Disaster loss and damage data:
Building global coverage from the bottom up
using the DesInventar approach and methodology

UNISDR, the United Nations Office for Disaster Risk Reduction is promoting a global initiative to build national disaster databases with a well defined methodology. UNISDR uses for this purpose the DesInventar free, open source methodology and software. It permits the homogeneous capture, analysis and graphic representation of information on disaster occurrence and loss. It has been under continuous development and improvement since the inception of the initiative in Latin America late 1993.

Disaster loss databases (DLDB's) are essential for countries to report on Sendai Framework Targets, especially on the first four out of seven targets, which refer to the imperative of reducing disaster losses and impacts. Accounting for losses will allow countries to monitor progress against such targets, and can be used as powerful Disaster Risk Reduction (DRR) risk knowledge tool.

Today, **95%** of all national disaster databases in the world have been built using this methodology and tool creating in this way a unique compatible and comparable dataset. In many of these countries, national disaster management agencies have used and are using these disaster databases as an input to their risk analysis, risk mitigation, the formulation of early warning systems, as well as to follow up the success or evolution of their risk reduction plans over time.

The coverage of this initiative is increasing rapidly and its prescence is covering all continents, including Europe with Albania, Italy, Serbia and Turkey.
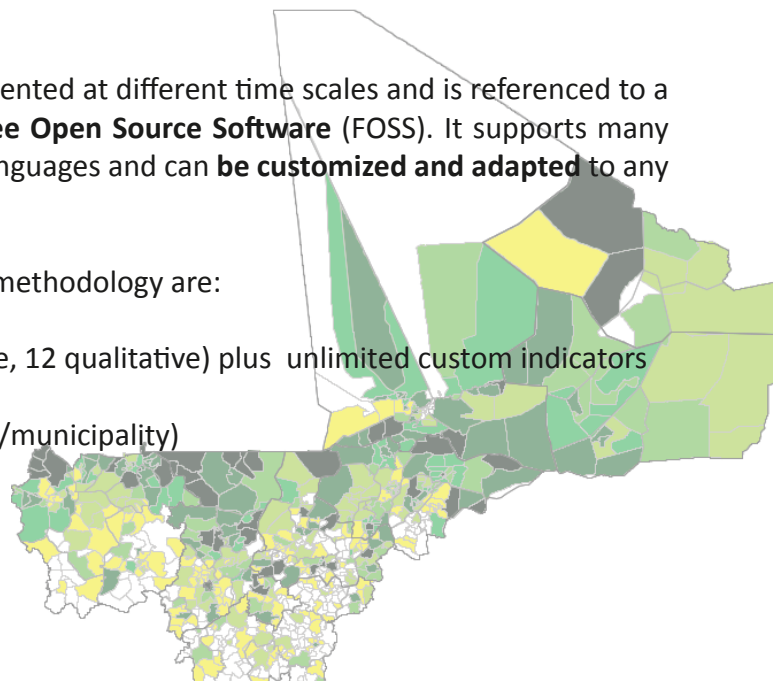
Besides, the tool has a range of options for analysis allowing national and sub-national authorities and DRR practitioners to to understand disaster trends, patterns and their impacts in a systematic manner. With increased understanding of the disaster trends and their impacts, better prevention, mitigation and preparedness measures can be planned to reduce the impact of disasters on communities.
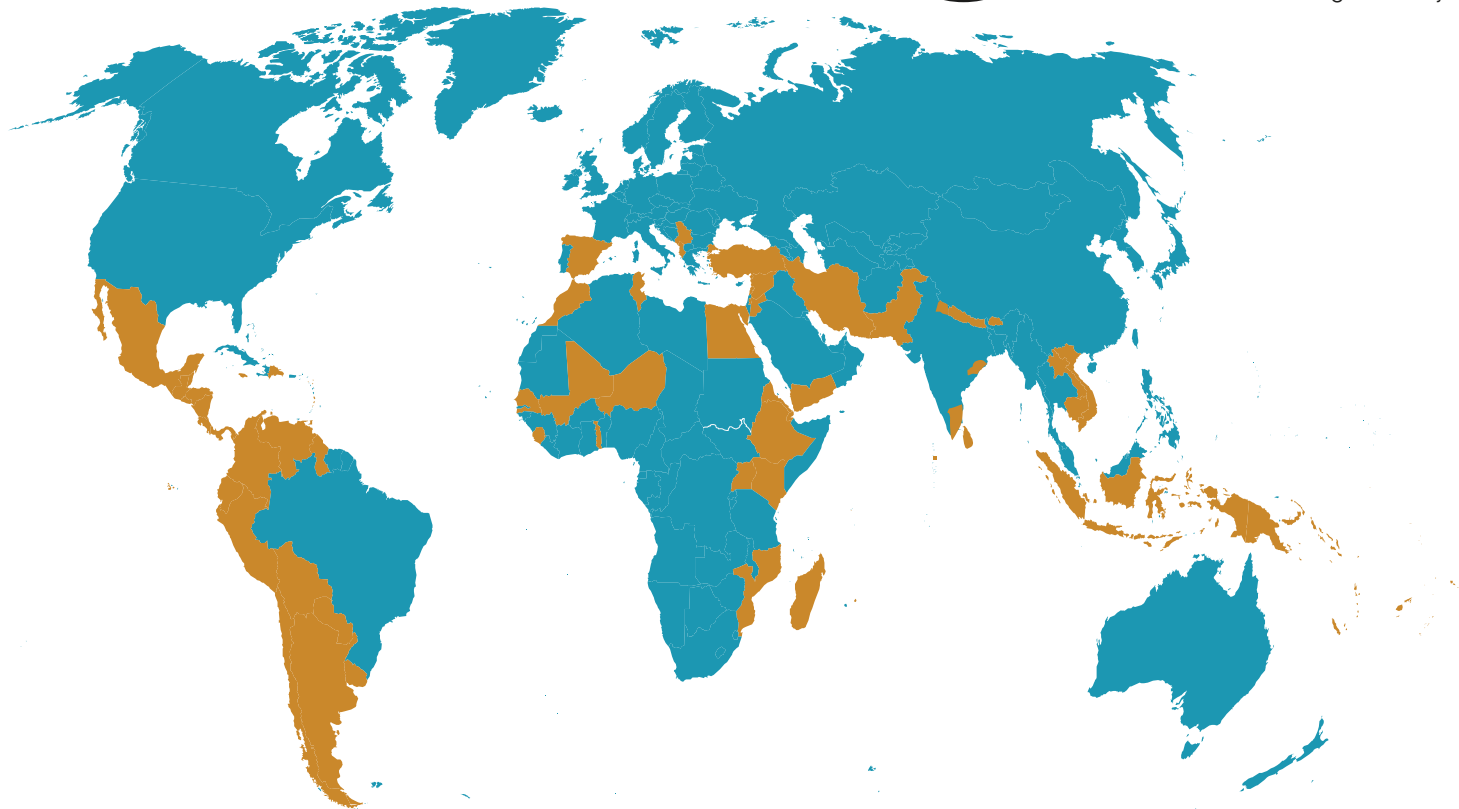
The UNISDR methodology essentially proposes the collection of detailed and homogeneous data about disasters at all scales using DesInventar.

The information compiled and processed can be presented at different time scales and is referenced to a relatively small geographic unit. DesInventar is a **Free Open Source Software** (FOSS). It supports many **standards** (OGC, XML, Glide, Google API etc…) and languages and can **be customized and adapted** to any needs.

The **5 pillars** of UNISDR disaster loss data collection methodology are:
 - Standard definition of hazards and its impacts.
 - Standard set of common indicators (16 quantitative, 12 qualitative) plus unlimited custom indicators
 - Wide coverage of disasters regardless of scales.
 - Disaggregation of data to subnational units (county/municipality)
 - Collected and validated locally within the country

The number of countries equipped with disaster loss databases has increased year by year to reach **89** countries as of April 2016. The database broadens the scope of Disaster Risk Management research by registering not only large scale events but also small scale events. Though there is room to improvment, the database is one of the best quality of disaster loss databases in the world.

UNISDR supports the initiative to **build global coverage from the bottom up.**

"Among existing loss databases DesInventar provides a methodology and data fields that corresponds the most to the technical requirements for recording loss data in the EU"

European Commission - JRC Scientific and Policy Reports - Recording Disaster Losses - 2013

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