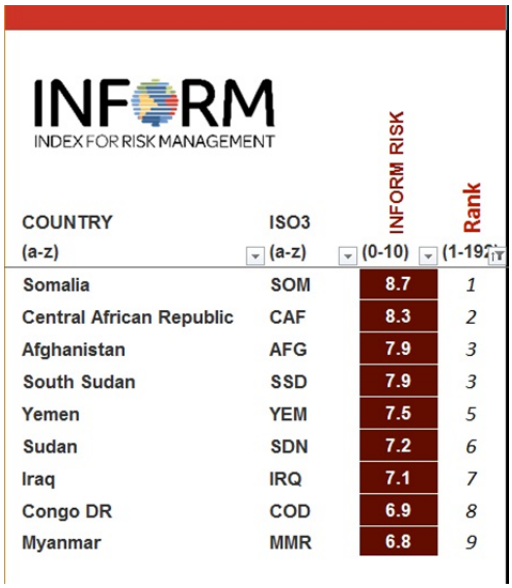
# MYANMAR HCT
# Risk Assessment (Update May 2016)



INFORM
INDEX FOR RISK MANAGEMENT

| COUNTRY (a-z) | ISO3 (a-z) | INFORM RISK (0-10) | Rank (1-192) |
|---|---|---|---|
| Somalia | SOM | 8.7 | 1 |
| Central African Republic | CAF | 8.3 | 2 |
| Afghanistan | AFG | 7.9 | 3 |
| South Sudan | SSD | 7.9 | 3 |
| Yemen | YEM | 7.5 | 5 |
| Sudan | SDN | 7.2 | 6 |
| Iraq | IRQ | 7.1 | 7 |
| Congo DR | COD | 6.9 | 8 |
| Myanmar | MMR | 6.8 | 9 |

Myanmar is ranked 9 out of 191 countries in the 2016 Index for Risk Management, and the first within Asia Pacific[1]. Myanmar is the second country most affected by extreme event within the period 1995-2014[2]. **Fire** is the most common hazard, followed by **flooding**. Floods occur in three waves: June, August and late September to October. The highest risk of flooding is in August, during the peak monsoon rains. The catchment areas of major rivers in the north and central zones, as well as the Southern Delta, prone to riverine floods. The mountainous and hilly areas in Kayin, Kachin, Shan, Mon and Chin states are threatened by flash floods. Coastal regions are at risk of flooding due to extreme rainfall and storm surge.

The Myanmar coastline is susceptible to severe **cyclones** which form in the Bay of Bengal, which has two cyclone seasons: April to May and September to November. According to the Myanmar Hazard Profile, the frequency of cyclone landfalls in Myanmar was once in three years before the year 2000. More recently, cyclones cross the Myanmar coast every year. In 2008, cyclone Nargis had an extremely severe impact in the Ayeyawady Region, due to the high vulnerability of the area. .

Myanmar frequently experiences **earthquakes,** as the Alphide-Himalayan earthquake belt passes through the country from north to south. Since 1900, there have been 8 strong earthquakes.

In order to identify the disaster risks most relevant for Myanmar, a risk assessment was elaborated by the ERP working group ranking the hazards by their foreseen impact and likelihood of occurrence. Three categories of hazards were identified: natural, man-made and epidemics/pandemics. Natural hazards are based on those listed in Myanmar hazard profile[3]

[1] [1] http://www.inform-index.org/
[2] [2] https://germanwatch.org/en/cri
[3] Hazard Profile of Myanmar, (2009).

## IMPACT AND LIKELIHOOD RISK ANALYSIS

| Impact | | | | | | |
|---|---|---|---|---|---|---|
| ↑ | *5. Critical* | | Tsunami | Earthquake | Cyclone | |
| | *4. Severe* | | | Conflict & Civil Unrest | | Floods |
| | *3. Moderate* | | | | Storm Surge | |
| | *2. Minor* | | Pandemics (including Zica) | Landslides & Drought & Fire | | |
| | *1. Negligible* | | Forest Fire | | | |
| | | *1. Very Unlikely* | *2. Unlikely* | *3. Moderately Likely* | *4. Likely* | *5. Very likely* |
| | | **Likelihood** → | | | | |

**Likelihood** :
1 = *Very unlikely* (a remote chance of an event occurring in the current year from 0-5%)
2 = *Unlikely* (5-15%)
3 = *Moderately likely* (15-30%)
4 = *Likely* (30-50%)
5 = *Very likely* (over 50%)

**Impact** :
1 = *Negligible* (minor humanitarian impact; gov. capacity sufficient to deal with the situation)
2 = *Minor* (minor humanitarian impact; current country level inter-agency resources sufficient to cover needs beyond gov. capacity)
3 = *Moderate* (moderate humanitarian impact; new resources up to 30% of current operation needed to cover needs beyond gov. capacity – regional support not required)
4 = *Severe* (substantive humanitarian impact; new resources up to 50% of current operations needed to cover needs beyond gov. capacity – regional support required)
5 = *Critical* (massive humanitarian impact; new resources over 80% of current operations needed to cover needs beyond government capacity – L3 scale emergency)

Rakhine State was prioritized to develop a specific Contingency Plan, as an area at higher level of probability for cyclone, in addition to the existing protracted emergency, the high levels of vulnerability, low levels of preparedness in communities, and the limited local capacities and resources. Additionally, it was developed a scenario planning for a cyclone in Ayeyawady and a brief contingency plan for an earthquake in Mandalay.

## WEATHER EVENTS TIMELINE