

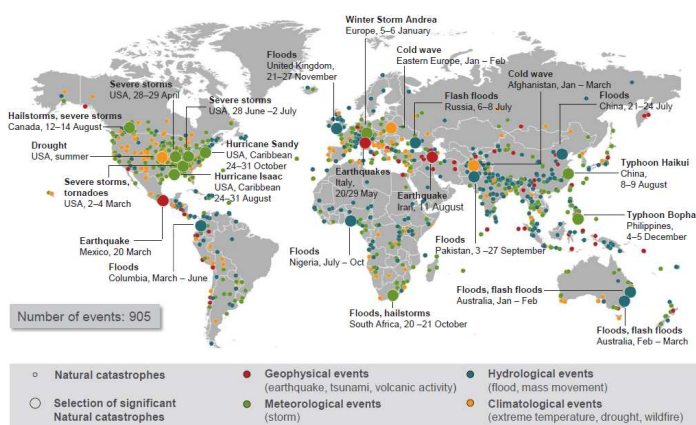
towards an Open Humanitarian Risk Index

“The probability of harmful consequences, or expected losses (deaths, injuries, property, livelihoods, economic activity disrupted or environment damaged) resulting from interactions between natural or human-induced hazards and vulnerable conditions.”

ISDR definition of risk

Understanding Humanitarian Risk

Around the globe, hundreds of millions of people are exposed to natural and man-made hazards. According to the Centre for Research on the Epidemiology of Disasters (CRED), at least 106 million people in 115 countries were affected by natural disasters in 2012. While the economic costs of these disasters are concentrated in the industrialized world, the impact on people is predominantly felt in developing countries, including the vast majority of those killed, injured and made homeless. 2012 also saw over 200 violent conflicts underway around the world, according to the Heidelberg Institute for International Conflict Research (HIIC). These and previous emergencies, both natural and man-made, have created over 16 million refugees and more than 41 million internally displaced people (IDPs).



Location of natural disaster events in 2012. Source Münchener Rückversicherung-Gesellschaft, Geo-Risks Research, as of January 2013

While the lead role in disaster management lies with communities and national government, the international humanitarian community plays an important supporting role both in responding to emergencies, as well as working with communities, national governments and civil societies on prevention, mitigation and preparedness.

Humanitarian stakeholders increasingly recognise the need to transition from a reactive humanitarian crisis response model to a proactive crisis management framework. Such a framework must be built on a sound understanding of the drivers of humanitarian risk so that actors can work from a common understanding of priorities in order to target their resources in a coordinated and effective manner.

While the Human Development Index (HDI) represents a widely used and established instrument and reference point for development work, the same cannot be said for resilience-building and humanitarian action. Although several organizations maintain their own, internal, models for analyzing humanitarian risk, there is currently no comprehensive, widely-accepted and open evidence base with which to reach common understanding and coordinated action.

An Open Humanitarian Risk Index

Since 2012, a group of UN agencies, donors and research institutions have explored how to address this gap. The group is proposing an objective, transparent and evidence-based multi-hazard risk index to inform programmes focused on anticipating, mitigating, and preparing for humanitarian emergencies. The index will follow the following principles:

Global coverage: Data is often scarce in countries at high humanitarian risk where weak development or ongoing conflict prevents sound data management. The index will use datasets with broad global coverage and follow international standards for the calculation of missing values. While initially the index will be at national level, future development will aim for sub-national analysis to distinguish regions of high risk in otherwise lower-risk countries.

Openness: the index will be based on evidence collectively gathered and owned by the public, agencies, governments, NGOs and academia, thereby increasing its acceptance and improving its rigour. The project includes agencies that generate much of the source data which will enhance timeliness and ensure proper interpretation of the data.

Continuity: the index will include at least five years of historical data to allow for immediate trends analysis.

Transparency: the index's methodology and data sources will be published and available for review. A website will be established to allow users to download underlying data as well as the indexes.

Flexibility: the index will be designed to operate as a standalone model to establish a common, basic understanding of risk. Recognizing that a global model cannot reflect the complex and sometimes unique factors affecting individual countries, or meet the specific needs of all humanitarian and resilience actors, the methodology will provide a framework for incorporating additional components to allow for more nuanced analysis of specific issues or geographic regions.

Methodology

The index will follow international standards for calculating risk, expressed as the combination of hazards and vulnerability offset by capacity.

Humanitarian Risk		
Hazard	Vulnerability	Capacity
Natural	Poverty	Institutional
Human	Livelihood	Economic
	Dependency	Infrastructure
	Inequality	
	Health	

Hazards: The index will measure the exposure of populations to natural and human hazards. Natural hazards will be weighted toward those that are most associated with humanitarian emergencies, such as flooding, tropical storms and earthquakes and account for seasonal variance. Human hazards will be weighted towards high-intensity conflict, while also accounting for other factors such as underlying violence that influence the outbreak of civil conflict.

Vulnerability: The index will reflect common factors creating vulnerability among exposed populations, including poverty, livelihoods, dependency, inequality and health.

Capacity: The index will seek to reflect the capacity of communities and nations to respond to natural disasters and cope with conflict, reflecting economic, institutional and physical capacity. Coping capacity has been a challenging area to rate based on currently available data, and the project group will examine new data sources that will improve this area of study.

Humanitarian Risk: These three components will be combined in a multiplicative model to create values for overall humanitarian risk. This risk index will seek to identify countries that combine exposure to natural or human hazards with high vulnerability and a low capacity to respond to emergencies. Subsequent sub-national-level analysis will provide greater granularity, identifying high-risk regions within otherwise lower-risk countries.

The index will aim to provide an objective basis for measuring risk and identifying countries that are more likely to experience humanitarian emergencies, and which therefore may require humanitarian assistance from the international community. No index can fully reflect the many complex and local factors that might influence such a humanitarian need, or indeed the decision of a government to request international assistance. The index will rather provide a basis for comparing activities and priorities against a set of common indicators.

Current Status

As of May 2013, the project group is compiling potential data sources in the areas of hazards, vulnerability and capacity that will be reviewed and assessed for possible inclusion in the index. Datasets will be selected based on the outlined principles and following statistical good practice to focus in on datasets that best represent the drivers of humanitarian risk. A pilot of the index will be developed in the 3rd quarter 2013, with a first version anticipated by the end of 2013.

OHRI is a project of the Inter-Agency Standing Committee (IASC) Sub-Working Group on Preparedness in partnership with the European Commission's Joint Research Centre (JRC). Current project partners include FAO, ISDR, OCHA, UNHCR, UNICEF, WFP, WHO, the Humanitarian Aid and Civil Protection Directorate General of the European Commission (ECHO) and the UK's Department for International Development (DFID).

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