

# Environmental Emergency Risk Index (EERI)



## What is the EERI?

The EERI builds upon existing humanitarian, development and environmental performance indices, primarily the InfoRM<sup>1</sup>. InfoRM is a way to measure the risk of humanitarian crises that identifies where crises requiring international assistance may occur and analyses that risk so it can be better managed by everyone.

The EERI looks at the InfoRM risk elements of hazards, vulnerabilities and capacities – adding key environmental emergency elements in order to get an understanding of those countries most at risk of environmental emergencies.

## Why do we need EERI?

The EERI captures two elements more than any other known index in the humanitarian sector: technological hazards and environmental vulnerability. In an increasingly urbanized, populated and industrialized world, the contribution of man-made hazards and environmental factors to disaster risk, sustainable development and resilience at community level can no longer be ignored.

EERI offers an opportunity to identify countries at significant risk of technological accidents, as well as countries with significant environmental vulnerabilities that must be taken into account when designing humanitarian programmes. As such, EERI works as a strategic tool for prioritizing work on environmental emergency preparedness and environment in humanitarian action.



## Who can use EERI?



Anyone can use EERI. EERI combines several indicators and datasets, all of which are open and transparent.

At a global and regional level, EERI results can be used to prioritize capacity development interventions and to identify the various elements of risk that would be important to address. At national level the individual datasets can be used to analyse the risk a country faces from technological hazards and environmental degradation.

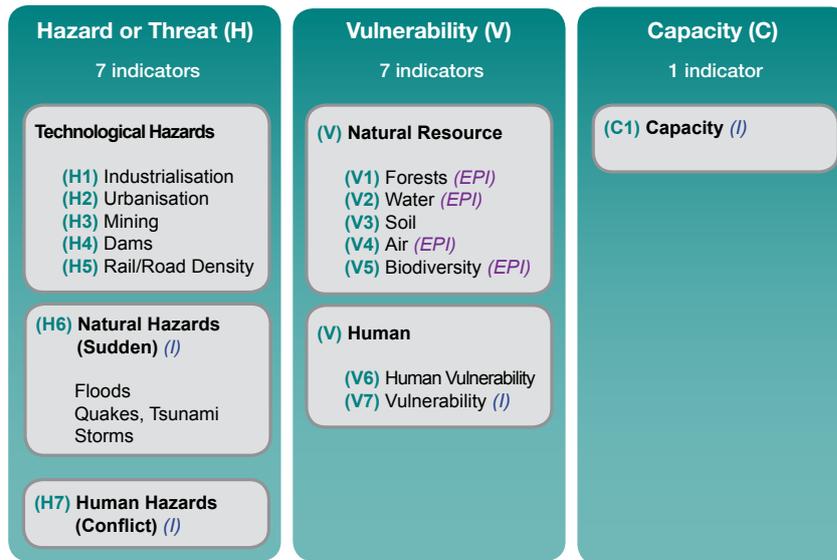
EERI can also be used for advocacy purposes; with the aim to improve datasets on industrialization, for assessing and addressing environmental vulnerabilities as part of humanitarian and development action, and for pushing for greater consideration of environmental issues as part of risk management.

1. <http://inform.jrc.ec.europa.eu>

2. Examples of natural hazard -induced technological accidents with significant negative impacts include the oil spill caused by typhoon Yolanda/Haiyan in the Philippines and the accident at the Fukushima Daiichi nuclear power plant in Japan.

## How is the EERI calculated?

The EERI covers 191 countries and draws on existing available data, combining 17 different indicators that measure hazards (technological, natural and human), vulnerability (environmental and human) and capacity into one overall index for environmental emergency risk.



**LEGEND**  
 (I) Extracted from InfoRM  
 (EPI) Extracted from EPI

Chart 1: Indicators used in the Environmental Emergency Risk Index

INDICATOR (layer iii)	INDICATOR COMPILATION (layer ii)	%	INDICATOR COMPILATION (layer i)	%
HAZARD 40%	Technological hazards	50%	Industrialization	25%
			Urbanization	25%
			Mining	25%
			Rail & Road Density	15%
			Dams	10%
	Natural hazards	37,5%	taken from InfoRM	
	Human hazards	12,5%	taken from InfoRM	
VULNERABILITY 30%	Environmental vulnerability	33,5%	Forests	20%
			Water	20%
			Soils	20%
			Air	20%
			Biodiversity	20%
	Human Vulnerability	33%	Population Density	100%
	Vulnerability (InfoRM)	33,5%	taken from InfoRM	
CAPACITY 30%	Capacity	100%	taken from InfoRM	

Chart 2: Breakdown of the contribution from each data set and category as used at each stage of indicator compilation

## EERI Results

East Africa (ROEA)	Latin America (ROLAC)	West Africa (ROWCA)	Asia Pacific (ROAP)	Southern Africa (ROSA)	Caucasus and Central Asia (ROCCA)	Middle East & North Africa (ROMENA)
Burundi Ethiopia Eritrea Kenya Rwanda Somalia South Sudan Uganda	Haiti	Chad Congo, Dem. Republic of Mali Nigeria	Cambodia East Timor India Indonesia Korea, Dem. People's Republic Laos Papua New Guinea	Angola Malawi Mozambique Tanzania Zimbabwe	Tajikistan	Afghanistan Pakistan Syrian Arab Republic Yemen

Chart 3: Top 30 countries most at risk of environmental emergencies, per region, according to the EERI

