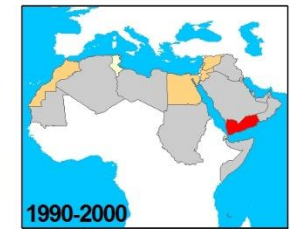
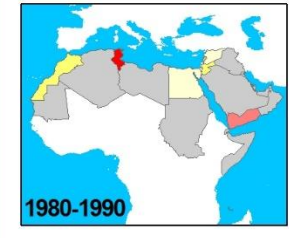
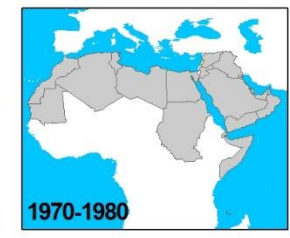
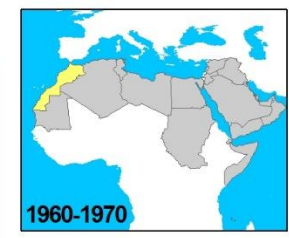
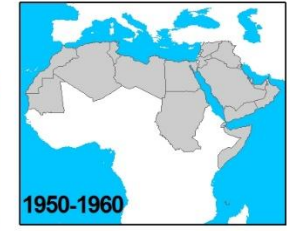
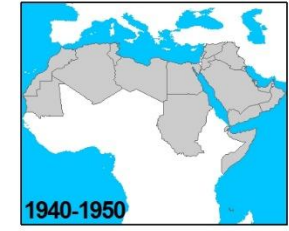
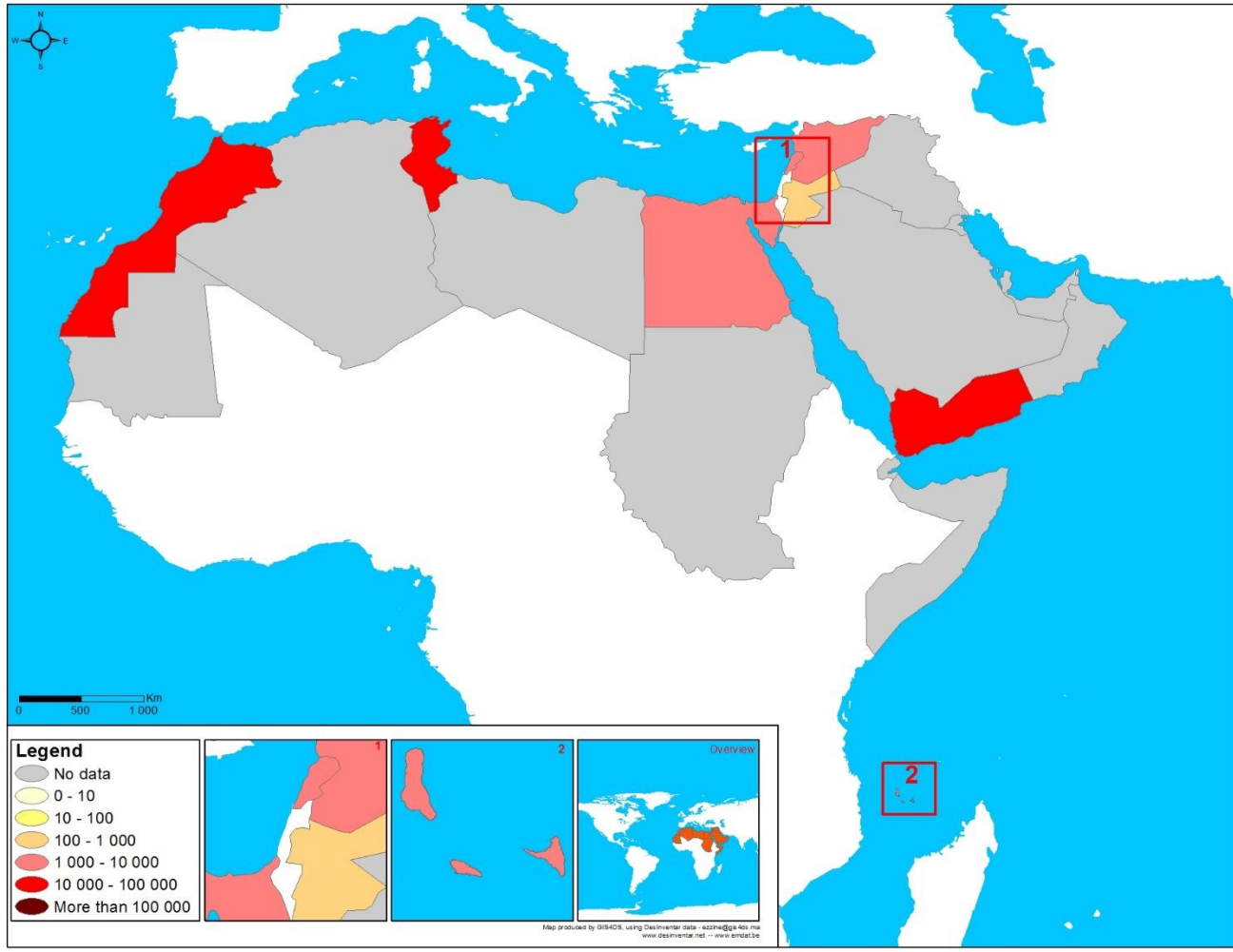
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SPATIOTEMPORAL MONITORING OF DAMAGE AND LOSS



Spatiotemporal evolution of destroyed and damaged houses in the Arab Region (1940 – 2014) - DesInventar





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ANALYSIS OF DISASTER DAMAGE LOSS DATA GATHERING PROCESS

- AVAILABILITY AND CONTENT OF DISASTER LOSS DATABASES
 - 10 / 22 Arab counties installed and implemented DesInventar
 - DesInventar databases cover different periods between 1940 and 2014
 - New and updated statistics (partial)



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ANALYSIS OF DISASTER DAMAGE LOSS DATA GATHERING PROCESS

- **THE MAIN PROBLEMS RAISED : INSTITUTIONAL, TECHNICAL, LOGISTICAL, LEGAL AND POLITICAL IN SOME COUNTRIES**
 - **Absence of a clear and agreed process** for disaster damage and loss data gathering,
 - **Absence of regional and national institutions** responsible of disaster data collection process,
 - **Data access** very difficult,
 - Absence of clear **validation mechanisms**,
 - Absence of a clear data **archiving strategy**,
 - Databases **do not contain all type of Hazards** (e.g. drought),
 - Different **languages** in a same database,
 - Databases **underused** use
 - Databases are **not comprehensive** and not **reliable**



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CONCLUSIONS AND RECOMMENDATIONS

- Heavy and costly loss and damage
- Hydro-meteorological event are much more frequent and destructive than geophysical
- Deaths related to geophysical hazards are more concentrated in space and time
- The last decades experienced an expansion in the geographical spread and in the number of countries affected by disasters.
- Temporal analysis of damage and loss through DesInventar showed a random distribution.
- Several gaps and discontinuities in the time series were detected in several databases



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الاستنتاجات والتوصيات

- مأسسة عملية إدارة البيانات المتعلقة بالأضرار والخسائر الناجمة عن الكوارث
- تعزيز فهم أهمية البيانات المتعلقة بالأضرار والخسائر الناجمة عن الكوارث
- ملكية قواعد البيانات المتعلقة بالأضرار والخسائر الناجمة عن الكوارث
- إدماج قواعد البيانات المتعلقة بالأضرار والخسائر كجزء من خطة العمل الجهوية و الوطنية للحد من الكوارث

CONCLUSIONS AND RECOMMENDATIONS

- **Institutionalize** disaster damage and loss data management process
- Promote deep **understanding** of the key importance of DDL data
- **Ownership** of disaster loss databases
- Integrate disaster damage and loss databases as a **part of the national** disaster reduction system



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الاستنتاجات والتوصيات

- الدعم التقني وغير التقني
- تحسين واستدامة عملية جمع البيانات وإجراء مراقبة الجودة
- إجراء تحليل عميق لقواعد البيانات الوطنية المتعلقة بالأضرار والخسائر الناجمة عن الكوارث
- التدريب

CONCLUSIONS AND RECOMMENDATIONS

- Technical and non-technical **support and coaching** is needed
- **Improving and sustaining data collection process** and performing a quality control
- Performing a **deep national analysis of** Disaster loss databases
- Training

Thanks to

شکرا



UNISDR

The United Nations Office for Disaster Risk Reduction



Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

**Swiss Agency for Development
and Cooperation SDC**