BRIEFING PAPER

GLOBAL CLIMATE RISK INDEX 2015

Who Suffers Most From Extreme Weather Events? Weather-related Loss Events in 2013 and 1994 to 2013

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GERMANWATCH

Brief Summary

The Global Climate Risk Index 2015 analyses to what extent countries have been affected by the impacts of weather-related loss events (storms, floods, heat waves etc.). The most recent data available – from 2013 and 1994–2013 – were taken into account.

The countries affected most in 2013 were the Philippines, Cambodia and India. For the period from 1994 to 2013 Honduras, Myanmar and Haiti rank highest.

This year's 10th edition of the analysis reconfirms that, according to the Climate Risk Index, less developed countries are generally more affected than industrialised countries. Regarding future climate change, the Climate Risk Index may serve as a red flag for already existing vulnerability that may further increase in regions where extreme events will become more frequent or more severe due to climate change. While some vulnerable developing countries are frequently hit by extreme events, there are also some others where such disasters are a rare occurrence.

Lima is a stepping-stone in the preparation of the Paris Agreement. It will provide the framing for the pivotal Paris Conference in 2015, and it will have to issue decisive guidance – national and international for the Paris preparation. Furthermore, in Lima countries must make concrete decisions to advance the implementation of National Adaptation Plans, and to develop the work plan for the Warsaw International Mechanism to support countries in addressing climatic loss and damage.

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Content

How to read the Global Climate Risk Index

The Germanwatch Global Climate Risk Index is an analysis based on one of the most reliable data sets available on the impacts of extreme weather events and associated socio-economic data. The Germanwatch Climate Risk Index 2015 is the 10th edition of the annual analysis. Its aim is to contextualize ongoing climate policy debates – especially the international climate talk – with real-world impacts of the last year and the last 20 years.

However, it must not be mistaken for a comprehensive climate vulnerability scoring. It represents one important piece in the overall, more comprehensive puzzle of climate-related impacts and associated vulnerabilities but, for example, does not take into account important aspects such as sea-level rise, glacier melting or more acidic and warmer seas. It is based on past data and should not be used for a linear projection of future climate impacts. Specifically, not too far reaching conclusions should be drawn for the political discussions around which country is the most vulnerable to climate change. Also, it is important that the occurrence of a single extreme event cannot be attributed to anthropogenic climate change. Nevertheless, climate change is an increasingly important factor for changing the odds of occurrence and intensity of these events. There is an increasing body of research (such as for the 2010 Russian heat wave and 2010 Pakistan flood) that looks, into the attribution of the risk of extreme events to the influence of climate change.[1]

The Climate Risk Index thus indicates a level of exposure and vulnerability to extreme events that countries should understand as warning to be prepared for more frequent and/or more severe events in the future. Due to the limitations of available data, particularly long-term comparative data, including socio-economic data, some very small countries, such as certain small island states, are not included in this analysis. Moreover, the data only reflects the *direct* impacts (direct losses and fatalities) of extreme weather events, whereas, for example, heat waves – which are a frequent occurrence in African countries – often lead to much stronger *indirec*t impacts (e.g. as a result of droughts and food scarcity). Finally, it does not include the total number of affected people (in addition to the fatalities) since the comparability of such data is very limited.

[1] See, for instance, Coumou and Rahmstorf (2012); Coumou et al. (2013); and Herring et al. (2014)

Key messages

- According to the Germanwatch Global Climate Risk Index, Honduras, Myanmar and Haiti were the countries affected most by extreme weather events between 1994 and 2013.
- Of the ten most affected countries (1994–2013), nine were developing countries in the low income or lower-middle income country group, while only one was classified as an upper-middle income country.
- Altogether, more than 530,000 people died as a direct result of approx. 15,000 extreme weather events, and losses between 1994 and 2013 amounted to nearly 2.2 trillion USD (in Purchasing Power Parities).
- In 2013, the Philippines, Cambodia and India led the list of the most affected countries.
- The Fifth Assessment Report of the IPCC stresses that risks associated with extreme weather events will further increase with rising temperatures. Those risks are unevenly distributed, which is likely to worsen as a trend.
- Latin America and the Caribbean, the host region of COP 20, are particular vulnerable to the impacts of climate change. Despite high levels of awareness the implementation of national climate policy remains a sticking point. COP 20 is an opportunity to promote domestic action on climate change within the region and take leadership at the global level.
- Lima is a stepping-stone in the preparation of the Paris Agreement. Furthermore countries must make concrete decisions to advance the implementation of National Adaptation Plans, and to develop the work plan for the Warsaw International Mechanism to support countries in addressing climatic loss & damage.
- The year 2015 represents a paramount opportunity for the international community to advance policies and programmes that help reduce climatic losses. These are: the Paris Agreement that is expected to yield an universal climate regime (which comes into effect in 2020); the post-2015 framework for disaster risk reduction that will frame disaster risk policies in the coming decade; and the Sustainable Development Goals that provide a new worldwide normative for development.

1 Key results of the Global Climate Risk Index 2015

People all over the world have to face the reality of climate variability and in many parts of the world an increasing variability. Between 1994 and 2013, more than 530,000 people died worldwide and losses of USD 2.17 trillion (in PPP) were inflicted as a direct result of over 15,000 extreme weather events. The 2014 New Climate Economy Report forewarns of similar disasters that will occur if no action towards limiting global temperatures to 2°C is taken, with many of these events affecting developing countries whose vulnerability to climate change is particularly high. There is still time to achieve the 2°C goal and minimalize the consequences of climate change; however, if mitigation efforts are not immediately taken, the world will continue heading down the path towards dangerous climate change.[2]

The **Global Climate Risk Index (CRI)** developed by Germanwatch analyses the quantified impacts of extreme weather events[3] – both in terms of fatalities as well as economic losses that occurred – based on data from the *Munich Re* NatCatSERVICE, which is worldwide one of the most reliable and complete data bases on this matter. The CRI examines both absolute and relative impacts to create an average ranking of countries in four indicating categories, with a stronger emphasis on the relative indicators (see chapter "Methodological Remarks" for further details on the calculation). The countries ranking highest are the ones most impacted and should see the CRI as a warning sign that they are at risk for either frequent events or rare, but extraordinary catastrophes.

The Climate Risk Index does not provide an all-encompassing analysis of the risks from anthropogenic climate change, but should be seen as one analysis explaining countries' exposure and vulnerability to climate-related risks along with other analyses,[4] based on the most reliable quantified data. It is based on the current and past climate variability and – to the extent that climate change has already left its footprint in the climate variability of the last 20 years – also on climate change.

Countries affected most in the period 1994–2013

Honduras, Myanmar and Haiti have been identified as the most affected countries in this 20 year period.[5] They are followed by **Nicaragua, the Philippines and Bangladesh**. Table 1 shows the ten most affected countries of the last two decades with their average, weighted ranking (CRI score) and the specific results in the four indicators analysed.

[2] See The Global Commission on the Economy and Climate, 2014: The New Climate Economy Report http://newclimateeconomy.report/TheNewClimateEconomyReport.pdf

[3] Meteorological events such as tropical storms, winter storms, severe weather, hail, tornados, local storms; hydrological events such as storm surges, river floods, flash floods, mass movement (landslide); climatological events such as freezing, wildfires, droughts.

[4] See e.g. analyses of Columbia University: http://ciesin.columbia.edu/data/climate/, Maplecroft's Climate Change Vulnerability Index: http://maplecroft.com/themes/cc/

[5] The full rankings can be found in the Annexes.

Table 1: The Long-Term Climate Risk Index (CRI): the 10 countries most affected from 1994 to 2013 (annual averages)

CRI 1994–2013 (1993–2012)	**Country**	**CRI score**	Death toll	Deaths per 100,000 inhabitants	Total losses in million US$ PPP	Losses per unit GDP in %	Number of Events (total 1994–2013)
1 (1)	Honduras	10.33	309.70	4.60	813.56	3.30	69
2 (2)	Myanmar	14.00	7137.40	14.80	1256.20	0.87	41
3 (3)	Haiti	16.17	307.80	3.41	261.41	1.86	61
4 (4)	Nicaragua	16.67	160.15	2.98	301.75	1.71	49
5 (7)	Philippines	19.50	933.85	1.13	2786.28	0.74	328
6 (5)	Bangladesh	20.83	749.10	0.54	3128.80	1.20	228
7 (6)	Vietnam	23.50	391.70	0.48	2918.12	1.01	216
8 (8)	Dominican Republic	31.00	210.45	2.38	274.06	0.37	54
9 (10)	Guatemala	31.17	83.20	0.68	477.79	0.62	80
10 (12)	Pakistan	31.50	456.95	0.31	3988.92	0.77	141

There are merely slight changes compared to the analyses presented in the CRI 2014, which considered the period from 1993 to 2012.[6] Nine out of ten countries that made the Bottom 10[7] list last year appear again in this year's edition. Haiti, the poorest country of the Western Hemisphere, as well as Honduras and Myanmar remain as the top three most affected countries over the past two decades. These rankings are attributed to the aftermath of exceptionally devastating events such as Hurricane Sandy in Haiti and Hurricane Mitch in Honduras. Likewise, Myanmar has also been struck hard, most notably by Cyclone Nargis in 2008, responsible for an estimated loss of 140,000 lives as well as the property of approximately 2.4 million people.[8]

Particularly in relative terms, poorer developing countries are hit much harder. These results emphasise the particular vulnerability of poor countries to climatic risks, despite the fact that the absolute monetary damages are much higher in richer countries. Loss of life and personal hardship is also much more widespread especially in low-income countries.

Countries affected most in 2013:

The Philippines, Cambodia and India have been identified as the most affected countries last year followed by **Mexico, St. Vincent and the Grenadines and Pakistan**.[9] Table 2 shows the ten most affected countries, with their average, weighted ranking (CRI score) and the specific results in the four indicators analysed.

[6] See Kreft, S. and Eckstein, D., 2013: Global Climate Risk Index 2014. http://germanwatch.org/de/download/8551.pdf
[7] The term "Bottom 10" refers to the 10 most affected countries in the respective time period
[8] See http://reliefweb.int/sites/reliefweb.int/files/resources/Myanmar-Natural%20Disasters-2002-2012.pdf
[9] The full rankings can be found in the Annexes.

Table 2: The Climate Risk Index for 2013: the 10 most affected countries

Ranking 2013 (2012)	Country	CRI score	Death toll	Deaths per 100,000 inhabitants	Absolute losses (in million US$ PPP)	Losses per unit GDP in %	Human Development Index[10]
1 (2)	Philippines	2.17	6479	6.65	24538.56	3.82	117
2 (65)	Cambodia	6.67	184	1.22	1495.52	3.24	136
3 (46)	India	12.67	7437	0.60	15147.02	0.22	135
4 (58)	Mexico	15.00	224	0.19	10589.70	0.51	71
5 (143)	St. Vincent and the Grenadines	15.33	9	8.18	96.58	8.33	91
6 (3)	Pakistan	15.50	301	0.16	5419.77	0.65	146
7 (143)	Lao PDR	17.67	23	0.34	263.51	0.83	139
8 (32)	Vietnam	17.83	152	0.17	2397.04	0.50	121
9 (40)	Argentina	20.33	122	0.29	2010.00	0.22	49
10 (16)	Mozambique	21.67	119	0.46	88.21	0.33	178

In terms of extreme weather events, 2013 will most likely be remembered by Typhoon Haiyan, which struck **the Philippines** in November 2013, inflicting over US$ 13 billion in economic loss and 6,000 deaths.[11] Typhoon Haiyan was the strongest tropical cyclone on record to hit land. **India** was the victim of Cyclone Phailin in October 2013, which was the second largest cyclone to ever strike the country. Phailin slammed the coastline of the Bay of Bengal, leaving behind extensive flooding that destroyed US$ 4 billion of crops in the heavily agricultural-based country.[12]

Neighbouring **Pakistan** was also the target of extreme weather in 2013 and suffered a four-week long heatwave with temperatures continuously above 38°C, causing damage in all realms of society.[13] The situation was significantly worsened by extensive flooding that plagued the country in August.[14] Pakistan is again affected after having been among the three highest ranked countries in the index for the past three years.

In recent years, countries including Cambodia and Vietnam have regularly appeared in the Bottom 10 list, and this year was no exception. **Cambodia**'s ranking is connected with 2013's particularly severe monsoon season, which induced heavy rainfall and widespread flooding throughout a country that was still recovering from the damage of previous year's floods.[15] After being struck by the remnants of Haiyan, **Vietnam** endured heavy rainfalls several days later in November 2013 that

[10] UNDP, 2014: Human Development Report, http://hdr.undp.org/en/data
[11] See http://www.unisdr.org/archive/36205
[12] See http://www.nbcnews.com/news/other/deadly-cyclone-phailin-destroys-4bn-worth-crops-across-area-size-f8C11390149
[13] See http://www.theguardian.com/environment/2013/jun/14/pakistan-heatwave-meteorologist
[14] See http://reliefweb.int/sites/reliefweb.int/files/resources/humanitarian_dashboard_Oct%202013.pdf
[15] See http://ec.europa.eu/echo/files/aid/countries/factsheets/cambodia_en.pdf

washed away the homes of 80,000 and killed 28.[16] Flooding was the culprit in **Lao People's Democratic Republic** in 2013, too, as it severely damaged the nation's transport, infrastructure, education, and agriculture sectors in September. The floods, which affected approx. 350,000 people, were reported to be the worst recorded in over 35 years.[17]

The wrath of such destructive storms was not constricted to Southeast Asia. In September 2013, Tropical Storm Manuel struck **Mexico**'s west coast, while Hurricane Ingrid simultaneously hit the eastern coast of the country, marking the first time since 1958 that the country was hit by two storms of this magnitude within 24 hours. The strength of the storms not only caused US$ 5.7 billion worth of damage but also triggered massive landslides throughout Mexico.[18]

Nearly 40 centimetres of rain fell within two hours in Buenos Aires and La Plata, **Argentina**, in early April marking the heaviest rainfall recorded in the country in over a century. The rains, which took the lives of 57 people, caused extensive infrastructural damage and an economic loss of $1.3 billion.[19] Similarly, flooding and landslides on Christmas Eve account for **St. Vincent and the Grenadines** spot on the Bottom 10 List. According to the World Bank, the flooding and its aftermath are estimated to have caused damage equal to 15% of the island's total GDP (US$108 million).[20]

Finally, **Mozambique** rounds off the Bottom 10 List due to floods that struck the African nation from late January until February. Flooding was prevalent in areas around the Inkomati, Zambezi and Limpopo Rivers, affecting over 213,000 people and temporarily displacing 140,000.[21]

Exceptional catastrophes or continuous threats?

The Global Climate Risk Index 1994–2013 is based on the average values of twenty years. However, the list of countries featured in the Bottom 10 can be divided into two groups: those that are continuously affected by extreme events and those that only rank high due to exceptional catastrophes.

Countries falling into the latter category include Myanmar, where Cyclone Nargis caused more than 95% of the damages and fatalities that occurred in 2008, and Honduras, where more than 80% of the damages in both categories were caused by Hurricane Mitch in 1998. The latest addition to this group is Thailand, where the floods of 2011 accounted for 87% of total damage. As a country that is struck by eight to nine typhoons per year and the victim of exceptional catastrophes, namely Typhoon Haiyan, the Philippines suggest that a new and remarkable classification of countries that fit both moulds may be emerging.

Similarly, the appearance of some European countries among the top 30 countries must be almost exclusively attributed to the extraordinary number of fatalities due to the 2003 heat wave, in which more than 70,000 people died across Europe. Although some of them are often hit by extreme events, the losses and fatalities are usually relatively minor compared to the countries' population and economic power.

[16] BBC, 2013a: see http://www.bbc.com/news/world-asia-pacific-24977283
[17] See http://reliefweb.int/disaster/fl-2013-000101-lao
[18] See http://www.worldvision.org/news-stories-videos/2013-top-natural-disasters
[19] See http://www.dw.de/mourning-argentina-struggles-with-flood-aftermath/a-16722108
[20] See http://www.worldbank.org/en/news/press-release/2014/03/21/eastern-caribbean-islands-rebuilding-from-flash-floods
[21] See http://www.unicef.org/mozambique/humanitarian_response_12269.html

Climate risks and the latest IPCC report (AR5)

The Fifth Assessment Report of the Intergovernmental Panel on Climate Change stresses that human influence on the climate system is clear.[22] The report states that: *"Climate change will amplify existing risks and create new risks for natural and human systems."*[23] Climate change-related risks from extreme events, such as heat waves, extreme precipitation, and coastal flooding, can already be observed.[24] The frequency of heat waves has increased in large parts of Europe, Asia and Australia. Likewise the number of heavy precipitation events has increased in most land regions. Especially in North America and Europe the frequency or intensity of heavy precipitation events has increased.[25] The IPCC predicts that risks associated with extreme events will further increase at global mean temperature raises.[26] It is projected that high latitudes, mid-latitude wet regions and the equatorial Pacific Ocean will experience an increase in annual mean precipitation. Extreme precipitation events over most of the mid-latitude landmasses and over wet tropical regions will very likely become more intense and more frequent. The projected increase in intensity and duration of monsoon precipitation is a further element of increasing climate risks.[27]

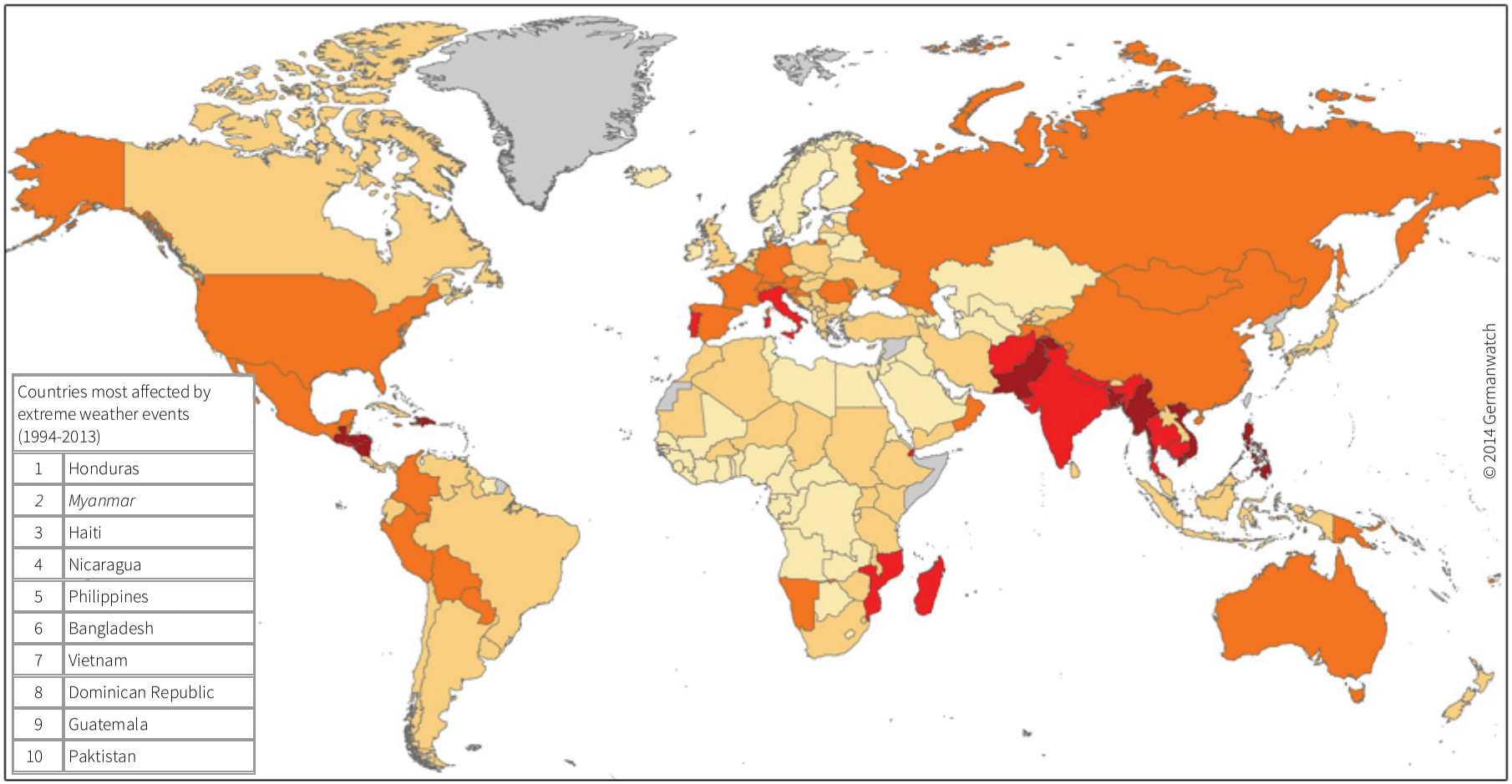
By contrast other regions are expected to get drier in terms of an increase in drought intensity and duration.[28] In many mid-latitude and subtropical dry regions, mean precipitation will decrease.[29] The risk of an increasing intensity and frequency of extreme weather events is regarded as a serious threat to humans systems such as water and food supply, with the subsequent risk of higher mortality and the loss of livelihoods.[30] Thus an important message of the IPCC report is that *"[…] risks are unevenly distributed and are generally greater for disadvantaged people and communities in countries at all levels of development."*[31] This unequal impact distribution is projected to account for additional warming above 2°C.[32] Thus emphasising the importance of providing additional support to those particularly vulnerable to climate change.

[22] IPCC (2014): Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.12
[23] Ibid., p.14
[24] Ibid, p.12
[25] IPCC (2013): Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.3
[26] IPCC (2014): Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.12
[27] IPCC (2013): Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.21
[28] Ibid., p.5
[29] Ibid, p.20
[30] IPCC (2014): Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.12
[31] IPCC (2014): Summary for policymakers. In: Climate Change 2014: Synthesis Report, p.10
[32] IPCC (2014): Summary for policymakers. In: Climate Change 2014: Impacts, Adaptation, and Vulnerability. Part A: Global and Sectoral Aspects. Contribution of Working Group II to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.12

Table 3: Recent trends, assessment of human influence on the trend, and projections for further changes of extreme weather events according to IPCC AR5

Phenomenon and direction of trend	Assessment that changes occurred (typically post 1950)	Assessment of a human contribution to observed changes	Likelihood for further changes	
			Early 21st century	Late 21st century
Warmer and/or fewer cold days and nights over most land areas	Very likely	Very likely	Likely	Virtually certain
Warmer and more frequent hot days and nights over most land areas	Very likely	Very likely	Likely	Virtually certain
Warm spells / heat waves. Frequency and/or duration increases over most land areas	Medium confidence on global level Likely in large parts of Europe, Asia and Australia	Likely	Not assessed	Very likely
Heavy precipitation events. Increase in the frequency, intensity, and/or amount of heavy precipitation.	More likely than not	Medium confidence	More likely than not	Very likely over most of the mid-latitude land masses and over wet tropical regions
Increase in intensity and/or duration of drought	Low confidence on a global scale Likely changes in some regions	Low confidence	Low confidence	Likely on regional to global scale
Increase in intense tropical cyclone activity	Low confidence in long term changes Virtually certain in North Atlantic since 1970	Low confidence	Low confidence	More likely than not in the Western North Pacific and North Atlantic

Adapted from: IPCC (2013): Summary for Policymakers. In: Climate Change 2013: The Physical Science Basis. Contribution of Working Group I to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change, p.5



Cursive: Countries where more than 90% of the losses/deaths occurred in one year/event

Figure 1: World Map of the Global Climate Risk Index 1994-2013

Source: Germanwatch and Munich Re NatCatSERVICE

2 Hosting Region of the Climate Summit: Latin American Group – Impacts in the region

This year's climate summit rotates to the Latin America and Caribbean Group of the UN (GRULAC),[33] with Peru hosting the Conference of Parties (COP) under the United Nations Framework Convention on Climate Change (UNFCCC) in Lima. Peru, with its diverse climatic landscapes – arid coast, glacial Andes Mountains and the biodiversity-rich Amazon region – is highly vulnerable to climate change and is already experiencing its impacts.

The Latin America and Caribbean region is characterized by its diversity. Its countries differ greatly in terms of their economies, annual emissions and vulnerabilities. The countries most affected by the impacts of climate change are illustrated in Table 4, indicating that in 2013 six of them were ranked among the 20 most at risk from extreme weather conditions. While in February 2013 Peru, Chile and Bolivia were hit by heavy rains resulting in devastating floods,[34] the fall of the same year brought two tropical storms that hit Mexico, also leading to serious flooding with more than 100 people being killed.[35] Taking into account the period between 1994 and 2013 (see Table 5), seven countries are among the 20 countries most at risk.

Table 4: The 15 GRULAC countries most affected in 2013

Ranking CRI	Country	CRI score	Death toll	Deaths per 100,000 inhabitants	Absolute losses (in US$ PPP)	Losses per unit GDP
4	Mexico	15.00	224	0.19	10 589.70	0.51
5	St. Vincent and the Grenadines	15.33	9	8.18	96.58	8.33
9	Argentina	20.33	122	0.29	2 010.00	0.22
12	St. Lucia	22.83	6	3.55	14.14	0.75
16	Paraguay	26.83	11	0.16	344.75	0.63
19	Bolivia	30.17	73	0.66	46.76	0.07
36	Brazil	43.33	111	0.06	1 666.61	0.06
39	Honduras	46.67	10	0.12	25.22	0.07
42	Peru	48.50	52	0.17	56.63	0.02
44	Guatemala	51.17	17	0.11	32.10	0.03
45	Chile	51.50	2	0.01	1 438.68	0.36
46	Ecuador	53.17	32	0.20	18.72	0.01
50	The Bahamas	56.50	0	0.00	46.92	0.53
52	Colombia	57.83	16	0.03	258.54	0.04
58	Nicaragua	61.83	13	0.21	2.28	0.01

[33] Antigua and Barbuda, Argentina, Bahamas, Barbados, Belize, Bolivia, Brazil, Chile, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Mexico, Nicaragua, Panama, Paraguay, Peru, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, Trinidad and Tobago, Uruguay, Venezuela

[34] BBC, 2013b: see http://www.bbc.com/news/world-latin-america-21399408

[35] Discovery News, 2013: see http://news.discovery.com/earth/weather-extreme-events/flood-landslides-wreak-havoc-mexico-130921.htm

Table 5: The 15 GRULAC countries most affected in 1994-2013

Ranking CRI	Country	CRI score	Death toll (annual average)	Deaths per 100,000 inhabitants	Absolute losses (in US$ PPP)	Losses per unit GDP
1	Honduras	10.33	310	4.60	813.56	3.30
3	Haiti	16.17	308	3.41	261.41	1.86
4	Nicaragua	16.67	160	2.98	301.75	1.71
8	Dominican Republic	31.00	211	2.38	274.06	0.37
9	Guatemala	31.17	83	0.68	477.79	0.62
12	El Salvador	35.50	34	0.56	335.72	0.93
13	Grenada	35.67	2	1.95	97.63	10.80
21	Belize	42.00	2	0.84	70.77	4.02
31	The Bahamas	50.67	1	0.36	180.41	2.68
32	Antigua and Barbuda	51.33	0	0.51	68.18	4.65
33	Bolivia	52.17	37	0.40	156.67	0.37
35	Dominica	53.17	0	0.49	49.58	9.43
35	St. Lucia	53.17	1	0.82	25.02	1.70
38	Mexico	54.50	146	0.14	3 622.85	0.25
39	St. Kitts and Nevis	55.17	0	0.41	65.37	7.44

More generally, observations indicate that the whole region has been experiencing an increase of extreme weather events. The El Nino phenomenon, which could be altered and intensified due to climate change,[36] has had a significant impact on the micro and macro climate of the region. There is a high level of awareness of the issue of climate change given that many people, particularly those who rely on the natural environment for living, already recognize its impacts. Within the Latin American population, 65% perceive global climate change as a major threat to their country.[37] Peru, for instance, has the world's largest concentration of tropical glaciers but 39 % of these have already been lost, causing problems in the supply of drinking water supply and for agricultural irrigation.[38]

On the political side hosting the COP provides Latin America and the Caribbean with the opportunity to show climate leadership. Several Latin American countries have been playing a constructive and assertive role in the international climate negotiations. The Independent Association of Latin America and the Caribbean (AILAC), made up of Chile, Colombia, Costa Rica, Guatemala, Panama, and Peru, has positioned itself as a proactive and conciliatory actor in the UNFCCC negotiations since 2008. Furthermore, a number of countries have been very active on developing domestic mitigation and adaptation strategies. For instance, while compared to other Latin American countries Colombia and Honduras have been implementing a comparatively high number of

[36] Power et al., 2014

[37] Pew Research Center, 2013: http://www.pewresearch.org/fact-tank/2013/11/11/u-s-middle-east-less-concerned-about-climate-change-than-those-in-other-nations/

[38] The Guardian, 2014: http://www.theguardian.com/environment/2014/jan/31/climate-talks-paris-2015-carbon-emissions-amazon

national and regional climate change adaptation projects,[39,40] Mexico has committed to a 50% emission reduction in 2050 compared to 2000 levels.[41] However to bear fruits a rigorous implementation on the ground is necessary. Too often climate policy is still perceived as a global issue to be dealt with at an international level, resulting in economic development remaining the key concern at the heart of national government policies.

In this context the COP presidency provides an opportunity for Peru, Latin America and the Caribbean to show leadership and raise awareness of domestic action, especially for the integration and coordination of climate and development policies.[42] In this sense, the slogan "*Don't come to Peru if you don't want to change the world*" by Peru Ministry of Environment, underlines the urgency for local climate action and for an ambitious global agreement.[43]

[39] Adaptation Partnership, 2011a: see http://www.preventionweb.net/files/25679_colombia.pdf, p.108
[40] Adaptation Partnership, 2011b: see http://www.preventionweb.net/files/25706_honduras.pdf, p.94
[41] Vance, E. (2012): Mexico passes climate-change law
[42] Latin American Platform on Climate, 2012: see http://intercambioclimatico.com/en/2012/11/14/the-platform-launches-reports-on-climate-change-policies-in-10-countries/
[43] Ministry of Environment, 2013: see http://www.youtube.com/watch?v=lviobqVGVq8

3 Climatic risks and the International Community: The cLIMAte conference 2014

The climate summit in Lima (COP20) is an important stepping stone in advancing the international response to climate change. Lima is the last stop before the international meeting in Paris in December 2015, which is expected to yield a new universal climate regime (coming into effect in 2020). In Lima, a draft text is expected with negotiation options for the Paris Agreement, which means that all substantive issues – mitigation, adaptation, means of implementation – need to be discussed. With other words, the Paris delegates will fully reveal their hand. It is also expected that countries will be instructed on how to bring forward their climate policy contributions prior to the Paris meeting and to inject momentum by increasing ambitions prior to the year 2020. The climate summit will also advance many implementation decisions, some relevant to the theme of this report.[44]

Advancing the adaptation agenda in Lima:

Lima has important decisions to make in helping developing countries to better adapt to the impacts of climate change. In recent years, the international community has made progress in advancing the climate change adaptation agenda. Many developing countries have initiated national projects and programmes to cope with climate impacts. Starting from an initial approach that focuses on the need for short-term adaptation, as outlined in the UNFCCC National Adaptation Programmes of Actions (NAPAs), the debate is now moving towards approaches for strategic long-term adaptation. The Cancun Adaptation Framework adopted in 2010 lays down the national and international narrative for supporting developing countries in their adaptation implementation. Internationally, the Adaptation Committee raises the profile of the adaptation agenda and promotes the implementation of enhanced action on adaptation in a coherent manner. Countries are encouraged to implement National Adaptation Plans. At COP 20, countries will discuss whether the existing guidance for developing countries needs to be revised. In many countries, the implementation of a national adaptation plan is still in its infancy and there is only a limited pool of experience that can feed into such a revision. The NAP guidelines are currently constructed as a flexible planning tool. While this kind of flexibility is needed, given the different situations of the countries, and also the different starting points, there is an articulated dissatisfaction, especially on the part of the least developed countries, that guidelines need to better assess the need to facilitate the financing of and support for adaptation. A potentially large gain in Lima could also be the clarification of the Green Climate Fund's role in supporting the preparation and implementation of the NAPs. In addition, countries should also signal what good adaptation actually entails and further strengthen principles in the NAPs, such as a special focus on the vulnerable. It would also be helpful to better clarify how countries can turn their National Adaptation Plan into a contribution to adaptation – the contributions of individual countries will become one of the defining elements of the Paris agreement and its climate policy architecture. Country delegates will also discuss the work undertaken in 2014 within the Adaptation Committee and develop relevant recommendations.[45] Issues include monitoring and evaluation of adaptation, further work on the recommendations of the National Adaptation Plans, following from an international workshop on best adaptation practices and the needs of local and indigenous communities. These insights should be directed to funding institutions such as the Green Climate Fund, the Global Environmental Facility or the Adaptation Fund.

[44] See Scenario Note of the ADP Co-chairs (ADP.2014.10.InformalNote)
[45] See Report of the Adaptation Committee (FCCC/SB/2014/2)

Climate-related Loss & damage –Work in 2015 and 2016

Loss and damage refers to approaches that support developing countries in addressing the adverse impacts of climate change, especially in cases where adaptation is not enough. After a foundational decision in Doha (2012), where the international community defined, firstly, the role of the UNFCCC, secondly, areas in which to support developing countries and, thirdly, areas of future loss and damage in the UNFCCC process (the Warsaw COP (2013) established the Warsaw International Mechanism, governed by an Executive Committee). In Lima, countries will have to decide on two issues: First, they will have to mandate the content work for the Mechanism in the years 2015 and 2016. This will give an indication of what the Mechanism is able to deliver for developing countries. And second, countries will decide about the governance arrangement (including country representation of the Executive Committee) as well as its modalities.

In 2014, several representatives developed a draft work plan for the 2015–16 Warsaw International Mechanism.[46] The draft includes activities for all areas of work related to loss and damage, for instance, issues such as approaches to comprehensive risk management, damage from slow-onset climate impacts, non-economic losses, migration and displacement, coordination and work with the humanitarian system and financial instruments. Two issues, however, have not been ambitiously reflected in the existing draft. One is the link between levels of loss and damage and the realization of mitigation ambition. Parties in Lima could therefore ask the future Executive Committee to take up this work. The second issue is the provision of support (not displacing support for adaptation), which is only weakly represented in the draft. Again, in Lima countries could ask the Executive Committee to develop far-reaching activities in this regard.

In Lima, the governance arrangements will also be decided, including the composition of the Executive Committee, the number of representatives, the country groups or bodies they represent and their mandates. The representatives should have relevant expertise and the composition should reflect adequate representation by developing countries that are particularly affected.

Supporting developing countries

In 2014, the Green Climate Fund became fully operational and an initial resource mobilization was organized. The GCF Board made a number of important decisions, for instance, to commit 50% of its resources to adaptation and 25% to poor countries and island states. The Berlin Pledging Conference in November 2014 yielded an encouraging 9.3bn USD with more expected during the Lima conference.

This, however, is only part of the 100bn USD committed by developed countries to mobilize climate action in developing countries until 2020. The funds are expected to be channeled through a plethora of institutions, with the GCF being the most important. How to actually procure 100bn. USD, however, will need to be further clarified in Lima. The Adaptation Fund, for instance, is in continuous crisis due to its resource base – a share of proceeds from CDM credits – being crippled as a result of low carbon credit prices. The Adaptation Fund has thus established a fundraising target of 80mn USD per annum. Since no new resources have come forward in 2014, securing an additional resource base for the Adaptation Fund will be another important question in Lima. Similarly, the Least Developed Country Fund, which supports the least developed countries in their immediate adaptation needs, requires further pledging in order to continue its work.

[46] See Report of the Executive Committee (FCCC/SB/2014/4)

Adaptation and loss & damage in the Paris Agreement

In the preparatory meetings for the Lima COP and the Paris conference, it became evident that adaptation will have to be addressed in the 2015 climate agreement as a matter of equal priority to mitigation. Concrete issues under consideration will include an ambitious global adaptation goal that reflects individual and collective responsibility. The relation between the costs of adaptation and loss & damage and the ambitions of realized mitigation should also be acknowledged in Paris. An additional aspect is to strengthen the principles of adaptation. For instance, countries should commit to undertaking adaptation action in consideration of the needs of vulnerable people. This could also be done as part of a newly established climate risk assessment framework. Lastly, the agreement should consider ways to build upon and strengthen the existing adaptation architecture under the UNFCCC.

One decision that should be made in Lima is the question of Intended Nationally Determined Contributions (INDCs): the climate policy pledges that countries will have to put forward by latest May 2015. The question is how this vehicle can also be used to report on national adaptation action. While it is clear that a comprehensive scope of INDCs must not negatively impact the delivery of a mitigation-INDC in the indicated timeline, it should be generally encouraged to showcase national leadership. However, reporting requirements and assessment will have to remain simple and streamlined.

Finally, part of the loss & damage negotiations should include the discussions leading to the 2015 agreement. Anchoring loss & damage in these negotiations, for instance through a reference to the Warsaw International Mechanism, is essential for the affected countries because they are concerned about having exceeded national capacities for climate impacts, even when national adaptation strategies are fully implemented. This is particularly true when the climate change remains unchecked and the 2°C limit cannot be achieved.

2015: relevant work outside the realm of the UNFCCC

Several international processes will have their political culmination in 2015.

One process that will be decided in March 2015 in Sendai, Japan is the post-2015 framework for disaster risk reduction. This will build on the Hyogo Framework for Action (HFA), which was adopted in 2005 and which maps the way forward for risk reduction in the decade 2005–2015.

Part of this process will include suggestions for action and an evaluation of priorities (1. understanding disaster risks; 2. strengthening governance and institutions to manage disaster risks, 3. investing in economic, social, cultural and environmental resilience; 4. enhancing preparedness for effective response and creating better recovery and reconstruction).[47] The Sendai outcome will have to send strong signals over and above the Hyogo Framework. It will have to lay down emerging challenges and risks, including climate change, initiate policy processes to be better aligned with climate change adaptation and generally take a more proactive approach.

In September 2015, world leaders will also decide on the Sustainable Development Goals (SDGs), which build on and further implement the Millennium Development Goals (MDGs). The SDGs are expected to become the world's defining development narrative. Unlike the MDGs, the SDGs not only address basic human needs, but global planetary boundaries as well. For instance, the current draft includes a specific climate change goal, which is required from a perspective of reducing climatic losses. The current draft of Sustainable Development Goals has additional entry-points to reduce the number and extent of climatic losses over time. Table 6 gives an overview of the linkage with other goals.

[47] See Zero draft submitted by the Co-Chairs of the Preparatory Committee (UNGA, 2014)

Table 6: Policies related to reducing climatic loss in the SDGs. See Open Working Group, 2014

Goal Outcome Document OWG	Content related to reducing climatic losses
Goal 1. End poverty in all its forms everywhere	Target 1.5 – reduce exposure and vulnerability to climate-related extreme events.
Goal 2. End hunger, achieve food security, improve nutrition and promote sustainable agriculture	Target 2.4 – sustainable food production systems, resilient agricultural capacity for adaptation to climate change and extreme weather events.
Goal 9. Build resilient infrastructures, promote inclusive and sustainable industrialization and foster innovation	Target 9.1 and 9.3 – sustainable and resilient infrastructures and retrofitting industries. Target 9.a – financial and technical support to African countries, LDCs, LLDCs and SIDS to facilitate sustainable and resilient infrastructure development.
Goal 10: Make cities and human settlements inclusive, safe, resilient and sustainable	Target 11.5 – reduce deaths and economic losses from disasters Target 11.b – create integrated policies that include resource efficiency, mitigation and adaptation to climate change and DRR, in line with the upcoming Hyogo Framework for Action. Target 11.c – support LDCs for sustainable and resilient buildings.
Goal 13. Ensure sustainable consumption and production patterns	Target 13.1 – strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries Target 13.2 – Integrate measures for climate change into national policies, strategies and planning Target 13.3 – improve education, awareness-raising and human and institutional capacities on climate change mitigation, adaptation, impact reduction and early warning Target 13.a – implement the commitment made to the United Nations Framework Convention on Climate Change by those in developed countries to a goal of mobilizing jointly and from all sources $100 billion annually by 2020 to address the needs of developing countries in the context of meaningful mitigation actions and transparency on implementation and fully operationalize the Green Climate Fund through its capitalization as soon as possible Target 13.b – promote mechanisms for raising the capacity for effective climate change-related planning and management in the least developed countries, including a focus on women, youth and local and marginalized communities

4 Methodological Remarks

The presented analyses are based on the worldwide data collection and analysis provided by Munich Re NatCatSERVICE. They comprise "all elementary loss events which have caused substantial damage to property or persons." For the countries of the world, Munich Re collects the number of total losses caused by weather events, the number of deaths, the insured damages and total economic damages. The last two indicators are stated in million US$ (original values, inflation adjusted).

In the present analysis, only weather related events - storms, floods, as well as temperature extremes and mass movements (heat and cold waves etc.) - are incorporated. Geological factors like earthquakes, volcanic eruptions or tsunamis, for which data is also available, do not play a role in this context because they do not depend on the weather and therefore are not possibly related to climate change. To enhance the manageability of the large amount of data, the different categories within the weather related events were combined. For single case studies on particularly devastating events, it is stated whether they concern floods, storms or another type of event.

It is important to note that this event-related examination does not allow for an assessment of continuous changes of important climate parameters. A long-term decline in precipitation that was shown in some African countries as a consequence of climate change cannot be displayed by the CRI. Such parameters nevertheless often substantially influence important development factors like agricultural outputs and the availability of drinking water.

Although certainly an interesting area for analysis, the present data does also not allow for conclusions about the distribution of damages below the national level. Respective data quality would only be sufficient for a limited number of countries.

Analysed indicators

For this examination, the following indicators were analysed in this paper:

1. Number of deaths,
2. Number of deaths per 100,000 inhabitants,
3. Sum of losses in US$ in purchasing power parity (PPP) as well as
4. Losses per unit of Gross Domestic Product (GDP).

For the indicators 2-4, economic and population data primarily provided by the International Monetary Fund were taken into account. It must be added, however, that especially for small (e.g. Pacific Small Island Developing States) or extremely politically unstable countries (e.g. Somalia), the required data is not always available in sufficient quality for the whole observed time period. Those countries must be omitted from the analyses.

The Climate Risk Index 2015 is based on the loss-figures from 2013 and 1994-2013. This ranking represents the most affected countries. Each country's index score has been derived from a country's average ranking in all four indicating categories, according to the following weighting: death toll, 1/6; deaths per 100,000 inhabitants, 1/3; absolute losses in PPP, 1/6; losses per GDP unit, 1/3.

Therefore, an analysis of the already observable changes in climate conditions in different regions sends a sign of warning to those most affected countries to better prepare for the future. Although looking at socio-economic variables in comparison to damages and deaths caused by weather extremes – as was done in the present analysis – does not allow for an exact measurement of the vulnerability, it can be seen as at least an indication or pattern of vulnerability. In most cases, already afflicted countries will probably also be especially endangered by possible future changes in

climate conditions. Despite the historic analysis, a deterministic projecting of the past to the future is not appropriate. That is, climate change might change past trends in extreme weather events.

For another, new phenomena can occur in states or regions. In the 2004, for example, a hurricane was registered in the South Atlantic, off the Brazilian coast, for the first time ever. The cyclone that hit Oman in 2007 or the one that hit Saudi Arabia in 2009 are of similar significance. So the appearance in the Climate Risk Index is an alarm bell for these countries. But the analyses of the Climate Risk Index should not be regarded as the only evidence for which countries are already afflicted or will be affected by global climate change. After all, people can in principle fall back on different adaptation measures. However, to which extent these can be implemented effectively depends on several factors, which altogether determine the degree of vulnerability.

The relative consequences also depend on economic and population growth

Identifying relative values in this index represents an important complement to the otherwise often dominating absolute values because it allows for analysing country specific data on damages in relation to real conditions in those countries. It is obvious, for example, that for a rich country like the USA one billion US$ causes much less economic consequences than for one of the world's poorest countries. This is being backed up by the relative analysis.

It should be noted that values, and hence the rankings of countries regarding the respective indicators do not only change due to the absolute impacts of extreme weather events, but also due to economic and population growth. If, for example, population increases, which is the case in most of the countries, the same absolute number of deaths leads to a relatively lower assessment in the following year. The same applies to economic growth. However, this does not affect the significance of the relative approach. Society's ability of coping with damages through precaution, mitigation and disaster preparedness, insurances or the improved availability of means for emergency aid, generally grows along with increasing economic strength. Nevertheless, an improved ability does not necessarily imply enhanced implementation of effective preparation and response measures. While absolute numbers tend to overestimate populous or economically capable countries, relative values give more prominence to smaller and poorer countries. So as to take both effects into consideration, the analysis of the Climate Risk Index is based on absolute as well as on relative scores, with an emphasis giving higher importance to relative losses than to absolute losses.

The indicator "losses in purchasing power parity" allows for a more comprehensive estimation of how different societies are actually affected

The indicator "absolute losses in US$" is identified by purchasing power parity (PPP), because using this figure better expresses how people are actually affected by the loss of one US$ than by using nominal exchange rates. Purchasing power parity is a currency exchange rate, which permits a comparison of, for instance, national GDPs, by incorporating price differences between countries. Basically this means that a farmer in India can buy more crops with US$ 1 than a farmer in the USA with the same amount of money. Thus, the real consequences of the same nominal damage are much higher in India. For most of the countries, US$ values according to exchange rates must therefore be multiplied by a factor bigger than one.

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Annexes

CRI = Climate Risk Index; GDP = gross domestic product; PPP = purchasing power parity

Table 7: Climate Risk Index for 1994–2013
(Avg. = average figure for the 20-year period. E.g., 31 people died in Albania due to extreme weather events between 1994 and 2013; hence the average death toll per year was 1.55.)

CRI Rank	Country	CRI Score	Deaths in 2013		Deaths per 100,000 inhabitants		Losses in US$ (PPP)		Losses per unit GDP	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
122	**Albania**	120.50	1.55	123	0.052	121	21.06	132	0.103	113
82	**Algeria**	87.83	73.45	37	0.227	67	132.77	72	0.034	142
107	**Angola**	107.67	27.30	61	0.170	75	21.18	131	0.017	152
32	**Antigua and Barbuda**	51.33	0.40	139	0.513	33	68.18	93	4.647	5
80	**Argentina**	86.67	25.70	63	0.069	113	747.30	31	0.123	100
124	**Armenia**	125.17	0.40	139	0.012	160	26.42	124	0.164	84
34	**Australia**	52.83	46.75	48	0.231	66	2143.81	17	0.274	60
41	**Austria**	57.33	26.95	62	0.330	52	567.80	34	0.199	72
123	**Azerbaijan**	123.17	2.25	115	0.027	149	88.74	82	0.079	122
115	**Bahrain**	114.00	2.90	109	0.368	46	2.30	155	0.006	164
6	**Bangladesh**	20.83	749.10	8	0.540	31	3128.80	9	1.196	23
135	**Barbados**	137.17	0.05	146	0.018	155	4.14	149	0.117	109
130	**Belarus**	129.83	4.65	98	0.047	126	24.41	127	0.020	151
62	**Belgium**	71.83	86.20	30	0.823	19	116.06	75	0.033	144
21	**Belize**	42.00	2.35	113	0.841	18	70.77	91	4.018	6
126	**Benin**	127.67	4.00	105	0.051	123	6.10	145	0.051	135
71	**Bhutan**	81.33	2.30	114	0.369	45	5.79	146	0.210	69
33	**Bolivia**	52.17	36.95	55	0.405	43	156.68	70	0.374	51
89	**Bosnia and Herzegovina**	94.67	1.00	131	0.026	150	185.06	63	0.605	37
133	**Botswana**	134.33	1.60	122	0.087	103	1.92	158	0.010	160
78	**Brazil**	85.67	159.45	22	0.088	102	1368.17	22	0.060	133
152	**Brunei Darussalam**	157.83	0.10	145	0.029	147	0.54	168	0.002	170
77	**Bulgaria**	85.50	7.35	89	0.094	101	183.31	64	0.181	79
94	**Burkina Faso**	96.67	6.60	90	0.051	124	40.79	112	0.260	65
109	**Burundi**	108.00	1.70	120	0.023	153	22.08	130	0.425	46
12	**Cambodia**	35.50	55.00	45	0.425	41	294.12	46	1.299	20
127	**Cameroon**	127.83	7.80	87	0.045	129	13.80	136	0.034	143
91	**Canada**	95.50	11.75	74	0.037	140	1422.46	21	0.125	99
134	**Cape Verde**	135.83	0.15	144	0.033	141	1.97	157	0.099	116
141	**Central African Republic**	144.83	1.10	129	0.028	148	1.10	162	0.035	141
94	**Chad**	96.67	4.60	99	0.054	118	42.01	111	0.243	67
100	**Chile**	101.33	7.70	88	0.048	125	280.98	48	0.109	111
26	**China**	44.67	1556.20	4	0.121	91	42535.42	2	0.523	40
33	**Chinese Taipei**	52.17	77.65	35	0.345	49	1101.17	26	0.187	77
43	**Colombia**	58.83	103.25	27	0.245	64	656.70	32	0.164	83
120	**Comoros**	117.17	0.95	132	0.162	77	0.62	167	0.071	125
60	**Costa Rica**	70.17	8.70	83	0.202	69	112.14	76	0.268	62
139	**Cote d'Ivoire**	143.17	4.40	103	0.024	152	7.80	144	0.017	154
42	**Croatia**	58.50	35.20	56	0.806	21	109.91	77	0.148	88
53	**Cuba**	62.67	5.20	96	0.047	127	3351.65	8	2.614	9
77	**Cyprus**	85.50	3.60	107	0.482	36	24.87	126	0.121	104
59	**Czech Republic**	68.50	10.35	78	0.100	97	843.87	29	0.355	55
137	**Democratic Republic**	140.17	19.10	66	0.032	143	1.88	159	0.006	165

CRI Rank	Country	CRI Score	Deaths in 2013		Deaths per 100,000 inhabitants		Losses in US$ (PPP)		Losses per unit GDP	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
	of Congo									
156	**Democratic Republic of Timor-Leste**	165.67	0.10	145	0.010	164	0.04	175	0.001	173
108	**Denmark**	107.83	0.95	132	0.018	157	351.18	39	0.177	81
18	**Djibouti**	40.17	8.75	82	1.229	13	39.11	113	2.344	10
35	**Dominica**	53.17	0.35	140	0.493	34	49.58	105	9.435	3
8	**Dominican Republic**	31.00	210.45	19	2.380	5	274.06	49	0.368	54
51	**Ecuador**	62.17	38.50	52	0.285	57	225.68	59	0.197	74
118	**Egypt**	116.33	38.50	52	0.056	117	68.14	94	0.012	159
12	**El Salvador**	35.50	33.70	58	0.558	30	335.72	41	0.933	27
159	**Equatorial Guinea**	169.67	0.00	147	0.000	171	0.00	177	0.000	176
103	**Eritrea**	104.50	0.15	144	0.003	169	66.81	95	0.997	25
128	**Estonia**	128.33	0.45	138	0.033	142	28.14	120	0.101	114
75	**Ethiopia**	84.17	91.05	29	0.127	90	72.01	90	0.121	103
25	**Fiji**	44.33	5.45	95	0.662	24	74.73	89	1.494	17
148	**Finland**	151.00	0.20	143	0.004	168	28.44	119	0.017	154
83	**Former Yugoslav Republic of Macedonia**	89.33	1.15	128	0.057	116	83.60	86	0.441	45
24	**France**	43.67	958.45	6	1.587	10	2187.08	16	0.111	110
155	**Gabon**	164.83	0.15	144	0.011	162	0.09	173	0.000	174
92	**Georgia**	95.83	2.35	113	0.052	120	61.56	100	0.271	61
22	**Germany**	42.67	476.75	10	0.582	29	3842.95	6	0.143	91
114	**Ghana**	113.50	17.75	68	0.087	104	23.10	129	0.041	138
79	**Greece**	86.00	13.10	72	0.119	92	308.86	44	0.117	108
13	**Grenada**	35.67	2.00	117	1.948	7	97.63	81	10.795	1
9	**Guatemala**	31.17	83.20	33	0.682	23	477.79	36	0.622	36
149	**Guinea**	153.83	1.05	130	0.012	161	1.62	161	0.016	155
129	**Guinea-Bissau**	128.83	0.10	145	0.007	166	3.48	150	0.198	73
88	**Guyana**	94.33	0.30	141	0.039	137	44.35	109	1.281	21
3	**Haiti**	16.17	307.80	15	3.408	3	261.41	52	1.857	12
1	**Honduras**	10.33	309.70	14	4.604	2	813.56	30	3.300	7
159	**Hong Kong SAR**	169.67	0.00	147	0.000	171	0.00	177	0.000	176
58	**Hungary**	67.50	34.90	57	0.344	50	249.50	54	0.129	97
102	**Iceland**	104.17	1.80	119	0.614	26	2.13	156	0.022	149
17	**India**	39.83	3425.80	2	0.316	53	9396.16	3	0.262	64
63	**Indonesia**	72.00	249.65	16	0.115	94	1932.88	18	0.119	105
145	**Iraq**	148.50	1.65	121	0.005	167	38.76	114	0.009	161
112	**Ireland**	110.83	1.85	118	0.045	128	173.53	67	0.107	112
15	**Islamic Republic of Afghanistan**	36.67	239.40	17	0.901	17	153.44	71	0.394	49
59	**Islamic Republic of Iran**	68.50	56.05	44	0.082	108	2383.39	15	0.237	68
116	**Israel**	114.33	4.65	98	0.072	111	69.99	92	0.044	137
14	**Italy**	36.33	1003.05	5	1.735	8	2407.94	13	0.135	92
48	**Jamaica**	61.17	4.45	102	0.169	76	198.59	61	0.995	26
85	**Japan**	91.67	68.20	38	0.054	119	2396.54	14	0.065	130
106	**Jordan**	107.33	2.75	111	0.052	122	62.57	99	0.131	95
126	**Kazakhstan**	127.67	10.75	77	0.069	112	18.16	133	0.006	166
70	**Kenya**	81.17	44.95	49	0.136	84	105.31	78	0.131	96
104	**Kiribati**	105.00	0.00	147	0.000	171	13.28	137	10.056	2
52	**Korea. Republic of**	62.50	86.15	31	0.180	72	1501.27	20	0.144	90
153	**Kuwait**	161.83	0.50	137	0.018	156	0.18	172	0.000	175
72	**Kyrgyz Republic**	82.33	18.25	67	0.358	48	15.85	135	0.125	98
67	**Lao People's**	77.50	5.55	94	0.097	99	81.45	87	0.458	43

CRI Rank	Country	CRI Score	Deaths in 2013		Deaths per 100,000 inhabitants		Losses in US$ (PPP)		Losses per unit GDP	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
	Democratic Republic									
86	**Latvia**	92.00	4.55	100	0.199	70	45.67	108	0.123	102
128	**Lebanon**	128.33	1.50	124	0.040	135	30.58	118	0.066	129
111	**Lesotho**	110.33	0.25	142	0.014	159	21.06	132	0.645	35
150	**Liberia**	156.67	0.30	141	0.009	165	0.50	169	0.020	150
144	**Libya**	147.67	1.05	130	0.019	154	17.46	134	0.014	157
113	**Lithuania**	112.33	2.60	112	0.079	110	51.73	104	0.089	119
95	**Luxembourg**	98.67	6.50	91	1.406	11	3.08	153	0.009	163
20	**Madagascar**	41.00	78.35	34	0.442	39	170.87	68	0.746	33
99	**Malawi**	101.00	5.20	96	0.039	138	26.52	122	0.345	56
78	**Malaysia**	85.67	38.80	51	0.153	80	290.92	47	0.069	128
157	**Maldives**	166.83	0.00	147	0.000	171	0.06	174	0.003	169
110	**Mali**	109.17	5.20	96	0.040	134	27.84	121	0.162	85
138	**Malta**	140.33	0.15	144	0.038	139	4.17	148	0.045	136
65	**Mauritania**	74.83	4.35	104	0.148	81	45.69	107	0.594	38
81	**Mauritius**	87.00	1.20	127	0.098	98	56.28	103	0.409	48
38	**Mexico**	54.50	146.00	24	0.141	82	3622.85	7	0.247	66
37	**Moldova**	53.83	5.90	93	0.159	79	270.02	50	2.152	11
36	**Mongolia**	53.67	11.05	76	0.439	40	84.67	84	0.523	41
73	**Morocco**	83.33	31.55	60	0.107	96	196.38	62	0.134	93
20	**Mozambique**	41.00	94.15	28	0.461	37	98.59	80	0.749	32
2	**Myanmar**	14.00	7137.40	1	14.805	1	1256.20	23	0.873	29
44	**Namibia**	59.17	11.25	75	0.591	28	42.32	110	0.299	57
19	**Nepal**	40.33	221.30	18	0.908	16	118.92	74	0.291	59
63	**Netherlands**	72.00	84.55	32	0.524	32	228.90	58	0.037	139
69	**New Zealand**	79.83	3.40	108	0.084	106	333.44	43	0.297	58
4	**Nicaragua**	16.67	160.15	21	2.979	4	301.75	45	1.705	13
64	**Niger**	73.33	13.65	71	0.109	95	58.15	101	0.581	39
102	**Nigeria**	104.17	76.55	36	0.058	114	162.96	69	0.027	146
131	**Norway**	131.83	1.40	125	0.030	144	76.79	88	0.028	145
28	**Oman**	46.83	8.10	85	0.310	54	923.20	28	0.815	30
10	**Pakistan**	31.50	456.95	12	0.306	55	3988.92	5	0.771	31
90	**Panama**	95.33	9.00	80	0.287	56	23.97	128	0.071	126
47	**Papua New Guinea**	60.17	25.15	64	0.443	38	38.39	115	0.369	53
45	**Paraguay**	59.33	7.70	88	0.135	85	334.78	42	0.919	28
50	**Peru**	61.50	108.15	26	0.404	44	252.66	53	0.123	101
5	**Philippines**	19.50	933.85	7	1.130	15	2786.28	12	0.736	34
56	**Poland**	65.00	52.45	47	0.137	83	1149.58	25	0.190	76
16	**Portugal**	38.00	143.00	25	1.377	12	470.83	37	0.203	71
159	**Qatar**	169.67	0.00	147	0.000	171	0.00	177	0.000	176
117	**Republic of Congo**	116.17	8.95	81	0.275	58	0.67	166	0.003	167
66	**Republic of Yemen**	75.83	53.50	46	0.264	59	100.65	79	0.119	106
29	**Romania**	48.67	57.25	42	0.260	61	1246.29	24	0.374	52
23	**Russia**	43.33	2956.95	3	2.040	6	2825.81	11	0.093	117
101	**Rwanda**	102.67	7.85	86	0.096	100	11.51	142	0.132	94
66	**Samoa**	75.83	0.35	140	0.193	71	11.86	141	1.541	16
159	**Sao Tome and Principe**	169.67	0.00	147	0.000	171	0.00	177	0.000	176
105	**Saudi Arabia**	106.00	18.25	67	0.079	109	246.79	55	0.026	148
125	**Senegal**	126.33	4.90	97	0.045	130	13.02	139	0.062	131
93	**Serbia, Montenegro, Kosovo**	96.50	2.85	110	0.029	146	266.48	51	0.267	63
147	**Seychelles**	150.00	0.00	147	0.000	171	1.05	163	0.075	124
119	**Sierra Leone**	117.00	8.35	84	0.173	74	0.92	164	0.017	153
154	**Singapore**	163.00	0.10	145	0.002	170	3.35	151	0.001	171

CRI Rank	Country	CRI Score	Deaths in 2013		Deaths per 100,000 inhabitants		Losses in US$ (PPP)		Losses per unit GDP	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
96	**Slovak Republic**	100.33	4.50	101	0.084	107	130.45	73	0.117	107
49	**Slovenia**	61.33	11.95	73	0.595	27	83.89	85	0.182	78
84	**Solomon Islands**	90.83	0.60	135	0.131	87	3.22	152	0.490	42
74	**South Africa**	83.83	59.25	41	0.128	89	359.53	38	0.078	123
30	**Spain**	49.00	704.65	9	1.644	9	1084.03	27	0.089	120
55	**Sri Lanka**	63.67	40.35	50	0.211	68	237.25	56	0.207	70
39	**St. Kitts and Nevis**	55.17	0.20	143	0.414	42	65.37	96	7.439	4
35	**St. Lucia**	53.17	1.30	126	0.821	20	25.02	125	1.704	14
46	**St. Vincent and the Grenadines**	60.00	0.70	134	0.650	25	12.24	140	1.467	18
98	**Sudan**	100.83	38.40	53	0.115	93	63.63	98	0.060	134
151	**Suriname**	156.83	0.15	144	0.030	145	0.19	171	0.003	168
87	**Swaziland**	93.33	0.90	133	0.085	105	26.50	123	0.419	47
128	**Sweden**	128.33	1.40	125	0.015	158	182.59	65	0.061	132
30	**Switzerland**	49.00	56.15	43	0.759	22	525.40	35	0.162	86
27	**Tajikistan**	46.50	17.70	69	0.262	60	212.19	60	1.597	15
94	**Tanzania**	96.67	19.15	65	0.052	120	64.39	97	0.147	89
11	**Thailand**	32.33	164.70	20	0.257	63	7863.87	4	1.236	22
31	**The Bahamas**	50.67	1.15	128	0.363	47	180.41	66	2.681	8
61	**The Gambia**	71.67	4.90	97	0.338	51	8.57	143	0.457	44
136	**Togo**	139.33	2.20	116	0.041	133	1.73	160	0.027	147
40	**Tonga**	56.83	1.15	128	1.144	14	5.40	147	1.358	19
142	**Trinidad and Tobago**	146.33	0.55	136	0.042	132	2.51	154	0.009	162
146	**Tunisia**	149.17	3.65	106	0.037	140	0.85	165	0.001	172
97	**Turkey**	100.67	38.35	54	0.057	115	347.63	40	0.037	140
158	**Turkmenistan**	169.50	0.00	147	0.000	171	0.01	176	0.000	176
76	**Uganda**	84.83	32.95	59	0.119	92	57.34	102	0.176	82
81	**Ukraine**	87.00	64.70	39	0.135	86	236.03	57	0.069	127
143	**United Arab Emirates**	147.33	0.55	136	0.011	163	47.65	106	0.012	158
57	**United Kingdom**	67.00	155.20	23	0.258	62	1600.48	19	0.091	118
26	**United States of America**	44.67	467.45	11	0.160	78	45305.64	1	0.377	50
68	**Uruguay**	78.50	5.95	92	0.180	73	84.96	83	0.195	75
132	**Uzbekistan**	133.50	10.30	79	0.039	136	13.14	138	0.016	156
140	**Vanuatu**	143.33	0.05	146	0.024	151	0.39	170	0.085	121
54	**Venezuela**	62.83	61.40	40	0.239	65	629.81	33	0.155	87
7	**Vietnam**	23.50	391.70	13	0.485	35	2918.12	10	1.015	24
121	**Zambia**	117.67	4.90	97	0.043	131	35.55	117	0.099	115
81	**Zimbabwe**	87.00	15.50	70	0.129	88	38.18	116	0.180	80

Table 8: Climate Risk Index 2013

CRI Rank	Country	CRI score	Fatalities in 2013		Fatalities per 100,000 inhabitants		Losses in PPP (US$ mn)		Losses per unit GDP in %	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
135	**Albania**	109.33	0	56	0.000	106	0.00	148	0.000	120
80	**Algeria**	75.50	17	39	0.045	70	15.18	68	0.003	103
92	**Angola**	83.67	11	45	0.053	64	1.34	105	0.001	112
101	**Antigua and Barbuda**	86.50	0	56	0.000	106	0.48	115	0.025	68
9	**Argentina**	20.33	122	16	0.294	19	2010.00	12	0.217	28
128	**Armenia**	105.33	0	56	0.000	106	0.11	134	0.000	115
27	**Australia**	35.67	17	39	0.073	50	1988.64	13	0.189	31
28	**Austria**	35.83	5	51	0.059	56	1494.53	18	0.397	17
135	**Azerbaijan**	109.33	0	56	0.000	106	0.00	148	0.000	120
92	**Bahrain**	83.67	0	56	0.000	106	8.89	78	0.015	78
39	**Bangladesh**	46.67	55	24	0.035	76	675.81	26	0.136	39
135	**Barbados**	109.33	0	56	0.000	106	0.00	148	0.000	120
110	**Belarus**	96.00	4	52	0.042	71	0.02	142	0.000	120
88	**Belgium**	81.83	0	56	0.000	106	49.27	51	0.011	86
112	**Belize**	97.50	0	56	0.000	106	0.17	131	0.006	93
98	**Benin**	85.33	0	56	0.000	106	3.34	94	0.018	75
103	**Bhutan**	87.17	0	56	0.000	106	1.09	109	0.020	73
19	**Bolivia**	30.17	73	21	0.661	8	46.76	54	0.071	45
132	**Bosnia and Herzegovina**	108.17	0	56	0.000	106	0.02	143	0.000	119
100	**Botswana**	85.83	2	54	0.096	46	0.11	135	0.000	117
36	**Brazil**	43.33	111	18	0.055	60	1666.60	14	0.055	54
135	**Brunei Darussalam**	109.33	0	56	0.000	106	0.00	148	0.000	120
121	**Bulgaria**	102.33	1	55	0.014	94	0.11	133	0.000	119
104	**Burkina Faso**	89.00	1	55	0.006	101	2.30	99	0.008	89
135	**Burundi**	109.33	0	56	0.000	106	0.00	148	0.000	120
2	**Cambodia**	6.67	184	9	1.220	4	1495.52	17	3.243	3
117	**Cameroon**	100.17	3	53	0.014	95	0.21	124	0.000	117
24	**Canada**	32.67	19	37	0.054	61	6665.70	7	0.439	15
135	**Cape Verde**	109.33	0	56	0.000	106	0.00	148	0.000	120
63	**Central African Republic**	64.50	0	56	0.000	106	9.58	77	0.344	21
135	**Chad**	109.33	0	56	0.000	106	0.00	148	0.000	120
45	**Chile**	51.50	2	54	0.011	98	1438.68	21	0.364	19
15	**China**	25.33	926	3	0.068	52	53875.53	1	0.334	22
53	**Chinese Taipei**	58.00	14	42	0.060	55	137.99	38	0.014	79
52	**Colombia**	57.83	16	40	0.034	77	258.54	35	0.043	59
135	**Comoros**	109.33	0	56	0.000	106	0.00	148	0.000	120
134	**Costa Rica**	109.17	0	56	0.000	106	0.01	147	0.000	120
126	**Cote d'Ivoire**	104.67	0	56	0.000	106	0.20	126	0.000	117
113	**Croatia**	98.00	1	55	0.023	85	0.20	127	0.000	118
59	**Cuba**	62.67	2	54	0.018	91	83.68	46	0.069	47
119	**Cyprus**	101.67	0	56	0.000	106	0.24	120	0.001	111
18	**Czech Republic**	29.50	11	45	0.105	43	1449.17	20	0.504	13
68	**Democratic Republic of Congo**	66.50	35	30	0.045	68	8.12	81	0.016	76
135	**Democratic Republic of Timor-Leste**	109.33	0	56	0.000	106	0.00	148	0.000	120
33	**Denmark**	39.17	3	53	0.054	63	1012.72	24	0.420	16
111	**Djibouti**	96.50	0	56	0.000	106	0.18	129	0.007	91
73	**Dominica**	70.67	0	56	0.000	106	1.62	102	0.221	27
105	**Dominican Republic**	90.83	1	55	0.010	100	5.17	86	0.004	102
46	**Ecuador**	53.17	32	31	0.203	26	18.72	66	0.011	85
135	**Egypt**	109.33	0	56	0.000	106	0.00	148	0.000	120

CRI Rank	Country	CRI score	Fatalities in 2013		Fatalities per 100,000 inhabitants		Losses in PPP (US$ mn)		Losses per unit GDP in %	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
125	**El Salvador**	104.17	1	55	0.016	93	0.02	144	0.000	120
135	**Equatorial Guinea**	109.33	0	56	0.000	106	0.00	148	0.000	120
129	**Eritrea**	106.00	0	56	0.000	106	0.04	140	0.001	114
102	**Estonia**	86.83	0	56	0.000	106	4.28	89	0.012	82
96	**Ethiopia**	85.00	0	56	0.000	106	13.78	72	0.011	85
135	**Fiji**	109.33	0	56	0.000	106	0.00	148	0.000	120
82	**Finland**	76.67	0	56	0.000	106	48.57	52	0.022	70
57	**Former Yugoslav Republic of Macedonia**	61.67	1	55	0.048	66	12.76	73	0.049	55
50	**France**	56.50	14	42	0.022	87	1492.52	19	0.059	52
135	**Gabon**	109.33	0	56	0.000	106	0.00	148	0.000	120
61	**Georgia**	63.50	3	53	0.067	53	7.42	84	0.023	69
32	**Germany**	39.00	20	36	0.025	83	17357.19	4	0.494	14
108	**Ghana**	92.83	9	47	0.035	75	0.22	124	0.000	118
81	**Greece**	75.83	5	51	0.045	69	14.50	70	0.005	98
135	**Grenada**	109.33	0	56	0.000	106	0.00	148	0.000	120
44	**Guatemala**	51.17	17	39	0.110	40	32.10	58	0.028	65
135	**Guinea**	109.33	0	56	0.000	106	0.00	148	0.000	120
135	**Guinea-Bissau**	109.33	0	56	0.000	106	0.00	148	0.000	120
114	**Guyana**	98.83	0	56	0.000	106	0.23	123	0.004	101
83	**Haiti**	77.33	6	50	0.058	58	1.08	110	0.006	94
39	**Honduras**	46.67	10	46	0.123	38	25.22	62	0.068	48
135	**Hong Kong SAR**	109.33	0	56	0.000	106	0.00	148	0.000	120
76	**Hungary**	73.17	3	53	0.030	80	28.12	60	0.012	83
135	**Iceland**	109.33	0	56	0.000	106	0.00	148	0.000	120
3	**India**	12.67	7437	1	0.598	9	15147.02	5	0.224	26
25	**Indonesia**	32.83	197	8	0.079	47	2290.23	11	0.096	42
94	**Iraq**	84.33	11	45	0.032	78	5.49	85	0.001	110
72	**Ireland**	69.17	1	55	0.021	88	55.18	50	0.026	67
31	**Islamic Republic of Afghanistan**	38.33	136	13	0.445	13	17.80	67	0.030	62
127	**Islamic Republic of Iran**	104.83	0	56	0.000	106	0.24	121	0.000	120
30	**Israel**	37.67	8	48	0.102	44	496.16	30	0.193	30
43	**Italy**	49.33	28	33	0.047	67	1174.44	23	0.058	53
135	**Jamaica**	109.33	0	56	0.000	106	0.00	148	0.000	120
38	**Japan**	44.00	82	19	0.064	54	1519.11	15	0.033	61
18	**Jordan**	29.50	21	35	0.321	16	113.74	40	0.149	35
133	**Kazakhstan**	108.83	0	56	0.000	106	0.02	145	0.000	120
23	**Kenya**	32.33	123	15	0.294	18	84.85	45	0.067	49
135	**Kiribati**	109.33	0	56	0.000	106	0.00	148	0.000	120
108	**Korea. Republic of**	92.83	12	44	0.024	84	1.31	107	0.000	119
40	**Kosovo**	47.00	1	55	0.054	62	45.72	55	0.283	24
90	**Kuwait**	83.00	3	53	0.077	49	0.78	113	0.000	117
135	**Kyrgyz Republic**	109.33	0	56	0.000	106	0.00	148	0.000	120
7	**Lao People's Democratic Republic**	17.67	23	34	0.340	15	263.51	34	0.834	4
99	**Latvia**	85.50	1	55	0.049	65	0.83	112	0.002	108
71	**Lebanon**	69.00	7	49	0.157	36	3.63	93	0.005	100
135	**Lesotho**	109.33	0	56	0.000	106	0.00	148	0.000	120
77	**Liberia**	73.50	0	56	0.000	106	3.79	91	0.105	41
64	**Libya**	64.83	21	35	0.343	14	1.33	106	0.001	110
112	**Lithuania**	97.50	0	56	0.000	106	1.62	103	0.002	107
135	**Luxembourg**	109.33	0	56	0.000	106	0.00	148	0.000	120

CRI Rank	Country	CRI score	Fatalities in 2013		Fatalities per 100,000 inhabitants		Losses in PPP (US$ mn)		Losses per unit GDP in %	
			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
21	**Madagascar**	31.83	38	28	0.165	33	81.44	47	0.254	25
54	**Malawi**	59.33	3	53	0.018	92	27.12	61	0.212	29
93	**Malaysia**	84.00	8	48	0.027	82	11.25	74	0.002	109
102	**Maldives**	86.83	0	56	0.000	106	0.89	111	0.022	71
45	**Mali**	51.50	37	29	0.220	22	4.63	88	0.018	74
95	**Malta**	84.67	0	56	0.000	106	2.67	96	0.021	72
37	**Mauritania**	43.67	8	48	0.215	23	8.47	80	0.072	44
22	**Mauritius**	32.00	11	45	0.845	7	31.75	59	0.142	37
4	**Mexico**	15.00	224	6	0.189	28	10589.70	6	0.514	11
135	**Moldova**	109.33	0	56	0.000	106	0.00	148	0.000	120
135	**Mongolia**	109.33	0	56	0.000	106	0.00	148	0.000	120
84	**Montenegro**	79.00	0	56	0.000	106	4.12	90	0.045	58
123	**Morocco**	103.83	1	55	0.003	104	0.23	122	0.000	119
10	**Mozambique**	21.67	119	17	0.461	12	88.21	43	0.327	23
62	**Myanmar**	64.00	30	32	0.059	57	19.98	64	0.009	87
47	**Namibia**	54.50	0	56	0.000	106	116.39	39	0.523	10
17	**Nepal**	27.50	157	10	0.565	10	56.00	49	0.090	43
67	**Netherlands**	65.83	2	54	0.012	97	351.94	31	0.045	58
42	**New Zealand**	48.50	1	55	0.022	86	593.91	28	0.394	18
58	**Nicaragua**	61.83	13	43	0.212	24	2.28	100	0.008	90
14	**Niger**	24.17	32	31	0.193	27	88.17	44	0.540	8
85	**Nigeria**	79.67	52	25	0.031	79	10.21	75	0.001	110
75	**Norway**	73.00	0	56	0.000	106	94.78	42	0.029	64
41	**Oman**	47.50	18	38	0.501	11	20.28	63	0.013	81
6	**Pakistan**	15.50	301	5	0.165	34	5419.77	8	0.649	6
91	**Panama**	83.33	4	52	0.107	41	0.18	130	0.000	118
70	**Papua New Guinea**	67.50	9	47	0.123	39	1.45	104	0.009	88
16	**Paraguay**	26.83	11	45	0.162	35	344.75	32	0.630	7
42	**Peru**	48.50	52	25	0.168	32	56.63	48	0.016	77
1	**Philippines**	2.17	6479	2	6.646	2	24538.56	3	3.816	2
109	**Poland**	95.33	5	51	0.013	96	3.12	95	0.000	117
26	**Portugal**	35.17	18	38	0.172	30	301.08	33	0.112	40
135	**Qatar**	109.33	0	56	0.000	106	0.00	148	0.000	120
122	**Republic of Congo**	103.67	0	56	0.000	106	0.19	128	0.001	113
73	**Republic of Yemen**	70.67	56	23	0.210	25	0.35	117	0.000	117
78	**Romania**	74.67	9	47	0.042	71	19.67	65	0.005	97
55	**Russia**	60.50	4	52	0.003	105	2418.88	9	0.069	46
89	**Rwanda**	82.00	4	52	0.037	74	1.14	108	0.007	92
135	**Samoa**	109.33	0	56	0.000	106	0.00	148	0.000	120
135	**Sao Tome and Principe**	109.33	0	56	0.000	106	0.00	148	0.000	120
35	**Saudi Arabia**	41.50	43	26	0.143	37	552.54	29	0.036	60
60	**Senegal**	62.83	8	48	0.057	59	8.57	79	0.027	66
106	**Serbia**	91.17	0	56	0.000	106	4.88	87	0.005	96
66	**Seychelles**	65.17	0	56	0.000	106	7.89	83	0.361	20
97	**Sierra Leone**	85.17	6	50	0.098	45	0.05	139	0.000	116
131	**Singapore**	107.50	0	56	0.000	106	0.07	137	0.000	120
132	**Slovak Republic**	108.17	0	56	0.000	106	0.03	141	0.000	120
130	**Slovenia**	107.33	0	56	0.000	106	0.06	138	0.000	119
74	**Solomon Islands**	72.17	0	56	0.000	106	1.89	101	0.184	32
29	**South Africa**	37.33	42	27	0.079	48	907.08	25	0.137	38
56	**Spain**	61.33	9	47	0.019	90	673.80	27	0.045	57
48	**Sri Lanka**	55.00	66	22	0.317	17	10.17	76	0.005	99
135	**St. Kitts and Nevis**	109.33	0	56	0.000	106	0.00	148	0.000	120
12	**St. Lucia**	22.83	6	50	3.550	3	14.14	71	0.752	5

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			Avg.	Rank	Avg.	Rank	Avg.	Rank	Avg.	Rank
5	**St. Vincent and the Grenadines**	15.33	9	47	8.182	1	96.58	41	8.333	1
34	**Sudan**	40.33	78	20	0.227	20	45.62	56	0.030	63
135	**Suriname**	109.33	0	56	0.000	106	0.00	148	0.000	120
69	**Swaziland**	67.17	0	56	0.000	106	14.97	69	0.179	33
51	**Sweden**	57.50	4	52	0.042	72	190.87	37	0.046	56
49	**Switzerland**	56.17	3	53	0.037	73	255.11	36	0.059	51
135	**Tajikistan**	109.33	0	56	0.000	106	0.00	148	0.000	120
118	**Tanzania**	101.00	2	54	0.004	103	0.38	116	0.000	115
13	**Thailand**	23.00	150	12	0.220	21	1503.81	16	0.156	34
50	**The Bahamas**	56.50	0	56	0.000	106	46.92	53	0.534	9
87	**The Gambia**	81.00	2	54	0.107	42	0.07	136	0.002	106
135	**Togo**	109.33	0	56	0.000	106	0.00	148	0.000	120
135	**Tonga**	109.33	0	56	0.000	106	0.00	148	0.000	120
120	**Trinidad and Tobago**	102.00	0	56	0.000	106	0.29	118	0.001	113
123	**Tunisia**	103.83	0	56	0.000	106	0.25	119	0.000	118
107	**Turkey**	92.17	15	41	0.020	89	2.31	98	0.000	118
135	**Turkmenistan**	109.33	0	56	0.000	106	0.00	148	0.000	120
79	**Uganda**	75.00	10	46	0.027	81	8.10	82	0.013	80
86	**Ukraine**	80.50	2	54	0.004	102	44.16	57	0.011	84
125	**United Arab Emirates**	104.17	1	55	0.011	99	0.14	132	0.000	120
11	**United Kingdom**	22.67	775	4	1.209	5	1386.50	22	0.060	50
20	**United States of America**	30.50	221	7	0.070	51	24802.15	2	0.148	36
65	**Uruguay**	65.00	6	50	0.177	29	3.71	92	0.006	95
135	**Uzbekistan**	109.33	0	56	0.000	106	0.00	148	0.000	120
124	**Vanuatu**	104.00	0	56	0.000	106	0.02	146	0.003	105
115	**Venezuela**	99.50	0	56	0.000	106	2.48	97	0.000	116
8	**Vietnam**	17.83	152	11	0.169	31	2397.04	10	0.505	12
116	**Zambia**	99.83	2	54	0.014	94	0.21	125	0.000	116
53	**Zimbabwe**	58.00	125	14	0.953	6	0.68	114	0.003	104

Germanwatch

Following the motto “Observing. Analysing. Acting.”, Germanwatch has been actively promoting global equity and the preservation of livelihoods since 1991. In doing so, we focus on the politics and economics of the North and their worldwide consequences. The situation of marginalised people in the South is the starting point of our work. Together with our members and supporters as well as with other actors in civil society, we intend to represent a strong lobby for sustainable development. We attempt to approach our goals by advocating for the prevention of dangerous climate change, for food security, and compliance of companies with human rights.

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