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# Climate Adaptation Finance Index 2023

How equitably finance for climate adaptation is distributed

# Contents

<b>Foreword</b>	<b>3</b>
<b>Executive Summary</b>	<b>4</b>
<b>The key issues: climate risk, vulnerability and adaptation</b>	<b>5</b>
<b>Unequal access: Climate Adaptation Finance Index 2023</b>	<b>7</b>
<b>Classifying the results: data basis, method and significance</b>	<b>14</b>
<b>The most disadvantaged: countries with the greatest climate risk</b>	<b>17</b>
<b>Particularly precarious: climate adaptation funding for fragile countries affected by conflicts</b>	<b>19</b>
<b>In particular focus: LDCs and small island states</b>	<b>21</b>
<b>A question of income: fair access to funding</b>	<b>23</b>
<b>It's not over yet: debt burden and climate adaptation</b>	<b>25</b>
<b>No climate justice: a comparison of global regions</b>	<b>27</b>
Africa	27
Asia	31
Caribbean	33
Latin America	35
Oceania	37
<b>Conclusions and political recommendations</b>	<b>39</b>
Index of figures	43
Abbreviations	43
Imprint	44

## Foreword



Dr Dagmar Pruin, President of Brot für die Welt

Climate change is in full swing. Heavy rain, flooding, drought and storms are becoming more frequent and far more severe. This extreme weather tends to hit the poorest levels of society particularly hard. They are impacted more frequently as a result of the geographic location of their homes and, due to their poverty, they have fewer options for adapting to these changes on their own.

Extreme weather events in states with low incomes thus lead to more victims, disproportionately high economic damage, and to a large number of displaced persons. Climate change is thus doing the most harm to the people who bear the least responsibility for it. This is why the UN Framework Convention on Climate Change and the Paris Agreement have declared finance for climate adaptation a key goal. In fact, one of the Paris Agreement's main objectives is to strengthen climate resilience – which refers to the ability to resist the consequences of climate change – in developing countries.

For years, Brot für die Welt has been fighting for climate justice and demanding an appropriate share of climate finance for the poorest and most vulnerable population groups. This is because, when there is a lack of adaptation measures, when these fall short or are no longer possible because the climate crisis is too far gone, loss and damage occur which are linked with much higher costs and human suffering. The limits of

adaptation have already been reached in many places, often because of insufficient capacities to manage climate change. We need to increase these capacities significantly, and finance them in accordance with the “polluter pays principle”.

While the need for adaptation grows steadily, the financial assistance provided is very low and is not nearly enough to meet people's needs. For instance, up until now, only eleven per cent of the adaptation funding needed by African countries has been met. As temperatures continue to increase, the risk gap is growing along with them.

While industrialised countries have never quite honoured their original funding promises from the Paris Agreement on climate change mitigation and adaptation, there are already ongoing negotiations about a new climate funding target starting in 2025. At the same time, negotiations are also taking place about how to provide funding for climate-related loss and damage which have already occurred.

With our “Climate Adaptation Finance Index: How equitably finance for climate adaptation is distributed” (Anpassungsindex: Wie das Geld für die Anpassung an den Klimawandel verteilt wird), Brot für die Welt seeks to increase transparency about where the funds are utilised and contribute to the debate over what we see as the most important question: “Is the funding, scarce as it is, at least reaching the people who are exposed to the greatest climate risks?”

An index alone does not lead to more climate justice, but it helps us to ask the right questions. For example: “Is the funding reaching the people who are the most affected?” With our Climate Adaptation Finance Index, we are adding momentum to the crucial debate about the direction and priorities which guide how adaptation funding is provided. We also seek to advance the discussion about the future use of funds for tackling loss and damage.

Dr Dagmar Pruin  
*President of Brot für die Welt*

## Executive Summary

The Climate Adaptation Finance Index measures how equitably international climate adaptation finance is distributed among the countries of the Global South according to their climate risk. This creates transparency on how successfully the climate policy goal of providing financial support primarily to the most vulnerable countries is being implemented.

The index, which was calculated for 129 countries based on 2014-2020 data, takes into account two factors: country-specific climate risk, based on adjusted data from the “EU Inform Risk Index” <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Risk>, and financial inflows, based on data from the OECD-DAC database on adaptation finance <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data>.

The results are clear: there is a serious lack of distributive equity in international adaptation finance: the 14 countries with the highest climate risk are also the 14 most underfunded countries, with Afghanistan at the top, followed by South Sudan, Niger, Sudan, Yemen, Uganda, Somalia, Mali, Iraq, Ethiopia, Syria, Mauritania, and Mozambique. If absolute funding inflows are chosen as the basis for calculation instead of per capita

funding received, nothing fundamental changes here: Ethiopia and Mozambique are the only two countries to improve their ranking reasonably significantly. The lack of risk-appropriate financing, which applies to the most vulnerable states in particular, can be generalised in a somewhat weakened form for the countries as a whole. Fewer than one in four of the 129 countries surveyed received risk-appropriate financing in the 2014-2020 period. This means that most countries, but especially the most vulnerable, are at risk of a permanent resilience gap, making the achievement of the SDGs a distant prospect. The German government, other donor countries, and the international community should therefore make it a priority to create more distributive equity in access to international climate adaptation finance and thus better access for particularly vulnerable countries – and also to massively increase climate adaptation finance.

The index is an important but not sufficient assessment criterion for climate adaptation finance: it only measures the distribution of available funds in relation to country-specific climate risks and does not provide any information on the absolute amounts that would be required to make a country climate resilient.



Vulnerable countries have little to counter climate change. In Bangladesh, the sea is gnawing away at the sparse coastal defences.

# The key issues: climate risk, vulnerability and adaptation

The climate crisis is the greatest threat of our time, and it endangers human security, socio-economic development and the stability of our ecosystems in almost all parts of the world. According to the latest status report from the “Intergovernmental Panel on Climate Change” (IPCC) [https://report.ipcc.ch/ar6/wg2/IPCC\\_AR6\\_WGII\\_Full-Report.pdf](https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_Full-Report.pdf) nearly half of the global population is already exposed to major climate risks today. According to the IPCC, this might be true for almost the whole of humanity within the next ten to fifteen years.

In order to limit and tackle the risks of climate change before they become uncontrollable, we need to take immediate and much more decisive action on all levels, according to the IPCC: in our transition to climate neutrality, in adapting to climate-related changes which have already occurred, as well as in compensating for loss and damage which could not be avoided. In developing countries, the greatest obstacle to successful action on all three levels is the lack of sufficient financial resources. According to the IPCC, this is particularly true for climate adaptation and the management of loss and damage. For us to increase adaptation capacities before the hard limits of adaptation are reached and

to successfully hold climate risks to a manageable level, we need to significantly increase the financial resources for climate adaptation, and fast. However, according to the IPCC, we are still very far away from reaching that goal: in recent years, the gaps in protection against or resilience to climate risks have increased significantly. The longer it takes us to reverse the trend, the higher the costs will be, and the greater the risk that adaptation will no be longer possible and that high levels of loss and damage will become inevitable. Without a significant growth in international support, it will not be possible to reverse the trend, particularly for the poorest countries and the countries most at climate risk, especially with global inflation and growing debt burdens due to the pandemic and climate change. With this comes high funding costs, and various factors come into play which narrow the financial leeway for many countries.

Fair access to funding is a fundamental requirement for overcoming vulnerability and ensuring climate justice. The climate-related vulnerability of people, societal groups, communities and whole countries is not merely due to their geographical or physical exposure to climate-related hazards such as storms, flooding, drought or



Evelyn and Gift Dirani suffered severe losses due to the drought in eastern Zimbabwe – a result of climate change. Farai Gumisai from the Brot für die Welt partner organisation TSURO is advising them on adaptation measures.

heat. For the most part, it is also due to a lack of equality. Without more social equality, gender equality, equal participation and distribution, there can be no successful path to climate-resilient development, according to the IPCC. Justice is therefore not just a result, but also a requirement for a successful transition to net-zero and a more resilient world where the goals of sustainable development are a reality. The poorest population groups are often particularly vulnerable to climate change. The future effects of climate change are very likely to worsen poverty and intensify the inequalities within and between countries. In order to enable climate-resilient development routes for everyone, there is a pressing need for better access to climate information, agricultural adaptation, maintenance ecosystem services, sustainable use of natural resources, adapted social security networks, healthcare, coastal protection, climate-resilient upgrading of towns and supply chains, disaster risk reduction and safeguarding against loss and damage. This will require considerable investments.

brief profiles of selected example countries. The conclusion presents our reasoning and our recommendations for political action to ensure greater distributive equity in climate adaptation funding.

## Why we developed the Climate Adaptation Finance Index

Fair access to adaptation funding which is based on a country's climate risk is not the only step in reducing vulnerability and establishing climate justice – but it is an important step. This is why we have developed an index which allows you to see whether the share of global climate adaptation funding that a country receives is commensurate with its level of risk. This creates transparency and serves as a guide for how to ensure more equitable distribution.

In following, we present the index and the rankings of the 129 countries examined, and then explain the methodological basis of calculation before analysing and classifying the results. All developing countries for which the OECD-DAC database provides climate change adaptation inflows in the period 2014 to 2020 are taken into account, with the exception of the oil and gas exporting countries of the Arabian Peninsula and of the Western Balkan states. In doing so, we will show that certain groups of countries have better access to climate funding than other groups of countries, and we will identify features and characteristics which correlate with significant underfunding. The analytical section is rounded off with

# Unequal access: Climate Adaptation Finance Index 2023

The Climate Adaptation Finance Index shows how well the climate adaptation funding that a country receives matches the country's specific climate risk for the years 2014 to 2020. This provides transparency and allows us to determine how well we are meeting the internationally agreed goal of providing financial support to the most vulnerable countries.

If the total funding available was distributed fairly based on the climate risk criterion, or climate vulnerability, the index value for all 129 analysed countries would be 1. If values are greater than 1, a country is receiving more than its risk-appropriate share. The further below 1 the value falls, the greater a country is underfunded, as measured by its risk. All values are relative values: they measure the distributive equity based on the funding available. They say nothing about how high the actual costs are for a country to adapt to climate change.

## More than 80 per cent of all developing countries are underfunded, as measured by their climate risk

The index unearths some very sobering findings. Between 2014 and 2020, less than one in every four developing countries received a fair share of financing, as measured by their climate risk, to strengthen their climate resilience. This means that the existing international adaptation funding is not being distributed in a fair manner in terms of risk. In fact, the vulnerability criterion hardly plays a role at all: if you calculate the index based on funding received per capita, there are 38 recipient countries who receive less than half of their risk-appropriate share (extremely underfunded). A further 51 countries receive a maximum of 64 per cent (highly underfunded), 20 countries a maximum of 80 per cent (underfunded), 17 between 81 and 99 per cent (adequately funded) and three island states receive more than this: the Marshall Islands, Nauru and Tuvalu.

If you calculate the index of global distribution of international adaptation funding based on the inflows in absolute numbers, and disregard the population size of a country, the number of extremely underfunded countries decreases from 38 to 21 and the number of highly underfunded countries declines from 51 to 41. Accordingly, the number of underfunded countries doubles from 20 to

### The five categories of the Climate Adaptation Finance Index

**Well-funded:** Countries in the first category (index values greater than 1) receive a share of the international climate funding which is greater than the share which corresponds to their climate risk. During the period from 2014 to 2020, only very few countries fall into this category: if you base the climate funding on an amount per capita, there are three countries in this category. If you look at absolute numbers, there are only two countries.

**Adequately funded:** Countries in the second category (index values greater than 0.8 and smaller than 1) receive a share of financing which roughly corresponds to their climate risk. There are 17 countries in this list from a per capita point of view, and 24 countries when using absolute numbers.

**Underfunded:** Countries in the third category (index values between 0.65 and 0.8) are underfunded. This category contains 20 countries on a per capita basis and 41 countries in absolute terms.

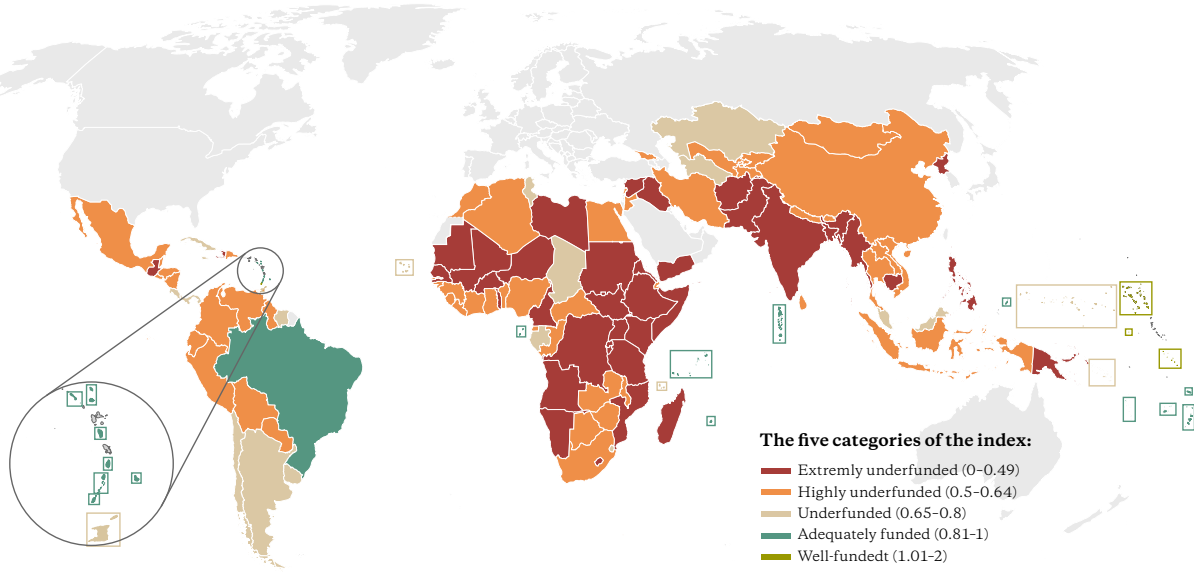
**Highly underfunded:** Countries in the fourth category (index values of at least 0.5 but less than 0.65) are highly underfunded, as measured by their climate risk. This means that they require considerably more financial support to be able to adapt to climate change. This category includes 51 countries on a per capita basis, and 41 countries in absolute terms.

**Extremely underfunded:** Countries in the fifth category (index values of less than 0.5) are the most extremely underfunded, as measured by their climate risk, and require a much better level of financial support and with the greatest urgency in order to reduce their climate vulnerability. There are 38 countries in this category based on per capita numbers, and 21 countries based on absolute numbers.

41 countries. Consequently, 24 countries are considered adequately funded and two countries (Brazil and India) are well funded. Using this calculation method, distributive equity improves a little, but still remains very low. This calculation method means that high absolute funding inflows lead to a better ranking.

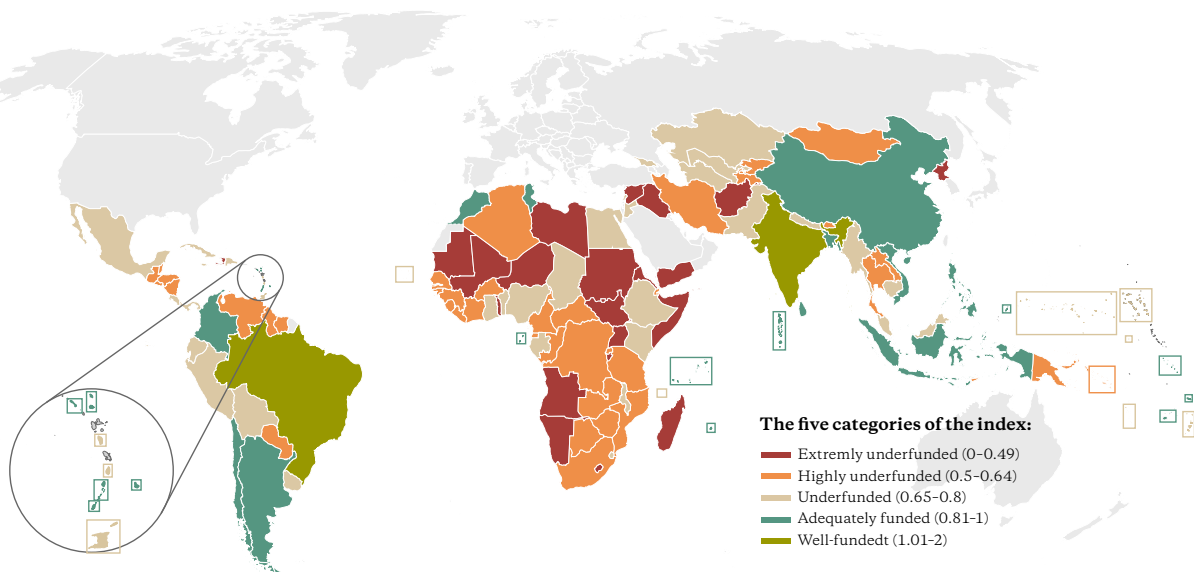
However, we consider the per capita method as more conclusive, as it more accurately captures the impact on individual people. Nevertheless, per capita observations also have their limits, for example, because costs

**Figure 1:** World map of adaptation funding distribution (Climate Adaptation Finance Index) per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020. Areas of Egypt's south-eastern border are disputed, as is also the case for the border of Sudan and South Sudan.

**Figure 2:** World map of adaptation funding distribution (Climate Adaptation Finance Index) in absolute numbers



The map is based on the committed adaptation funding for the countries in absolute numbers in the period 2014 to 2020. Areas of Egypt's south-eastern border are disputed, as is also the case for the border of Sudan and South Sudan.

for adaptation measures in countries with a smaller population generally become more expensive per person. At the end of the day, the differences between the two approaches are not very great for most countries. Large deviations are primarily seen in a few small, relatively vulnerable and also very populous states which receive a great deal of adaptation funding, such as India, Vietnam, Bangladesh, the Philippines or Indonesia. These countries perform better in the index calculation based on absolute funding inflows (adequately funded), but

slip down considerably when you take into account their large population. The only populous country which always obtains a relatively fair share, as measured by risk, whether calculated per capita or in absolute numbers, is Brazil. Furthermore, the ranking of small island states tends to improve using the per capita method.





Chad is one of the fragile states on high alert. Those who live here have to cope with severe climate fluctuations, like these women from the village Dougui.

## Underfunding ranking

The following table shows the underfunding rankings based on the per capita inflows of international climate adaptation funding (2014 to 2020). The most underfunded is Afghanistan, with a Climate Adaptation Finance Index value of 0.21, followed by South Sudan (0.26) and Niger (0.28). With climate risk values of 7.96, 7.46 and 7.24, respectively, these three countries are also assigned to the highest climate risk category (category 5), and in turn have the greatest individual values in this category. The table also shows other important commonalities for these countries and for the next five countries: all are countries with low incomes, are part of the group of least developed states (apart from Mali), or have a very high debt burden. They are also very fragile, which means they are categorised in the three highest fragility levels in the “Fragile States Index” developed by “The Fund for Peace” (FFP) for 2020 <https://fragilestatesindex.org/wp-content/uploads/2020/05/fsi2020-report.pdf>.

The rankings show the examined countries in ascending order from the lowest to the highest index value and, at the same time, allocates them to the five

funding categories from “extremely underfunded” to “well-funded”. Countries with a high to very high climate risk according to the *INFORM Risk Index*, as well as countries which were in one of the three highest fragility classes of the Fragile States Index in 2020, are indicated by special symbols (see key in figure). Also highlighted with their own symbols are all countries which belong to one or more of the three groups of states which are classed as “the most vulnerable states” in many international climate policy documents: least developed countries (LDCs), small island developing states (SIDS) and African states.

Figure 3: Ranking of underfunding for climate adaptation (Climate Adaptation Finance Index) per capita

Extremely underfunded			Value	Highly underfunded			Value
1	Afghanistan	L R F	0.21	39	Honduras	R	0.50
2	South Sudan	L A R F	0.26	40	Guinea-Bissau	L I R F	0.50
3	Niger	L A R F	0.28	41	Vietnam	R	0.50
4	Sudan	L A R F	0.30	42	Equatorial Guinea	A	0.51
5	Yemen	L R F	0.31	43	Jordan	R	0.51
6	Uganda	L A R F	0.32	44	Nigeria	A R F	0.51
7	Somalia	L A R F	0.33	45	Central African Rep.	L A R F	0.51
8	Mali	L A R F	0.33	46	Laos	R	0.51
9	Iraq	L A R F	0.34	47	Malawi	L A R	0.51
10	Ethiopia	L A R F	0.34	48	Tajikistan	R	0.51
11	Syrian Arab Republic	R F	0.34	49	The Gambia	L A	0.52
12	Mauritania	L A R F	0.34	50	Congo	A R F	0.52
13	Mozambique	L A R F	0.35	51	Bolivia	R	0.53
14	Haiti	L I R F	0.36	52	Ivory Coast	A	0.53
15	North Korea	R F	0.37	53	Peru	R	0.53
16	Burkina Faso	L A R	0.38	54	Mexico	R	0.53
17	Madagascar	L A R	0.38	55	Botswana	A	0.54
18	Eritrea	L A R F	0.41	56	Morocco	A	0.54
19	Burundi	L A R F	0.41	57	Sierra Leone	L A	0.54
20	Congo (Dem. Rep.)	L A R F	0.42	58	Zambia	L A R	0.54
21	Kenya	L A R F	0.42	59	Zimbabwe	A R F	0.55
22	Tanzania	L A R	0.42	60	Indonesia		0.55
23	Lesotho	L A R	0.42	61	EL Salvador		0.55
24	Angola	L A R	0.43	62	China		0.55
25	Senegal	L A R	0.44	63	Venezuela	F	0.55
26	Bangladesh	L R	0.44	64	Iran		0.55
27	Cameroon	L A R F	0.44	65	Liberia	L A F	0.56
28	Myanmar	L A R F	0.44	66	Paraguay		0.56
29	Togo	L A R	0.45	67	Nicaragua		0.56
30	Namibia	L A R	0.45	68	Thailand		0.56
31	Pakistan	L A R F	0.46	69	Ecuador		0.56
32	Rwanda	L A R	0.46	70	Benin	L A	0.57
33	Guatemala	L A R	0.48	71	Colombia	A R	0.57
34	Libya	L A R F	0.48	72	Guinea	L A R F	0.57
35	India	L A R	0.48	73	Mongolia		0.57
36	Cambodia	L R	0.48	74	Egypt		0.58
37	Philippines	L A R	0.49	75	East Timor	L I	0.58
38	Papua New Guinea	L R	0.49	76	Ghana	A	0.58
				77	Bhutan	L	0.59
				78	Georgia		0.60
				79	Djibouti	L A	0.60
				80	Sri Lanka		0.60
				81	Kyrgyzstan		0.61
				82	Nepal	L	0.61
				83	South Africa	A	0.61
				84	Uzbekistan		0.61
				85	Algeria	A	0.62
				86	Lebanon		0.63
				87	Guyana	I	0.63
				88	Belize	I	0.63
				89	Dominican Republic	I	0.64

Underfunded	Value	Adequately funded	Value	Well-funded	Value		
90	Gabon	A	0.65	110	Barbados	I	0.82
91	Suriname	I	0.65	111	St Kitts and Nevis	I	0.82
92	Cuba	I	0.65	112	Palau	I	0.83
93	Solomon Islands	L I	0.65	113	Fiji	I	0.85
94	Jamaica	I	0.65	114	Vanuatu	I	0.87
95	Turkmenistan		0.66	115	St Lucia	I	0.87
96	Eswatini	A	0.66	116	Mauritius	A I	0.87
97	Argentina		0.68	117	Tonga	I	0.88
98	Tunisia	A	0.68	118	Brazil		0.89
99	Panama		0.68	119	Dominica	I	0.91
100	Malaysia		0.68	120	Sao Tome and Principe	A I L	0.91
101	Chad	L R F	0.69	121	Antigua and Barbuda	I	0.92
102	Micronesia	I	0.71	122	Samoa	I	0.92
103	Kazakhstan		0.74	123	Maldives	I	0.95
104	Comoros	A I L	0.75	124	Seychelles	A I	0.98
105	Uruguay		0.76	125	St Vincent	I	0.99
106	Trinidad and Tobago	I	0.76	126	Grenada	I	1.00
107	Costa Rica		0.76				
108	Chile		0.80				
109	Cape Verde	A I	0.80				
127	Marshall Islands	I	1.03				
128	Nauru	I	1.22				
129	Tuvalu	I L	1.74				

**The five categories of the index:**

- Extremely underfunded (0-0.49)
- Highly underfunded (0.5-0.64)
- Underfunded (0.65-0.8)
- Adequately funded (0.81-1)
- Well-funded (1.01-2)

**Country types:**

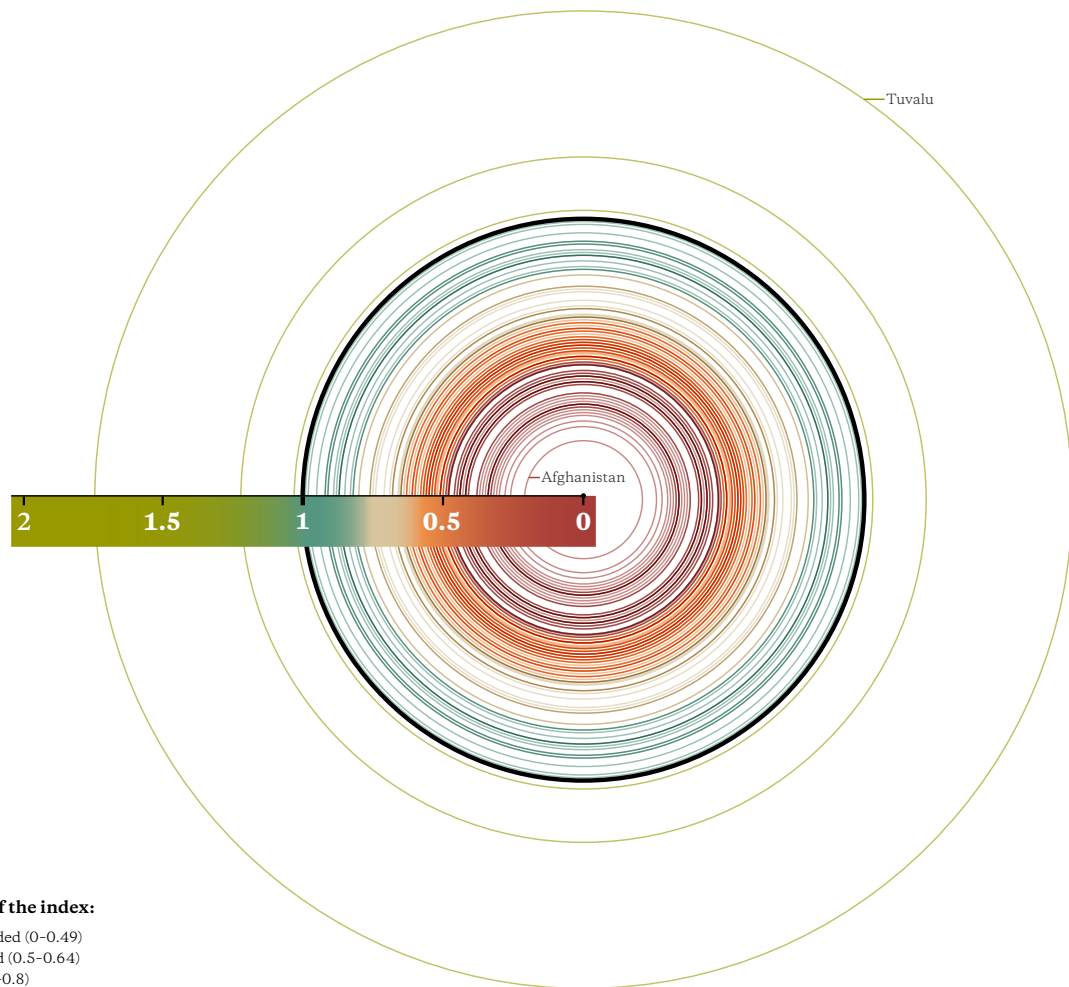
- L LDCs – least developed countries
- A African State
- I Small island state among the developing countries
- R State with high to very high climate risk
- F Countries in the three highest fragility levels

The ranking is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020

The pie chart (figure 4) supplementing the ranking shows the distribution of individual values in the index – with each coloured ring representing a country. The distances between the rings reflect the distances between the index values in a way which is true to scale. All rings within the

black ring show that the country in question obtains too small a share of international climate adaptation funding on a per capita basis relative to their risk, whereby the red, orange and yellow rings represent countries which are clearly underfunded.

**Figure 4:** Distribution of countries in the index per capita



The ranking is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020.

Figure 5: Ranking of underfunding for climate adaptation (Climate Adaptation Finance Index) in absolute numbers

Extremely underfunded			Value	Highly underfunded			Value	Underfunded			Value
1	Afghanistan	L R F	0.32	22	Burkina Faso	L A R	0.50	63	Micronesia	I	0.65
2	Yemen	L R F	0.34	23	Guinea-Bissau	L I R F	0.50	64	Malawi	L A R	0.65
3	Syrian Arab Republic	L R F	0.35	24	Equatorial Guinea	A	0.51	65	Ecuador		0.65
4	Sudan	L A R F	0.35	25	Central African Rep.	L A R F	0.52	66	Cambodia	L R	0.66
5	Mauritania	L A R F	0.36	26	Cameroon	A R F	0.52	67	Turkmenistan		0.66
6	South Sudan	L A R F	0.36	27	The Gambia	L A	0.52	68	Ghana	A	0.66
7	North Korea	R F	0.37	28	Mozambique	L A R F	0.53	69	Jamaica	I	0.66
8	Iraq	R F	0.39	29	Guatemala	A R	0.53	70	Eswatini	A	0.66
9	Somalia	L A R F	0.41	30	Congo	A R F	0.53	71	Gabon	A	0.66
10	Eritrea	L A R F	0.42	31	Papua New Guinea	I R	0.54	72	Cuba	I	0.66
11	Lesotho	L A R	0.43	32	South Africa	A	0.54	73	Benin	L A	0.67
12	Niger	L A R F	0.43	33	Congo (Dem. Rep.)	L A R F	0.54	74	Georgia		0.68
13	Haiti	L I R F	0.44	34	Botswana	A	0.55	75	Jordan	R	0.68
14	Angola	L A R	0.45	35	Honduras	R	0.55	76	Lebanon		0.68
15	Burundi	L A R F	0.45	36	Venezuela	F	0.56	77	Nigeria	A F	0.69
16	Mali	L A R F	0.46	37	Iran		0.56	78	Malaysia		0.69
17	Namibia	A R	0.47	38	Sierra Leone	L A	0.56	79	Myanmar	L R F	0.69
18	Togo	L A R	0.47	39	Thailand		0.56	80	Peru	R	0.69
19	Madagascar	L A R	0.48	40	Tajikistan	R	0.57	81	Egypt	A	0.69
20	Libya	A R F	0.48	41	Liberia	L A F	0.58	82	Dominican Republic	I	0.69
21	Uganda	L A R F	0.49	42	Paraguay		0.58	83	Vanuatu	I	0.70
				43	East Timor	L I	0.58	84	Panama		0.70
				44	Bhutan	L	0.58	85	Uzbekistan		0.73
				45	Ivory Coast	A	0.58	86	Dominica	I	0.73
				46	Rwanda	L A R	0.59	87	Mexico	R	0.74
				47	Nicaragua		0.59	88	Marshall Islands	I	0.74
				48	Laos	L R	0.59	89	Comoros	L A I	0.74
				49	Zimbabwe	A R F	0.59	90	Bolivia	R	0.74
				50	Mongolia		0.59	91	Chad	L A F	0.75
				51	EL Salvador		0.59	92	Trinidad and Tobago	I	0.75
				52	Djibouti	L A	0.60	93	Uruguay		0.76
				53	Guinea	L A F	0.60	94	Tonga	I	0.77
				54	Belize	I	0.60	95	Nauru	I	0.77
				55	Guyana	I	0.60	96	Pakistan	R F	0.77
				56	Senegal	L A R	0.61	97	Nepal	L	0.78
				57	Zambia	L A R	0.62	98	Ethiopia	L A R F	0.78
				58	Tansania	L A R	0.62	99	Costa Rica		0.79
				59	Solomon Islands	L I	0.63	100	Kenya	A R F	0.79
				60	Algeria	A	0.63	101	Cape Verde	A I	0.80
				61	Suriname	I	0.64	102	Kazakhstan		0.80
				62	Kyrgyzstan		0.64	103	St Lucia	I	0.80

Adequately funded			Value	Well-funded			Value
104	Palau	I	0.81	125	Brazil		1.05
105	Chile		0.81	129	India	R	1.48
106	Morocco	A	0.81				
107	Sri Lanka		0.81				
108	Argentina		0.81				
109	Tunisia	A	0.82				
110	Barbados	I	0.82				
111	St Kitts and Nevis	I	0.82				
112	Samoa	I	0.82				
113	China		0.82				
114	Kolumbien	R	0.82				
115	Fiji	I	0.83				
116	Antigua and Barbuda	I	0.83				
117	St Vincent	I	0.83				
118	Tuvalu	L I	0.84				
119	Mauritius	A I	0.84				
120	Sao Tome and Principe	A I L	0.86				
121	Grenada	I	0.87				
122	Indonesia		0.90				
123	Maldives	I	0.92				
124	Seychelles	A I	0.92				
125	Philippines	R	0.96				
126	Bangladesh	L R	0.98				
127	Vietnam	R	0.99				

The five categories of the index:

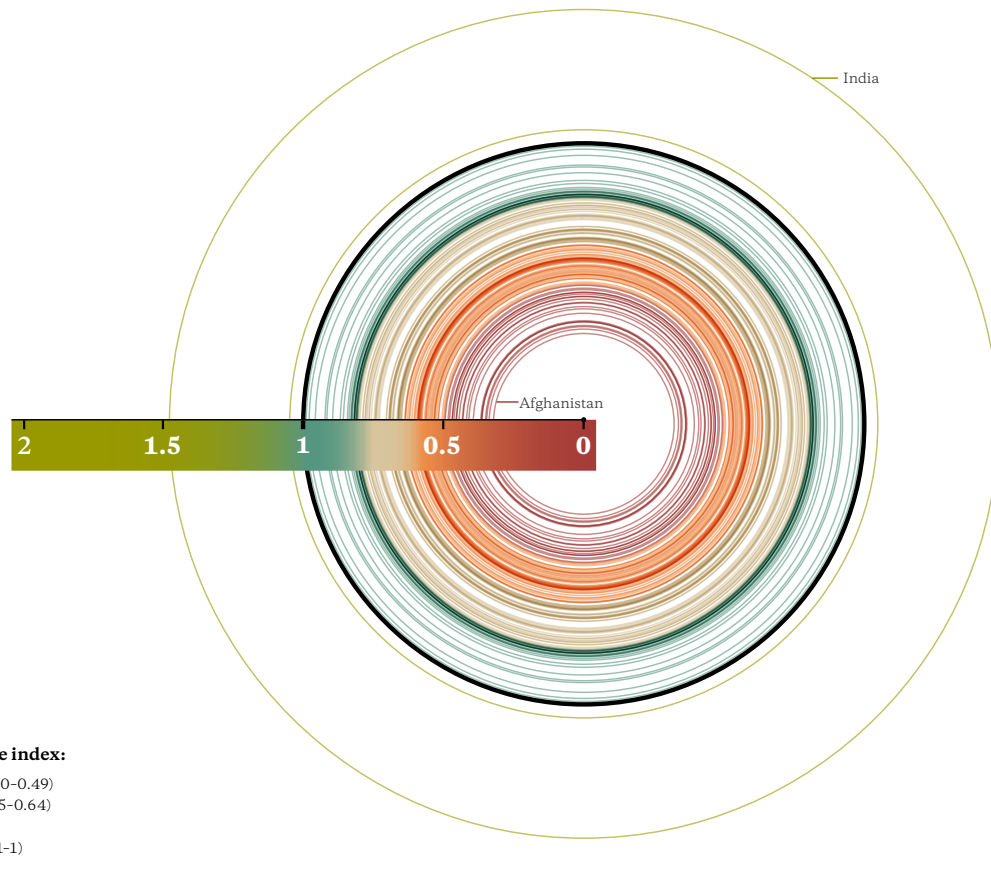
- Extremely underfunded (0-0.49)
  - Highly underfunded (0.5-0.64)
  - Underfunded (0.65-0.8)
  - Adequately funded (0.81-1)
  - Well-funded (1.01-2)
- I LDCs – least developed countries
  - A African State
  - I Small island state among the developing countries
  - R State with high to very high climate risk
  - F Countries in the three highest fragility levels

The ranking is based on the committed adaptation funding for the countries in absolute numbers in the period 2014 to 2020

The second table shows the rankings based on the absolute inflows of funding. The population size is therefore not taken into account. Once again, Afghanistan is the most underfunded, now followed by Yemen and Syria. In this ranking, South Sudan (second place in the per capita rankings) and Niger (third place in the per capita rankings) are now in sixth and twelfth place, respectively. Here, too, a pie chart representing the frequency of distribution (figure 6) supplements the ranking. When you compare the two pie charts, there are several remarkable

differences in the distribution: Compared to the per capita rankings, the number of countries which are the most extremely underfunded is almost halved, while at the same time the group of underfunded countries (yellow rings) doubles. In all, it is also striking that the distance between the smallest and the largest ring seems somewhat smaller than in the first pie chart, which takes into account the population numbers of the countries. This means that the distributive equity is somewhat better overall.

**Figure 6:** Distribution of countries in the index in absolute numbers



The ranking is based on the committed adaptation funding for the countries in absolute numbers in the period 2014-2020.

# Classifying the results: data basis, method and significance

The Climate Adaptation Finance Index creates transparency: it shows how fairly international funding is distributed among countries, as measured by climate risk. The Climate Adaptation Finance Index is a two-factor index with a very robust data basis:

Firstly, it takes into account all inflows of climate adaptation funding (in US dollars for both absolute numbers and per capita) for each of the 129 examined countries for the years 2014 to 2020. This data comes from the publicly accessible OECD database on development financing <https://www.oecd.org/dac/financing-sustainable-development/development-finance-data>. Here, the climate funding is collected for donor countries and recipient countries, differentiated based on climate mitigation and climate adaptation by using so-called Rio markers. The Rio markers were introduced between 1998 and 2010 to record development funding flows which are used to achieve the objectives of the three Rio Conventions on climate change (United Nations Framework Convention on Climate Change, UNFCCC), biological diversity (Convention on Biological Diversity, CBD) and on combating desertification (United Nations Convention to Combat Desertification, UNCCD).

For funding to be classed as climate adaptation funding, it must be used for one or more of the following objectives:

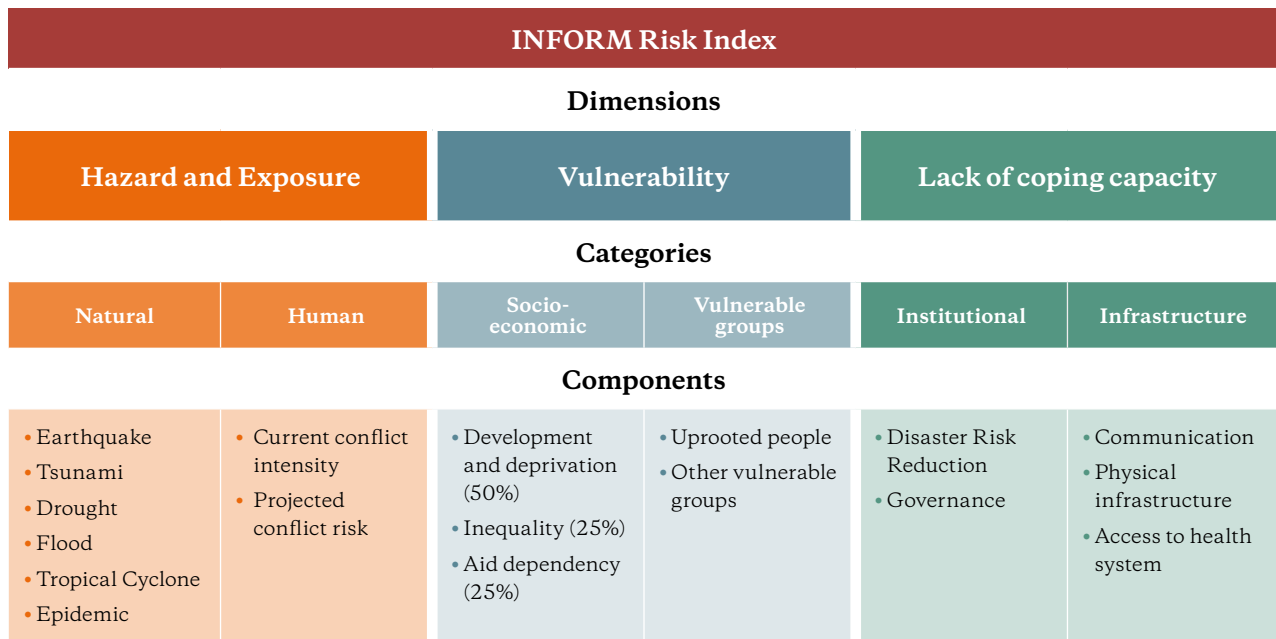
- Adapting to climate change
- Conducting a climate risk analysis
- Identifying and combating context-specific and location-specific vulnerabilities related to climate.

For the index, only funding inflows which pay into the Rio markers for adaptation funding in the OECD database are recorded. Funding which is used for both, climate adaptation as well as climate protection is not taken into account for our index, as in these cases it is not possible to make a clear distinction.

Secondly, the country-specific climate risk is determined, based on the *INFORM Risk Index*. This is published by the “Disaster Risk Management Knowledge Centre” (DRMKC) of the European Union, in cooperation with the “Inter-Agency Standing Committee”



In East Africa, periods of drought alternate with heavy rainfall. The parched soils cannot absorb the water. Villages are flooded, as here in the Upper Nile region of South Sudan.

**Figure 7:** INFORM Risk Index – Risk factors considered

Source: European Commission – DRMKC

(IASC). IASC was founded by the UN General Assembly in 1991 and is the highest-ranking humanitarian coordination committee. Its “Reference Group on Risk, Early Warning and Preparedness” is specialised in risk analysis, disaster risk reduction and funding issues. The DRMKC continually conducts risk analyses for the European Commission with regard to climate risks, other natural risks and conflict risks, and prepares complex, inter-disciplinary scientific data in such a way that political entities can make decisions on risk management and about the corresponding investment decisions. Here, INFORM Risk is just one of many risk analysis instruments at country level. In 2022, for instance, the portfolio was expanded to include the INFORM Climate Change Tool <https://drmkc.jrc.ec.europa.eu/inform-index/INFORM-Climate-Change/INFORM-Climate-Change-Tool>, which models current and future country-specific climate risks, taking into account various scenarios, however this does not provide any information for the previous years which are examined in the Climate Adaptation Finance Index. The more general *INFORM Risk Index* can be used for this, however.

This index is a continually updated, global, open source risk analysis where, as well as exposure to natural hazards, the risk calculation is also influenced by the

socio-economic vulnerability and the pre-existing adaptive capacity of each individual country. In turn, for each risk dimension, a vast number of individual components are taken into account, as shown by figure 7.

As is generally the case for risk analyses, as well as the specific exposure of countries to natural hazards and human conflict hazards, as a second risk dimension, the *INFORM Risk Index* takes into account the vulnerability (socio-economic factors, vulnerable groups, displaced persons) of a country and, as a third dimension, the existing adaptation capacity to the identified risks. Here, institutional (disaster risk reduction and governance capabilities) as well as infrastructural factors (physical infrastructure of a country, communication infrastructure, healthcare system) are evaluated. This kind of process is much more differentiated than a sole observation of exposure to climate hazards such as storms, drought or flooding: a country which is already in a resilient position and which has a high adaptive capacity, such as Japan, would suffer far less loss and damage due to an extreme weather event than the Philippines, for example, if they were exposed to the same event, as they have a much more vulnerable disposition and less adaptive capacity.

The INFORM risk values were modified only slightly for the Climate Adaptation Finance Index: all non-climate-related natural hazards and conflict-related risks were not taken into account during the calculation of risk.

In the next stage, the raw data for each of the two factors – adaptation funding and climate risks in the years 2014 to 2020 – were converted so that they represented a value between 0 and 1. To do this, the modified INFORM risk values which are between 0 and 10 were divided by 10, thus reflecting the *INFORM Risk Index* in a way that is true to scale. The raw data for climate adaptation funding was scaled, i.e. the individual value of an individual country was divided by the maximum of all individual values of the countries. This gives you a scaled depiction of the share of climate adaptation funding for each country.

All Climate Adaptation Finance Index values calculated in this way are between 0 and 2. Here, 1 is the ideal value. This shows that a country is receiving exactly the optimal share of available climate adaptation funding that is relative to its country-specific risk. The further an index value goes beyond 0, the more underfunded the country is. For all numbers greater than 1, the opposite is the case.

**The mathematical formula for the index is as follows:**

$$x_3 = 1 - x_1 + x_2$$

**Where:**

**$x_1$  is the risk variable in a range from 0 to 1,**

**$x_2$  is the climate adaptation funding in a range from 0 to 1,**

**$x_3$  is the index value in a range from 0 to 2.**

The strength of the Climate Adaptation Finance Index is that it applies the same scale to all countries, which means that the country-specific events can be compared and interpreted very easily. The Climate Adaptation Finance Index thus allows statements to be made about how fair the existing funding is distributed, according to the climate risk and the climate vulnerability.

The significance of the Climate Adaptation Finance Index has limits determined by its methodology. No statements can be made about how appropriate the

absolute amount of available funding is, and whether the country-specific distribution is sufficient for achieving climate resilience.

In addition, the index currently only takes into account extreme events when determining the climate risk and does not consider any changes which occur slowly (such as rising sea levels). In addition, up until now only the events which are already manifest and no possible future events are considered. Finally, the only financial inflows taken into account are funds which entirely or predominantly serve the purpose of climate adaptation.

There are also the limits of significance which are inherent in the *INFORM Risk Index* or the OECD data on development funding.

For these reasons, the Climate Adaptation Finance Index cannot be the sole decision and evaluation criterion when deciding about how the international climate adaptation funding is distributed between countries. However, the Climate Adaptation Finance Index does create transparency and permits fundamental statements to be made about the distributive equity in adaptation funding up until now.

An aim is to further develop the methodology beyond this point. In this way, in the future, for instance, the events from the *INFORM Climate Risk Tool* are to be incorporated into the analysis in order to calibrate the results. Over the course of the development of the Climate Adaptation Finance Index, there were experiments going beyond the *INFORM Risk Index* with a series of other climate risk indices (such as ND GAIN – Notre Dame Global Adaptation Initiative; <https://gain.nd.edu/our-work/country-index/rankings>) and data in order to find the best option for the Climate Adaptation Finance Index. These comparisons are continued in order to always reach the best results.



# The most disadvantaged: countries with the greatest climate risk

The *INFORM Risk Index* which the Climate Adaptation Finance Index is based on for its risk analysis distinguishes between five risk categories: very high risk, high risk, moderate risk, low risk, very low risk.

If you do not take into consideration the non-climate-related risks included in the *INFORM Risk Index* and calculate the moderate climate risk value for the 129 examined countries for the years between 2014 and 2020, the countries are distributed across the risk categories as follows (in descending order in each category, sorted according to the overall position in the Climate Adaptation Finance Index):

#### **14 countries with a very high risk:**

Afghanistan, South Sudan, Niger, Sudan, Yemen, Uganda, Somalia, Mali, Iraq, Ethiopia, Syria, Mauritania, Mozambique, Haiti.

#### **38 countries with a high risk:**

North Korea, Burkina Faso, Madagascar, Eritrea, Burundi, Congo (Democratic Republic), Kenya, Tanzania, Lesotho, Angola, Senegal, Bangladesh, Cameroon, Myanmar, Togo, Namibia, Pakistan, Rwanda, Guatemala, Libya, India, Cambodia, Philippines, Papua New Guinea, Honduras, Guinea-Bissau, Vietnam, Jordan, Central African Republic, Laos, Malawi, Tajikistan, Bolivia, Peru, Mexico, Zambia, Zimbabwe, Colombia.

#### **47 countries with a moderate risk:**

Equatorial Guinea, Nigeria, the Gambia, Congo, Ivory Coast, Botswana, Morocco, Sierra Leone, Indonesia, El Salvador, China, Venezuela, Iran, Liberia, Paraguay, Nicaragua, Thailand, Ecuador, Benin, Guinea, Mongolia, Egypt, East Timor, Ghana, Bhutan, Georgia, Djibouti, Sri Lanka, Kyrgyzstan, Nepal, South Africa, Uzbekistan, Algeria, Lebanon, Guyana, Belize, Dominican Republic, Gabon, Suriname, Cuba, Solomon Islands, Jamaica, Turkmenistan, Eswatini, Argentina, Micronesia, Vanuatu.

#### **19 countries with low risk:**

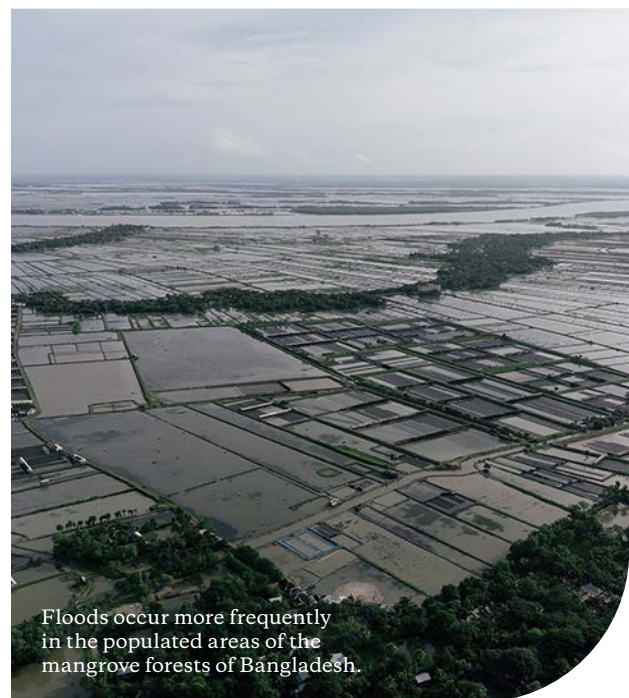
Tunisia, Panama, Malaysia, Chad, Kazakhstan, Uruguay, Comoros, Trinidad and Tobago, Costa Rica, Chile, Cape Verde, Palau, Fiji, St Lucia, Tonga, Dominica, Samoa, Marshall Islands, Nauru.

#### **Eleven countries with a very low risk:**

Barbados, St Kitts and Nevis, Mauritius, Brazil, Sao Tome and Principe, Antigua and Barbuda, Maldives, Seychelles, St Vincent and the Grenadines, Grenada, Tuvalu.

The low assessed risk of small island states is surprising at first, and deviates from the common perception. Above all, this is explained by the fact that the *EU INFORM Risk Index* primarily takes into account extreme weather events, but not the risks emanating from slow changes, such as the effects of rising sea levels, coastal erosion and coral bleaching. In this respect, assessing the risk of island states requires an expanded set of tools. The next step in the further development of the Climate Adaptation Finance Index is to take this into account more closely, provided there are new data available for this in the future.

If you correlate the risk analysis with the received adaptation funding, the results are sobering: the countries with the greatest climate risk, where access to adaptation funding is therefore especially important, clearly come out the worst in the index. In concrete terms, this means that the 14 countries which fall into the highest risk category (very high risk) also top the Climate Adaptation Finance Index ranking (per capita observation), i.e. the 14 most severely underfunded countries. If you look at the Climate Adaptation Finance Index ranking based on the absolute funding inflows, the position of Mozambique and, above all, Ethiopia improve. As a whole, however, the picture does not change much.



Floods occur more frequently in the populated areas of the mangrove forests of Bangladesh.

For the countries with a high climate risk (per capita observation), the situation is not much better: 24 are extremely underfunded, 14 highly underfunded. Of the 47 countries with a moderate risk, 36 are highly underfunded, nine are underfunded and only one is adequately funded. Things look better for the remaining 30 countries with a low or very low risk: of these, “only” eleven are underfunded, but 16 are adequately funded and three are well-funded.

The results are alarming, because the consequences of underfunding are very serious, especially for countries with a high climate risk. If, out of the 52 countries in the two highest risk levels which together make up

40 per cent of all the examined countries, not a single country received a fair share of financing to some extent, this means that the adaptation funding is not oriented around the criterion of climate-related vulnerability. This means that these countries are in danger of a permanent resilience gap, which will lead to a further increase in climate-related humanitarian disasters, climate-related evacuation and a growth in climate-related loss and damage: the last report from the IPCC expressly pointed out that particularly in the most vulnerable countries, the limits of climate adaptation will be reached and exceeded very quickly if there are not substantial investments in climate adaptation now.



To help them cope better with the frequent flooding, the Brot für die Welt partner organisation CCDB teaches farmers how to create floating gardens, as here on Padma River in Bangladesh.

# Particularly precarious: climate adaptation funding for fragile countries affected by conflicts

There are further, more informative findings if you compare the Climate Adaptation Finance Index ranking with other country-specific rankings and analyses and explore the question of how certain groups of states which are viewed as particularly vulnerable in one way or another perform in the Climate Adaptation Finance Index ranking. The correlations with the fragility status of states are especially significant.

By definition, states are deemed fragile or vulnerable when basic state functions such as security, basic social care and rule of law are not, or cannot be, exercised by the government. The Federal Ministry for Economic Cooperation and Development (BMZ) counts 1.6 billion people <https://www.bmz.de/de/themen/fragile-staetlichkeit> who live in fragile and conflict-affected states, and who are therefore in danger in terms of their human security and the safeguarding of their human rights due to direct violence, marginalisation and human rights violations. Fragility and conflicts also endanger neighbouring states and create huge challenges for development cooperation, humanitarian aid and, not least, also the financial and technical assistance required for climate adaptation: if governments of fragile states affected by conflicts are not willing to guarantee, or are not capable of guaranteeing, a minimum level of the required framework conditions for support during climate adaptation – for instance because violent conflicts are dominating the country, there is no rule of law or investment security, support is denied to certain population groups or illegitimate governments are in control – there are tight limits on classic state cooperation, or perhaps cooperation cannot take place at all. Nevertheless, it is necessary to find solutions for these cases based on humanitarian and human rights principles, and ultimately also in terms of interests of security and climate policy. More so because at present, around 20 per cent of the global population is living in fragile and conflict-affected states. Forecasts from the UN and World Bank expect that by 2030, at least 60 per cent of the world's poorest population will live in countries which are affected by fragility and conflicts <https://unsdg.un.org/resources/pathways-peace-inclusive-approaches-preventing-violent-conflict>.

The “Fragility States Index” <https://fragilestates-index.org>, which is published each year by “Fund for Peace” (FFP), determines the scope of state stability or fragility for all states using a vast number of political, social, economic and other indicators. The FFP splits the

achieved index values into four categories (sustainable, stable, warning level, alarm level), each with three subgroups. For our analysis, we have compared the findings of the “Fragile States Index Annual Report 2020” <https://fragilestatesindex.org/wp-content/uploads/2020/05/fsi2020-report.pdf> with the Climate Adaptation Finance Index. On this basis, the most fragile states (alarm level) hardly obtain any access to funding, even if they have high climate risks and a corresponding population in dire need of aid: of the 30 states which were considered at the alarm level (with its three subgroups) in the 2020 fragility index, according to the Climate Adaptation Finance Index, 22 of these are extremely underfunded, seven are highly underfunded and one country is underfunded. This means that none of these countries have a fair access to funding, as measured by their own climate risk; whereas just under 40 per cent of the stable states enjoy adequate or even good access to funding. Only two countries from this group, Botswana and Mongolia, are highly underfunded. Not a single country classed as stable suffers from extreme underfunding. Only two countries (Botswana and Mongolia) are highly underfunded, and eight countries are underfunded.

**Extremely underfunded states with the highest level of fragility (alarm level) (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Afghanistan, South Sudan, Niger, Sudan, Yemen, Uganda, Somalia, Mali, Iraq, Ethiopia, Syria, Mozambique, Haiti, North Korea, Eritrea, Burundi, Congo (Democratic Republic), Kenya, Cameroon, Myanmar, Pakistan, Libya.

**Highly underfunded states with the highest level of fragility (alarm level) (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Guinea-Bissau, Nigeria, Central African Republic, Congo, Zimbabwe, Venezuela, Liberia.

**Underfunded with the highest level of fragility (alarm level) (per capita observation):**

Chad.



We can therefore summarise the results of this correlation by saying that the more stable the states are, the more support they receive for climate adaptation. Conversely, the more fragile states are, the more they are avoided, regardless of how vulnerable they are to climate change. At first it is understandable that decisions about climate adaptation funding are particularly oriented around places where there is a suitable climate for investment and sufficiently stable conditions so that the adaptation projects can be successful, however we cannot lose sight of that fact that in many particularly fragile states which are troubled by conflict, there are very severe climate risks and hundreds of millions of people are threatened by these. They are already suffering from substantial climate-related loss and damage, have had to flee within their own country or to neighbouring countries, or perhaps they have had to evacuate even further. The catastrophic flood disaster in Libya with ten thousand dead and missing persons which occurred while this analysis was being prepared, is a tragic example of the consequences which threaten when fragile countries have no available crisis reaction capacity when it comes to climate disasters. For this reason, an urgent political task should be to improve access of people in fragile

states to climate adaptation funding in order that they can also at least be given a risk-appropriate share of the funding – even if this is difficult to guarantee and new approaches in the “climate world” have to be taken to achieve this. In this context, it is important to learn from institutions which are well tested in providing humanitarian aid in fragile contexts.

In this way, Germany is participating intensively on an international level in preparing strategies for engagement in fragile states, including as part of the European Union and the Organisation for Economic Cooperation and Development <https://www.bmz.de/de/themen/fragile-staatlichkeit>. Here, it is useful to apply the internationally planned principles for international engagement in fragile states, the “New Deal for Engagement in Fragile States” <https://www.oecd.org/dac/conflict-fragility-resilience/docs/IEFS.pdf> and to implement the federal government’s guiding principles adopted in 2017: “Krisen verhindern, Konflikte bewältigen, Frieden fördern” (Preventing crises, combating conflicts, promoting peace) when it comes to climate funding as well <https://www.auswaertiges-amt.de/blob/1213498/d98437ca3ba49c0ec6a461570f56211f/krisen-verhindern-data.pdf>.

# In particular focus: LDCs and small island states

The group of LDCs, which stands for the group of least developed countries, is the third group of countries which have particularly poor access to climate adaptation funding, although they are listed in the Paris Climate Agreement as especially vulnerable and thus should be treated as a priority when it comes to access to climate adaptation funding (cf. <https://www.nature.com/articles/s41599-019-0298-6>). However, in an observation of the absolute inflows, 75 per cent of all LDCs are actually in the two groups with the lowest and second lowest distributive equity. This means that they are actually avoided, rather than given priority. Only three out of 45 LDCs – Bangladesh, Sao Tome and Principe and Tuvalu – are ranked in the category with fair access to climate funding. In a per capita observation, the two aforementioned island states remain in the category with good access to climate funding, while Bangladesh drops down. In total, in the per capita observation, the percentage of LDCs which are extremely underfunded or highly underfunded sits at almost 90 per cent.



Small island states (here islands of Tuvalu) are particularly dependent on climate adaptation.

**Extremely underfunded LDCs (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Afghanistan, South Sudan, Niger, Sudan, Yemen, Uganda, Somalia, Mali, Ethiopia, Mauritania, Mozambique, Haiti, Burkina Faso, Madagascar, Eritrea, Burundi, Congo (Democratic Republic), Tanzania, Lesotho, Angola, Senegal, Bangladesh, Myanmar, Togo, Rwanda, Cambodia.

**Highly underfunded LDCs (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Guinea-Bissau, Central African Republic, Laos, Malawi, the Gambia, Sierra Leone, Zambia, Liberia, Benin, Guinea, East Timor, Bhutan, Djibouti, Nepal.

**Underfunded LDCs (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Solomon Islands, Chad, Comoros.

**Adequately funded LDC:**

Sao Tome and Principe.

**Well-funded LDC: Tuvalu.**

The group of Small Island Development States (SIDS) are also named in the Paris Climate Agreement as a particularly vulnerable group of states. In fact, their access to international climate adaptation funding is significantly better than that of the LDCs: If you look at the absolute inflows, just under 40 per cent of the 34 SIDS have adequate access to funding, as measured by their climate risk, a further 40 per cent are underfunded and 20 per cent are highly or extremely underfunded. In a per capita analysis, four out of 34 SIDS still receive good climate adaptation funding and 15 receive adequate climate adaptation funding. This means that 19 of the 20 countries which were rated as adequately funded or well-funded in the analysis associated with the Climate Adaptation Finance Index are island states. The only non-island state in these two groups is Brazil (adequately funded). In the Climate Adaptation Finance Index, based on absolute funding inflows, two states are categorised as well-funded (Brazil, India), and 28 states as adequately funded. In this observation, the proportion of the small island states in these two categories is reduced to 50 per cent (13 countries).



In Tuvalu, the government building is protected from rising sea levels by sandbags.

### Tuvalu at great risk due to rising sea levels

The rising sea levels threaten the existence of the island state of Tuvalu in the South Pacific. The national territory has just 26 square metres of land area. On average, the country sits a mere two metres above the sea level, and the highest point of the island atoll is just four metres. For the sake of comparison: the most devastating cyclone in recent years, Cyclone Pam in 2005, already involved six-metre tidal waves which completely inundated the country. The damage in Tuvalu was around 60 million euros. In order to protect its population of 11,000, the small island state is reliant on the support of the community of nations. There are already sandbags and artificial cement barriers to protect the coasts from erosion from the tides. New land areas were created at great expense by using pumps to convey sand from the sea floor of the lagoon to fill the atoll. As a whole, the village settlements are to be situated higher up with the aid of the sand backfilling.

Now there are sand hills everywhere which are being built on. In order to create additional land area, the old sandpits that the US military excavated during the 2nd World War have been filled back in. The military used the removed sand of the atoll to create airfields in the South Pacific.

Immediately in front of the government building, yet another large area of land is being created using the sand transported from the sea floor. Five tons of heavy sandbags protect the artificially created land area from erosion due to rising sea levels.

There are further projects planned to protect the state, and these are also urgently required to protect the lives of the islanders. So far, a coastal protection project involving over 36 million US dollars has been approved by the international community of nations through the “Green Climate Fund”.

The fact that small island states are under-represented among the countries with adequate or good access to climate adaptation funding must not obscure the fact that there are also island states which are underfunded, as the following list shows:

**Extremely underfunded SIDS (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Haiti, Papua New Guinea.

**Highly underfunded SIDS (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Guinea-Bissau, East Timor, Guyana, Belize, Dominican Republic.

**Underfunded SIDS (per capita observation, sorted in descending order by ranking in the Climate Adaptation Finance Index):**

Suriname, Cuba, Solomon Islands, Jamaica, Micronesia, Comoros, Trinidad and Tobago, Cape Verde.

**Adequately funded SIDS:**

Barbados, St Kitts and Nevis, Palau, Fiji, Vanuatu, St Lucia, Mauritius, Tonga, Dominica, Sao Tome and Principe, Antigua and Barbuda, Samoa, Maldives, Seychelles, St Vincent and the Grenadines.

**Well-funded SIDS:**

Grenada, Marshall Islands, Nauru, Tuvalu.

# A question of income: fair access to funding

Is there a connection between the level of average income in a country and its share of international climate funding? To answer this question, we first looked at which of the four World Bank income groups <https://datatopics.worldbank.org/world-development-indicators/the-world-by-income-and-region.html> the 129 examined countries belong to (data relates to the gross domestic product per capita in the 2014 financial year):

- LIC,  
*low income country, < 1,136 US dollars*
- LMIC,  
*lower middle income country, 1,136 to 4,465 US dollars*
- UMIC,  
*upper middle income country, 4,466 to 13,845 US dollars*
- HIC,  
*high income country, > 13,845 US dollars.*

We then analysed how the four income groups are distributed across the four Climate Adaptation Finance Index categories. If there were no connection between the two factors, you would expect the income groups to be distributed roughly evenly across the Climate Adaptation Finance Index categories. From a perspective of climate policy, you might also expect for poorer states to be given a disproportionately high level of support because they particularly require the assistance. The opposite is actually the case, however, as the following overview shows:

Consequently: the higher the income, the better the access to climate adaptation funding. In the group of extremely underfunded countries, states with a low per capita income dominate (53 per cent), and in the group of highly underfunded countries, states with a lower middle income dominate (53 per cent). In the group of 20 underfunded countries, the picture is relatively balanced, while for the adequately funded and well-funded countries, there are predominantly states with higher middle and lower middle incomes. In other words: of the poorest countries (LICs), not a single one is adequately funded or well-funded; instead, 74 per cent are extremely underfunded, 22 per cent are highly underfunded, and 4 per cent are underfunded.

Among the countries with a low middle income, the largest group (50 countries), 28 per cent are extremely underfunded, 54 per cent are highly underfunded, twelve per cent are underfunded, and only three countries are adequately funded. All three are island states: Samoa, Sao Tome and Principe, and Vanuatu.

Among the 40 countries with a higher middle income, the second largest group, only ten per cent are extremely underfunded, 38 per cent are highly underfunded, 23 per cent are underfunded, but already 23 per cent are adequately funded, and three countries are well-funded: Grenada, Marshall Islands and Tuvalu, all three are island states.

Of the eleven countries with a high income, including eight island states, two are highly underfunded, four

**Figure 8:** Country income and international adaptation funding (based on the Climate Adaptation Finance Index per capita)

	Extremely underfunded	Highly underfunded	Underfunded	Adequately funded	Well-funded
LIC	20	6	1	–	–
LMIC	14	27	6	3	–
UMIC	4	15	9	10	3
HIC	–	2	4	4	1

The World Bank has not categorised North Korea into an income group.

are underfunded, four are adequately funded and one is well-funded (Nauru).

Are donor institutions purposefully looking for more prosperous countries for their adaptation funding? The direct causal connection is probably something else: adaptation funding mainly flows into stable countries because the chances of the funding being used for its true purpose are expected to be higher in these places. Of the eleven countries with a high income, nine are deemed very stable or stable according to the 2020

Fragile States Index. The two countries for which this was not the case, Nigeria and Guyana, are the only two HICs which rank as highly underfunded in the Climate Adaptation Finance Index. This means that the more stable and prosperous a country is, the greater the probability of receiving a fair share of financing, or more. Here, climate-related vulnerability only plays a subordinate role as a selection criterion: only two of the HICs have a moderate climate risk, yet nine have a low or even very low risk.



Climate adaptation is necessary, but it is also expensive. The inhabitants of the village of Anberbir in the Ethiopian highlands have built an irrigation canal with the support of Brot für die Welt, which helps them to overcome periods of lack of rain.



# It's not over yet: debt burden and climate adaptation

The climate crisis and its financial consequences – a greater need for investment in climate protection and climate adaptation, and growing climate-related loss and damage – are not the only drivers, but they are important drivers of the current debt crisis facing many states in the Global South. Over recent years, their foreign debt has risen steadily, partly because more and more credit had to be accepted in order to manage extreme weather events.

We wanted to know whether the debt status has an influence on the access of states to international climate adaptation funding. This is why we compared the level of debt of the 129 examined states with their performance in the Climate Adaptation Finance Index. In analysing the debt, we made use of the 2023 debt report <https://erlassjahr.de/wordpress/wp-content/uploads/2023/04/SR23-online.pdf> which was published by erlassjahr.de and Misereor.

If you compare the Climate Adaptation Finance Index with the debt situation, you cannot identify clear trends: countries with a critical or very critical debt situation, as well as states which have only slightly critical or non-critical debt, are distributed relatively evenly along the entire index range. For countries which have critical or very critical debt, extremely poor access to climate adaptation funding represents an additional hardship, because with high levels of debt, countries are much less capable of compensating for a lack of access to climate adaptation funding through their own budgetary funds. In this respect, it would be very important to avoid this kind of double hardship, as otherwise it is the population which will suffer even more from climate extremes, because they cannot adequately protect themselves with adaptation measures.

In a per capita observation of the Climate Adaptation Finance Index, we see the following picture:

## **Extremely underfunded countries which also have very critical or critical debt:**

Sudan, Yemen, Somalia, Mozambique, Eritrea, Kenya, Angola, Senegal, Pakistan, Rwanda (**all with very critical debt**) and Afghanistan, South Sudan, Niger, Uganda, Ethiopia, Mauritania, Haiti, Madagascar, Burundi, Tanzania, Cameroon, Myanmar, Togo, Namibia, India, Papua New Guinea (**all with critical debt**).

## **Highly underfunded countries which also have very critical or critical debt:**

Guinea-Bissau, Jordan, Malawi, the Gambia, Congo, Zambia, Zimbabwe, El Salvador, Venezuela, Mongolia, Egypt, Ghana, Bhutan, Sri Lanka, Lebanon, Belize (**all with very critical debt**); Central African Republic, Laos, Tajikistan, Bolivia, Ivory Coast, Morocco, Sierra Leone, Indonesia, Nicaragua, Colombia, Georgia, Djibouti, Kyrgyzstan, Dominican Republic (**all with critical debt**).

## **Underfunded countries which also have very critical or critical debt:**

Suriname, Jamaica, Argentina, Panama, Cape Verde (**with very critical debt**); Tunisia, Malaysia, Chad, Micronesia, Kazakhstan, Comoros, Uruguay, Trinidad and Tobago, Costa Rica, Chile (**all with critical debt**).

## **Adequately funded countries which also have very critical or critical debt:**

Sao Tome and Principe, Antigua and Barbuda, Maldives, Seychelles, Grenada (**all with very critical debt**); Barbados, Fiji, St Lucia, Mauritius, Tonga, Brazil, Dominica, Samoa, St Vincent and the Grenadines (**all with critical debt**).

## **Well-funded countries which have critical debt:**

Marshall Islands, Tuvalu.

The overview shows that a great many states are affected by a double crisis: debt and climate. Brot für die Welt already analysed this extensively in the Brot für die Welt publication “Climate change, Debt and COVID-19” <https://www.brot-fuer-die-welt.de/ccdc19>. This also affects countries with a middle income, which barely have access to debt relief programmes and highly concessional loans. Instead, they suffer from additional interest

rate premiums based on their climate risk, which means that they can hardly invest in climate adaptation. This particular situation requires specific solutions: the proposals made by the Bridgetown Initiative and the V20 in the Accra-Marrakech Agenda <https://www.v-20.org>, such as adding climate clauses to loan contracts, could form a basis for this.



A man works on rebuilding his house in the Pakistani village of Peer Sabaq. More than 90 per cent of the village's houses were destroyed in the 2010 floods.

# No climate justice: a comparison of global regions

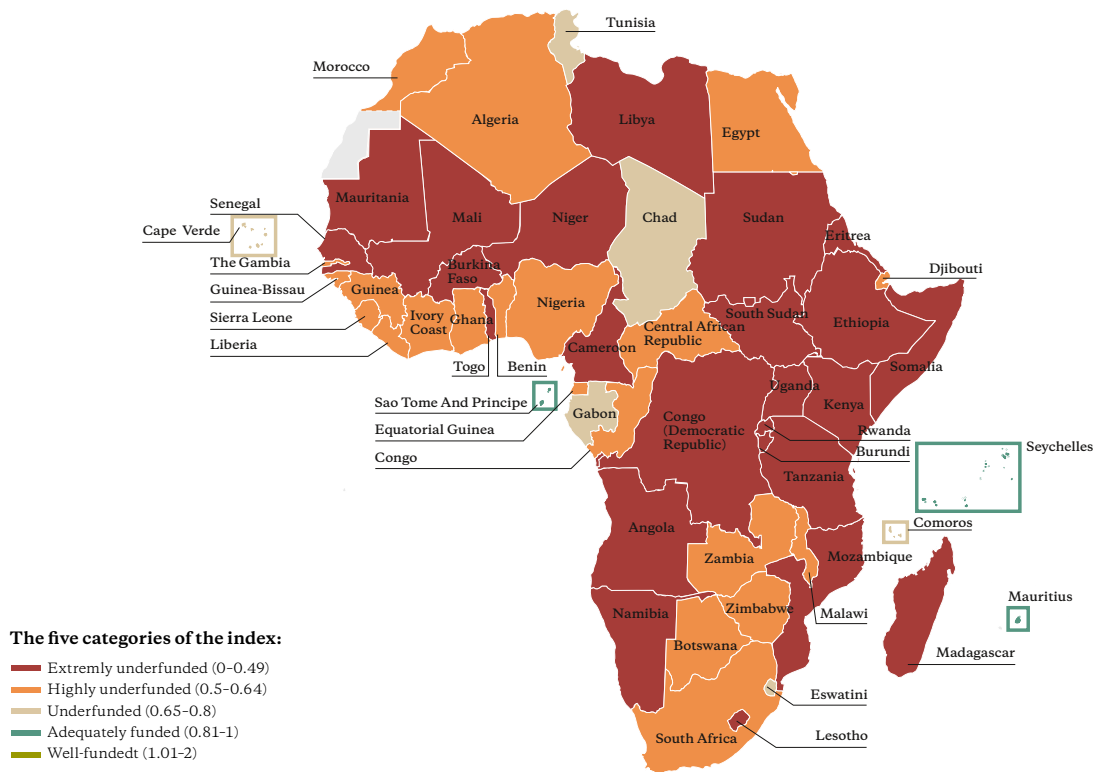
Looking at the world map makes the particular disadvantage of Africa and Asia visible: in a per capita observation of the inflows of climate adaptation funding, 83 per cent of the African and 87 per cent of the Asian states are extremely or highly underfunded, as measured by their climate risk. In Latin America, this share is 65 per cent, in the Caribbean it is 17 per cent and in Oceania it is nine per cent.

Conversely, 73 per cent of all Pacific and 58 per cent of all Caribbean island states are adequately funded or well-funded as measured by their climate risk, but only three African countries (Mauritius, Seychelles and Sao Tome and Principe), one Asian country (Maldives), and one Latin American country (Brazil) are. If we calculate our index to ignore population size, the funding situation improves for Asia, but not for Africa.



## Africa

**Figure 9:** Countries of Africa in the Climate Adaptation Finance Index ranking per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020. Areas of Egypt's south-eastern border are disputed, as is also the case for the border of Sudan and South Sudan.

The severe disadvantage of Africa is a contradiction to the declared aim of supporting climate resilience on the African continent in particular: in the Paris Climate Agreement and in many resolutions of the UNFCCC Conference of the Parties (COP), the African states are highlighted as being especially vulnerable, linked with the reference to a particular need for support. However, in a per capita observation, the Climate Adaptation Finance Index shows 24 African states as being extremely underfunded, 21 African states as highly underfunded, and six as being underfunded, but only three as being adequately funded and none as well-funded. The three adequately funded states have in common the fact that they are island states: Mauritius, Sao Tome and Principe, and the Seychelles. In other words: 94 per cent of the African states are underfunded, of which 83 per cent are extremely or highly underfunded.

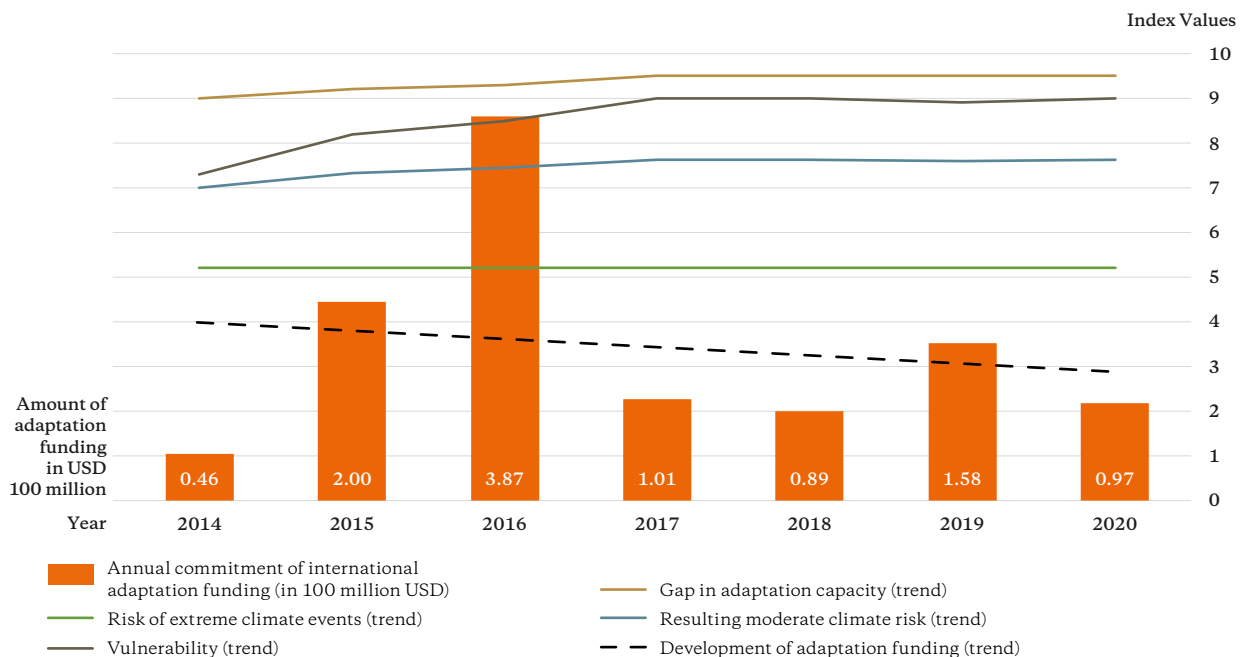
The consequences of underfunding are substantial. In the following, we would like to demonstrate this in clear terms using two examples: South Sudan and Ethiopia

### Example country: South Sudan

In the per capita Climate Adaptation Finance Index, South Sudan ranks second, directly after Afghanistan, the country which is most extremely underfunded. At the same time, South Sudan is the country with the second greatest climate risk. It is one of the least developed countries, has critical debt, has a very low income per capita and was one of the four most fragile states in 2020, along with Yemen, Somalia and Syria.

South Sudan was founded in 2011 as a result of its independence from Sudan. It has just double the land area of Germany, is situated on the Horn of Africa and is characterised by floodplains and marshland. The estimated 13 million inhabitants, who primarily live in rural areas and are subsistence farmers, are extremely vulnerable to a vast number of climate hazards which are increasing dynamically due to global warming, particularly in this region: flooding and droughts, epidemics advanced by climate change and the sharp increase of pest infestations (such as locust swarms), and forest and bush fires severely threaten the lives and livelihoods of the largely defenceless population.

Figure 10: Development of climate adaptation funding and climate risk in South Sudan (2014 to 2020)



The index shows a country with a very high exposure to climate hazards (see blue line in figure), where its already extremely low ability to adapt (yellow line) continues to decrease with a trend of decreasing, highly fluctuating international adaptation funding (dotted blue line), and with its very high socio-economic vulnerability (grey line) increasing unabated, reaching more extremely worrying values than almost any other country on earth. Will South Sudan be neglected by the international community of nations, although it is known that the people there have absolutely no chance of becoming resilient to climate change without substantial international support? Is this another humanitarian disaster in the making? In the Climate Adaptation Finance Index ranking based on absolute funding inflows and without taking into account the population numbers, South Sudan only performs slightly better than in a per capita observation. This indicates that the highly fragile and poor country can hardly obtain any adaptation funding, even though it is exposed to the greatest climate risks of all. There is a need for urgent action here.

## Example country: Ethiopia

Ethiopia takes tenth place in both the per capita Climate Adaptation Finance Index as well as the ranking of countries with the greatest climate risk. At the same time, Ethiopia is one of the least developed countries, has a very low income per capita, has critical debt, and is also fragile both politically and societally.

Ethiopia, the Cradle of Humanity, is characterised by vast diversity, whether this is ethnic and cultural, or regional, climatic and biological. The country on the Horn of Africa has deserts in the north and east, tropical savannah and rainforests in the west and south, and a rugged high-mountain landscape in the centre, but no sea access. The population of 122 million – the second largest in Africa – is young and growing fast. The economy, which is focused strongly on agricultural exports, has been one of the strongest growing in the world over the last decade, however this has lost its dynamism over the course of the pandemic and the civil war from 2020 to 2022. At the same time, the debt has grown. Ethiopia has always been characterised by climate extremes with many droughts and floods. However, global warming has

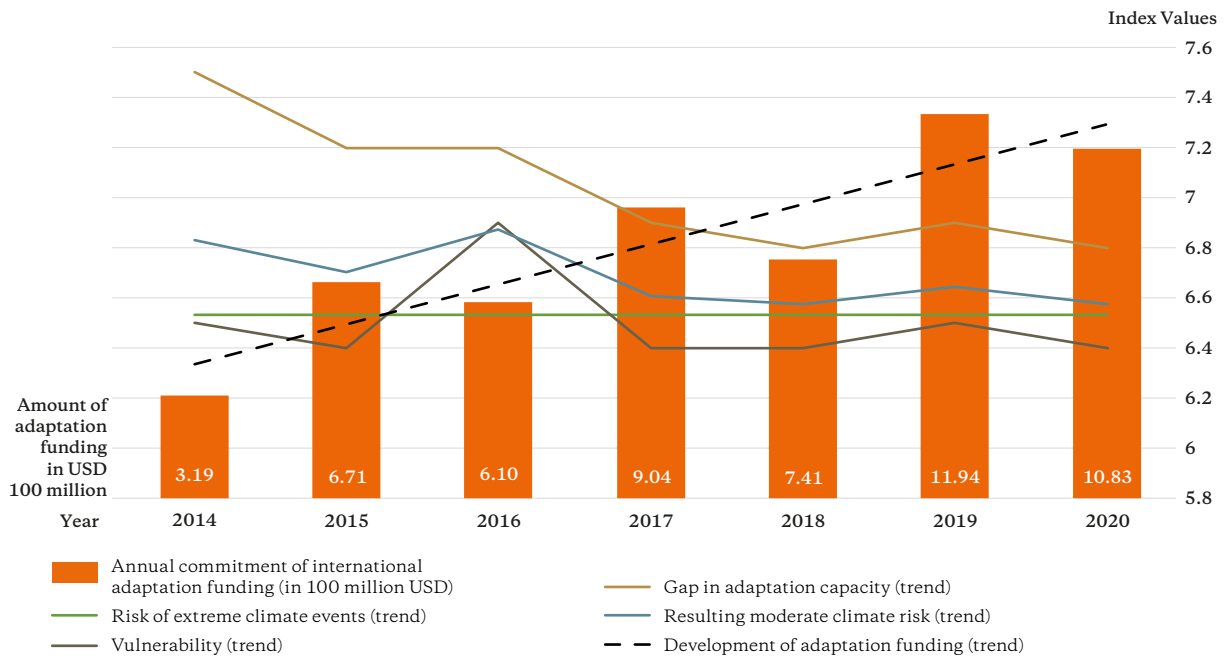


The Church Mekane Yesus supports the inhabitants of the Ethiopian highlands in the construction of irrigation canals.

drastically exacerbated this trend. As well as increasing heat, the considerably decreasing rainfall, particularly in the south of the country, and the much higher variability of precipitation across the entire country, threaten agriculture and most notably the cattle herds which are the largest in Africa. This is reflected in famines and internal migration.

It is true that Ethiopia is one of the preferred recipient countries of adaptation funding in Africa, owing to its size, strategic importance and exposure to risk. This is shown in the graph as well as in the absolute amount as well as in the dynamic increase in funding (dotted blue line). In the absolute Climate Adaptation Finance Index ranking, this is reflected to the extent that only Kenya performs better out of the mainland states of Sub-Saharan Africa. In a per capita observation, however, the ranking changes dramatically due to the large population.

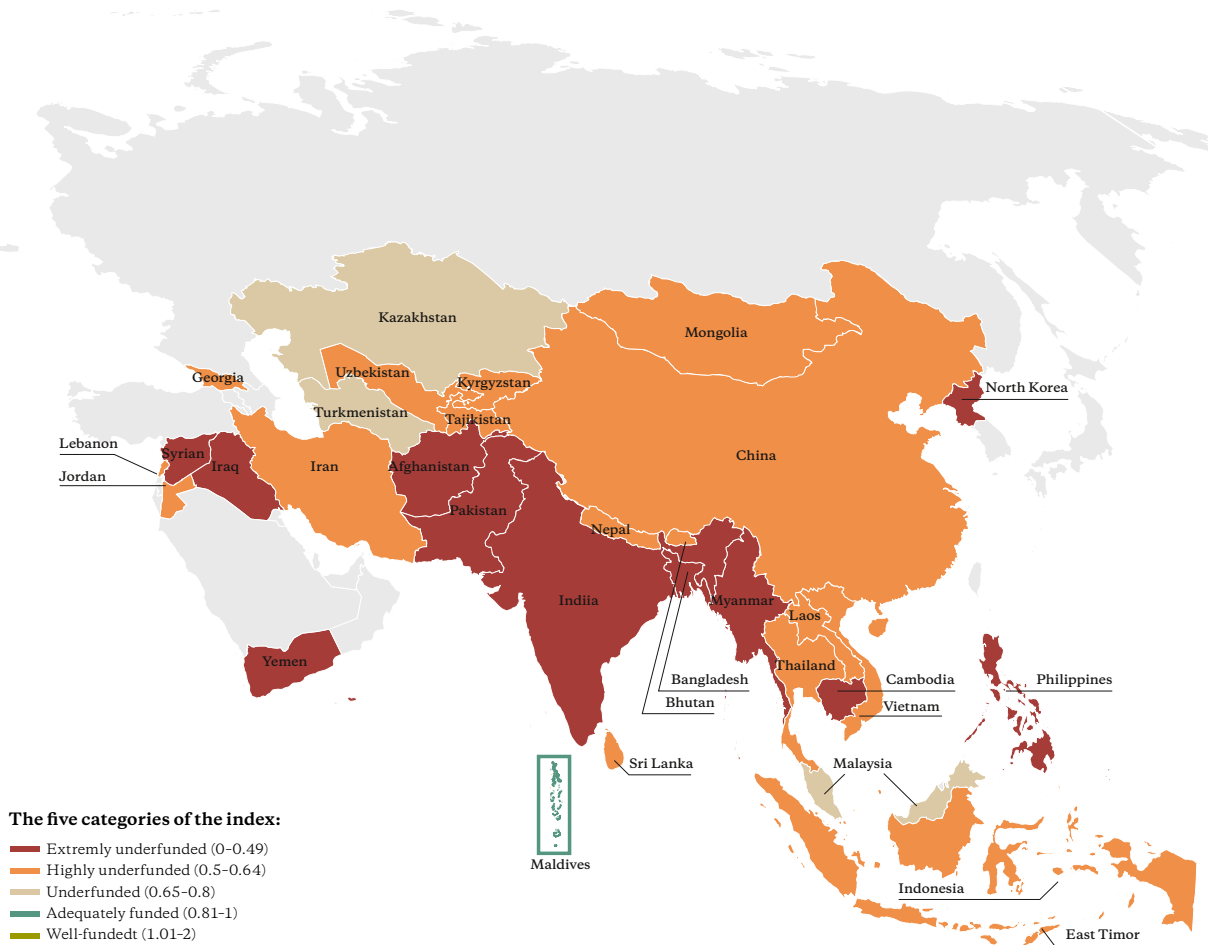
**Figure 11:** Development of climate adaptation funding and climate risk in Ethiopia (2014 to 2020)



As the graphic as a whole shows, the country has still succeeded in significantly reducing the gap in its adaptation capacity (descending yellow line). The fact that the climate risk value has not decreased to the same degree (blue line) is due to the highly variable and yet still high, predominantly socio-economic vulnerability of the population (grey line), which is also related to a very high number of refugees and displaced persons. Overall, however, we can see that successes in climate adaptation are also possible in very difficult conditions, but that this only happens slowly in countries such as Ethiopia which are so severely under threat. Setbacks occur again and again, and it requires long-term commitment.

## Asia

**Figure 12:** Countries of Asia in the Climate Adaptation Finance Index ranking per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020.

Ahead of Africa and Latin America (not including the Caribbean), Asia might not have the highest number, but certainly the highest proportion of extremely or highly underfunded countries in terms of international adaptation funding (per capita observation): eleven states are classed as extremely underfunded, 16 as highly underfunded, three as underfunded, only one (Maldives) as adequately funded and none as well-funded. This means that a massive 97 per cent of Asian states are underfunded, of which 87 per cent are extremely or highly underfunded.

When viewing the Climate Adaptation Finance Index based on the inflows of international adaptation

funding without taking into account the population numbers, Asia performs considerably better, as some countries receive high inflows in absolute numbers. However, these inflows seem significantly less when you take into account the high population numbers. In particular, this includes India, Vietnam, Bangladesh, the Philippines, Indonesia and China.

Overall, also in the case of Asia, there is a large discrepancy between internationally declared aims and reality, particularly since four Asian states in the highest climate category and eleven in the second highest are extremely or highly underfunded. Here, too, we would like to use some countries as examples to make this clear.

## Example country: Bangladesh

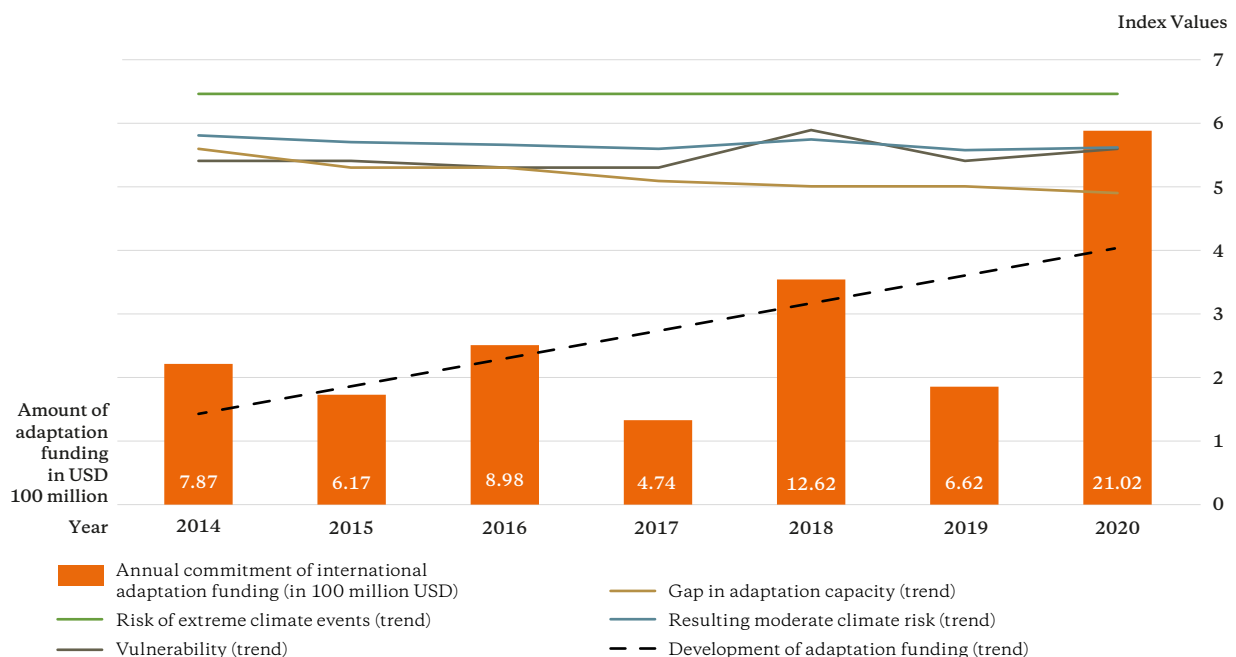
In the per capita Climate Adaptation Finance Index, Bangladesh ranks 26th. The country is one of the extremely underfunded states and, at the same time, is among the group of countries in the second highest climate risk category. Bangladesh has been a country with a lower middle income since 2015. It will soon leave the group of least developed countries.

In topographical terms, Bangladesh is situated in one of the largest river deltas on the planet. 700 rivers pass through it, including powerful streams such as the Ganges and Brahmaputra, which originates in the Himalayas, Asia’s water tower. Climate change has caused a sharp increase in flooding and cyclones, which start at sea and unleash their destructive force in the predominantly flat countryside and deep into the hinterland. In the long term, however, the greatest danger to the population of 160 million emanates from the rising sea levels and the associated salinisation of the groundwater and soil, which is progressing fast. Ten per cent of the country’s territory is less than one metre above sea level, and a large portion of the country is barely higher than that. This does not merely endanger food security and

the water supply; it also threatens the homes of around 30 million people in regions which are in danger of flooding.

The index shows a country for which it identifies the severe dangers of climate change (see the red line with equally high value for exposure to risk in the figure) and where a great effort is made to increase its adaptation capabilities accordingly (see the continually decreasing yellow line for the existing adaptation gap). To do this, Bangladesh is not merely investing much of its own money from its own created funds, from which many non-governmental organisations benefit as well; in addition, it also receives continually increasing funds from the international adaptation funding, as the bars in the diagram and the blue dotted trend line show. This means that the country ranks very highly among the recipient countries, which in turn shows a good position in the Climate Adaptation Finance Index table based on the absolute inflows of funds (adequately funded). However, when you take into account the very large population, the picture is turned on its head and Bangladesh drops more than any other country in the Climate Adaptation Finance Index ranking (extremely underfunded).

Figure 13: Development of climate adaptation funding and climate risk in Bangladesh (2014 to 2020)





## Caribbean

**Figure 14:** Countries of the Caribbean in the Climate Adaptation Finance Index ranking per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020.

Out of the twelve Caribbean states we examined, one is well-funded (Grenada), and six are adequately funded (Barbados, St Kitts and Nevis, St Lucia, Dominica, Antigua and Barbuda, and St Vincent and the Grenadines). Trinidad and Tobago, Jamaica and Cuba are classed as underfunded. Belize is highly underfunded and Haiti is extremely underfunded. In the ranking without taking into account the population numbers, this picture does not change much. In terms of distributive equity when accessing international adaptation funding, the Caribbean performs the best after Oceania. However, this does not apply to Haiti and Belize – two states which are also assigned to the highest (Haiti) and second highest (Belize) climate risk category. In addition, Belize has very critical debt, and Haiti has critical debt.

The debt aspect is a particularly pronounced additional stress factor in the Caribbean: six of the examined countries have critical debt, four even have very critical

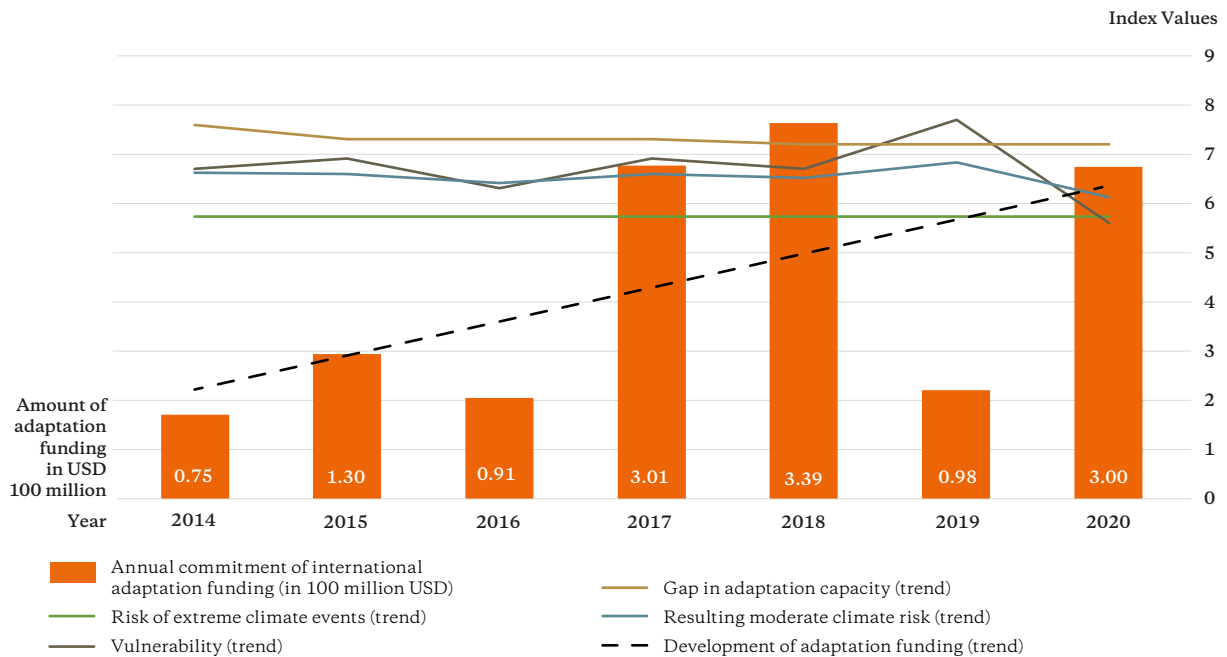
debt. One country has slightly critical debt. For Cuba, the twelfth country, we have no information.

In the case of the Caribbean, hurricanes are resulting in serious devastation at increasing frequency and, more recently, to an increasing extent. The high costs of reconstruction are an important driver of the debt burden. Access to risk-appropriate adaptation funding is therefore of great importance, and should be obtained or improved.

### Example country: Haiti

In the per capita Climate Adaptation Finance Index, Haiti ranks 14th. If we disregard the population size, it also ends up in 14th place. The country is among the group of countries in the highest climate risk category. It is one of the least developed countries, has a low income, has critical debt, and is also deemed very fragile.

Figure 15: Development of climate adaptation funding and climate risk in Haiti (2014 to 2020)



In geographical terms, Haiti is situated on the western part of the island of Hispaniola in the Greater Antilles archipelago and shares a border with the Dominican Republic. The predominantly hilly to rugged and mountainous country with flat coastlines is streaked with deep valleys. It is situated on a very active tectonic boundary and is therefore frequently shaken by severe recurring earthquakes. It is characterised by smallholder farming agriculture on minuscule parcels of land, for the most part. It suffers greatly from soil erosion and deforestation, and also increasingly from heavy rainfall and flooding. Almost the entire population is threatened by one or more of these risks. The political situation is very unstable and there are widespread violent conflicts. In this respect, it is the combination of geographical, socio-economic and political factors which determine the high climate risk of the country: no other country in the western hemisphere is exposed to such severe climate risks.

The index shows a country with a sustained severe risk from extreme weather events, particularly hurricanes, storm surges and flooding (average value 6.53, one of the highest values of all countries, see red line). This geographically triggered exposure to risk affects an extremely vulnerable population. Their vulnerability reduced slightly only at the end of the period from 2014 to 2020, after having increased now and again (grey line). The extremely large gap in adaptation capacity – among our example countries, the value is only surpassed by South Sudan and is on the same level as Papua New Guinea – has not reduced during the observation period. A reason for this is certainly the very low level of

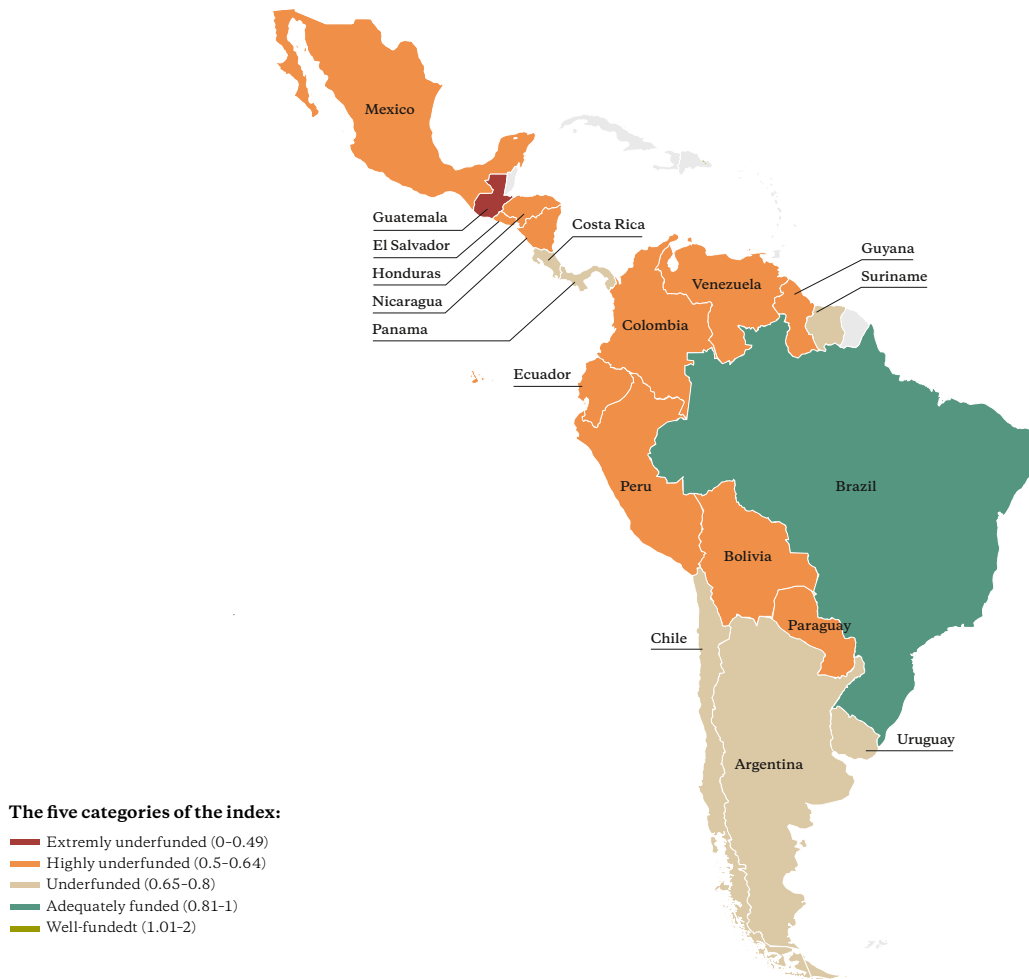
adaptation funding that Haiti receives, although this has increased considerably in recent years, even if this was only a small improvement.



After Hurricane Matthew in October 2016, Michele Civile sits in front of the door of his destroyed house near the Haitian town of Jérémie.

## Latin America

**Figure 16:** Countries of Latin America in the Climate Adaptation Finance Index ranking per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020.

The index based on a pro capita observation of the international adaptation funding shows Guatemala as extremely underfunded within Latin America. Twelve countries are also highly underfunded, six are underfunded, one (Brazil) is adequately funded and none are well-funded. This means that the rate of extremely or highly underfunded countries with 65 per cent is in third place behind Asia and Africa, followed by the two regions which are the only ones containing island states.

When viewing the Climate Adaptation Finance Index based on the inflows of international adaptation

funding without taking into account the population numbers, Latin America performs considerably better, similar to Asia. In this case, no Latin American country is extremely underfunded, eight are highly underfunded, eight are underfunded, but three are adequately funded (Argentina, Chile, Colombia) and one (Brazil) is well-funded.

In total, Central America performed somewhat worse than South America. We have selected an example country from this region.

## Example country: Guatemala

In the per capita Climate Adaptation Finance Index, Guatemala ranks 33rd, the second worst position out of all states in the western hemisphere, after Haiti. If we disregard the population size, it ends up in 30th place. Again, a worse position in the underfunding ranking. The country is among the group of countries in the highest climate risk category, it has a low middle income, has slightly critical debt and is classed as moderately fragile. In the climate risk index, Guatemala falls into the second highest risk category and, with a risk value of 5.26, is roughly on the same level as Papua New Guinea, among our example countries.

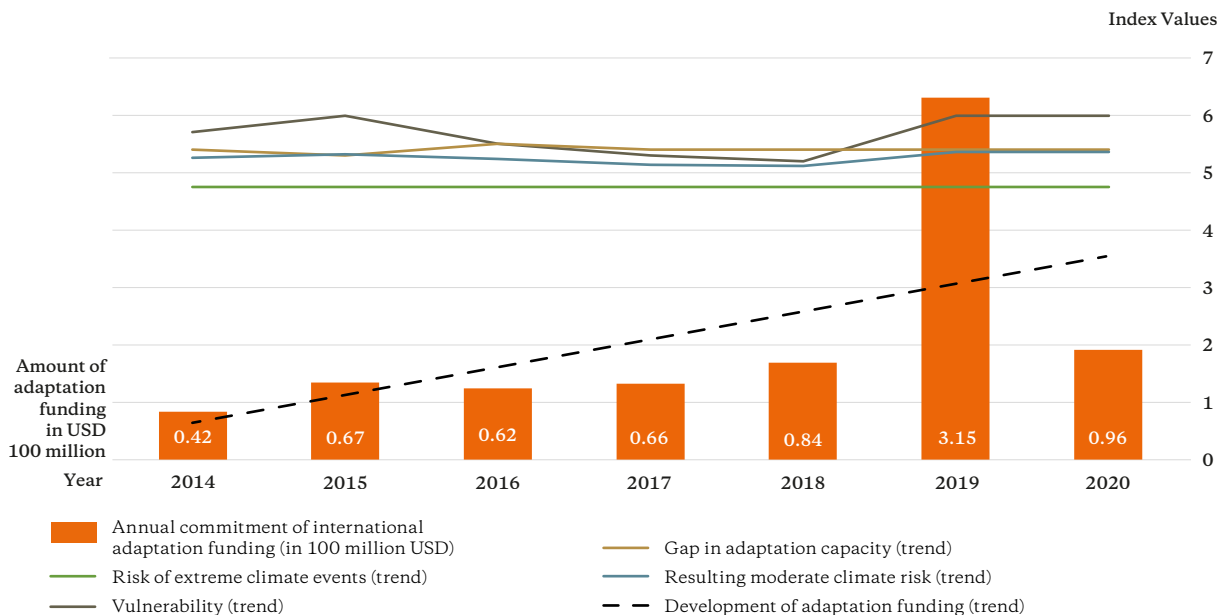
Geographically, Guatemala is situated in the south of the Yucatán peninsula, is still largely covered with tropical forests, has a hilly to mountainous topography, and borders the Pacific as well as the Caribbean. One third of the population lives off agriculture, which is characterised by large contrasts between large land ownership and smallholder farming. Indigenous population groups in particular are heavily affected by

marginalisation, human rights violations and politically motivated violence.

Guatemala is very badly affected by a number of climate extremes: storms (along the Caribbean coast) and droughts (in the country’s dry belt), flooding, landslides (in the mountains) and sometimes very high temperatures (in lowland areas), are the key risk factors which above all threaten the agriculture and thus the food security of the largely very poor population of the country.

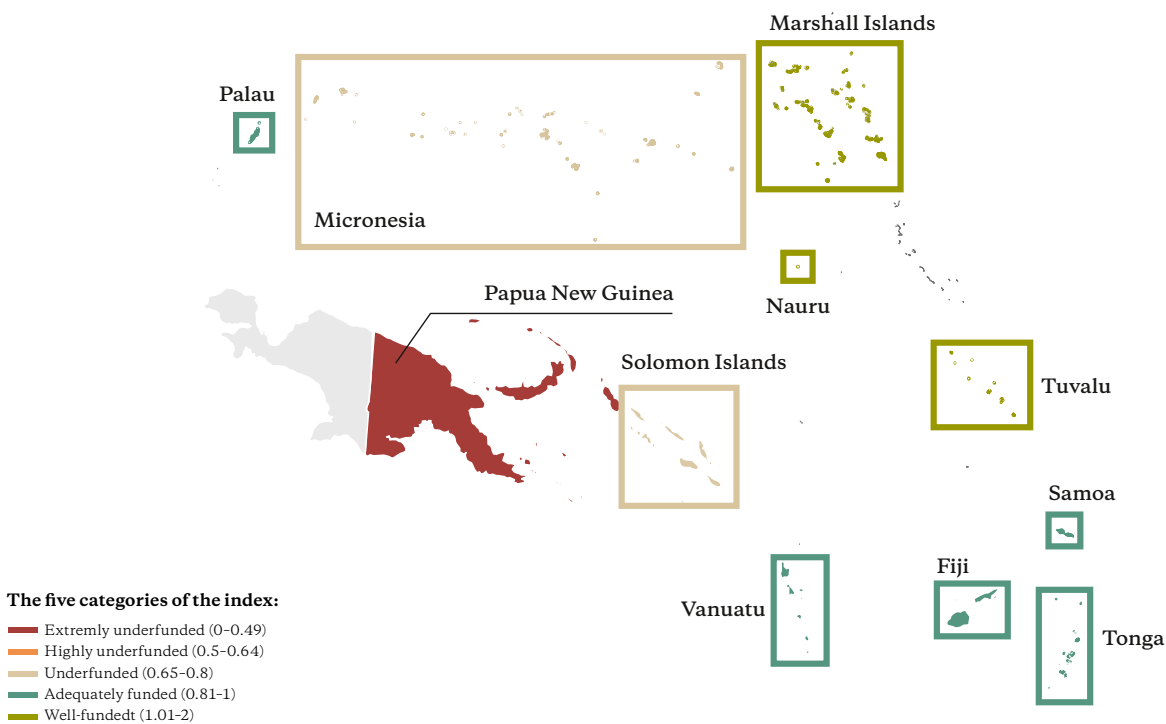
The index shows a country with a relatively high risk of extreme weather events (red line) with the highest individual risk rating for flooding. The consistently high vulnerability (grey line), which decreases slightly now and then, but then increases again, is even higher during the observation period. The gap in the adaptation capacity (yellow line) is also alarming. This remains at a high level between 2014 and 2020, while the inflow of adaptation funding remains very low, with the exception of 2019. This outlier year distorts the blue dotted trend line a little, which feigns an increase in the adaptation funding which did not occur, if you disregard 2019 as an exception.

Figure 17: Development of climate adaptation funding and climate risk in Guatemala (2014 to 2020)



## Oceania

**Figure 18:** Countries of Oceania in the Climate Adaptation Finance Index ranking per capita



The map is based on the committed adaptation funding for the countries per capita in the period 2014 to 2020.

By comparison, Oceania performs the best out of all global regions in the index. In the per capita ranking, three countries are well-funded (Marshall Islands, Nauru and Tuvalu), five more are adequately funded, but there are also two which are underfunded and one – Papua New Guinea – which is extremely underfunded. This means that the rate of extremely or highly underfunded countries in Oceania in this form of indexing is a comparatively low nine per cent.

The results are a little different – and less favourable – when you form the index without taking into account the population size of the countries. In this case, four countries are adequately funded, five are underfunded and two are highly underfunded (Solomon Islands, Papua New Guinea).

Particularly in the case of states with such a small national territory and very small populations, as is the case for the examined countries in Oceania (apart from

Papua New Guinea, the index results need you to consider these very specific circumstances. Otherwise, you would not be doing justice to the special situation of these countries. In this way, it must be considered that many adaptation measures are particularly expensive based on the very long transport routes for almost all the required products. Only very few products are manufactured within the countries themselves, and even within the countries, transport by sea and by air is expensive. Many of the small coral islands even have to import drinking water during periods of drought. In this respect, it is appropriate to prepare a tailored scale when assessing the Climate Adaptation Finance Index values – which makes the good performance of most of Oceania's countries more relative.

In each case, however, Papua New Guinea's situation remains critical, which is why we have chosen this country as an example.

## Example country: Papua New Guinea

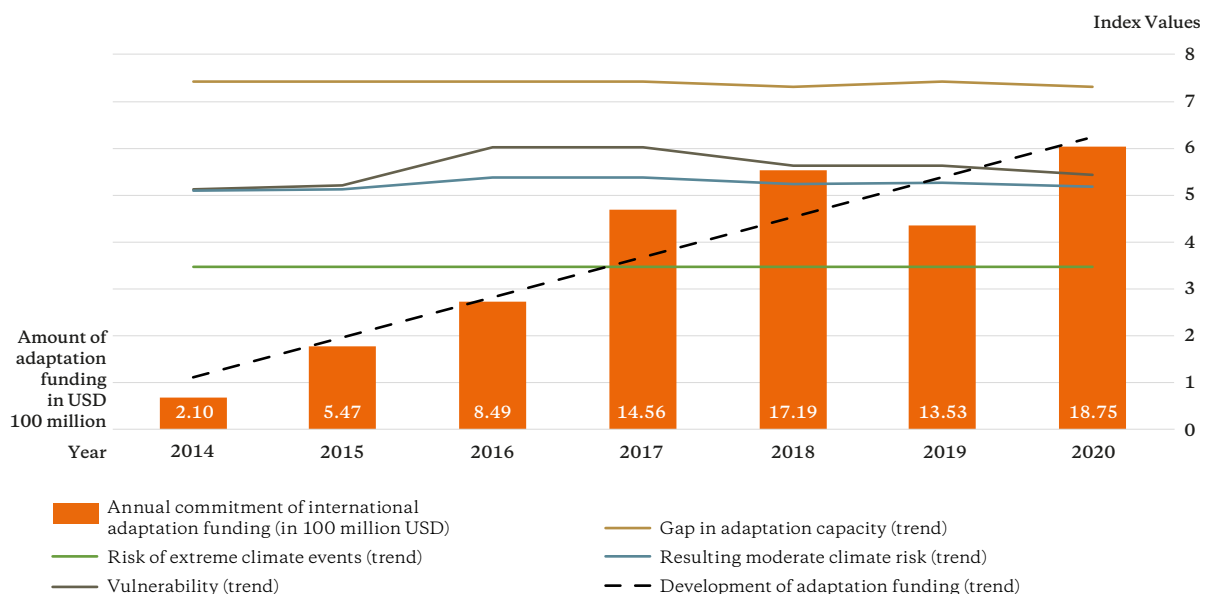
Papua New Guinea takes 38th place in the Climate Adaptation Finance Index ranking on per capita base, and still falls into the category of extremely underfunded countries. This means that, after Haiti, it is the most underfunded island state. If the population size is not considered, the country takes 31st place. Papua New Guinea has a high climate risk, is deemed very fragile, has critical debt and is among the countries with a low middle income.

Geographically, it is the third largest island state after Indonesia and Madagascar. On one hand, it forms the eastern part of the island of New Guinea (West Papua belongs politically to Indonesia), and on the other hand, it is made up of many hundreds of islands in the Bismarck Sea and Solomon Sea of the South Pacific. Vast parts of the country with just under ten million inhabitants are extremely inaccessible and cannot be reached by road or rail. In terms of ethnicity, linguistics, culture and religion, the population is very diverse, and around 90 per cent live in rural areas. The poverty rate is high, the

life expectancy is low, and illiteracy is widespread in the growing population. Three quarters of the population work in agriculture. The human rights situation is critical and violent conflicts and gang crime are widespread. The greatest climate risks stem from extreme rainfall, linked with flooding and landslides. Parts of the country also suffer from increased periods of drought.

Accordingly, the index shows a country with a relatively high risk of extreme weather events (red line), a distinct climate risk (blue line), but above all, a very high vulnerability and very low adaptation capacity which corresponds to that of Haiti and is only surpassed by South Sudan among our example countries. In this respect, international support is urgently required. The inflows of international adaptation funding actually increased significantly between 2014 and 2020, but this started at a very low level. In light of the size, remoteness and diverse exposures to risk, the contributions are small, as before, and, as measured by the climate risk, Papua New Guinea also receives much too little support. In all, it can be confirmed that the efforts made up until now have brought about no measurable successes in increasing the adaptation capacity.

Figure 19: Development of climate adaptation funding and climate risk in Papua New Guinea (2014 to 2020)



# Conclusions and political recommendations

Overall, a very complex but still relatively clear picture emerges which you stack the different levels of analysis: international climate adaptation funding is distributed very unevenly. As measured by their specific climate risk, very few countries receive a fair share of financing. The group of countries with the greatest climate risk are particularly underfunded, above all. The LDCs, countries with low income, African countries and above all fragile states are also very frequently underfunded. If several or all of these factors come together, it is almost certain that a country will end up in the group of countries with the worst access to adaptation funding, as measured by the climate risk. This greatly increases the obstacles to these countries becoming climate resilient. There is a threat of a permanent gap in resilience, which will push the achievement of the SDGs even further away.

In terms of climate policy, there is an imperative of fairness for supporting these countries in ways which are tailored to their specific climate risks. Where countries are not merely exposed to high climate risks, but are also threatened by a vast number of other risk factors, this leads to a multiple risk situation, which is often more difficult to combat than exposure to a single risk. In these cases, there should be a particularly intensive search for solutions, and correspondingly diverse support would be required.

**Figure 20:** Countries in the Climate Adaptation Finance Index ranking with particularly prevalent and multiple risk factors

Country (position in the index)	Index level	Climate risk	Debt burden	Income	Fragility	LDC
Afghanistan (1)	5	5	Critical	LIC	Very high	LDC
South Sudan (2)	5	5	Critical	LIC	Extremely high	LDC
Niger (3)	5	5	Critical	LIC	High	LDC
Sudan (4)	5	5	Very critical	LIC	Very high	LDC
Yemen (5)	5	5	Very critical	LIC	Extremely high	LDC
Somalia (7)	5	5	Very critical	LIC	Extremely high	LDC
Uganda (6)	5	5	Critical	LIC	High	LDC
Ethiopia (10)	5	5	Critical	LIC	High	LDC
Mozambique (13)	5	5	Very critical	LIC	High	LDC
Haiti (14)	5	5	Critical	LIC	High	LDC
Eritrea (18)	5	4	Very critical	LIC	High	LDC
Burundi (19)	5	4	Critical	LIC	High	LDC
Congo (Democratic Republic) (21)	5	4	Slightly critical	LIC	Very high	LDC
Togo (29)	5	4	Critical	LIC	Moderate	LDC
Rwanda (32)	5	4	Very critical	LIC	Moderate	LDC
Mali (8)	5	5	Slightly critical	LIC	High	LDC
Syria (11)	5	5	No information available	LIC	Extremely high	
Mauritania (12)	5	5	Critical	LMIC	Moderate	LDC
Burkina Faso (16)	5	4	Slightly critical	LIC	Moderate	LDC
Madagascar (17)	5	4	Critical	LIC	Moderate	LDC
Tanzania (22)	5	4	Critical	LMIC	Moderate	LDC
Angola (24)	5	4	Very critical	LMIC	Moderate	LDC
Senegal (25)	5	4	Very critical	LMIC	Moderate	LDC
Myanmar (28)	5	4	Critical	LMIC	Moderate	LDC

6 risk criteria met

5 risk criteria met

4 risk criteria met

The following overview shows for which countries in the Climate Adaptation Finance Index this applies to in particular. Included in the record are all countries for which more than three of the following criteria apply:

- countries which fall into the category of “extremely underfunded” in the Climate Adaptation Finance Index pro capita ranking,
- countries which fall into one of the two highest climate risk categories,
- countries belonging to the group of countries with a low income,
- countries included in the group of least developed countries,
- countries with very critical or critical debt,
- countries on the list of fragile states, assigned to one of the two highest fragility levels.





Politicians must find ways to improve distributive equity.

## Our political recommendations

According to their claim, the German development cooperation and the foreign policy and climate diplomacy have human rights as their basis. There should therefore be a guiding principle that is also based on human rights, and not merely climate policy, which gives the highest priority to supporting the most vulnerable. Political decision makers are therefore called upon to find ways of improving the distributive equity regarding access to climate adaptation funding, and in particular ending the serious underfunding of states with the highest risk.

1. We recommend that an analysis is performed to find out why there is so little distributive equity regarding access to international climate adaptation funding, and which measures can be taken in order to improve this quickly. The federal government should take the initiative here. A first step would be an analysis of the German climate adaptation funding using the index. This would contribute to more transparency, and thus also create more trust.
2. The findings from the Climate Adaptation Finance Index can influence the discussion about priority target groups of the nascent funding mosaic for tackling climate-related loss and damage, particularly with a view to the planned “Loss and Damage Fund”. From the very beginning, this can contribute to aspects of distributive equity being considered.
3. Quickly and effectively increasing access to adaptation funding for countries with the greatest climate risk should become the top priority of the German and international climate adaptation funding. In order to achieve this, specific targets and implementation plans are required. In Germany’s case, future climate partnerships (P+) could be negotiated, first and foremost for high-risk countries.
4. For particularly highly underfunded states in Africa which suffer from multiple crises involving poverty, food insecurity, violent conflicts, evacuation and debt, a plan should be prepared, incorporating the African Union and relevant stakeholder groups in

order to improve the access to funding quickly. The federal government could also make this aim a part of the Africa strategy.

5. Some island states have already received a fair share of the climate adaptation funding. Building on what has been achieved and achieving a fair share of climate adaptation funding for all island states is a very aspirational and realistic aim which should be pursued as a priority. According to the IPCC, this group of states in particular faces particularly great challenges, has, in some cases, already reached hard limits in terms of climate adaptation and requires particular support.
6. The funding problems of fragile states are also very specific and especially serious. These states barely receive access to climate adaptation funding, yet at the same time, they are the hotspots of climate change, which leads to humanitarian disasters and displacement. This is why, even purely from reasons of humanity, human rights and migration policy, specific solutions for these countries are urgently required. This must also apply in cases where there are difficulties with compliance with financial and legal standards, and where the administrative process of financial cooperation is made much more difficult by this. This is more likely to succeed when international and also non-state organisations which are active in these countries and have plenty of experience in supporting population groups in need in fragile contexts are intensively involved and, if applicable, also take on fiduciary and implementation tasks.
7. Countries with low (LIC) and upper middle income (UMIC) also need to be considered as a priority with regard to access to climate adaptation funding, because at present, they participate at a level which is far below average, as measured by their climate risks. For this to happen, specific aims should be set in Germany and internationally in dialogue with these countries, and an implementation plan should be prepared, linked with accompanying measures for improving the framework conditions for access to funding within the countries themselves.
8. Even if the overall picture currently does not allow any clear trends to be identified, many states are affected by a double debt and climate crisis, as *Brot für die Welt* and many others have shown. This also affects countries with a middle income, which barely have access to debt relief programmes and affordable credit. Instead, they suffer from additional interest rate premiums based on their climate risk, which means that they can hardly invest in climate adaptation. This particular situation requires specific solutions: the proposals made by the Bridgetown Initiative and the V20 in the Accra-Marrakech Agenda, such as adding climate clauses to loan contracts, could form a basis for this.

## Index of figures

- Figure 1:** World map of adaptation funding distribution per capita
- Figure 2:** World map of adaptation funding distribution in absolute numbers
- Figure 3:** Ranking of underfunding for climate adaptation per capita
- Figure 4:** Distribution of countries in the index per capita
- Figure 5:** Ranking of underfunding for climate adaptation in absolute numbers
- Figure 6:** Distribution of countries in the index in absolute numbers
- Figure 7:** INFORM Risk Index – Risk factors considered
- Figure 8:** Country income and international adaptation funding
- Figure 9:** Countries of Africa in the Climate Adaptation Finance Index ranking per capita
- Figure 10:** Development of climate adaptation funding and climate risk in South Sudan (2014 to 2020)
- Figure 11:** Development of climate adaptation funding and climate risk in Ethiopia (2014 to 2020)
- Figure 12:** Countries of Asia in the Climate Adaptation Finance Index ranking per capita
- Figure 13:** Development of climate adaptation funding and climate risk in Bangladesh (2014 to 2020)
- Figure 14:** Countries of the Caribbean in the Climate Adaptation Finance Index ranking per capita
- Figure 15:** Development of climate adaptation funding and climate risk in Haiti (2014 to 2020)
- Figure 16:** Countries of Latin America in the Climate Adaptation Finance Index ranking per capita
- Figure 17:** Development of climate adaptation funding and climate risk in Guatemala (2014 to 2020)
- Figure 18:** Countries of Oceania in the Climate Adaptation Finance Index ranking per capita
- Figure 19:** Development of climate adaptation funding and climate risk in Papua New Guinea (2014 to 2020)
- Figure 20:** Countries in the Climate Adaptation Finance Index ranking with particularly prevalent and multiple risk factors

## Abbreviations

<b>BMZ</b>	Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung (Federal Ministry for Economic Cooperation and Development)
<b>CBD</b>	UN Convention on Biological Diversity
<b>COP</b>	Conference of the Parties of the United Nations Framework Convention on Climate Change
<b>DRMKC</b>	EU Disaster Risk Management Knowledge Centre
<b>FFP</b>	Funds for Peace
<b>HIC</b>	High income country
<b>IASC</b>	Inter-Agency Standing Committee Reference Group on Risk, Early Warning and Preparedness
<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>LDCs</b>	Least Developed Countries
<b>LIC</b>	Low income country
<b>LMIC</b>	Lower middle income country
<b>SIDS</b>	Small Island Developing States
<b>UMIC</b>	Upper middle income country
<b>UNCCD</b>	United Nations Convention to Combat Desertification
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change)

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