

GLOBAL CLIMATE RISK INDEX 2010

WHO IS MOST VULNERABLE? WEATHER-RELATED LOSS
EVENTS SINCE 1990 AND HOW COPENHAGEN NEEDS TO
RESPOND

Sven Harmeling



Summary

Extreme weather events are generally expected to increase in frequency and intensity due to global climate change. They have the potential to significantly undermine progress towards the achievement of the Millennium Development Goals (MDGs). The Global Climate Risk Index 2010 analyses to what extent countries have been affected by the impacts of weather-related loss events (storms, floods, heatwaves etc.). These analyses are based on the well-known assessments of the Munich Re database NatCatSERVICE®. The figures for the period 1990 to 2008 and for the year 2008 reveal that poorer countries dominate the ranking of the most affected countries (the Down 10).

In various respects, inter alia regarding the losses in relation to GDP or deaths in relation to population, less developed countries are more affected than industrialised countries. In terms of adaptation to climate change, it is important to note that many synergies exist between disaster risk reduction activities and adaptation. Through the establishment of an ambitious Adaptation Action Framework, a Copenhagen agreement can make a real difference to developing countries' current and future efforts to cope with climate change. It is obvious that especially the poorest countries need financial support for adaptation and domestic climate protection additional to efforts to reach the Millennium Development Goals (MDGs) and the 0.7 percent GNI target of developed countries to deliver Official Development Assistance (ODA).

Imprint

Author: Sven Harmeling, with support from Maja Röse

Germanwatch would like to thank Munich RE (in particular Petra Löw) for support (in particular the provision of the core data which are the basis for the Global Climate Risk Index).

Publisher:

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December 2009

Purchase order number: 10-2-02e

ISBN 978-3-939846-58-1

This publication can be downloaded at:

<http://www.germanwatch.org/cri>

With financial support from the German Federal Ministry for Economic Cooperation and Development (BMZ).



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How to read the Germanwatch Global Climate Risk Index

The Germanwatch Global Climate Risk Index is an analysis based on the most reliable available data on the impacts of extreme weather events and associated socio-economic data. Thus, it only looks at one important piece in the overall, more comprehensive puzzle of climate-related impacts on socio-economic systems and, for example, does not take into account aspects such as sea-level rise or glacier melting. It is based on past data and is thus not a linear projection of future climate impacts, also because a single extreme event can not be traced back solely to anthropogenic climate change. Nevertheless, climate change is an increasingly important factor for the occurrence and intensity of these events. The Climate Risk Index thus indicates a level of exposure and vulnerability to extreme events which countries should see as a warning signal to prepare for more severe events in the future. The limitations to the data availability, including the socio-economic data, is a certain disadvantage for very small countries such as some small island states, since in particular in a longer-term comparison, sufficiently sound data is not always available. Furthermore the data only show the direct impacts of extreme weather events, while for example heat waves often lead to much stronger indirect impacts (e.g. through droughts and food scarcity) which is often the case in African countries. Also, it does not include the total number of affected people (in contrast to the deaths), since the comparability of such data is very limited. This is another reason for the relatively low visibility of African countries amongst those countries ranked highest. The results should thus not be understood as questioning the Bali Action Plan definition of particularly vulnerable countries, which includes Least Developed Countries, Small Island Developing States and African countries prone to drought, desertification and floods.

Key messages:

- According to the Germanwatch Global Climate Risk Index, Bangladesh, Myanmar and Honduras were the countries most affected by extreme weather events from 1990 to 2008;
- All of the ten most affected countries (1990-2008) were developing countries in the low-income or lower-middle income country group;
- In total, 600,000 people died as a direct consequence from more than 11,000 extreme weather events, and losses of 1.7 trillion USD occurred;
- Myanmar, Yemen and Viet Nam were most severely affected in the year 2008;
- Anthropogenic climate change is expected to lead to further increases in precipitation extremes, both increases in heavy precipitation and increases in drought.
- Through an ambitious adaptation action framework, the Copenhagen climate summit can result in a real difference for particularly vulnerable developing countries. A key role herefore needs to be played by scaled-up financial support provided by developed countries.

1 Key results of the Global Climate Risk Index 2010

1990 marked a turning point in the climate debate, with the adoption of the First Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). This report laid the foundation to negotiate and eventually agree on the UN Framework Convention on Climate Change (UNFCCC) only two years later, in 1992. Now, almost 20 years later, it is time to take stock of the impacts of climate-related extreme events. Also, 1990 is the base year for greenhouse gas emission reduction targets for developed countries under the Kyoto Protocol, and the lack of substantial progress on the way to low-carbon economies is a key factor why many poor countries face a bleak future in face of more severe climate change. That is why the fifth edition of Germanwatch's Global Climate Risk Index (CRI) looks particularly at the impacts of extreme weather events from 1990 up until the most recent available data – 2008. In that time almost 600,000 people died directly from more than 11,000 extreme weather events, and losses of 1.7 trillion USD occurred (in 2008 values).¹ The number of large catastrophes and their impacts increased significantly and the same has been true for small and medium-sized disasters. This is especially challenging for humanitarian aid, since climate-related losses have grown rapidly, while low public attention to small- and medium-sized events results in limited funding.

The **Global Climate Risk Index (CRI) developed by Germanwatch** analyses the quantified impacts of extreme weather events² – both in terms of people that have died from them, as well as economic losses that occurred – based on data from Munich Re's Nat-CatSERVICE® which is one of the most reliable and complete data bases on this matter. It looks at absolute and relative impacts, and results in an average ranking of countries in four indicators, with the countries ranking highest being those most impacted. It does not include the factor “affected people” – those that have suffered in different ways but have not died from the events – because the reliability and comparability of this indicator across all of the world's countries is significantly lower than that of the other indicators.

¹ Munich RE, 2009; many more died from the indirect consequences which, however, are more difficult to account to the original cause of the extreme event.

However, the figures for affected people imply more severe impacts in particular for African countries than the Climate Risk Index suggests. Thus, the Climate Risk Index does not provide an all-encompassing analysis of the risks from anthropogenic climate change to countries, but should be seen as a piece in the puzzle of an analysis of countries' exposure and vulnerability to climate-related risks, based on the most reliable quantified data.

Countries most affected in the period of 1990-2008

Bangladesh, Myanmar and Honduras have been identified to be the most affected. They are followed by Viet Nam and Nicaragua, Haiti and India.³ Table 1 and figure 1 show the ten most affected countries (Down 10), with their average ranking (CRI score) and the specific results in the four indicators analysed.

Table 1: The Long-Term Climate Risk Index (CRI): Results (annual averages) in specific indicators in the 10 countries most affected in 1990 to 2008.

CRI 1990-2008	Country	CRI score	Death toll (annual Ø)	Deaths per 100,000 inhabitants (annual Ø)	Total losses in million US\$ PPP (annual Ø)	Losses per GDP in % (annual Ø)
1	Bangladesh	8.00	8,241	6.27	2,189	1.81
2	Myanmar	8.25	4,522	9.60	707	2.55
3	Honduras	12.00	340	5.56	660	3.37
4	Viet Nam	18.83	466	0.64	1,525	1.31
5	Nicaragua	21.00	164	3.37	211	2.03
6	Haiti	22.83	335	4.58	95	1.08
7	India	25.83	3,255	0.33	6,132	0.38
8	Dominican Republic	27.58	222	2.93	191	0.45
8	Philippines	27.67	799	1.11	544	0.30
10	China	28.58	2,023	0.17	25,961	0.78

Among the ten countries most affected, there is not one developed or Annex-I country, among the first 20 there are only four developed countries. Particularly in relative terms, poorer developing countries are often hit much harder. These results underscore the particular vulnerability of poor countries to climatic risks, despite the fact that the absolute monetary damages are much higher in richer countries. In addition, one has to acknowledge that affected developing countries are also least responsible for causing climate change.

Exceptional catastrophes or continuous threats?

The Global Climate Risk Index is based on average figures. But there are two groups of countries among the Down 10: those who continuously face the threat of extreme events, and those who only rank high because of exceptional catastrophes. Two examples for the latter case are Myanmar, where more than 95% of the damages and fatalities occurred in 2008 through cyclone Nargis, and Honduras, where more than 80% in both categories were caused through Hurricane Mitch in 1998. Similarly, the appearance of European countries among the first 25 countries is almost exclusively because of the extraordinary number of fatalities due to the 2003 heat wave, in which more than 70,000 people died across Europe. While in Bangladesh more than 80% of the deaths occurred in 1991, the

² Meteorological events such as tropical storms, winter storms, severe weather, hail, tornado, local storms; hydrological events such as storm surges, river floods, flash floods, mass movement (landslide); climatological events such as freeze, wildland fires, droughts, see Munich Re, 2009

³ The full rankings can be found in the Annexes.

country is continuously hit by extreme events. The fact that no further peak catastrophe has happened, such as in 1991 with 140,000 deaths, is a partial proof that it is possible to better prepare for climate risks and prevent larger-scale disasters.

What climate change science tells us about extreme events

Recent science updating the Fourth Assessment Report of the IPCC suggests that the risks from extreme weather events are increasing at an earlier level of temperature rise than expected so far, along with other severe climate change risks, such as sea-level rise, glacier melting, etc.⁴ Furthermore, a recent scientific report⁵ concluded:

- Increases in hot extremes and decreases in cold extremes have continued and are expected to amplify further.
- Anthropogenic climate change is expected to lead to further increases in precipitation extremes, both increases in heavy precipitation and increases in drought.
- Although future changes in tropical cyclone activity cannot yet be modelled, new analyses of observational data confirm that the intensity of tropical cyclones has increased in the past three decades in line with rising tropical ocean temperatures.

There is thus a certain likeliness that those countries severely affected today from extreme weather events are also particularly at risk from further intensification in this type of climate risks. However, it is also possible that countries will be hit harder in the future where these risks have not yet resulted in significant numbers of fatalities or damages.

How Copenhagen can make a real difference for countries at risk

An outcome of the Copenhagen climate summit could make a real difference for those countries particularly at risk through the adoption of an ambitious Adaptation Action Framework which:

- significantly scales-up the financial and technical support for vulnerable developing countries by at least two orders of magnitude, provided in reliable and continuous resource flows in addition to existing ODA commitments and prioritising the needs of the most vulnerable people and communities;⁶
- provides near-term finance (2010 to 2012) to implement the most urgent adaptation needs (incl. disaster preparedness) and to build capacities for comprehensive national responses;
- builds up and advances regional or international insurance pools to help vulnerable countries manage the shocks of large weather-related catastrophes,
- advances institutional arrangements to assist developing countries, such as regional centres, an adaptation technical panel under the UNFCCC or a subsidiary body for adaptation;
- initiates a clear process to develop modalities for dealing with the unavoidable loss and damage from climate change.

⁴ Smith et al., 2009

⁵ Allison et al. 2009

⁶ Recent assessments suggest additional annual adaptation costs in the developing countries well in excess of USD 50 bn.

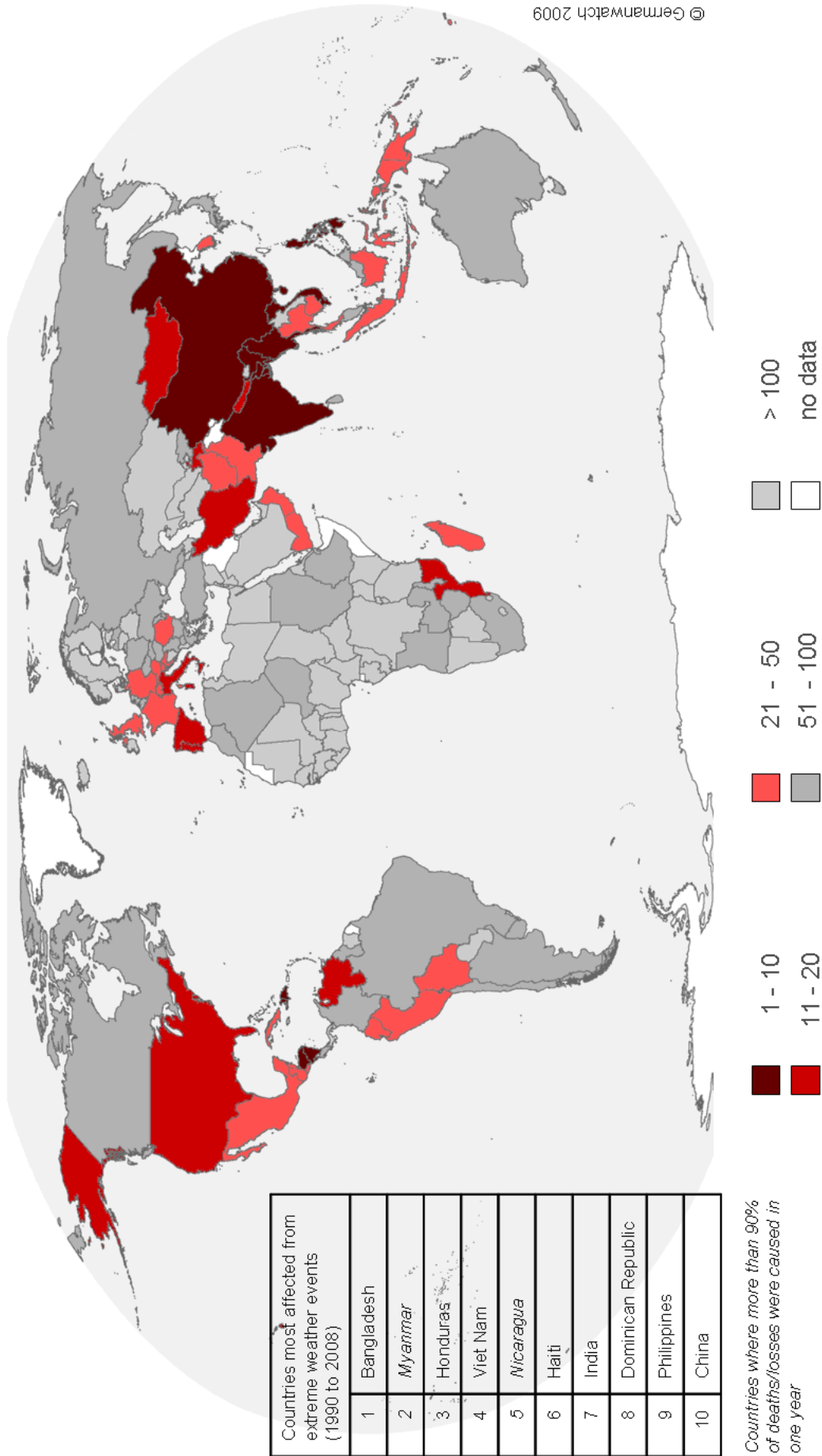


Figure 1: World Map of the Global Climate Risk Index 1990-2008

Source: Germanwatch and Munich Re NatCatSERVICE®

2 Additional analyses

2.1 Countries most affected in 2008

According to the Climate Risk Index, in **2008 Myanmar, the Republic of Yemen, Viet Nam and the Philippines** have been most affected by extreme weather events (table 2). While Vietnam and the Philippines are relatively regularly affected through storms and floodings, as can be seen in the Climate Risk Index editions 2006, 2007 and 2008⁷, the high figures for Myanmar and Yemen are exceptional. The huge number of fatalities in Myanmar were caused by cyclone Nargis and revealed the low adaptive capacity of the country which, however, is also a result of the political failure to embark upon serious disaster preparedness. In previous years, Yemen has never shown remarkable records of impacts. After Oman in 2007 it is now the second time in a row that a country from the Arabic peninsula appears in the Down 10.

In total, 654 events were registered worldwide in 2008, which caused around 93,700 deaths and economic losses of more than US\$ 123 billion. Only around a third had been insured, primarily in developed countries. 2008 was a relatively harsh year, with the second highest number of deaths as well as damages recorded since 1990. Table 3 shows the impacts of selected extreme weather events in 2008.

Table 2: Climate Risk Index 2008, the 10 most affected countries

Ranking 2008 (2007)	Country	CRI score	Death toll	Deaths per 100,000 inhabitants	Absolute losses (in US\$ PPP)	Losses per unit GDP	Human Development Index (2006)
1 (89)	Myanmar	1.83	84,537	143.77	10,375	15.27	138
2 (117)	Yemen, Republic of	8.58	184	0.80	823	1.49	140
3 (6)	Viet Nam	9.58	378	0.44	2,423	1.01	116
3 (10)	Philippines	10.50	785	0.87	796	0.25	105
5 (16)	United States	13.92	429	0.14	67,477	0.47	13
6 (28)	Madagascar	14.25	106	0.52	128	0.64	145
7 (8)	Mozambique	14.67	69	0.33	229	1.22	172
8 (13)	China	15.50	1,113	0.08	47,498	0.60	92
9 (34)	Belize	15.83	15	4.69	123	4.86	93
10 (7)	India	16.58	2,439	0.21	2,606	0.08	134

⁷ www.germanwatch.org/cri

Table 3: Most extreme events in 2008.

Source: Munich Re, 2009

Loss event	Region	Fatalities	Overall losses (absolute, million US\$)	Explanations
Cyclone Nargis	Myanmar	85,000	4,000	Wind speeds up to 215 km/h. 450,000 houses destroyed, 350,000 damaged. Crops destroyed, 156,000 head of livestock killed. Major losses to infrastructure. Missing: 54,000.
Flood	Yemen	185	400	Thousands of houses damaged/destroyed. Losses to infrastructure.
Typhoon Hagupit	China, Philippines, Viet Nam	87	1,000	Wind speeds up to 220 km/h, torrential rain, flash floods, landslides. 30,000 houses in Vietnam damaged/destroyed.
Cyclone Ivan	Madagascar	93	60	Wind speeds up to 230 km/h, heavy rain, floods. >130,000 houses, bridges damaged / destroyed. 500 km ² of crops destroyed, livestock killed.
Hurricane Ike	USA	168	38,000	Storm surge. Hundreds of thousands of houses and vehicles damaged/destroyed. Losses to oil platforms. >2 million people without electricity.
Winter damage	China	129	21,000	485,000 houses damaged/destroyed. 2,100 greenhouses collapsed. Severe losses to agriculture, 118,600 km ² of crops affected/ damaged.

2.2 Relevance of extraordinary events in the period of 1990-2008

Although less relevant for a long-term analysis than in a single year, it is important to distinguish those countries which continuously face extreme weather events from those where events of exceptionally extreme impacts have caused large-scale damage and thousands of deaths. Nevertheless, even in the latter case it is an indication of high vulnerability to such extremes, while less so for the exposure to such risks, if the country is only rarely hit by extreme events.

Figure 2 shows such an in-depth analysis for the Down 10 countries in 1990 to 2008, which indicate that in Myanmar and Nicaragua more than 90% of the deaths (and in Nicaragua also more than 90% of the damages) occurred in only one year.

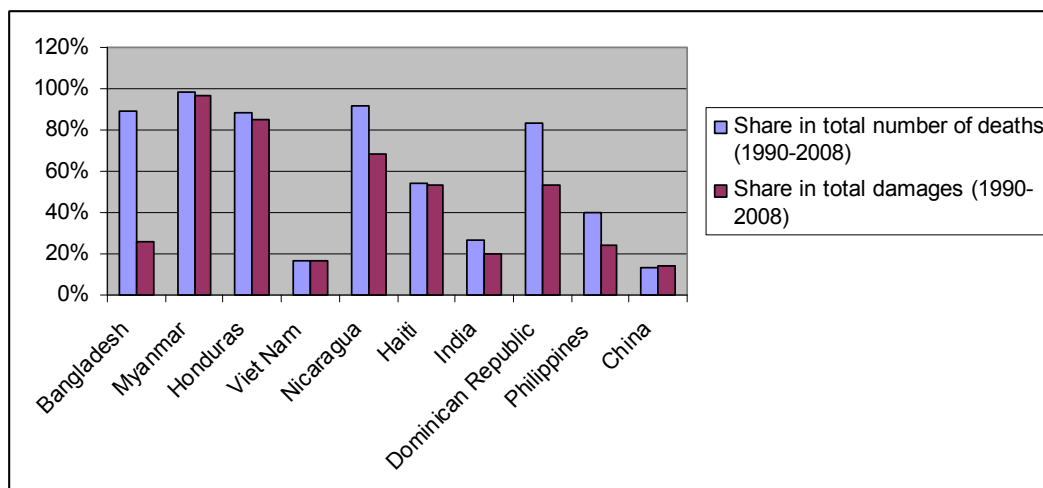


Figure 2: Share of the most extreme year in the overall deaths and losses from 1990-2008 in the ten most affected countries

Table 4 complements Figure 2 and shows the years when the highest number of deaths and losses occurred. It also shows how many events were registered during 1990 to 2008. China, India, Bangladesh and the Philippines belong to those countries that are most often hit by extremes which, of course, is partially due to their large size and/or specific exposure to extreme weather events.

Table 4: Down 10 countries and the most extreme years between 1990 and 2008

Countries most affected from extreme weather events (1990 to 2008)	Extreme year in total number of deaths (1990-2008)	Extreme year in total losses (1990-2008)	Total number of events (1990 to 2008)
1 Bangladesh	1991	1998	244
2 Myanmar	2008	2008	22
3 Honduras	1998	1998	49
4 Viet Nam	2006	2006	192
5 Nicaragua	1998	1998	34
6 Haiti	2004	2004	40
7 India	1998	1993	325
8 Dominican Republic	1998	1998	39
9 Philippines	1991	2006	243
10 China	1993	2008	558

2.3 Country-group comparison

A comparison of the relative impacts of extreme weather events on different country groups is useful to complement the country-specific analysis of the Climate Risk Index. Figure 3 shows the relative impacts in the period 1990-2008 on country groups according to the World Bank income classification.⁸ It reveals a differentiated picture of the impacts. With regard to the fatalities from extreme weather events, the vulnerability of the poor in low-income countries becomes quite obvious. The high relative death figure in high-income countries is surprising, but much of it is due to the 2003 European heatwave, where Europe-wide more than 70,000 people died. Nevertheless it also indicates that the increasing divide between rich and poor people in developed countries also increases the number of vulnerable people.

The relative economic losses are most significant in the lower-middle income countries, low-income countries are almost at the same level of high-income countries. On the one hand, the highest absolute losses occur in high-income countries because there are much more values which can be lost, and extreme events such as Hurricane Katrina or Hurricane Ike have produced losses that were also significant for the USA in relative terms. But it also has to be recognised that many values in low-income countries are generated in the informal sector and are not counted into the GDP statistics. Furthermore, in particular poor people who possess little economic values suffer from the adverse impacts of extreme events.

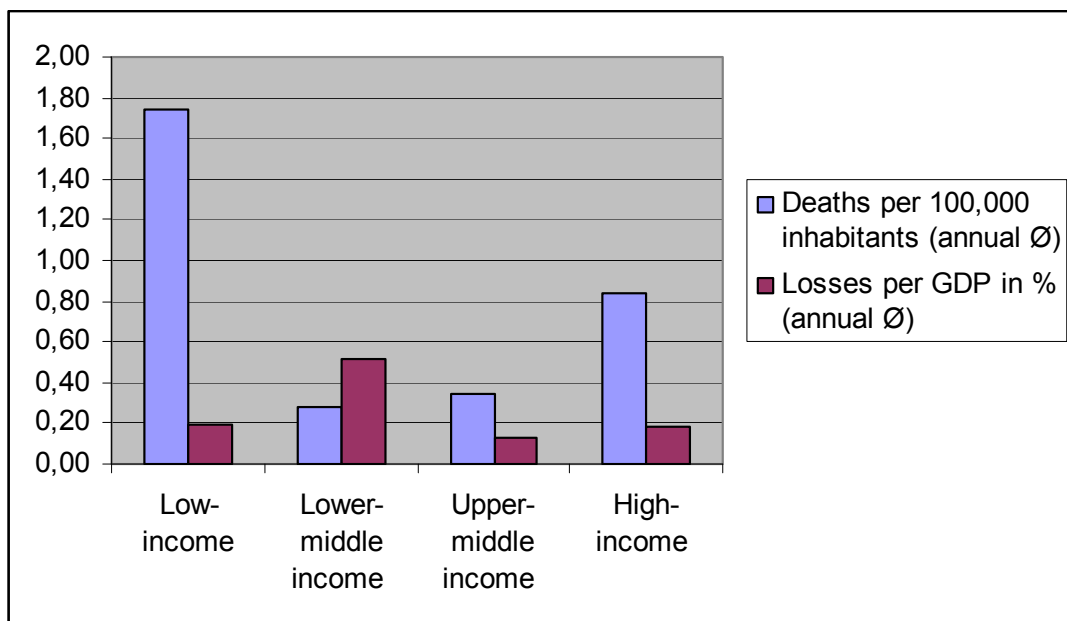


Figure 3: Impacts from 1990 to 2008 on country-groups (annual mean)

⁸ Economies are divided according to 2008 GNI per capita, calculated using the World Bank Atlas method. The groups are: low income, \$975 or less; lower middle income, \$976 - \$3,855; upper middle income, \$3,856 - \$11,905; and high income, \$11,906 or more.

3 Methodological Remarks and Limitations

The presented examinations are based on the data collection and analysis, acknowledged worldwide, provided by the division GeoRiskResearch (NatCat*SERVICE*®) of Munich Re. 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 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 cases – for especially 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 for some African countries as a consequence of climate change cannot be displayed by the index. Such parameters nevertheless often substantially influence important development factors like agricultural outputs and the availability of drinking water.

The present data does also not allow for conclusions about the distribution of damages below the national level, although this would be interesting. However, the 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. to 4., economic and population data primarily by the International Monetary Fund was taken into account. However, it has to be added that especially for small (e.g. Pacific small island states) or politically extremely instable countries (e.g. Somalia), the required data is not always available in sufficient quality for the whole observed time period. For those countries, reliable analyses are sometimes not possible.

The Climate Risk Index 2010 is based on the figures from 2008 and 1990-2008, but only takes into account countries which are Parties to the United Nations Framework Convention on Climate Change (UNFCCC). This ranking represents the most affected countries. Each country's index score has been derived from a country's average ranking in all four analyses, according to the following weighting: death toll 1/6, deaths per inhabitants 1/3, absolute losses 1/6, losses per GDP 1/3.

The analysis of the already observable changes in climate conditions in different regions presented here indicates which countries are particularly endangered by future climate change. 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. 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 recording of the past to the future is not appropriate. On the one hand, the likelihood for past trends in extreme weather events to continue unchanged is very low.

Additionally, new phenomena can occur in states or regions. In the year 2004, for example, a hurricane was registered in the South Atlantic, off Brazil's coast, for the first time ever. The cyclone that hit Oman in 2007 is of similar significance. Accordingly, the analyses of the Climate Risk Index should not be seen as the only evidence for which countries are already afflicted or will undoubtedly be affected by the anthropogenic 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 one billion US\$ for a rich country like the USA entail 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 therefore 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. The ability of society to cope with damages, through precaution, mitigation and disaster preparedness, insurances or the improved availability of means for emergency aid, generally rises 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 place stronger weight on smaller and poorer countries. To give consideration to both effects, the analysis of the Climate Risk Index is based on absolute and on relative scores, with a weighting that gives the relative losses a slightly higher importance than the absolute losses..

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

The indicator "absolute damages in US\$" is being identified through purchasing power parity (PPP), because using this figure better expresses how people are actually affected by the loss of one Dollar than using nominal exchange rates. Purchasing power parity are currency exchange rates which permit a comparison of e.g. national GDP, by incorporating price differences between countries. Simplified, this means that a farmer in India can buy more crop with one US\$ than a farmer in the USA. Therefore, 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 values bigger than one.

4 Annex

A1 = Annex I countries (industrialised countries); NA1 = Non-Annex I countries (developing countries); CRI = Climate Risk Index; GDP = gross domestic product; PPP = purchasing power parity; X = no data available

Table 5: Climate Risk Index for 1990-2008: all countries (UNFCCC Parties)

Rank CRI	Country	Party	CRI (average ranking)	Death toll (annual Ø)	Rank death toll	Deaths per 100,000 inhabitants (annual Ø)	Rank deaths per 100,000 inhabitants	Total losses in million US\$ PPP (annual Ø)	Rank total losses in million US\$ PPP	Losses per GDP in % (annual Ø)	Rank losses per GDP in %
28	Afghanistan	NA1	41.33	347.37	15	3.64	11	16.16	105	0.27	52
111	Albania	NA1	103.50	2.05	122	0.07	108	14.19	108	0.12	84
78	Algeria	NA1	77.75	73.95	38	0.26	59	40.01	85	0.03	118
71	Angola	NA1	74.50	539.42	11	4.25	7	2.69	134	0.01	143
52	Antigua and Barbuda	NA1	58.83	1.00	139	0.61	31	41.17	84	4.51	7
63	Argentina	NA1	68.92	25.00	63	0.07	108	525.80	25	0.16	66
124	Armenia	NA1	112.92	0.42	150	0.01	157	19.01	101	0.23	58
57	Australia	A1	63.00	18.11	68	0.10	94	1083.85	17	0.21	59
42	Austria	A1	53.75	30.21	60	0.39	47	367.57	30	0.16	66
118	Azerbaijan	NA1	108.33	2.21	120	0.03	146	37.56	87	0.13	82
46	Bahamas	NA1	56.67	1.21	135	0.31	51	224.43	41	3.42	10
117	Bahrain	NA1	108.00	3.79	105	0.52	35	0.81	152	0.01	143
1	Bangladesh	NA1	8.00	8240.79	1	6.27	3	2189.50	8	1.81	17
168	Barbados	NA1	155.17	0.05	167	0.01	157	0.42	159	0.01	143
127	Belarus	A1	113.67	4.42	102	0.04	134	22.44	98	0.04	115
69	Belgium	A1	70.50	51.79	47	0.52	35	91.47	64	0.03	118
38	Belize	NA1	50.75	2.63	116	0.77	25	57.33	77	3.94	8
159	Benin	NA1	146.92	0.84	142	0.01	157	1.03	147	0.01	143
134	Bhutan	NA1	116.75	1.79	130	0.26	59	0.31	161	0.02	128
33	Bolivia	NA1	47.83	36.16	54	0.45	42	93.26	63	0.36	40
120	Bosnia and Herzegovina	NA1	109.33	0.26	155	0.01	157	35.08	92	0.29	48
139	Botswana	NA1	121.00	1.58	132	0.10	94	3.16	131	0.02	128
81	Brazil	NA1	81.08	99.68	29	0.06	116	347.35	33	0.03	118
174	Brunei Darussalam	NA1	168.17	0.00	171	0.00	165	0.03	173	0.00	166
86	Bulgaria	A1	82.83	4.53	100	0.06	116	123.01	55	0.21	59
116	Burkina Faso	NA1	107.25	6.16	91	0.06	116	6.65	121	0.06	106
123	Burundi	NA1	112.58	7.42	86	0.12	89	0.44	157	0.02	128
34	Cambodia	NA1	48.42	35.32	55	0.30	52	76.15	70	0.60	30
146	Cameroon	NA1	127.17	6.00	92	0.04	134	1.38	138	0.01	143
91	Canada	A1	88.58	12.16	73	0.04	134	610.47	21	0.07	100
176	Cape Verde	NA1	168.67	0.00	171	0.00	165	0.00	176	0.00	166
161	Central African Republic	NA1	149.42	0.74	144	0.02	151	0.13	168	0.01	143
142	Chad	NA1	123.25	3.68	108	0.05	123	1.44	137	0.02	128
87	Chile	NA1	83.00	16.26	69	0.11	93	107.34	59	0.08	98
10	China	NA1	28.58	2022.89	5	0.17	72	25960.66	2	0.78	27
80	Colombia	NA1	81.00	90.74	31	0.23	63	36.81	89	0.02	128
134	Congo	NA1	116.75	8.37	84	0.29	53	0.28	163	0.00	166
144	Congo, the Democratic Republic of the	NA1	125.92	13.37	71	0.03	146	1.12	144	0.01	143
x	Cook Islands	NA1	x	149	3.95	8	x	x	x	x	x
61	Costa Rica	NA1	66.08	8.95	82	0.24	61	67.02	72	0.25	55
166	Cote d'Ivoire (Ivory Coast)	NA1	152.58	2.05	122	0.01	157	0.21	165	0.00	166
49	Croatia	A1	56.92	69.26	40	1.53	17	55.51	78	0.11	89
36	Cuba	NA1	49.83	7.58	85	0.09	99	2357.96	5	3.77	9
105	Cyprus	NA1	98.67	3.47	111	0.46	41	3.72	128	0.03	118
62	Czech Republic	A1	66.25	6.74	89	0.07	108	584.02	22	0.36	40
114	Denmark	A1	105.92	0.84	142	0.02	151	207.72	44	0.14	76
98	Djibouti	NA1	94.67	9.21	81	1.43	19	0.30	162	0.02	128
72	Dominica	NA1	74.83	0.26	155	0.15	77	35.25	91	7.25	5
8	Dominican Republic	NA1	27.58	222.26	20	2.93	15	191.06	47	0.45	33
21	Ecuador	NA1	36.83	64.79	41	0.55	33	257.01	38	0.39	36
109	Egypt	NA1	103.00	42.42	50	0.07	108	26.36	95	0.01	143
37	El Salvador	NA1	50.08	22.32	65	0.42	46	106.98	60	0.38	37
173	Eritrea	NA1	164.58	0.16	158	0.00	165	0.05	171	0.00	166
132	Estonia	A1	115.83	0.42	150	0.03	146	19.54	99	0.14	76
79	Ethiopia	NA1	80.67	116.68	26	0.19	66	11.27	110	0.03	118
50	Fiji	NA1	57.50	5.63	94	0.65	28	16.20	104	0.63	29
160	Finland	A1	147.92	0.16	158	0.00	165	7.87	117	0.01	143
22	France	A1	37.33	1983.53	6	3.53	12	1485.26	13	0.10	92
175	Gabon	NA1	168.50	0.00	171	0.00	165	0.01	175	0.00	166
112	Gambia	NA1	103.58	3.89	104	0.29	53	0.46	156	0.04	115
99	Georgia	NA1	95.08	3.74	107	0.08	106	14.53	107	0.15	72
23	Germany	A1	37.92	974.95	9	1.25	20	2249.34	6	0.11	89

Rank CRI	Country	Party	CRI (average ranking)	Death toll (annual Ø)	Rank death toll	Deaths per 100,000 inhabitants (annual Ø)	Rank deaths per 100,000 inhabitants	Total losses in million US\$ PPP (annual Ø)	Rank total losses in million US\$ PPP	Losses per GDP in % (annual Ø)	Rank losses per GDP in %
128	Ghana	NA1	114.58	9.42	78	0.05	123	3.30	130	0.02	128
60	Greece	A1	64.58	13.95	70	0.13	83	351.15	32	0.17	63
32	Grenada	NA1	47.67	2.11	121	1.05	23	88.94	66	12.17	2
24	Guatemala	NA1	38.58	75.42	37	0.72	26	137.40	53	0.33	42
157	Guinea	NA1	142.75	1.89	124	0.02	151	0.43	158	0.01	143
170	Guinea-Bissau	NA1	160.00	0.00	171	0.00	165	0.07	170	0.01	143
93	Guyana	NA1	90.33	0.32	152	0.04	134	43.84	83	2.19	15
6	Haiti	NA1	22.83	335.11	17	4.58	5	94.88	62	1.08	21
3	Honduras	NA1	12.00	339.58	16	5.56	4	660.10	20	3.37	11
83	Hungary	A1	81.83	8.84	83	0.09	99	153.25	50	0.12	84
122	Iceland	A1	112.08	1.89	124	0.51	37	1.10	145	0.01	143
7	India	NA1	25.83	3254.84	3	0.33	49	6132.10	3	0.38	37
25	Indonesia	NA1	39.17	306.79	18	0.16	74	1683.20	11	0.32	43
19	Iran, Islamic Re- public of	NA1	36.75	91.05	30	0.15	77	3120.48	4	0.68	28
125	Ireland	A1	113.50	1.84	127	0.05	123	47.45	82	0.05	112
113	Israel	NA1	104.08	2.95	114	0.05	123	82.17	69	0.07	100
12	Italy	A1	30.25	2071.42	4	3.80	9	1862.50	10	0.14	76
55	Jamaica	NA1	60.58	4.16	103	0.16	74	172.77	48	0.96	25
70	Japan	A1	73.25	70.21	39	0.06	116	2206.45	7	0.07	100
136	Jordan	NA1	118.42	2.58	117	0.06	116	4.53	125	0.03	118
115	Kazakhstan	NA1	106.58	10.68	75	0.07	108	12.84	109	0.02	128
102	Kenya	NA1	96.33	36.63	53	0.13	83	7.24	118	0.02	128
171	Kiribati	NA1	160.50	0.00	171	0.00	165	0.03	173	0.01	143
x	Korea, Democratic People's Republic of	NA1	x	35	x	x	x	x	x	x	X
35	Korea, Republic of	NA1	49.25	87.00	33	0.19	66	1265.21	15	0.16	66
165	Kuwait	NA1	152.33	0.89	140	0.04	134	0.05	171	0.00	166
59	Kyrgyzstan	NA1	64.42	20.84	67	0.43	44	16.13	106	0.24	57
109	Lao People's Democratic Re- public	NA1	103.00	2.32	119	0.05	123	10.59	111	0.15	72
75	Latvia	A1	76.17	3.53	110	0.14	80	57.34	76	0.29	48
132	Lebanon	NA1	115.83	1.68	131	0.05	123	17.28	102	0.06	106
140	Lesotho	NA1	121.58	1.21	135	0.06	116	1.14	141	0.06	106
158	Liberia	NA1	145.75	0.16	158	0.01	157	0.18	166	0.03	118
167	Libyan Arab Jama- hiriya	NA1	153.17	0.00	171	0.00	165	3.38	129	0.01	143
152	Liechtenstein	A1	136.00	0.05	167	0.15	77	0.22	164	0.01	143
106	Lithuania	A1	98.83	2.53	118	0.07	108	38.42	86	0.12	84
148	Luxembourg	A1	133.33	0.00	171	0.00	165	19.08	100	0.08	98
100	Macedonia, the former Yugoslav Republic	NA1	96.00	0.89	140	0.04	134	53.45	79	0.32	43
26	Madagascar	NA1	40.50	81.53	36	0.53	34	62.64	74	0.51	32
82	Malawi	NA1	81.75	31.37	58	0.29	53	4.58	124	0.07	100
64	Malaysia	NA1	69.58	50.37	48	0.23	63	152.57	51	0.07	100
143	Maldives	NA1	123.67	0.00	171	0.00	165	2.28	136	0.28	51
163	Mali	NA1	150.75	1.89	124	0.02	151	0.32	160	0.00	166
155	Malta	NA1	140.50	0.00	171	0.00	165	3.87	127	0.06	106
x	Marshall Islands	NA1	x	167	0.12	89	x	x	x	x	X
137	Mauritania	NA1	118.58	2.95	114	0.12	89	0.85	151	0.02	128
95	Mauritius	NA1	93.58	0.58	146	0.05	123	37.28	88	0.42	35
30	Mexico	NA1	44.83	161.26	22	0.18	70	1867.38	9	0.19	61
47	Micronesia, Federa- ted States of	NA1	56.83	3.37	112	3.06	14	0.93	150	39.34	1
51	Moldova, Republic of	NA1	57.58	5.32	97	0.14	80	151.68	52	2.35	14
16	Mongolia	NA1	36.42	11.74	74	0.50	39	276.58	37	5.61	6
73	Morocco	NA1	75.58	24.26	64	0.09	99	112.50	57	0.14	76
19	Mozambique	NA1	36.75	85.63	34	0.51	37	88.02	68	0.97	23
2	Myanmar	NA1	8.25	4522.42	2	9.60	1	707.24	19	2.55	13
107	Namibia	NA1	99.58	3.32	113	0.18	70	5.58	123	0.07	100
13	Nepal	NA1	34.83	284.11	19	1.24	21	70.07	71	0.37	39
54	Netherlands	A1	59.83	89.95	32	0.59	32	245.23	39	0.05	112
83	New Zealand	A1	81.83	3.68	108	0.10	94	117.31	56	0.16	66
5	Nicaragua	NA1	21.00	164.37	21	3.37	13	211.11	43	2.03	16
96	Niger	NA1	94.00	6.68	90	0.07	108	8.20	115	0.14	76
121	Nigeria	NA1	110.08	39.89	51	0.04	134	23.82	97	0.01	143
x	Niue	NA1	x	167	4.39	6	0.00	176	x	x	X
141	Norway	A1	122.67	1.26	134	0.03	146	51.59	80	0.03	118
40	Oman	NA1	52.17	5.47	95	0.24	61	365.68	31	0.96	24
27	Pakistan	NA1	40.67	480.84	12	0.37	48	419.41	28	0.17	63
101	Panama	NA1	96.17	9.26	80	0.32	50	4.43	126	0.02	128
39	Papua New Guinea	NA1	51.75	35.05	56	0.71	27	26.67	94	0.31	46
131	Paraguay	NA1	115.67	5.89	93	0.12	89	2.34	135	0.01	143
43	Peru	NA1	53.92	104.58	28	0.44	43	154.62	49	0.12	84

Rank CRI	Country	Party	CRI (average ranking)	Death toll (annual Ø)	Rank death toll	Deaths per 100,000 inhabitants (annual Ø)	Rank deaths per 100,000 inhabitants	Total losses in million US\$ PPP (annual Ø)	Rank total losses in million US\$ PPP	Losses per GDP in % (annual Ø)	Rank losses per GDP in %
9	Philippines	NA1	27.67	799.05	10	1.11	22	544.20	24	0.30	47
68	Poland	A1	70.33	26.00	62	0.07	108	574.83	23	0.15	72
16	Portugal	A1	36.42	146.26	23	1.49	18	317.36	35	0.19	61
31	Romania	A1	47.33	57.84	44	0.27	58	433.83	27	0.27	52
58	Russian Federation	A1	64.08	130.58	24	0.09	99	1258.80	16	0.10	92
138	Rwanda	NA1	119.00	7.05	88	0.10	94	0.48	155	0.01	143
74	Saint Kitts and Nevis	NA1	75.58	0.21	157	0.14	80	36.45	90	7.80	4
92	Saint Lucia	NA1	89.08	0.32	152	0.13	83	6.96	120	0.57	31
89	Saint Vincent and the Grenadines	NA1	84.00	0.58	146	0.28	56	2.78	133	0.43	34
53	Samoa	NA1	59.00	1.16	138	0.43	44	58.27	75	9.19	3
147	Saudi Arabia	NA1	130.92	7.26	87	0.04	134	5.61	122	0.00	166
145	Senegal	NA1	126.33	4.79	99	0.05	123	1.30	139	0.01	143
97	Serbia, Montenegro and Kosovo	NA1	94.58	0.32	152	0.00	165	227.50	40	0.82	26
176	Seychelles	NA1	168.67	0.00	171	0.00	165	0.00	176	0.00	166
149	Sierra Leone	NA1	133.58	1.84	127	0.04	134	0.56	154	0.02	128
172	Singapore	NA1	161.92	0.11	162	0.00	165	0.96	149	0.00	166
88	Slovakia	A1	83.92	4.47	101	0.08	106	99.79	61	0.16	66
44	Slovenia	A1	55.00	12.37	72	0.62	30	88.74	67	0.25	55
56	Solomon Islands	NA1	60.75	10.68	75	2.11	16	2.81	132	0.29	48
66	South Africa	NA1	70.00	55.26	45	0.13	83	276.78	36	0.09	96
14	Spain	A1	35.50	1450.89	8	3.72	10	1057.02	18	0.12	84
67	Sri Lanka	NA1	70.25	32.84	57	0.19	66	64.58	73	0.13	82
77	Sudan	NA1	76.92	38.74	52	0.13	83	49.70	81	0.11	89
164	Suriname	NA1	151.50	0.16	158	0.03	146	0.15	167	0.01	143
150	Swaziland	NA1	133.67	0.58	146	0.06	116	0.80	153	0.02	128
130	Sweden	A1	115.33	1.32	133	0.02	151	136.49	54	0.06	106
29	Switzerland	A1	42.58	62.47	43	0.91	24	368.52	29	0.17	63
162	Syrian Arab Republic	NA1	150.00	1.84	127	0.01	157	1.13	142	0.00	166
14	Tajikistan	NA1	35.50	30.26	59	0.50	39	216.83	42	3.33	12
103	Tanzania, United Republic of	NA1	96.75	30.05	61	0.10	94	8.84	112	0.03	118
41	Thailand	NA1	52.92	108.79	27	0.19	66	444.42	26	0.14	76
169	Timor-Leste	NA1	155.58	0.11	162	0.01	157	0.08	169	0.01	143
151	Togo	NA1	134.50	1.21	135	0.02	151	1.13	142	0.03	118
104	Tonga	NA1	97.08	0.11	162	0.05	123	7.08	119	1.77	18
153	Trinidad and Tobago	NA1	138.00	0.68	145	0.05	123	1.24	140	0.01	143
119	Tunisia	NA1	108.58	4.89	98	0.05	123	24.24	96	0.05	112
85	Turkey	A1	82.08	53.89	46	0.09	99	198.85	45	0.04	115
154	Turkmenistan	NA1	138.33	0.00	171	0.00	165	8.45	114	0.06	106
x	Tuvalu	NA1	x	171	0.00	165	0.00	176	x	x	X
126	Uganda	NA1	113.58	21.95	66	0.09	99	1.01	148	0.01	143
64	Ukraine	A1	69.58	63.05	42	0.13	83	196.97	46	0.10	92
156	United Arab Emirates	NA1	141.58	0.11	162	0.00	165	16.32	103	0.02	128
47	United Kingdom	A1	56.83	125.95	25	0.22	65	1407.31	14	0.09	96
18	United States	A1	36.50	417.68	14	0.16	74	30556.17	1	0.32	43
90	Uruguay	NA1	88.17	5.42	96	0.17	72	26.71	93	0.10	92
129	Uzbekistan	NA1	114.75	9.32	79	0.04	134	8.72	113	0.02	128
108	Vanuatu	NA1	100.00	0.11	162	0.04	134	7.94	116	1.29	20
11	Venezuela	NA1	29.92	1595.84	7	7.01	2	342.25	34	0.16	66
4	Viet Nam	NA1	18.83	465.68	13	0.64	29	1525.44	12	1.31	19
45	Yemen, Republic of	NA1	55.08	48.21	49	0.28	56	89.54	65	0.26	54
76	Zambia	NA1	76.75	3.79	105	0.04	134	109.19	58	1.04	22
94	Zimbabwe	NA1	92.17	9.63	77	0.09	99	1.10	145	0.15	72

Table 6: Climate Risk Index 2008: all countries (UNFCCC Parties)

Rank CRI	Country	Party	CRI score (average ranking)	Death toll 2008	Rank death toll	Deaths per 100,000 inhabitants 2008	Rank deaths per 100,000 inhabitants	Total losses in million US\$ PPP (annual Ø)	Rank total losses in million US\$ PPP	Losses per GDP in % (annual Ø)	Rank losses per GDP in %
19	Afghanistan	NA1	28.00	1000	4	3.55	4	2.83	58	0.01	49
45	Algeria	NA1	48.00	96	16	0.28	24	0.80	94	0.00	67
67	Angola	NA1	58.83	11	49	0.07	45	1.25	78	0.00	67
60	Antigua and Barbuda	NA1	53.00	0	92	0.00	88	47.85	38	2.94	5
32	Argentina	NA1	39.42	9	56	0.02	73	1234.99	9	0.22	17
26	Australia	A1	33.17	10	52	0.05	54	1921.38	8	0.24	16
22	Austria	A1	28.83	12	45	0.14	33	526.28	16	0.16	20
118	Bahamas	NA1	86.17	0	92	0.00	88	0.06	113	0.00	67
51	Bangladesh	NA1	50.42	63	19	0.04	58	4.78	53	0.00	67
114	Belgium	A1	83.83	0	92	0.00	88	0.39	99	0.00	67
9	Belize	NA1	15.83	15	38	4.69	2	123.74	27	4.86	4
99	Benin	NA1	75.33	0	92	0.00	88	0.97	84	0.01	49
61	Bhutan	NA1	54.50	12	45	1.83	7	0.03	115	0.00	67
17	Brazil	NA1	24.83	179	10	0.09	40	947.91	10	0.05	32
76	Bulgaria	A1	65.92	5	72	0.07	45	0.94	86	0.00	67
58	Burkina Faso	NA1	52.83	30	33	0.21	25	0.44	96	0.00	67
116	Cambodia	NA1	85.17	0	92	0.00	88	0.13	107	0.00	67
83	Cameroon	NA1	68.83	6	65	0.03	61	0.87	90	0.00	67
62	Canada	A1	54.83	6	65	0.02	73	132.58	24	0.01	49
66	Central African Republic	NA1	58.75	3	76	0.07	45	0.81	93	0.03	39
92	Chad	NA1	72.33	0	92	0.00	88	1.93	66	0.01	49
56	Chile	NA1	51.25	5	72	0.03	61	79.13	30	0.03	39
8	China	NA1	15.50	1113	3	0.08	43	47497.91	2	0.60	11
16	Colombia	NA1	24.42	146	11	0.30	22	165.33	23	0.04	37
28	Costa Rica	NA1	33.92	9	56	0.20	27	59.88	35	0.12	22
21	Cuba	NA1	28.58	7	62	0.06	49	26242.62	3	20.91	1
81	Cyprus	NA1	68.17	1	84	0.13	36	0.50	95	0.00	67
48	Czech Republic	A1	49.58	3	76	0.03	61	121.60	28	0.05	32
107	Denmark	A1	79.00	0	92	0.00	88	1.80	70	0.00	67
55	Dominica	NA1	51.17	0	92	0.00	88	69.90	31	9.62	3
53	Dominican Republic	NA1	50.67	15	38	0.17	32	2.02	65	0.00	67
12	Ecuador	NA1	19.33	43	25	0.31	21	317.14	19	0.29	14
91	El Salvador	NA1	71.42	2	80	0.03	61	1.01	83	0.00	67
49	Ethiopia	NA1	49.92	45	22	0.06	49	2.83	59	0.00	67
67	Fiji	NA1	58.83	7	62	0.80	10	0.10	111	0.00	67
52	France	A1	50.50	8	60	0.01	80	624.56	15	0.03	39
78	Gambia	NA1	66.67	0	92	0.00	88	1.54	74	0.07	28
77	Georgia	NA1	66.00	6	65	0.14	33	0.03	115	0.00	67
35	Germany	A1	40.92	12	45	0.01	80	2563.44	6	0.09	26
105	Ghana	NA1	77.67	3	76	0.01	80	0.41	98	0.00	67
117	Greece	A1	85.67	0	92	0.00	88	0.11	110	0.00	67
34	Guatemala	NA1	39.83	70	17	0.51	13	2.67	60	0.00	67
85	Guinea	NA1	70.00	0	92	0.00	88	2.42	62	0.02	44
80	Guinea-Bissau	NA1	67.17	0	92	0.00	88	0.92	87	0.11	23
15	Haiti	NA1	24.08	316	8	3.60	3	4.33	54	0.04	37
20	Honduras	NA1	28.17	34	30	0.44	16	23.53	44	0.07	28
10	India	NA1	16.58	2439	2	0.21	25	2606.06	5	0.08	27
39	Indonesia	NA1	45.00	127	13	0.06	49	26.59	43	0.00	67
44	Iran, Islamic Republic of	NA1	47.33	24	37	0.03	61	40.99	39	0.01	49
119	Ireland	A1	86.50	0	92	0.00	88	0.03	115	0.00	67
89	Israel	NA1	71.17	1	84	0.01	80	7.03	47	0.00	67
37	Italy	A1	43.92	26	35	0.04	58	126.47	26	0.01	49
13	Jamaica	NA1	21.17	13	44	0.48	14	190.60	22	0.79	9
88	Japan	A1	71.08	6	65	0.00	88	2.32	63	0.00	67
90	Kazakhstan	NA1	71.33	1	84	0.01	80	6.56	48	0.00	67
84	Kenya	NA1	69.50	6	65	0.02	73	1.45	76	0.00	67
102	Korea, Democratic People's Republic of	NA1	76.83	0	92	0.00	88	3.28	57	0.00	67
71	Korea, Republic of	NA1	59.58	15	38	0.03	61	1.52	75	0.00	67
98	Kuwait	NA1	74.75	1	84	0.03	61	0.43	97	0.00	67
29	Kyrgyzstan	NA1	34.50	120	14	2.26	6	1.15	79	0.01	49
38	Lao People's Democratic Republic	NA1	44.83	11	49	0.18	31	2.48	61	0.02	44
86	Liberia	NA1	70.17	0	92	0.00	88	0.90	89	0.06	31
87	Luxembourg	A1	70.67	0	92	0.00	88	3.65	56	0.01	49
97	Macedonia, the former Yugoslav Republic	NA1	74.17	1	84	0.05	54	0.20	104	0.00	67
6	Madagascar	NA1	14.25	106	15	0.52	12	127.88	25	0.64	10

93	Malawi	NA1	73.08	4	74	0.03	61	0.27	102	0.00	67
65	Malaysia	NA1	57.75	31	31	0.11	38	0.12	109	0.00	67
107	Maldives	NA1	79.00	0	92	0.00	88	0.14	106	0.01	49
100	Mali	NA1	76.50	0	92	0.00	88	0.86	91	0.01	49
39	Marshall Islands	NA1	45.00	0	92	0.00	88	x	x		
33	Mexico	NA1	39.58	27	34	0.03	61	474.31	17	0.03	39
69	Moldova, Republic of	NA1	58.92	2	80	0.06	49	1.76	72	0.02	44
27	Mongolia	NA1	33.58	44	23	1.66	8	1.89	67	0.02	44
46	Morocco	NA1	48.33	31	31	0.10	39	5.40	51	0.00	67
7	Mozambique	NA1	14.67	69	18	0.33	18	229.11	20	1.22	7
1	Myanmar	NA1	1.83	84537	1	143.77	1	10375.43	4	15.27	2
41	Namibia	A1	45.50	47	21	2.28	5	0.36	100	0.00	67
11	Nepal	NA1	18.50	132	12	0.48	14	54.14	36	0.17	18
100	Netherlands	A1	76.50	0	92	0.00	88	3.86	55	0.00	67
23	New Zealand	A1	29.42	14	43	0.33	18	83.16	29	0.07	28
24	Nicaragua	NA1	30.42	18	38	0.29	23	18.38	45	0.11	23
70	Niger	NA1	59.50	7	62	0.05	54	0.95	85	0.01	49
110	Nigeria	NA1	80.00	4	74	0.00	88	0.26	103	0.00	67
109	Norway	A1	79.17	0	92	0.00	88	1.79	71	0.00	67
57	Pakistan	NA1	52.00	44	23	0.03	61	5.16	52	0.00	67
30	Panama	NA1	35.58	11	49	0.32	20	17.59	46	0.05	32
47	Papua New Guinea	NA1	48.75	12	45	0.19	30	1.05	82	0.01	49
103	Paraguay	NA1	77.25	2	80	0.03	61	0.02	118	0.00	67
42	Peru	NA1	46.33	15	38	0.05	54	29.20	42	0.01	49
4	Philippines	NA1	10.50	785	5	0.87	9	796.47	12	0.25	15
63	Poland	A1	56.33	6	65	0.02	73	63.58	33	0.01	49
112	Portugal	A1	82.33	1	84	0.01	80	0.05	114	0.00	67
31	Romania	A1	36.17	43	25	0.20	27	31.14	41	0.01	49
96	Russian Federation	NA1	73.67	1	84	0.00	88	5.74	50	0.00	67
104	Saint Kitts and Nevis	NA1	77.50	0	92	0.00	88	0.13	107	0.02	44
72	Saint Vincent and the Grenadines	NA1	62.83	0	92	0.00	88	1.81	69	0.17	19
94	Saudi Arabia	NA1	73.50	1	84	0.00	88	6.32	49	0.00	67
113	Senegal	NA1	82.67	0	92	0.00	88	0.82	92	0.00	67
54	Slovakia	A1	50.83	2	80	0.04	58	63.24	34	0.05	32
58	Slovenia	A1	52.83	0	92	0.00	88	217.47	21	0.37	13
14	South Africa	NA1	23.08	60	20	0.12	37	774.39	13	0.16	20
75	Spain	A1	65.25	9	56	0.02	73	2.29	64	0.00	67
25	Sri Lanka	NA1	30.83	41	29	0.20	27	50.29	37	0.05	32
64	Sudan	NA1	57.25	25	36	0.07	45	0.91	88	0.00	67
106	Suriname	NA1	78.17	0	92	0.00	88	0.30	101	0.01	49
111	Sweden	A1	80.67	0	92	0.00	88	1.14	80	0.00	67
50	Switzerland	A1	50.00	6	65	0.08	43	40.50	40	0.01	49
79	Tanzania, United Republic of	NA1	66.92	8	60	0.02	73	1.82	68	0.00	67
35	Thailand	NA1	40.92	42	28	0.06	49	68.17	32	0.01	49
115	Togo	NA1	84.83	0	92	0.00	88	0.19	105	0.00	67
120	Tonga	NA1	87.00	0	92	0.00	88	0.02	118	0.00	67
81	Turkey	A1	68.17	10	52	0.01	80	1.34	77	0.00	67
94	Uganda	NA1	73.50	3	76	0.01	80	1.69	73	0.00	67
18	Ukraine	A1	26.92	43	25	0.09	40	376.51	18	0.11	23
43	United Kingdom	A1	46.58	10	52	0.02	73	674.22	14	0.03	39
5	United States	A1	13.92	429	6	0.14	33	67476.97	1	0.47	12
74	Venezuela	NA1	65.08	9	56	0.03	61	1.12	81	0.00	67
3	Viet Nam	NA1	9.58	378	7	0.44	16	2423.03	7	1.01	8
2	Yemen, Republic of	NA1	8.58	184	9	0.80	10	823.41	11	1.49	6
73	Zambia	NA1	64.00	10	52	0.09	40	0.07	112	0.00	67

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Germanwatch

Following the motto "Observing, Analysing, Acting", Germanwatch has been actively promoting North-South equity and the preservation of livelihoods since 1991. In doing so, we focus on the politics and economics of the North with 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 endeavour to approach our aims by advocating fair trade relations, responsible financial markets, compliance with human rights, and the prevention of dangerous climate change.

Germanwatch is funded by membership fees, donations, grants from the "Stiftung Zukunftsfähigkeit" (Foundation for Sustainability), and by grants from a number of other public and private donors.

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