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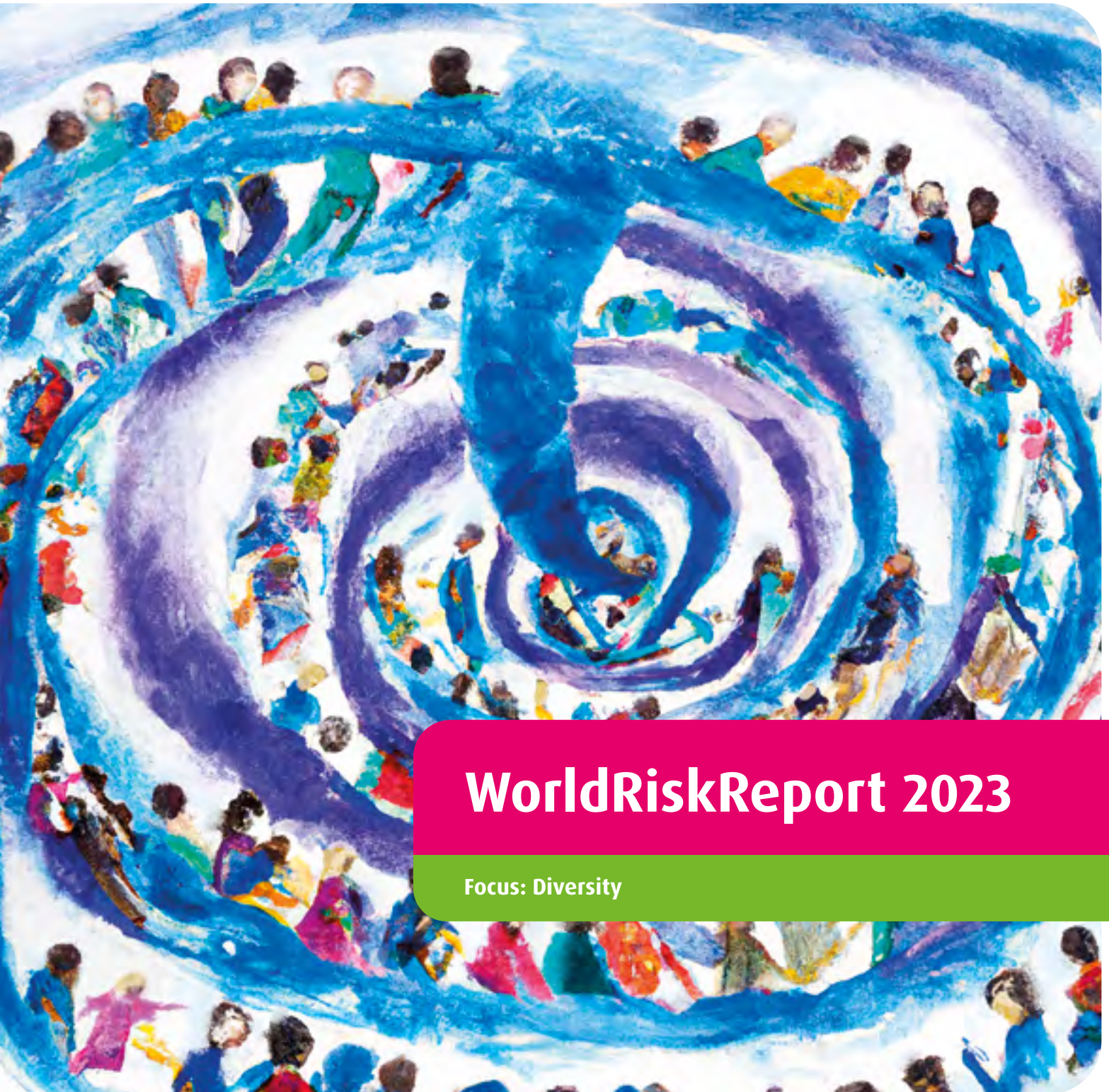


IFHV

**Bündnis  
Entwicklung Hilft**



Gemeinsam für Menschen in Not.



# WorldRiskReport 2023

Focus: Diversity



# **WorldRiskReport 2023**

# Imprint

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## Preface

This WorldRiskReport begins with the words of a young woman whose experiences tie in perfectly with this year's focus topic. A girls'

rights activist, Mama Sampy explains why diversity – taking everyone into account – is so important:



### Mama Sampy

Member of the "She Leads" program and President of the Child Marriage, Violence Against Women, and Women's and Girls' Rights section of the "West African Network of Young Women Leaders" in Mali.

“In 2023 the world has yet again been confronted with a growing number of humanitarian crises. I come from the Sahel where the effects of climate change, food insecurity, and unstable political conditions are intertwined. Especially in Mali, where I live, the number of affected young women and girls increases exponentially as time goes by. This is why I want to share my perspective.

Many think that when there is no food in the family it is up to the head of the family to act. Instead, the responsibility is put on young women and girls to find ways to meet the needs of their families. These young women and girls must look for something to feed the family. Which leads them to a decline in themselves, their own happiness, their own security, and their own health.

They migrate to the big cities to find work, even at a very young age. There they are

faced with all kinds of violence, like abuse, rape, unwanted pregnancies, clandestine abortions. Whatever the case, they have to look for money at all costs and whatever the price.

Young women and young girls are increasingly exploited, they see all their rights flouted, they see themselves being used to achieve all possible ends. They do not have the right to speak and express their desires as their ideals. They have no say even in decisions that directly affect them. They are underestimated, discriminated against, belittled, silenced because their voices have power. Girls and young women have the right to equality. For their own sake and for the sake of society.

I am a Girls' Rights Advocate and I know that even though my point of view is individual, the problem is global. We want to be taken into account. I hope that this year's World Risk Report will contribute to that.

The WorldRiskReport (WRR) 2023 has been produced by Bündnis Entwicklung Hilft and the Institute for International Law of Peace and Armed Conflict (IFHV) at Ruhr University Bochum. It examines the complex interrelationship between crises, marginalized groups, and the diverse structure of our societies. Crises affect people in different ways as a result of factors such as age, gender, health, and social status. But one thing is important for all of them: support that takes into account their individual needs.

Mama Sampy's statement gives voice to a universal truth: Striving for true equality is the key to social progress. The efforts of the people affected show us how important it is to translate intention into effective intervention. The WorldRiskReport is a call for joint action that recognizes the relevance of previously unheard voices and takes the rights of marginalized groups into consideration. It is time to understand and respect human diversity – not just in theory but, above all, by taking concrete action. We hope this year's WorldRiskReport can help achieve that.

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### **Further information**

In-depth information, methodologies, and tables are available at [www.WorldRiskReport.org](http://www.WorldRiskReport.org).

The reports from 2011–2022 can be downloaded there as well.



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**Bündnis Entwicklung Hilft** is formed by the aid organizations Brot für die Welt, Christoffel-Blindenmission, DAHW, Kindernothilfe, medico international, Misereor, Plan International, terre des hommes, Welthungerhilfe and the associated members German Doctors and Oxfam. In contexts of crises and disasters the member organizations provide short-term relief as well as long-term support in order to overcome poverty and prevent new crises.

**The Institute for International Law of Peace and Armed Conflict (IFHV)** of Ruhr University Bochum is one of the leading institutions in Europe for research and teaching on humanitarian crises. Coming from a long tradition in scientific analysis of international humanitarian law and human rights, the Institute today combines interdisciplinary research in the fields of law, social science, geoscience, and public health.

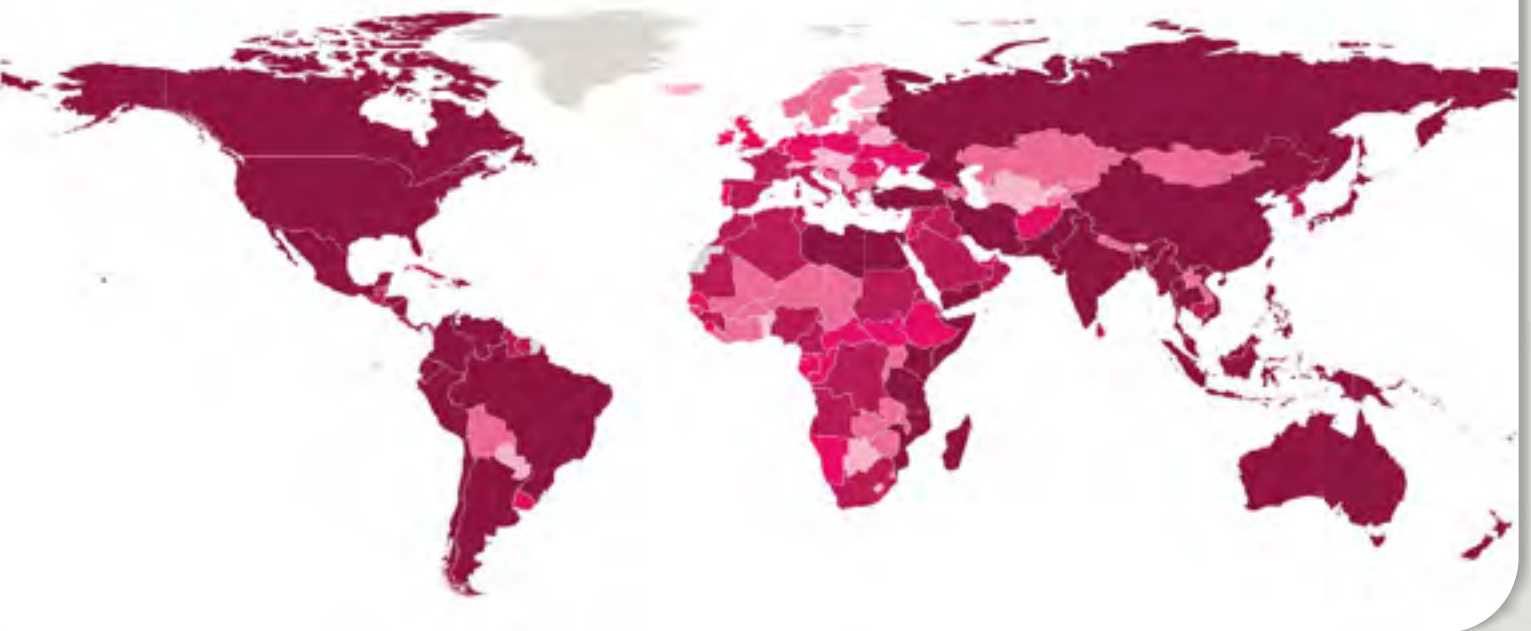


Figure 1: The WorldRiskIndex 2023

## Key Findings

### WorldRiskIndex 2023

- + The WorldRiskIndex 2023 assesses the disaster risk for 193 countries. It covers all UN-recognized countries and more than 99 percent of the world's population.
- + The countries with the highest disaster risk worldwide are the Philippines (WRI 46.86), Indonesia (WRI 43.50), and India (WRI 41.52).
- + The composition of the ten countries with the highest risk remains virtually unchanged compared to the previous year. Only Pakistan has dropped out of the group due to Russia moving up to eighth place.
- + Seven of the highest-risk countries are also among the ten countries with the highest exposure. As in the previous year, China's exposure is highest, followed by Mexico and Japan.
- + The composition of the ten countries with the highest vulnerability remains relatively stable. However, with Afghanistan having been replaced by Mali, the group now consists exclusively of African countries. The most vulnerable country worldwide is Somalia, followed by South Sudan and the Central African Republic.
- + At number 94, Germany remains in the middle range of the WorldRiskIndex, having fallen seven places with a score of 4.30.
- + Once again, the examples of South Korea and Italy illustrate clearly that low or very low vulnerability can decrease a country's disaster risk even if it has high exposure.
- + Continuing the previous years trend, the Americas is the continent with the highest disaster risk. It is followed by Asia, Africa, Oceania, and Europe—with scores significantly below the global average. Oceania's risk profile is mainly influenced by exposure while Africa is the continent with the highest vulnerability.
- + This is the first WorldRiskReport to calculate trend curves for the continents' medians. They reveal extremely dynamic changes in disaster risks since 2000 and a marked difference between the Americas and other continents both in terms of the level of risk and risk dynamic.



**+ Focus: Diversity**

- + Diversity plays a significant role in how disaster risk is distributed within a society. While it is true that disasters, extreme natural events, and crisis affect everyone in the immediate surroundings, the impact of the negative consequences tends to be more severe for marginalized groups such as people read as female, persons with disabilities, or members of the queer community.
- + Existing inequalities and discrimination reinforce the impact of disasters on the people affected. This results in specific challenges in terms of disaster preparedness and management. Conversely, the consequences of disasters also reinforce the existing inequalities in a society. Ensuring that diversity is not ignored in disaster contexts is imperative if this vicious circle is to be broken.
- + To address diversity and inequalities in the context of disasters, it is essential that legal protection frameworks be respected and evolved. Civil society initiatives and standards, along with targeted training and awareness-raising of existing policies that need to be implemented play a complementary role, helping to ensure that the special needs, challenges, and resources of different groups are taken into account in the context of disasters.
- + More often than not, people are disadvantaged due to a combination of identity characteristics, not just one diversity dimension. Disaster management must take this intersectionality into consideration. It is crucial that relief organizations, donors, policymakers, and researchers adopt an intersectional perspective.
- + For a disaster management cycle to be inclusive, the groups that are significantly affected need to be actively included in important decision processes. If possible, humanitarian assistance should be managed and led at the local level.
- + Collection and availability of detailed and disaggregated data is a challenge. They are

Rank	Country	Risk
1.	Philippines	46.86
2.	Indonesia	43.50
3.	India	41.52
4.	Mexico	38.17
5.	Colombia	37.64
6.	Myanmar	36.16
7.	Mozambique	34.61
8.	Russian Federation	28.20
9.	Bangladesh	27.29
10.	China	27.10
11.	Pakistan	26.45
12.	Papua New Guinea	26.30
13.	Peru	25.55
14.	Somalia	25.09
15.	Yemen	24.39
15.	Vietnam	24.39
...		...
94.	Germany	4.30
...		...
179.	Switzerland	1.02
180.	Nauru	1.00
181.	Denmark	0.99
182.	Slovakia	0.95
183.	Hungary	0.94
184.	Malta	0.88
185.	Bahrain	0.87
186.	Belarus	0.75
187.	Liechtenstein	0.72
188.	Sao Tome and Principe	0.67
189.	Luxembourg	0.64
190.	Singapore	0.63
191.	San Marino	0.36
192.	Monaco	0.24
193.	Andorra	0.22

Figure 2:  
Excerpt from the  
WorldRiskIndex 2023

essential to understanding the different effects of extreme natural events on specific groups and taking them into account in aid projects and programs.



# 1 Diversity and Risk Analysis

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*Disaster risks come about through a combination of extreme natural events and vulnerability. One of the WorldRiskReport's core messages is that these two factors are unequally distributed—both among the 193 countries in the WorldRiskIndex and within societies. Diversity within society plays a significant role in this unequal distribution as different people are affected differently by the impacts of extreme natural events.*

Although disasters, extreme natural events and crises are inherently neutral, affecting everyone in the immediate surroundings, their impact is not. Often, this is due to structural discrimination against specific groups in society. Existing inequalities—gender inequality, for instance—and vulnerabilities among groups (such as persons with disabilities, the elderly or children) reinforce the impact of extreme natural events and disasters on these people. Conversely, the consequences of extreme events reinforce the inequalities present within a society.

In the major earthquakes in Turkey in spring 2023, for example, it became clear that women were disproportionately hit by the impact. In many cases, they were buried by rubble as they tried to save their children, often had to fend for their families alone in the aftermath of the disaster, and experienced (sexual) violence more frequently ([The Guardian 2023](#)). Women also tended to resort to unsustainable coping strategies when it came to nutrition—reducing the number of meals or taking on debt, for instance. Dependence on humanitarian aid increased particularly among internally displaced people (IDPs), female-headed households, and widows ([Care 2023](#)). Women and families without male adults are still far worse off even long after these types of disaster. This had already become evident in the wake of the earthquake in Haiti in 2010 when female-headed households faced significantly greater difficulties in earning enough to support their entire family, compensating for material losses, and securing a medium-term income that could cover housing, food, and other expenditure. In particular, the double burden of looking after

young children and earning a livelihood is disproportionately higher for single mothers than for two-parent families.

## Dimensions of diversity

The term “diversity” refers to individual, structural, and social differences and similarities between individuals and groups. It illustrates the fact that people’s ability to participate in the economy and in society is very much dependent on their gender, social background, education, and/or ethnic/cultural background. For example, these factors frequently determine a person’s access to health care or where they live, which can further increase the risks for already disadvantaged groups—especially in the context of a crisis.

The diversity approach calls for all people in society to be acknowledged and valued. More than just a mere idea, it is a duty, laid down in legal documents such as national legislation, the EU Treaty, and international conventions (Chapter 2.1).

Public debate distinguishes between different dimensions of diversity, based on the models developed by [Loden and Rosener \(1990\)](#) and [Gardenswartz and Rowe \(2003\)](#). Different models divide the dimensions up differently but the German Diversity Charter (“[Charta der Vielfalt](#)”) cites the following core dimensions: gender and gender identity, ethnic background and nationality, social background, religion and worldview, age, physical and mental abilities, and sexual orientation. These core dimensions describe the virtually unalterable characteristics



of a person and have the largest impact on social participation/exclusion. In addition to the core dimensions, the Charter identifies other levels of diversity, which are more flexible and variable yet of equal importance in ensuring all people are treated equally and with respect. They include income, education, work experience, family status, and parenthood ([Charta der Vielfalt, n.d.](#)).

More often than not, people are disadvantaged due to a combination of characteristics, not just one. This is known as intersectionality. In Southeast Asia, for instance, indigenous women are particularly hard hit by the effects of climate change. The rise in extreme weather events such as droughts or floods is making it increasingly difficult for them to do the jobs they have traditionally been responsible for in their communities—things like tending to crops and cattle. When male family members leave the home to seek work outside the agricultural sector, women’s workload in the community grows ([Alegado 2020](#)). In the worst-case scenario, the structural disadvantages arising from various characteristics can have a mutually compounding effect. To give an example: In a number of countries, the chances of obtaining a good qualification are poorer for people with disabilities.

This intersectionality requires multidimensional approaches to access and assist the groups targeted by projects and action in the best possible way (Chapter 2.3). Aid programs and relief measures have traditionally concentrated on essential services and housing without paying adequate attention to the multiple dimensions of diversity. This ignores the fact that women, children, people with disabilities, and members of the LGBTQIA\* community are often exposed to special risks and hazards in emergency situations, including gender-specific violence, discrimination, or lack of access to health care.

### **Diversity in disaster prevention**

The relevance of diversity is an acknowledged fact in disaster preparedness and response. The discourse surrounding ways of reducing vulnerabilities and boosting resilience has traditionally been based on approaches of a more

scientific or technocratic nature. But there is a growing trend toward consideration of social aspects too, as practiced by the largest humanitarian aid donor, the United Nations. The Leave no One Behind Framework ([United Nations 2017](#)) and the Sendai Framework for Disaster Risk Reduction (SFDRR 2015) explicitly incorporate inclusion and diversity into humanitarian aid, development cooperation, and disaster risk reduction. One of the SFDRR’s goals, for instance, is “to prevent new and reduce existing disaster risk through the implementation of inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional measures that prevent and reduce hazard exposure and vulnerability to disaster, increase preparedness for response and recovery, and thus strengthen resilience” ([UNISDR 2015](#)).

Building on this, humanitarian organizations have developed a number of programs and tools with which to incorporate diversity into their project work. Often, they focus either on vulnerable groups as a collective category or on specific, separate groups. For example, most projects set out to provide special support for people with disabilities, single parents, children, or elderly people—provided there is sufficient data and context-specific knowledge to assess and address the target groups’ humanitarian needs (Chapter 3.1).

However, as an intersectional understanding of disaster risks gains ground, there is a growing awareness that tailoring action to individual (micro-)groups only satisfies the complex contextual conditions and realities to a certain extent. What is required instead is an approach that takes into account various dimensions of identity. Intersectional approaches aim to provide a better understanding of the complex nature of vulnerability in order to reveal the dynamics that determine vulnerability and resilience. In view of the numerous different contexts, it is virtually impossible to specify one clearly defined method to achieve that aim. Consequently, a key takeaway for policymakers, practitioners, and researchers is the need to exercise caution with generalizations and to acknowledge that a variety of strategies is required to reduce vulnerability and build

## Core Dimensions of Diversity

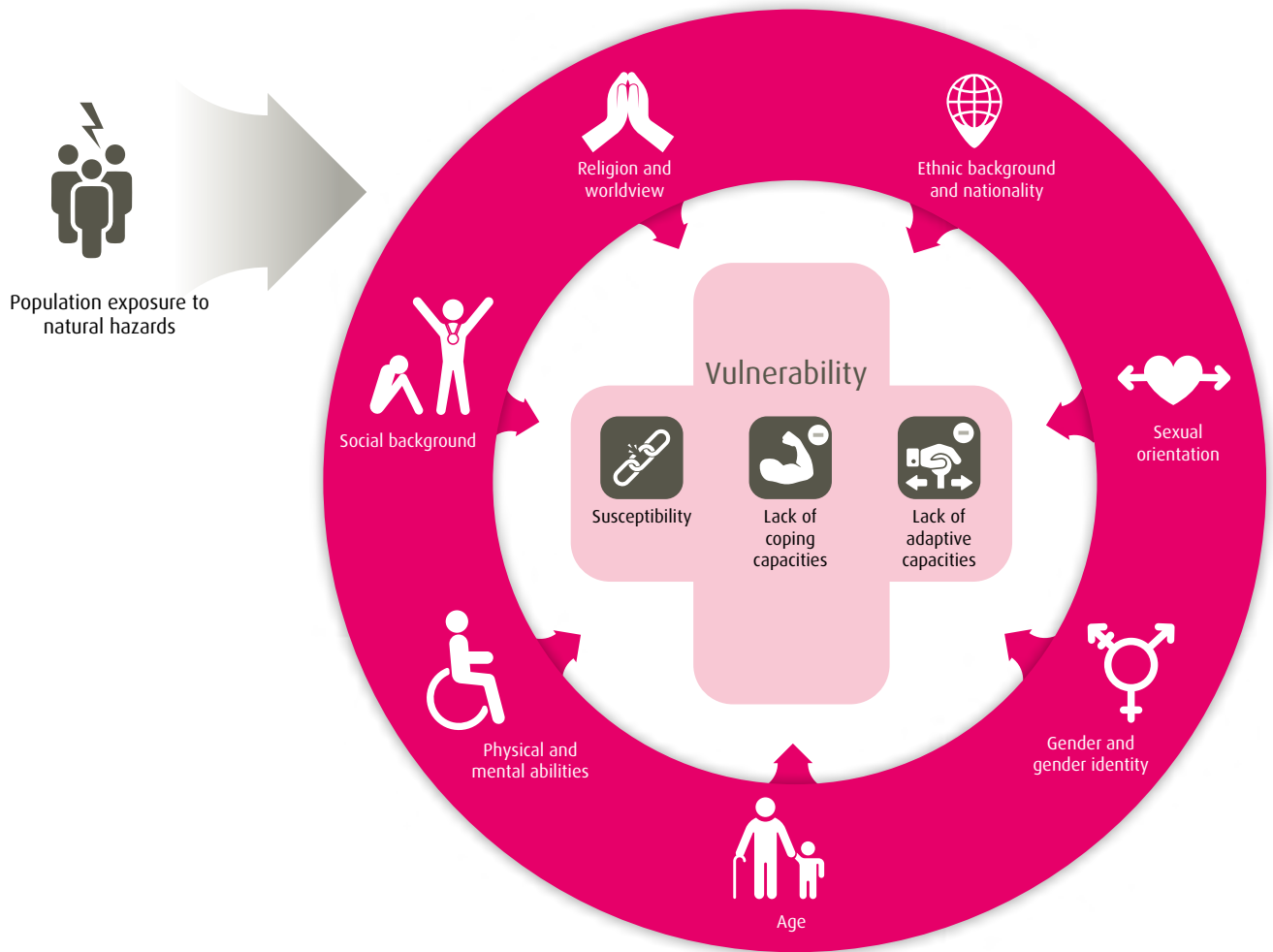


Figure 3: The seven core dimensions of diversity influence human vulnerability to extreme natural events.

resilience (Rao et al. 2017) (Chapter 2.3). As explained in more detail in the following section, a vital prerequisite is to ensure the participation of and accountability toward the target groups in each phase of the project so that projects and programs can be adjusted in line with their needs.

### Challenges and obstacles

Ensuring the participation of those who are particularly hard hit by disasters is essential in efforts to mainstream diversity as part of intersectional approaches to disaster preparedness and prevention. It is crucial that all target

groups be included in disaster-management decision-making processes. This is why the Sendai Framework for Disaster Risk Reduction calls for “disaster risk reduction practices that are multi-hazard and multisectoral, inclusive and accessible in order to be efficient and effective” and highlights the need “to engage with relevant stakeholders, including women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples, volunteers, the community of practitioners and older persons in the design and implementation of policies, plans and standards” (UNISDR 2015). Currently, however, it is precisely the groups

that are most affected by disasters that are least included in these decision processes.

For instance, as a result of colonial and neocolonial processes that have led to social and economic marginalization, extreme natural events hit indigenous groups disproportionately hard. Loss and destruction of land, restricted access to resources and infrastructure, lack of inclusion in decision-making processes, and increased susceptibility to the effects of climate change contribute to their high level of vulnerability. To strengthen their resilience, it is important that disaster preparedness and response measures give appropriate consideration to indigenous communities' specific needs and knowledge and actively include them. The traditional knowledge and practices of indigenous communities can play a key role in post-disaster reconstruction.

An awareness of the specific needs of different target groups necessitates sensitivity toward and an understanding of the local culture, conditions, and social factors. This is best achieved by having project staff who are familiar with the specifics on the ground. This poses major challenges for many organizations with regard to diversity in their management and staff. To ensure staff diversity, some have to completely rethink their entire organizational culture and reassess their often unconscious prejudices, attitudes, and colonially rooted structures. This is fundamentally important when seeking to

implement inclusive projects and programs. In the words of Sarah Knibbs, Officer-in-Charge for UN Women Asia-Pacific, speaking about female representation: "Engaging women in leadership in DRR is not only something that we think is right, but it's also smart because we see inclusive leadership does produce better results" (UNDRR 2022). Besides discriminatory behavior and stereotypes, the largest obstacles to implementation include a lack of targeted financing, capacity gaps, and knowledge-transfer challenges (ibid.)

Finally, a significant challenge is lack of data (Chapter 3). The different effects of extreme natural events on different groups can only be understood and taken into account in aid projects and programs if detailed and disaggregated data breakdowns are available. Although many actors are aware of this necessity, data tends to be disaggregated by gender at best. While it is true that donors and governments are increasing their investments in data collection in the areas of gender, disability, geography, and age, appropriate data coordination, categorization, and harmonization have not yet been established (Chaplin et al. 2019). It does require more effort to break target-group data down by characteristics such as gender, age, health status, or social or cultural background but the results permit considerably more targeted and sustainable support to the benefit of the people affected.



# The Concept of the WorldRiskReport

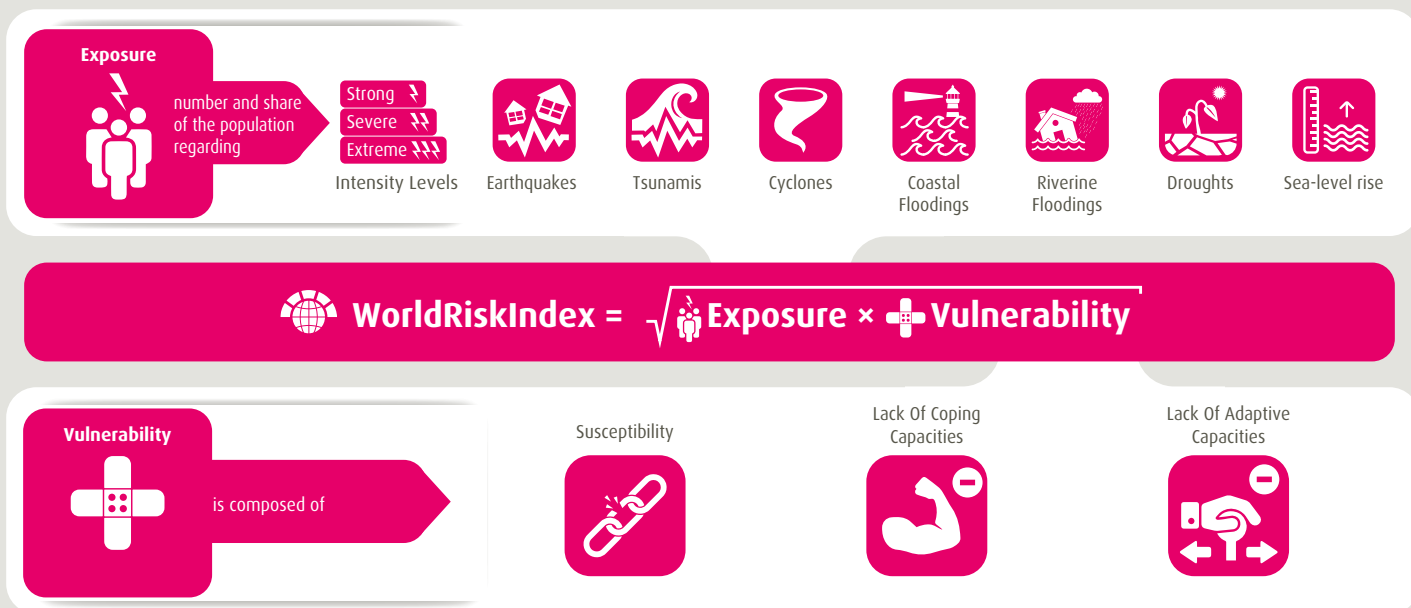


Figure 4: The WorldRiskIndex and its spheres

## Concept of 'risk' and approach

The risk assessment in the WorldRiskReport is based on the general notion that the emergence of a disaster not only depends on how severely natural hazards hit a society, but also on how vulnerable society is to their effects (WorldRiskReport 2011).

## Risk assessment

The WorldRiskReport includes the WorldRiskIndex, which Bündnis Entwicklung Hilft developed in cooperation with the United Nations University in Bonn and published in 2011 for the first time. Since 2022, Bündnis Entwicklung Hilft and the Institute for International Law of Peace and Armed Conflict (IFHV) of the Ruhr University Bochum, which is co-publisher since 2018, present the WorldRiskIndex in a fundamentally revised form. The calculation of disaster risk is done for 193 countries worldwide and based on the interaction between the spheres of exposure and vulnerability (Figure 4 above):

- + **Exposure** to earthquakes, tsunamis, cyclones, coastal floods, riverine floods, drought and sea-level rise
- + **Susceptibility** depending on socio-economic development, social disparities and deprivations, and the weakening of the population through violence, disasters, and diseases
- + **Lack of coping capacities** related to social shocks, political stability, health care, infrastructure, and material security
- + **Lack of adaptive capacities** related to developments in education and research, reduction of disparities, investments, and disaster preparedness

The WorldRiskIndex can only consider indicators for which comprehensible, quantifiable data is available. For example, while immediate neighborhood assistance cannot be measured in the event of a disaster, it is nonetheless very important. Furthermore, discrepancies in data

quality between different countries may occur if data is only gathered by national authorities and not by an independent international institution.

In addition to the data section, the WorldRiskReport always contains a focus chapter examining background and context from a qualitative perspective—this year's topic is "diversity".

## The aim of the report

The presentation of disaster risks using the index and its two spheres shows the disaster risk hotspots across the world and the fields of action to achieve the necessary reduction of risks on a quantitative basis. Complemented by qualitative analyses within the report, it is possible to formulate recommendations for action for national and international, state and civil society actors.



# 2 Diversity

## 2.1 Diversity in Disaster Contexts: A Review of the Legal Situation

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*This article provides an overview of how crises affect vulnerable groups in different ways and what protective mechanisms exist or are necessary to fully protect their human rights in crisis contexts. It focuses on women, members of the LGBTQIA\* community, Black and people of color (BPoC), and people with disabilities, with the intention of analyzing the mechanisms in place to protect their human rights and how those mechanisms function. The article concludes by discussing whether creating separate legal categories for diverse groups helps ensure their human rights are fully protected, what the strengths and weaknesses of such categorization are, and whether there any gaps that need to be closed.*

Crises intensify existing inequalities. They have a disproportionate impact on systematically disadvantaged groups such as women, members of the LGBTQIA\* community, Black and people of color, people with disabilities, and people with low socio-economic status (Kuran et al. 2020). Crisis management and prevention therefore require an inclusive and diverse strategy that offsets that impact and compensates for inequalities. A strategy of this nature is also a legal imperative since human rights apply universally and are required to be respected, protected, and guaranteed for every person without discrimination. Where certain persons face a higher probability of human rights violations or a risk of more severe violations, the state must adopt special measures to protect these vulnerable groups. In this context, “vulnerability” means that states are required to take action to compensate for existing inequalities.

### Vulnerable groups in international law

#### Women

Disaster situations bring specific challenges and dangers for women, posing a particular risk to their fundamental human rights. They include a higher risk of sexual violence, difficulty accessing water, food, education, and health care, and an increase in general socio-economic

disadvantages and discrimination (Aoláin 2011).

In international law, the main instrument designed to counter this imbalance is the United Nations (UN) Convention on the Elimination of All Forms of Discrimination against Women (CEDAW). Its preamble states that “extensive discrimination against women continues to exist” despite there being numerous universal human rights treaties. The 165 states that have signed the Convention—and it is worth noting that they do not include the United States, Iran, Sudan, or Somalia—are not only obliged by law to refrain from any form of discrimination on the grounds of gender but also to actively take measures to ensure women’s rights are guaranteed and protected effectively and equally. The CEDAW Committee has issued general recommendations to explain what exactly this can mean in the context of a crisis. They include, for instance, the measures that need to be in place to ensure that refugee and displaced women are treated in a non-violent and non-discriminatory manner.

In its General Recommendation No. 37, the Committee makes explicit reference to disasters in the aftermath of extreme natural events, stating that “sexual violence is common in humanitarian crises” (including pandemics, National



[Sexual Violence Resource Center 2021](#)) and “girls and women [...] may face even greater obstacles to participation in education, owing to the destruction of infrastructure, [...] and security concerns [...]”. It also points out that “The susceptibility of women and girls to disease is heightened as a result of inequalities in access to food, nutrition and health care and the social expectations that women will act as primary caregivers”. At the regional level, the Council of Europe’s Istanbul Convention contains additional provisions aimed at combating violence and discrimination—especially domestic violence—against women. The alarming increase in domestic violence during the Covid-19 pandemic served as a stark reminder of the need for state measures to provide appropriate protection in times of crisis (Istanbul Convention 2020).

Despite the ambitious objectives set out in these recommendations, there is hardly any state-provided guidance on how to implement the measures. Civil society actors have therefore increasingly drawn up their own recommendation frameworks. One example is the set of comprehensive standards produced by the Louisiana Foundation Against Sexual Assault and the National Sexual Violence Resource Center ([Klein 2008](#)). Developed in the wake of the devastating Hurricane Katrina that struck the US Gulf Coast in 2005, they include practical recommendations on how to maintain procedures for responding to and reporting gender-based violence before, during, and after disasters resulting from extreme natural events.

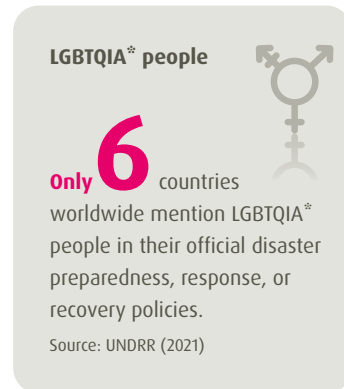
### LGBTQIA\* people

#### LGBTQIA\* people

Crises also pose multiple challenges and risks for LGBTQIA\* people, which are closely linked to the forms of discrimination and prejudices to which their community is already subject. This discrimination is currently at an all-time high, as a result of the dramatic tightening of a number of national criminal laws (most recently in Uganda). In crises, LGBTQIA\* people often face additional stigmatization, ostracization and violence—both from civil society and state actors. One example is restricted access to essential services and resources. Restricted access to psychosocial support and legal assistance can

additionally compromise their resilience and wellbeing ([King 2022](#)). In the horrific earthquake in Eastern Turkey and Syria in 2023, for instance, there were reports not only of members of the LGBTQIA\* community having difficulty gaining access to shelters but also of a rise in hate crime and police violence ([Çay 2023](#)).

Despite this widespread discrimination, LGBTQIA\* people are not protected by a dedicated convention. Though the universal human rights also apply to them, the significant violations in numerous states are a flagrant illustration of those states’ failure (or lack of willingness) to comply with their human rights obligations. In 2006, experts developed the Yogyakarta Principles to improve the level of protection by providing guidance on how human rights should be interpreted. Further principles were added in 2016 to create the “Yogyakarta Principles plus 10”. All these principles stress that LGBTQIA\* people are entitled to enjoy all human rights and fundamental freedoms irrespective of sexual orientation or



gender identity. They call for the complete eradication of discrimination, violence, and torture on the grounds of sexual orientation or gender identity.

However, there is a lack of concrete guidelines at the international level dealing with the specific needs of LGBTQIA\* people and requirements with regard to states' duties in crisis situations. In 2022, the UN Special Rapporteur on Sexual Orientation and Gender Identity presented a set of key findings on security and armed conflict, which established the particular vulnerability of LGBTQIA\* people in armed conflict. In his report, he calls for Resolution 1325 on "Women, Peace and Security" to be expanded to include sexual orientation and gender identity. Furthermore, a "Report on the impact of the COVID-19 pandemic on the human rights of LGBT persons" was published in 2020, which called for measures to ensure non-discriminatory health care as well as more empowerment and participation. This was accompanied by the development of the ASPIRE Guidelines, which specify six "fundamental actions" (Acknowledgement, Support, Protection, Indirect discrimination avoidance, Representation, and Evidence-gathering) in addition to other good practice as an aid to practical implementation and guidance for states. For instance, the guidelines point out the need for hormone replacement therapy to be deemed a life-saving treatment.

### **Black and people of color** **Black and people of color**

Black and people of color (BPoC) are another group that are particularly vulnerable in crisis situations. Negative stigmatization and discrimination against them are often reinforced in crises. This could be observed clearly in the Covid-19 pandemic, for instance, during which there was a significant rise in anti-Asian racism (Gover et al 2020). The effects are felt in various areas of their lives, including their access to vital resources, security, health care, and their participation in decision-making processes. As people fled Ukraine last year, it became clear that racially motivated discrimination can make evacuation difficult and impede access to shelter. There were numerous reports of people of color being arbitrarily refused permission to leave or enter neighboring countries (CBS 2022). And

in the United States, for example, structural discrimination and inequality of opportunity mean that BPoC often live in areas that are more prone to disaster. Thus, to increase BPoC resilience in the long term, states must not only take protective measures in crisis situations, but also tackle existing discriminatory structures.

An important legal instrument for combating discrimination on the grounds of origin, ethnicity, or nationality can be found in the non-discrimination provisions set out in the universal human rights treaties. Both the International Covenant on Civil and Political Rights (ICCPR) and the International Covenant on Economic and Social Rights (ICESCR), for instance, prohibit unjustified differentiation by states parties on the basis of certain characteristics—including race, skin color, language, and origin. Although these clauses provide for the possibility to justify unequal treatment and also apply to other reasons (such as gender), the virtually unanimous opinion in the legal debate is that unequal treatment on the grounds of race and skin color cannot be justified under any circumstances (ECHR 2005, *Timishev v. Russia*). A further instrument is the International Convention on the Elimination of All Forms of Racial Discrimination (ICERD), which obliges states parties to adopt effective measures to prevent, prohibit, and eliminate discrimination.

The CERD Committee, which monitors states parties' compliance with and implementation of the ICERD, has not yet published any crisis-specific general recommendations. It has, however, published recommendations that take on particular relevance in the context of a crisis. All types of crises result in increased migration and (forced) displacement, as acknowledged by the Committee in a General Recommendation that underlined the prohibition of discrimination on such grounds as ethnicity, race, or nationality in these contexts. A further recommendation of relevance for crisis contexts is the latest recommendation, No. 36, on preventing and combating racial profiling by law enforcement officials. One of the points it asserts is that racial profiling has increased particularly in anti-terrorism activities although, in the Committee's and other human rights organizations' view, this violates the rights of the persons

profiled and must therefore stop and be stopped (HRC 2009, Williams Lecraft v. Spain). All in all, though, it is clear that there is an acute lack of concrete, crisis-specific recommendations for action at the international level to prevent and reduce discrimination on the grounds of origin, nationality, or ethnicity specifically in the context of extreme natural events.

### Persons with disabilities

The specific perspectives and needs of people with disabilities are often not afforded adequate consideration in crisis prevention, adaptation, or response (Chapter 2.2). One example that made this tragically clear was the flood disaster in Germany's Ahr Valley in 2021, in which twelve people with disabilities drowned due to a lack of prevention measures and precautions such as flood-specific evacuation plans and sufficient care staff (Focus 2022).

In response to a number of shortcomings in national approaches to persons with disabilities, an international human rights instrument—the UN Convention on the Rights of Persons with Disabilities (CRPD)—was created in 2006 to ensure their full and equal participation. In addition to reinforcing general human rights for this group, the CRPD contains a series of provisions tailored to the specific situation of people with disabilities, for example, accessibility. It requires the states parties to ensure their rights are fully respected, guaranteed, and protected in all areas of life.

Article 11 of the CRPD deals specifically with situations of risk and humanitarian emergencies, and obliges states parties to take “all necessary measures to ensure the protection and safety of persons with disabilities in situations of risk [...]”. This makes the CRPD the only international agreement to take the particular vulnerability of people with disabilities in crisis situations into account. A series of comments concerning the convention specify what these obligations mean in real terms. The general comment on the topic of accessibility, for instance, states: “In situations of risk, natural disasters and armed conflict, the emergency services must be accessible to persons with disabilities.” It continues: “Accessibility must

be incorporated as a priority in post-disaster reconstruction efforts. Therefore, disaster risk reduction must be accessible and disability-inclusive.” Finally, a further comment devotes an entire paragraph to situations of risk and humanitarian emergencies, calling on states parties “to include on an equal basis persons with disabilities in national emergency protocols” and “to fully recognize persons with disabilities in evacuation scenarios.”

Looking both at the text of the convention and the comments, the CRPD and the Committee have not only provided concrete guidance of states' duties in crisis situations but Article 11 of the CRPD itself establishes increased legal obligations to this end. However, as underlined in the 2021 “Report on the rights of persons with disabilities in the context of armed conflict” by the UN Special Rapporteur on the Rights of Persons with Disabilities, the duty to provide protection must not be understood to mean that a paternalistic approach should be adopted.

### Derogation and abrogation in crisis situations

The overwhelming majority of human rights treaties contain clauses that provide for derogation (as in Article 15 of the European Convention on Human Rights, for example) or even suspension of some rights in the event of a crisis. These clauses are intended to cover state interests and specific challenges that arise in crisis contexts. Although there is some room for state discretion in determining whether a situation is a crisis (for example ECHR, Ireland v. the United Kingdom 1977, § 207), such clauses do not give states the legal power to do as they please. Strict restrictions (primarily in the form of procedural requirements) are in place to prevent abuse. As a rule, states are required to notify the relevant institutions of any derogation and to specify exactly the reasons for derogation. This ensures transparency, allowing the institutions and other states parties to monitor the situation.

Some provisions cannot be derogated from even in a crisis. These include the right to life and the prohibition of torture and degrading or inhuman treatment. In addition, Article 4(1) of the International Covenant on Civil and



Political Rights explicitly states that derogation must “not involve discrimination solely on the ground of race, colour, sex, language, religion or social origin.” Ultimately, however, such suspension is primarily limited by the requirement that a strict proportionality test has to be carried out. This means that such measures must be restricted to the extent absolutely necessary for the emergency situation—both with regard to geographical and substantive scope—and states must assess them thoroughly. A key part of this assessment is the requirement to ensure that vulnerable groups are not disproportionately affected by such derogations.

In practice, however, there has been an increase in the number of cases in which, at the national level, states cite crisis situations as the grounds for a restriction of rights but fail, at the international level, to provide notification of formal derogation while also restricting rights for which there is no provision to do so (Helfer 2021). For instance, almost all states worldwide restricted rights due to the Covid-19 pandemic but fewer than 30 gave formal notification (Teshome 2022). A further significant limit on restrictability stems from the stipulation that the “essence” of human rights must not be compromised (Thielbörger 2019). Irrespective of the crisis facing a state, it must always respect said essence. This requirement, however, is very much subject to interpretation and raises questions such as what the legal implications of such an essence are (i.e., whether restriction is categorically forbidden or merely subject to stricter requirements).

### **Categorization of vulnerable groups—is it really such a good idea?**

This analysis illustrates that there is an increasing number of recommendations at the international law level to address the specific challenges of crisis situations. However, they tend to be very abstract in their wording and require further concretization. However, the most significant shortcomings in terms of protection root arguably in the isolating approach of mainly focusing separately on the vulnerability of specific groups, thus failing to give sufficient consideration to overlapping forms of discrimination (Chapter 2.3.). There are efforts to tackle this by means of an intersectional approach, which is now finding its way into the international law discourse too. For instance, the [CEDAW Committee](#) has emphasized that women are not a homogenous group and that discrimination comprises multiple dimensions. The existence of General Recommendation 18 on women with disabilities and General Recommendation 39, which focuses on indigenous women, is a clear sign that an intersectional understanding of risks is gaining ground.

The [CERD Committee](#) makes explicit reference to intersectionality in its General Recommendation 32, recognizing it as “double or multiple discrimination” and underlines that full protection of human rights requires such a multidimensional understanding of different forms of discrimination along with special measures to tackle them. If states were to take into consideration the overlaps and mutually compounding effects between discrimination in its various guises, it would be an important initial step toward concrete measures offering a higher level of protection. Only an intersectional approach can ensure that human rights are fully protected and that the idea of the universality of human rights is actually fulfilled.

## 2.2 Mainstreaming Disability in Disaster Risk Reduction and Humanitarian Action

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*Despite significant advancements in policy, persons with disabilities, who constitute approximately 16 percent of the world's population, remain socially and logistically isolated during disasters and continue to face barriers in accessing essential services, warning systems, evacuation routes, and transportation. This article shows that challenges in promoting disability inclusive disaster risk reduction, disaster risk management, and humanitarian action mainly stem from a lack of staff capacity to translate policy commitments into practice. Thus, it highlights several initiatives for strengthening the capacities of both mainstream actors and organizations of persons with disabilities.*

Approximately 1.3 billion people have a disability (WHO 2022). According to the UN Convention on the Rights of Persons with Disabilities (CRPD), "persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others."

The majority of them, around 80 percent, live in developing countries, where most humanitarian crises and disasters occur. Often socially and logistically isolated, they face challenges in accessing early warning systems, evacuation routes, transportation, emergency housing, and essential medicine. Following the 2011 Great East Japan earthquake, for instance, persons with disabilities accounted for 24.6 percent of total disaster-related deaths, which is more than twice their share of the total

population (Kyodo News 2020). Environmental, attitudinal, and institutional barriers increases the danger of exclusion from disaster risk reduction (DRR), disaster risk management (DRM) and general relief and response efforts. According to the United Nations Office for Disaster Risk Reduction (UNDRR), about 85 percent of persons with disabilities have never participated in community disaster management and risk reduction processes (UNDRR 2019). To make these processes inclusive, capacity building of both mainstream actors and organizations of persons with disabilities (OPDs) is essential.

### Global progress and normative change

At the policy level, processes to mainstream disability into DRR, DRM and humanitarian action are quite advanced. Building upon the CRPD and its ratification in more than 186 countries and regional organizations (Article 2.1), efforts to end disability-based discrimination have been incorporated in numerous multilateral agreements and donor policies. Various strategies and specific guidelines promote disability-inclusion in organizations and their interventions.

The Sendai Framework on Disaster Risk Reduction 2015-2030 calls upon governments to prioritize the needs and specific requirements of persons with disabilities. It establishes that persons with disabilities and their representative organizations should be included in all stages of the disaster response efforts, from design to implementation (UNDRR 2015). Another crucial

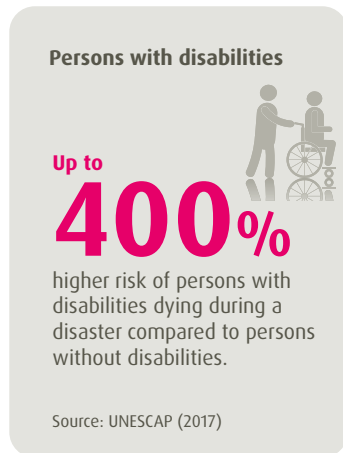
#### Persons with disabilities

**73%**



of persons with disabilities would have difficulty evacuating in the event of a sudden-onset disaster. Only 21% could evacuate without difficulty and 6% would not be able to evacuate at all.

Source: UNISDR (2014)



instrument, the [Humanitarian Disability Charter \(2016\)](#), does not have a disaster focus but promotes the protection, safety, and respect for dignity for persons with disabilities in all situations of risk, including armed conflict and other humanitarian emergencies. Moreover, it is open to endorsement for all relevant stakeholders involved in humanitarian contexts, including UN agencies, non-governmental organizations, and organizations of persons with disabilities. With 226 endorsements thus far, signatories commit themselves to render humanitarian action inclusive by lifting barriers and ensuring participation of persons with disabilities in the development, planning and implementation of humanitarian programs. The Charter also served as a catalyst for the drafting of the 2019 Inter-Agency Standing Committee Guidelines on Inclusion of Persons with Disabilities in Humanitarian Action ([IASC Guidelines 2019](#)). These Guidelines were developed in a participatory and inclusive process over three years and provide stakeholders with guidance on how to translate the Humanitarian Disability Charter into practice by providing practical orientation, including indicators and sector-specific recommendations for all stages of a disability-inclusive intervention from assessment to monitoring and evaluation. Recommended actions include improving access for persons with disabilities to essential infrastructure, for example through wheelchair ramps ([Inter-Agency Standing Committee 2019, 172](#)).

Disability inclusion gained further momentum with the launch of the UN Disability Strategy (United Nations 2019), the adoption of the International Committee of the Red Cross

Vision 2030 on Disability ([ICRC 2020](#)), [Guidance on Strengthening Disability Inclusion in Humanitarian Response Plans \(2019\)](#), which create a roadmap for each organization to translate their commitments into action. Nevertheless, despite this progress in policy development, persons with disabilities continue to face numerous barriers in practice and, as mentioned, often remain at the margins of DRR and humanitarian response efforts.

### Challenges to disability inclusion

The exclusion of persons with disabilities from DRR, DRM as well as humanitarian relief and response efforts can be attributed to various factors, most notably limited staff capacity and financial resources. A 2022 study across eight low- and middle-income countries highlighted that there is lack of knowledge, capacity and funding to effectively include persons with disabilities in preparedness and humanitarian response efforts ([Gvetadze and Pertiwi 2022](#)).

When disabilities are targeted or mainstreamed in the development, planning and implementation of humanitarian programs, the focus tends to be on visible impairments, such as blindness or restricted mobility, while persons with intellectual, psychosocial, or other “invisible” impairments are frequently overlooked ([Funke 2022, 393](#)). Stigma and discrimination further contribute to the low participation of persons with disabilities in community meetings, focus group discussions, and consultations ([Funke and Dijkzeul 2022, 18](#)).

Compounding the problem is the frequent absence of reasonable accommodation, such as sign language interpretation or screen readers that enable an individual with a disability to have equal opportunity and participate in society. However, participation is a crucial element in identifying and addressing persisting barriers when disasters occur and taking necessary measures to remove them in a timely manner. Furthermore, most mainstream humanitarian organizations still perceive disability inclusion not as a cross-cutting issue to be mainstreamed in all their policies and programs, but as a specific topic which is best addressed by disability-focused organizations, such as Christian

Blind Mission (CBM) or Humanity & Inclusion (HI).

### **Building capacities of humanitarian and DRR actors**

In order to make DRR, DRM, and humanitarian action more inclusive for persons with disabilities, capacity building and awareness raising are crucial. Several strategic capacity building programs have therefore been initiated. For example, in 2022, the United Nations System Staff College introduced a self-paced course “United Nations Disability Inclusion Strategy – Putting Words into Action” ([United Nations System Staff College 2022](#)). It covers key concepts and approaches related to disability inclusion and teaches participants how to identify and take specific actions for the implementation of the UN Disability Strategy in their areas of expertise.

The Age and Disability Capacity Programme (ADCAP) consortium developed a training module, a handbook, toolkits, templates and material on best practices ([Hill et al., 20](#)). With these materials, participants shall develop a critical understanding of age and disability inclusion issues in humanitarian action to improve programming, response, and monitoring. The course and the supplementary material were jointly developed by the Age and Disability consortium, a group of seven agencies working to promote age and disability inclusive humanitarian assistance: CBM, DisasterReady.org, HI, HelpAge International, IFRC, Oxford Brookes University and RedR UK ([ADCAP 2017](#)).

In addition, the Disability Reference Group developed seven training modules for trainers to facilitate learning, reflections and discussions around disability-inclusive humanitarian action. The modules cover different aspects of inclusion, such as Accessibility, Universal Design and Reasonable Accommodation, Inclusive Programme Cycle Management, and Inclusive Accountability to Affected Populations ([International Disability Alliance n.d.b](#)).

Another initiative is the “Leave No One Behind!” project, developed and launched by Handicap International (HI) and CBM, after the 2016 World Humanitarian Summit. This project,

funded by the German Federal Foreign Office (GFFO), is more comprehensive than a general training module. It also promotes disability mainstreaming in humanitarian action through awareness raising and capacity development with targeted and tailored seminars or coaching sessions.

Due to the continuous and growing demand, the second phase of the project extended the target group to local partner organization and contained the development of nine online training modules. Additionally, Phase 2 addressed the evidence gap on disability inclusion in humanitarian action by incorporating applied research with the Institute for International Law of Peace and Armed Conflict (IFHV) as the third project partner. Through fieldwork in Bangladesh and South Sudan, the team identified challenges in implementing inclusive humanitarian action ([Funke and Dijkzeul 2021, 2022](#)). In Bangladesh, for example, short funding cycles, frequent staff turnover, government policies and administrative procedures that entail a high workload for humanitarian staff reduce the time and resources needed to create an inclusive environment and ensure the meaningful participation of persons with disabilities.

A third phase began in 2022 and will conclude by the end of 2024. Building upon the results, experiences, and lessons from the previous phases, the third phase aims to support the operationalization of the IASC Guidelines. It involves activities related to the development of inclusive tools tailored for mainstream humanitarian actors, such as rapid needs assessment questionnaires, which better identify households with persons with disabilities, development of sector-specific learning packages, as well as capacity development and support for local technical staff and surge mechanisms in East and West Africa. One very recent example is the technical support of CBMs’ LNOB country team in Cameroon, where they worked with the humanitarian community on disability-mainstreaming during the development of the Humanitarian Needs Overview and Humanitarian Response Plan 2023 (OCHA 2023). This resulted in an increase in activities and indicators which specifically target persons with disabilities, for example the protection indicator “Number of children, care-givers

and persons with disabilities (including their care-givers) accessing mental health or psychosocial support.”

### **Strengthening capacities of persons with disabilities**

It is equally important to strengthen the capacities of persons with disabilities and their representative organizations (Grech 2022, 15). Recent studies in Niger and Cameroon have shown that even OPDs involved in humanitarian action often have limited knowledge on the humanitarian coordination system. Hence, they face challenges in accessing funding and resources and participating in cluster coordination meetings and specialized working groups (Takougang 2022; Capo and Sidibe 2023). Even when invited to consultations or planning meetings, persons with disabilities may struggle to actively contribute if they lack an understanding of key concepts and terminology. Therefore, capacity building initiatives have also addressed the needs of OPDs to strengthen their ability to engage effectively with their humanitarian and DRR counterparts. The International Disability Alliance and the International Disability and Development Consortium, for example, created an intensive training program on the CRPD and the Sustainable Development Goals (SDGs), the so-called “Bridge CRPD-SDG” training initiative (International Disability Alliance 2021). A specific training module on Article 11 of the CRPD on situations of risk and humanitarian emergencies aims to build stronger relationships between OPDs and experienced humanitarian actors to realize Article 11, the Sendai Framework, and the Charter on Inclusion of Persons with Disabilities in Humanitarian Action (Fleury and Ujah Sulayman AbdulMumuni 2020, 13).

### **Outlook**

Following the adoption of the CRPD, significant progress has been made at the global and national policy levels to promote disability inclusion. Nevertheless, the policy-implementation gap is significant and requires more dedicated funding and capacity building. While the issue of resource allocation primarily relies on commitments from government donors, mainstream organizations have begun to prioritize disability inclusion internally and in programming,

leading to an increased demand for capacity building in mainstreaming disability. Various training modules address this demand. The “Leave No One Behind” project offers technical support, for example, through tailored in-house trainings, development of sector-specific learning packages, and applied research. Promising initiatives, such as the “Bridge CRPD-SDG” training, complement these efforts and target OPDs. However, we are only at the beginning of mainstreaming disability throughout the humanitarian sector. To make DRR, DRM and humanitarian action inclusive, further sustained capacity building efforts and dedicated funding are needed. In the future, we also need more evaluations of the actual impacts of these initiatives and collections of best practices to help more organizations in their quest to become more disability inclusive.

## 2.3 Intersecting Vulnerabilities: Why thinking intersectionally matters in disaster contexts

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*This article explores the idea of intersectionality from a critical perspective and a gender lens. It discusses what adopting an intersectional approach implies in theory, and importantly in practice, in the disaster context, but at the same time problematizes the way intersectionality has tended to be operationalised by agencies and institutions to date. While it highlights the complexities and challenges with applying an intersectional lens in policy and practice, it also argues it is a necessity if we are to 'leave no one behind' and are to address vulnerability and risk at its root causes.*

It has long been recognised that risk is determined by the interaction between exposure and vulnerability. As such, different groups of people can experience the same hazard event differently. While vulnerability is a contested term and a complex notion, it is often assumed by policy makers and planners that we know who the vulnerable are—the very old and the very young, those with physical disabilities, and very often women. Exploring why women are considered to be vulnerable helps highlight why intersectionality matters.

### Questioning women's vulnerability

The 2004 Indian Ocean Tsunamis clearly highlighted that women's vulnerability lies not with biological weakness, but with gendered social codes of conduct that restrict women's bodies and movement, putting them at greater risk than men (Nasreen 2012). For example, in Sri Lanka, women's traditional saris wrapped restrictively around their bodies were a hindrance when there was a need to run fast (Oxfam 2005). Yet, the idea that hormonal and biological characteristics render women weaker than men remains a strong social narrative. This supposed physiological weakness is implicit in the Geneva Convention when suggesting that women shall be 'treated with all consideration due to their sex' (Gardam and Jervis 2001, 95), while the 1973 Declaration on the Protection of Women and Children in Armed Conflict states

explicitly that 'women and children [...] are the most vulnerable members of the population'. In the disaster context, the UN suggest 'women always tend to suffer most from the impact of disasters' (UN/ADPC 2010, 8).

This homogenised view of women as vulnerable is justified through a biology that is based on women as child bearers. Societies that see the main value and role of women as mothers will

often subconsciously picture all women as pregnant, and when not pregnant encumbered by children. Heavily pregnant women or a woman with a small child to carry may indeed be slower and less able to respond to a fast-moving and sudden onset hazardous

event (the stereotypical notion of disaster). In the latter example vulnerability stems not from being a woman but from being a mother. More precisely it stems from the caring roles socially assigned to women, which means they are the ones caring for, and here carrying, the small child.

### Risk is intersectional

Being a woman in itself does not create vulnerability. The most robust evidence for a 'feminised disaster mortality' comes from an analysis by Neumayer and Plümper (2007) which concludes that in situations of greater inequality,

„All inequality is not created equal“

Kimberle Crenshaw  
quoted in [UN Women 2020](#)



### Why do we use a capital “w” in “White people”?

“White” (with a capital “w”) describes people who have a privileged position in society as they are not subject to racism. The capital “w” is intended to distinguish the term from its other meanings and to emphasize the difficulties of using terminology based on skin color. It indicates that the term is being used as a socially constructed category and not an objective or natural characteristic. Its use reflects an awareness and sensitivity in dealing with racist power structures and efforts to ensure language choices are inclusive and well-considered.

there is greater chance that more women will die. In Sri Lanka, as in many countries, women often stay in their homes in the face of hazards, as cultural practices mean they are not allowed to leave without male agreement or accompaniment ([Ariyabandu 2009](#)). In Bangladesh many parents were found to consider cyclone shelters to be unsafe for girls and preferred to leave them at home rather than expose them to the perceived potential harms that arise from shared sleeping and sanitary facilities ([Plan 2011](#)). In contrast, at times societal expectations of men to protect and provide for their family may place them in higher risk situations. For example, men in Nicaragua during Hurricane Mitch sought to cross fast flowing rivers to save cattle, while men, in particular Black men stayed in their homes during Hurricane Katrina to protect their property and to ensure their access to employment once the water receded ([Bradshaw 2013](#)).

Risk is socially constructed, and thus who will be most at risk varies by context and characteristics, such as gender, race, and age. It is the combination of specific economic, social and cultural characteristics in any given context, that creates vulnerability. This notion of the combination of characteristics and the context in which they occur as key, is the essence of intersectionality.

### Intersectionality reveals vulnerabilities

[Kimberlé Crenshaw \(1989\)](#) first used the term intersectionality to express the specific issues faced by working class Black women seeking

employment in factories in the USA in the 1960s and 70s, to highlight how their dual, or intersecting characteristics meant they were discriminated against. While (White and Black) men were employed on the factory floor, women were not. Women were employed in administrative roles, but only White women. There was not seen to be a race issue as Black men were employed, nor a gender issue, as White women were also employed. Only by looking at the intersection can the injustice be revealed.

[Carbado and Crenshaw \(2019\)](#) note to operationalise intersectionality means problematizing the roots of discriminations. The need to understand the intersection of discriminations to get to the heart of multiple oppressions, and then to question power at that intersection. In a disaster context only by looking at the intersection of characteristics such as gender, race, class can vulnerability be revealed, understood and addressed. Yet, while intersectionality is implicit when considering who is more or less vulnerable to hazards, it is often not explicitly noted in disaster contexts, nor adequately operationalised ([Nasreen 2022](#)).

### We need links not lists

What we do often see is a listing of so-called protected characteristics that are assumed to make people vulnerable, or a list of analytical categories to include. For example, the Sendai Framework when stressing governments should engage with relevant stakeholders, notes the need to include “women, children and youth, persons with disabilities, poor people, migrants, indigenous peoples [...]” (pp. 10). Intersectionality, however, is not about the number but about the combination of characteristics and about how they intersect to render certain groups more vulnerable.

The links between age, gender, and marital status serve as an example: Young women living with their parents are generally dependent on the decisions made for them, including during disasters. Those living with male partners may have more independence, but research from Nicaragua shows they have less access to and control over household assets than older married women ([Bradshaw 2001](#)). Widows

#### People living in poverty

**2-3x**

Share of assets lost by poor people\* in extreme natural events compared to the rest of the population.

\*Lowest 20%

Source: World Bank Group (2017)

across the globe often face economic insecurity and social stigma on losing their partner (UN Women 2021). All combinations of characteristics can produce vulnerabilities at the intersections.

### Disaggregation can be dangerous

The move toward data driven humanitarian action and the drive to recognise multiple disadvantages, has meant operationalisation of an intersectional approach has often taken the form of the adding on of characteristics, adding more and more columns into a spreadsheet of disadvantages to calculate who is the most vulnerable. Rubin in 1975 talked of women's oppression as being characterised by a 'monotonous similarity' but demonstrating an 'endless variety', and it remains an important idea. Disaggregation can take the focus from the monotonous similarity of structural causes of inequalities and rather focus on the endless variety of outcomes of inequality.

Disaggregation into smaller, and smaller groups of intersections often leads to specific targeted policies being designed to meet the perceived needs of these micro-groups. One group often highlighted as particularly vulnerable is single mothers or female heads of household. While there is little empirical evidence to support this, and often evidence suggests they are in fact not the 'poorest of the poor' (Chant 2008), post-event they are often targeted with resources ahead of the majority of women, those living with a male partner. By meeting the needs of micro-groups, we are seen to be meeting the

needs of the most vulnerable. We may however then miss the wider picture.

### Focus on group-based inequalities, not groups of individuals

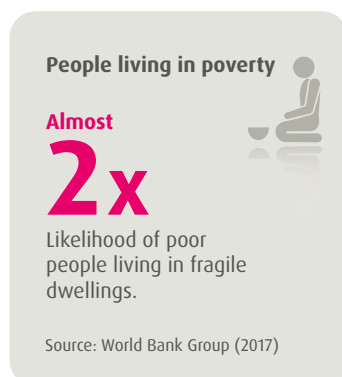
Intersectionality is about getting to the heart of multiple and intersecting oppressions and questioning power at that intersection. As such, at the intersection it is important to keep a focus not on the characteristics of the individuals, but on the structural causes of inequalities, to address inequalities of power at their structural roots, not via their myriad outcomes.

While a focus on specific groups means their needs are recognised and can be addressed, such as disabled women's sanitary needs, the focus is often on groups of individuals, rather than group-based inequalities. During hurricane Katrina, assumptions that women over 65 years of age would be more vulnerable due to their age were not borne out. It was not elderly women as a group, but rather the twinning of race and gender, group-based inequalities, that was important for understanding impact (Willing and Knight 2012).

### Avoid assumptions

Intersectionality recognises people have multiple identities, different characteristics that define who they are, and the importance of any one characteristic may be specific to time, place, and context. In the disaster context it is important also to recognise how the hazard event, and the response to the event, may impact on the intersections and produce vulnerabilities (Azad et al. 2014).

While many Western development and humanitarian agencies suggest there is a 'window of opportunity' post-disaster to challenge and change gender roles and relations, this goes against what actually gains access to aid in crisis situations. As gender intersects with a highly racialized set of relations embedded in colonial gratitude, showing weakness gains access to resources, showing gratitude is the correct response once access is gained (Henry and Highgate 2013). In this context it is overtly feminine characteristics that gain access to



### Why do we use a capital “b” in “Black people”?

“Black” (with a capital “b”) is a term established by the people to whom it refers to describe a social position influenced by racism. The capital letter highlights the fact that it is a constructed label rather than indicating an inherent characteristic based on skin color. Consequently, being Black encompasses a shared experience of racism as a result of being assigned this attribute as well as implying membership of an actual or assumed ethnic group.

resources and women must enhance their victim status to enable their access to aid. [Hilhorst et al. \(2018\)](#) suggest aid workers play along with rather than challenge these stereotypes, in part because of the social acceptability of this focus ([Carpenter 2005](#)).

### Avoid othering

It seems often when we operationalise intersectionality we place one characteristic to the fore. For example, we start with inequalities that derive from gender, then focus on specific groups of women as demonstrating ‘variations of’ these inequalities—a focus on the endless variety. This approach highlights the ‘otherness’ of some women. The danger of ‘othering’ is another important insight gained from adopting an intersectional approach.

Crenshaw’s work highlighted not only that the discrimination against Black women came from them being both women and Black, but also how this could be ignored and had been invisibilised. In terms of race, the civil rights movement spoke from within patriarchal structures placing Black men’s experiences as central, meaning Black women’s interests were neither recognised nor addressed. In feminist circles, women were conceived in the image of the dominant group and as such reflected the concerns and problems of White, largely middle-class women. They promoted a shared experience of subordination that actually emerged from their own experience. As ‘sisters in struggle’ these concerns became the main concerns of all women, leading the Black feminist activist [bell hooks \(1981\)](#) to ask of the women’s movement, ‘ain’t I a woman?’

Intersectionality is then about challenging processes that homogenise people, in Crenshaw’s original construction: women. It is also about problematizing the construction of the norm, here women as White and Western. Positioning Southern women’s experiences and interests against a heterosexual, White, middle-class, Western women reference point ([Mohanty 2003](#)) means in the Global South women are often pictured as ‘poor, pregnant and powerless’ ([Win 2009](#)). This construct is the opposite

of what is called for when adopting an intersectional approach!

Intersectionality recognises power as well as powerlessness, in that it is context specific, and a dynamic not static concept. For example, Black-minority ethnic women in Honduras might be assumed to fit the ‘poor, pregnant and powerless’ model but as members of the *Comité de Emergencia Garifuna* they have been recognised as performing important post-disaster rescue functions and longer-term development work such as construction of safe housing ([Fordham and Gupta 2010](#)).

### Ain’t I more than a woman?

Each individual has multiple different identities, and which is key for them may not be the same as what an outsider, or expert, might assume. A poor indigenous woman may see herself and her concerns as being more closely allied to her male counterparts than to a non-indigenous woman, particularly a middle-class city dweller. Assuming gender is her key vulnerability is a mistake. She may understand the main issue to be the capitalist system that forces her to live on a flood plain so she can access paid work in a factory, or the colonial heritage that has driven her from her and her peoples’ lands. Her struggle then is with indigenous men, not against them.

This means it is important that ‘we’ do not assume to know which oppressions matter most for ‘others’, but that instead analysis allows the characteristics that matter to the people themselves in terms of how they experience their own oppression to be revealed ([Bradshaw et al. 2017](#)).

### Intersectionality adds more than it costs

Some gender critics of intersectionality point to it as taking away from what they see to be the key oppression for women, their gender identity, and taking the spotlight of women. It is argued that in some contexts just talking gender is already seen as controversial in itself, and that including discussion of women’s specific issues in policy and practice is a big step forward. To then add in other characteristics

is seen to complicate matters and to threaten advances made. However, an intersectional approach can bring gendered benefits.

Intersectionality allows us the option of taking an ‘intersectionality with gender’ approach rather than talking ‘gender and intersectionality’. Talking about gender as part of, or within a wider intersectional conversation around various types of disadvantage can be seen to be less threatening in some deeply patriarchal contexts where the mention of gender would end the conversation before it even began. Focussing on intersectional discriminations and not privileging a ‘gender and...’ discussion, can get gender onto agendas where it was previously denied.

While an intersectional approach can lead to micro-groups, it should actually do the opposite and open up agendas and spaces to a plurality of voices which together can be louder and more likely to be heard. During the negotiations around the Sendai Framework the different civil society groupings recognised by the UN worked together to maximise the limited times and capacities to influence member states and thus

the policy. This was intersectionality in action, with the disabled caucus always mentioning age and gender as interrelated and important issues, or the gender group highlighting the issue of indigenous peoples as a key to understanding some women’s oppression.

### **Concluding thoughts: The personal is professional**

To avoid the issues raised above, an intersectional approach calls for us to adopt a perspective on structures of oppression which puts the spotlight not only on the victim but also on the victimising structures. It asks us not only to look at who we see to be the victims—the vulnerable, those at risk—but also ourselves and our role in creating or sustaining the oppressive structures that construct that vulnerability and risk ([Bankoff and Hilhorst 2020](#)). This can be personally and professionally challenging. To adopt an intersectional approach is not easy, but it is necessary if we are to address vulnerability and risk at its root causes, to get to the heart of the intersecting oppressions, and in this way address its myriad lived realities.

## 2.4 Global Hunger Crisis – Why Recognizing Age and Gender is Vital for Survival

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*In March 2023, the German Federal Foreign Office published the "Guidelines for Feminist Foreign Policy". In these guidelines, the German Federal Foreign Office, as one of the world's most important donors of humanitarian assistance recognizes that, due to their diversity, people are affected differently by crises. Humanitarian crises can act as important drivers for social change, which often occurs automatically due to shifts in power. This can be either negatively exacerbated or consciously considered by humanitarian actors. The example of the global hunger crisis and the associated age- and gender-specific impacts clearly show how important it is to take this diversity into account. Gender inequality in the context of humanitarian assistance must be analyzed and addressed in order to save lives.*

### Facts, context, and background to the global hunger crisis

Humanitarian action supports people who find themselves in crisis situations due to conflict or natural extreme events exceeding their own coping capacities. It is based on the humanitarian principles of humanity, neutrality, impartiality, and independence. Its aim is to save lives and alleviate suffering ([Auswärtiges Amt 2023](#)).

Diversity is also increasingly being discussed in the context of humanitarian programs against the backdrop of the newly published feminist foreign and development policy of the German Federal Government ([Auswärtiges Amt 2023](#); [Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung 2023](#)). It is important to understand how the different social and political realities of a group of people interact and produce different forms of discrimination

and privilege. This is in line with the do-no-harm principle ([Koordinierungsausschuss Humanitäre Hilfe et al. 2014](#)).

The global food crisis is an example of how humanitarian crises affect different social groups disproportionately. It is precisely in such life-threatening situations that dynamics of oppression and discrimination are reinforced. At the same time, as disasters are disruptive and can affect existing power structures, a window for change is opened. In this context and beyond, a competition for power among different groups determines which social groups will control important resources and gain political decision-making power in the future ([VENRO 2010](#)). However, this requires contextual analyses that acknowledge the complexity of the situation. And this is where the challenges begin:

Although the triggers for an acute food crisis may differ among countries, all countries have to deal with multiple, interconnected, and mutually reinforcing causes of food insecurity. This is why we speak of a global hunger crisis—not many hunger crises. Three major factors—i.e. conflict, economic instability, and climate change impacts (such as weather extremes)—form a vicious cycle that often results in protracted crises ([World Food Programme 2022](#)).

At least 345 million people in 82 countries are currently experiencing acute food insecurity due to the hunger crisis—a number that has been rising since 2019 ([World Food](#)

#### Women and children

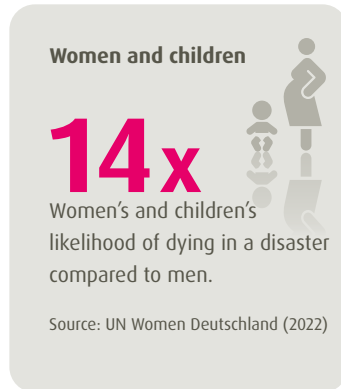
As many as

**80%**

of the 21.5 million people displaced by climate-related disasters are women.

Source: UN Women Deutschland (2022)





Programme 2023). It is estimated that one person dies of hunger every four seconds (Oxfam 2022). Globally, nearly 45 million children under the age of five suffer from acute malnutrition (UN News 2022). One in five deaths of children aged zero to five years is due to severe acute malnutrition, which is one of the greatest risk factors to child survival (UNICEF 2022). The risk of a child dying from a typical disease is eleven times higher for the millions of children who are severely malnourished (UNICEF 2022). Around 149 million children under the age of five experience delays in growth and development due to a diet that is chronically deficient in essential nutrients. (FAO 2022). In addition, available data suggest that about 150 million more women than men were affected by food insecurity in 2021 (Care 2022)—a gap that continues to grow (FAO 2022).

### **Beyond the numbers – what the statistics do not show**

Current statistics paint a harrowing picture—and yet they fail to name many things. Headlines often do not tell us anything about individual susceptibility to acute food insecurity, nor about the underlying factors that determine different outcomes / impacts. This is also because disaggregated data is often not available. This is not only dangerous for the people affected, but also limits the opportunities of providing adequate solutions for sustainable assistance.

Nevertheless, there is an agreement (Sphere Associations 2018) that gender plays an important role for the protection and well-being of

children and adults alike (Fu 2022)—in combination with factors such as age, disability, ethnicity, and displacement status (Fu 2022).

The causes and consequences of food insecurity are inextricably linked to gender—the most food insecure countries are also the countries with the greatest gender inequality (Care 2022). This plays a role in the way food is produced and consumed. It also shapes the strategies people adopt to cope with the situation. And it influences the multiple impacts of hunger and food insecurity on those affected (Wright 2023). The following remarks on how girls and young women are affected are to be understood as exemplary. They in no way claim to be exhaustive but can only provide an insight into the complex dynamics.

### **Indirect consequences of acute food insecurity for girls and young women**

Existing gender norms shape girls' and women's susceptibility to the effects of food insecurity. The gendered distribution and consumption of food at the household level often leads to girls and women eating less, or only after boys and men have eaten. For married girls in some contexts, their lower status within the household may also mean that they are denied food by their husbands, his relatives, or his other wives (Fu 2022).

Women- and child-headed households and girls and women with disabilities face disproportionately higher barriers to accessing food. They have less income but must generate it to cover the cost of food. This puts them at risk of abuse and exploitation, such as child labor or sexual exploitation for food. Likewise, relevant information on food distribution or registration points may not be offered in a child-friendly or accessible way (Wright 2023; United Nations 2020).

Like any crisis, acute food insecurity exacerbates the risks of violence, abuse, and exploitation that girls and women face both inside and outside their homes. It is quite common for women and girls to be responsible for procuring and preparing food. Associated activities, such as obtaining water and firewood for cooking,



can increase their risk of sexual abuse. Directing information about food assistance explicitly towards women and girls can create tensions in the household, increasing the risk of domestic violence (IASC 2015).

Strategies used to cope with food insecurity increase the vulnerability of girls and women to violence—risks that are exacerbated in conflict situations or during displacement. These risks include child, early, and forced marriages, which were already common before the current food crisis in many of the contexts studied (Plan International 2023). Food insecurity may place pressure on families to marry off their daughters to obtain a dowry, ensure the economic well-being of the girl, or reduce food needs within the family (IASC 2015).

The hunger crisis has a negative impact on children's education. This impact varies depending on the child's gender. Girls' enrolment and/or attendance in school has declined sharply in countries affected by fragility, conflict, and violence (The World Bank 2022). Moreover, hunger generally negatively impacts the ability of children to learn (World Food Programme 2019). With families threatened by food insecurity, girls may increasingly take care of younger siblings to enable their parents to work or obtain food. This forces them to miss classes or drop out of school. Their education appears less profitable compared to the education of boys who are expected to be more responsible for paid work and thus income generation (Wright 2023).

The unmet needs in the area of sexual and reproductive health (SRH) (UNFPA 2023) also have serious consequences, not only for the education of girls and young women. These were neglected even before the crisis and, as a result, the number of unwanted pregnancies and sexually transmitted infections is increasing. There is a lack of information, health services, and goods, such as contraceptives, medicines, or menstrual products. This is also due to funds—both government funds from donors and individual expenditure by affected people—being primarily invested in food to ensure survival. Accordingly, less financial resources remain for sexual and reproductive health.

Moreover, in many cases, girls and women do not have the power to make decisions about their own health care, sex, or contraception (UNFPA 2023). For these reasons, unwanted pregnancies tend to increase in times of crisis. And the risk associated with pregnancy in a situation of crisis context is exacerbated by malnutrition (UNFPA 2022). Malnutrition increases the risk of miscarriage and maternal mortality, as well as stillbirths, neonatal deaths, low birth weight, and growth delay in children, leading to intergenerational malnutrition (WHO 2020). Here, too, age is a significant factor. Pregnant girls aged 15 to 19 years are twice as likely to die during childbirth than women over the age of 20 (UNFPA 2023).

### Possible solutions

Interventions to address the current global hunger crisis reveal the need to consider the different needs of target groups, particularly the ways in which they are shaped by entrenched gender inequalities. Otherwise, there is a risk that the specific needs of girls and women will be neglected and progress towards gender equality that has already taken place will be undermined (Wright 2023). An intersectional view is essential to understand how different forms of discrimination are interrelated. An important misunderstanding must be addressed here: While girls and young women are particularly affected by the hunger crisis, they must not be victimized. They are important actors who have an impact in society that should not be underestimated. If they can claim their rights, this has a positive impact on society as a whole. For example, 45 million people could benefit from food security if gender differences in agricultural productivity were overcome (World Food Programme 2023).

Humanitarian assistance always takes place under difficult conditions. Closing the gap between aspiration and reality as well as theory and practice is one of the central challenges, especially in the context of humanitarian action (Behmer 2013).

Challenges already arise in ensuring that food security data is disaggregated by gender, age,

and disability and includes information on the needs of children and adolescents. Assessments and data collection conducted during crises should be strengthened to better identify and understand particular needs and risks of specific gender and age groups. One problem, however, is that this can be costly and time-consuming (IASC 2018). Here, donors can make a crucial contribution.

In this context, a quantitative assessment alone is not enough. Public donors should push for efforts beyond mere data collection. Taking into account special categories such as age and gender broaden the perspective to include further intersectional categories (Behmer 2013). Therefore, gender, age, and disability markers can be important tools for donors in selecting humanitarian projects (Behmer 2013). For example, access to food distribution in humanitarian contexts should not be based solely on quantitative data such as the number of food distribution points. The marker would also include whether women face harassment during food distribution or whether children find their way home without getting lost. Addressing these intersectional categories could ensure that all population groups benefit from food distribution and

that no one is disadvantaged. It is also important to constantly consider local conditions to not do any harm in the respective context and to avoid unintended effects.

Another challenge is related to the right to participation among target populations. This implies the imperative for humanitarian actors to question their own work and effectiveness and to be open for criticism of the target group. It must be ensured that the target group is consulted and involved in the design of humanitarian work. This equally applies to children and young people.

Wherever possible, locally led programs must be supported, as local organizations are often the first on the ground after an extreme natural event and know the realities of affected areas best (Metcalf-Hough et al. 2022). Local organizations, including young women-led organizations, need direct, flexible, and additional resources, as well as a central role in deciding on interventions. Unequal power and dependency relations need to be addressed. Not only within the local population, but also with respect to one's own role as a humanitarian actor, donor, and policy maker.

# Disaster gender gap

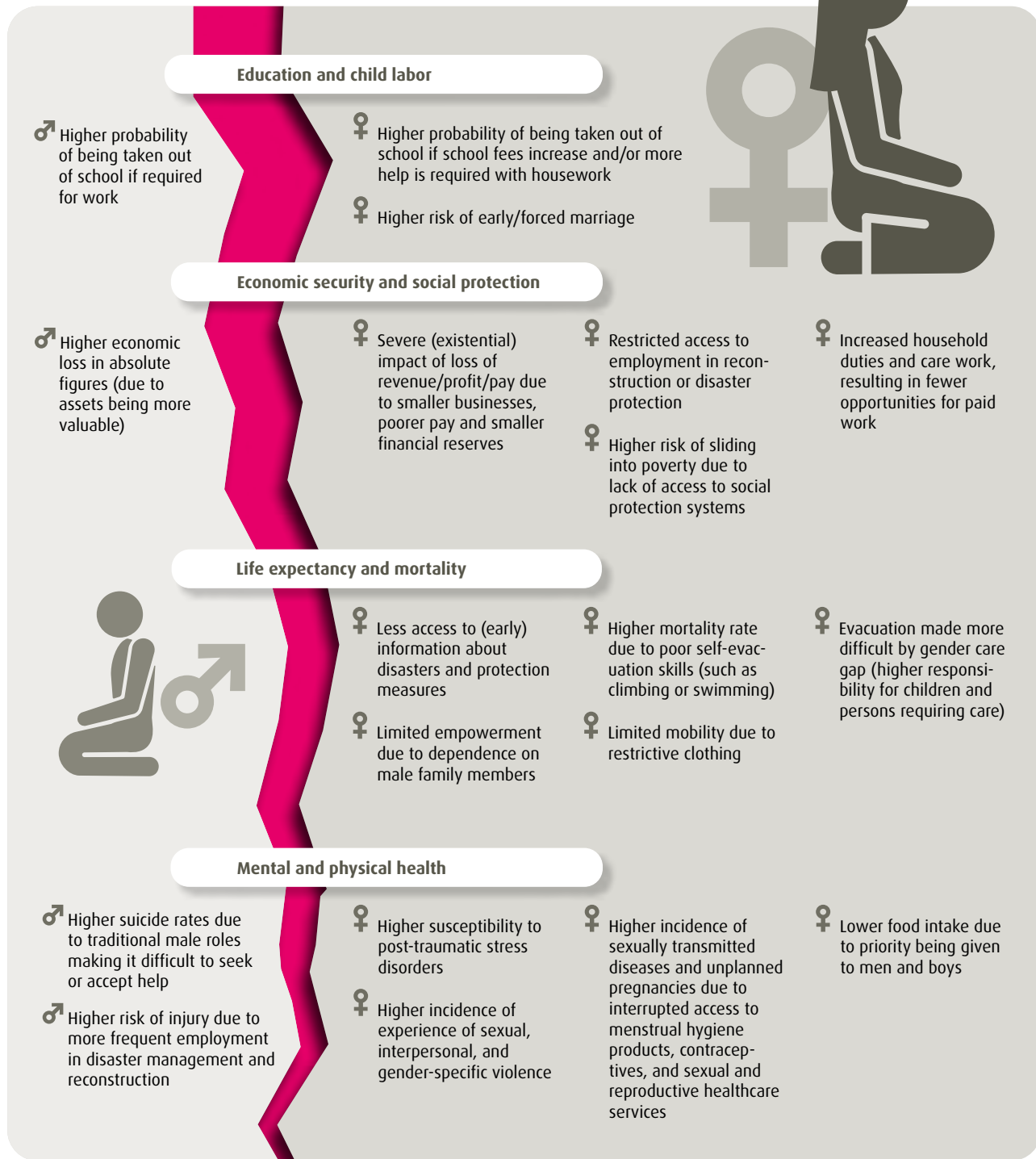


Figure 5: Negative post-disaster impacts are significantly stronger and more common for women (or people read as female)



## Ecuador

# Empowering women to support the green transition

### Country profile

WorldRiskIndex Rank 18

**Risk**  
very high



23.58

**Exposure**  
very high



14.57

**Vulnerability**  
very high



38.15

In 2008, Ecuador adopted an extremely progressive constitution that explicitly incorporates the “buen vivir” (or “good living”) concept. Drawing on this indigenous philosophy, the focus of the new constitution is living life in harmony with nature. However, the recent governments’ approach to development has failed to live up to the goals set out in the constitution, instead concentrating on exporting crude oil and agricultural produce (primarily bananas and flowers). When oil prices fell, President Moreno’s government curtailed social and workers’ rights. Mass protests ensued and the government’s response was brutal.

The measures taken to tackle the Covid-19 pandemic led to a significant increase

in social inequality. Currently, around one quarter of Ecuador’s population is living below the official poverty line (INEC 2022).

The country’s women are especially disadvantaged. 65% have experience of gender-specific violence (UN 2022). Patriarchal social structures, financial factors and deficient infrastructure hamper access to school and education for girls and women in rural areas. Moreover, the women who work in the flower industry in Cayambe are only paid a minimum wage, which is below the subsistence level. In addition, the pesticides used have a fatal impact on their own and their children’s health.

## Situation on Diversity

18,001,000  
Inhabitants

Source: World Bank (2022)



53%

Women with at least some secondary education (≥ 25 years old)

Source: Gil (2021)



♀ 94% ♂ 95%

Literacy rate (> 15 years old)

Source: World Bank (2021)



39%

Proportion of seats held by women in national parliaments

Source: World Bank (2022)

The project region is situated in two of the country's poorest cantons, Cayambe and Pedro Moncayo, in the Andean Highlands. Located close to the equator and at an altitude of between 2,600 and 5,700 meters, it has a mostly temperate climate, several vegetation zones, extensive biodiversity and good conditions for farming. However, the amount of land and water resources available to small-scale farmers living there is constantly decreasing due to the major expansion of the flower industry and industrial-scale agriculture. This intensive farming is causing environmental contamination.

Global warming and the extreme weather events it causes have left their mark in the project area and resulted in the loss of traditional Andean crops such as corn or quinoa. Crop failures due to sudden cold snaps, hail, drought or flooding brought on by continuous rainfall have caused huge harvest losses and pose a risk to the local population's food sovereignty.

The effects of increasingly unpredictable extreme weather events and environmental pollution arising from intensive monoculture farming have been compounded by cheap food imports putting pressure on market prices and sales of organic produce.

### Project context and activities

The Fundación SEDAL in Ecuador helps farming cooperatives' agroecology efforts and offers a joint-use certification system to support their marketing activities. Brot für die Welt has been providing funding for the organization since 2005. Managed by women, SEDAL's approach is for women farmers to pass on their knowledge about environmentally friendly fruit and vegetable farming to other women and their families working in small-scale agriculture.

The agroecological farming concept includes low-impact, sustainable use of land and water, which helps prevent fertile land being lost due to climate-change effects such as heavy rain or drought. For instance, the women SEDAL advises make organic fertilizer from pigs' urine and guinea-pigs' or chickens' droppings. They also grow small trees and bushes to provide protection from the wind and install rainwater irrigation systems.

Equipped with techniques like this, the women are able to grow crops even at a height of more than 3,000 meters, where the weather is extremely dry and windy. Although the soil is hard and has lost some of its fertility as a result of erosion, chemical fertilizers and excessive digging, the women use organic fertilizers and a shallow digging method that protects the topsoil, allowing them to grow crops such as barley, potatoes onions, lettuce, corn, pumpkins and beans.

To sell their products at markets, they form alliances with other women or groups of women. Together they agree on fixed prices that remain constant regardless of the market price fluctuations. This

reduces competition and price wars. The participants monitor compliance with environmental standards and have developed an organic label, which guarantees safe and healthy regional products.

### Outcomes and impacts

This form of solidarity-based local marketing, coupled with agroecological production, gives many families in Cayambe the opportunity to avoid dependency on precariously paid jobs and harmful working conditions in monoculture farming and intermediaries in conventional farming. The women can harvest enough from their small-scale farming to be able to feed their families themselves.

Women who sell their agricultural produce successfully become more visible in their community, take on more leadership roles and contribute income to their family, thereby encouraging reflection on how families and the community see gender roles. Many women's families are so impressed by their success that they support the production and marketing work and are proud of their products.

By working with the SEDAL project, the women become more confident and often end up participating in further training programs. They also inspire young women in rural areas to break away from traditional views of roles in society and develop new ideas for their own future and that of their communities.

#### Charlotte Spiewok

Program Officer Project Communication,  
Brot für die Welt





## Of places where it will not be good again Field report from Pakistan

WorldRiskIndex Rank 11

**Risk**  
very high  26.45

**Exposure**  
very high  13.11

**Vulnerability**  
very high  53.38

### Current situation

My colleague and I are on our way to Pakistan. For more than ten years, the country has become a theater of the global climate crisis. Its inhabitants are confronted with storms, earthquakes, or heat waves every year: frequency increasing. From July to September 2022, it rained for three months straight, turning Sindh province into an ocean. Enormous amounts of water buried roads and schools, and people watched their houses collapse from the hills or ridges where they were forced to camp under tarpaulins for up to five months. Three years earlier, a climatological study had already predicted such a scenario should there be a two-degree increase in global warming ([Bashir/Hanif 2018](#)).

Upon our arrival: burning heat. We see fallow, parched soil where there were floods until a few months ago and rice fields should be to the left and right of the

paths: the other side of the climate crises. While Europe's inhabitants are warned of dramatic health problems and heat-related deaths at 35 degrees Celsius, the temperatures rise to 45 degrees Celsius during our stay.

The rise in temperature affects the region's weather phenomena in such a way that the likelihood of renewed heavy rainfall and above-average monsoon rains increases drastically ([Otto et al. 2022](#)). The parched soils cannot absorb the water, which leads to further flooding. The crisis is a vicious cycle.

The villages we visited are in Sindh, in areas that were most affected by the floods. We meet people in sheer despair. The months of continuous rain had not only left them trapped, but also isolated—no sun, no electricity, no light, no charged cell phones. At the same time, they lacked places for privacy and retreat in



## Situation on Diversity

235,824,862  
Inhabitants

Source: World Bank (2022)



22.1 %

Women with at least some secondary education (≥ 25 years old)

Source: Gil (2021)



♀ 46 % ♂ 69 %

Literacy rate (> 15 years old)

Source: World Bank (2019)



20 %

Proportion of seats held by women in national parliaments

Source: World Bank (2022)

the makeshift camps. Women, who were exposed to the glances and intrusiveness of men during all forms of personal hygiene, were particularly affected.

But the villagers did not only lose their houses. They had to decide between saving themselves or their livestock. Those who were able to salvage at least some of their livestock had to witness many of their animals die even after the rain. Garbage, sewage, and pollutants collected in the stagnant, soon to be fetid waters. They not only became breeding grounds for myriads of mosquitoes, but also contaminated the soil and groundwater. A restart of peasant agriculture, or even mere subsistence, is still impossible in many places today as irrigation channels were destroyed by the pressure of the floods.

Therefore, the only way for most villagers to survive is as temporary workers. On average, they find work on 15 days per month. After deducting rising transportation costs, they are left with the equivalent of less than 1.80 euros a day—close

to nothing, well below the poverty line. Daily meals are reduced from three to two. The inaccessibility of villages, exacerbated by destroyed roads, first affects those who are particularly dependent on them: pregnant women who need medical assistance for childbirth and people who are sick, elderly, or weak. The loss of resources thus reinforces dependencies and inequalities that existed before. When school attendance for boys is a virtually unaffordable luxury, it is no longer available for girls.

### Project

In this nearly hopeless situation, we encounter people who hold on to life nonetheless. With the support of medico's partner organization HANDS (Health And Nutrition Development Society), villagers begin to organize themselves. They form committees, set development goals, and look for ways to implement them together. People defending their dignity against the desperation of circumstances. Women who speak out loudly and openly. Democratization as a practice.

medico has already been associated with HANDS since the tsunami in 2010. At that time, the reconstruction of 1,550 houses could be realized under the motto "build back better," which indeed enabled better standards of living. The majority of these houses have now been destroyed: No house can withstand meters of standing water for months without damage. The provincial government has now launched a program to rebuild more than two million houses (Zaidi 2023). HANDS will accompany the construction of more than 300,000—knowing that with the worsening climate crises, it is only a matter of time before these houses will also be destroyed.

The village committees explain to us how they plan to prepare for new floods with evacuation plans. They plan ramparts to protect their own, but also the surrounding villages, and prepare to be able to continue farming or raising livestock even under the most adverse conditions

of drought and saline soils. They know that the ubiquity of the crisis has become the normality of their lives. And yet they persist in making the best of it. These efforts, however, find their limits in the given conditions—an invisible wall.

### Outlook

The Pakistani state is on the verge of bankruptcy and will not be able to finance the repair of damage on this scale. The nine billion US dollars promised to the country by the international donor conference in Geneva will not be enough either (dpa 2023).

The invisible wall is the refusal of major CO<sub>2</sub> emitters, which is demonstrated annually at the World Climate Summit, to make substantial changes and assume responsibility for previous climate crisis-induced damage.

In 2022, Pakistan's Federal Minister of Climate Change, Sherry Rehman, struck at the heart of the problem when she demanded reparations to the full extent for damage and losses. Because the responsible governments did not even comment on her demand, Rehman was forced to ask for help instead. If those affected wanted to take legal action against this refusal to pay reparations, they would each have to file their own claim. What they could put forward, however, would at best elicit a meager shrug from the major CO<sub>2</sub> emitters. Ultimately, landless Pakistani farmers are structurally denied the possibility of being anything other than recipients of charity. For now, everything remains the same—while climate activists are criminalized in Germany. Until the next disaster.

### Karin Zennig

South Asia and Climate Justice Officer at medico international







# 3 WorldRiskIndex 2023

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*In many parts of the world, extreme natural events such as earthquakes, storms, floods, or droughts are part of life for millions of people. Mid- and long-term effects of climate change will not only amplify the frequency and intensity of these phenomena but also drastically increase the number of people affected by them. However, the extent to which extreme events trigger disasters depends not only on natural processes alone but also on societal capacities and resources. Accordingly, disaster risks are particularly high where extreme natural events affect vulnerable societies. In line with this perspective, the WorldRiskIndex provides an assessment of latent disaster risks for 193 countries worldwide. The analysis shows that the trends of recent years are persisting: While the Americas top the continental ranking in terms of risk and exposure, the global hotspot of vulnerability is Africa – almost 80 percent of the continent faces high or very high risk.*

In the media discourse, the image of humanitarian crises was again shaped by the war in Ukraine and the conflict in Sudan. Their courses have led to severe displacement crises and claimed countless lives. At the same time, extreme natural events resulted in injuries and deaths, damaged buildings and infrastructure, and destroyed the livelihood of millions of people: Chile, for example, was affected by heavy wildfires at the beginning of the year and large parts of Asia experienced severe heat waves in April. In the Horn of Africa, the rainy season failed to arrive once again, prolonging the catastrophic drought in Somalia for another year. In Turkey and Syria, earthquakes not only caused extreme damage and destruction of buildings, streets, and supply structures but also resulted in more than 100,000 injuries and deaths. In May, thousands of people in Bangladesh had to

be evacuated due to Cyclone Mocha. In Myanmar, where the storm subsequently hit, one third of the population had already been dependent on humanitarian aid. Shortly before that, Cyclone Freddy hit Madagascar, Malawi, and Mozambique, causing nearly 1,000 deaths and a catastrophic loss of livestock in Malawi. Additionally, it led to a dramatic increase of cholera cases in Mozambique as sanitation and water supplies were destroyed. Once again, the countries suffering the most from the consequences of extreme natural events are the ones that have lost their ability to respond to shocks and crises due to previous conflicts and disasters, whereas other countries have the societal capacities to cope with the negative impact of these kinds of events. This fact is highlighted by the WorldRiskIndex, which emphasizes the relevance of societal capacities in disaster prevention.

## The concept of the WorldRiskIndex

The WorldRiskIndex is a synthesis of various discourses and concepts on the phenomena of hazard, exposure, and vulnerability, the interaction of which is considered to be the main cause of disaster risks (Wisner et al. 2004). The model is based on the works of Bogardi and Birkmann (2004), Cardona (1999), Birkmann (2006), and Cardona / Carreno (2011), as well

as more recent discourses on coping and adaptation (Davies 1993; Lavell et al. 2012), which emphasize an equivalence of driving forces. Consequently, the WorldRiskIndex differs from earlier approaches (Cardona 2005; Peduzzi et al. 2009), which focused on the aspects of risk, exposure, and damage. At the core of the model lies the understanding that disaster

risks are not solely shaped by the occurrence, intensity, and duration of extreme natural events, but that societal factors, political conditions, and economic structures are equally responsible for whether disasters occur in the context of extreme natural events. This reflects the assumption that, in theory, every society is capable of taking precautions, either directly or indirectly, such as establishing and maintaining effective disaster protection systems to address the effects of natural hazards or climate change.

Last year, the model of the WorldRiskIndex was completely revised (Weller 2022) in order to reflect that the risk profiles of countries and regions have become more heterogeneous and complex due to the impacts of climate change—a trend which is not only expected to continue in the foreseeable future but also gives rise to new risks and hazards in regions that were previously not or only to a limited extent exposed. In order to adapt to these evolving conditions, it is crucial to develop and strengthen additional societal capacities. The focus on flexibility and consistency is central to the new model. On the one hand, this approach enables the utilization of a wide range of data for risk analysis and facilitates the faster integration of new aspects, such as new types of hazards. On the other hand, clearer processes and methods enhance the comprehensibility of the analyses and create new possibilities for evaluation. This is expressed, among other things, in a stronger alignment of the terms and definition of the model with the terminology of the United Nations Office for Disaster Risk Reduction (UNDRR 2022):

- + **Risk** is the interaction of the two spheres of exposure and vulnerability, which only arises where both spheres meet. In this respect, risks only occur where populations without sufficient resilience, coping, or adaptation capacities live in regions, where hazards from extreme natural events or negative impacts of climate change exist.
- + **Exposure** is the extent to which populations in hazard-prone areas are exposed to and burdened by the impacts of extreme natural events or the negative consequences of climate change. Thus, exposure consists of the

aspects of hazardousness, which includes the frequency and intensity of earthquakes, tsunamis, coastal and river floods, cyclones, droughts, and sea-level rise in an area (hazard zone), and populations (hazard object).

- + **Vulnerability** is the predisposition of populations to be vulnerable to damage from extreme natural events or negative impacts of climate change. As a sphere of economic, political, social, and environmental factors, vulnerability maps the capacities and dispositions of people, households, and societies and indicates how easily and to what degree they can be destabilized, damaged, or even destroyed by extreme events. It consists of the three dimensions of susceptibility, lack of coping capacities, and lack of adaptive capacities, which are subdivided into further categories.
- + **Susceptibility** refers to structural characteristics and general conditions of societies that increase the overall likelihood of populations suffering damage from extreme natural events and entering a state of disaster. In this respect, susceptibility indicates the extent of resilience and resources of a population to mitigate the immediate consequences of extreme events.
- + **Coping capacities** refers to the abilities and measures of societies to counter adverse impacts of natural events or climate change through direct actions and available resources in the form of formally or informally organized activities and measures, as well as to reduce damage in the immediate aftermath of an event and initiate recovery. Within the model of the WorldRiskIndex, the deficits in these capacities are included, which is why it is referred to as the lack of coping capacities.
- + **Adaptive capacities**, in contrast to coping capacities, refers to long-term processes and strategies to achieve anticipatory changes in societal structures and systems to counteract, mitigate, or prevent future negative impacts. Analogous to the lack of coping capacities, the lack of adaptive capacities is included in the WorldRiskIndex.

In total, a set of 100 indicators is included in the calculation of the WorldRiskIndex (Figure 6). Only indicators provided by scientifically recognized and publicly accessible data sources, such as World Bank, UNESCO, and WHO, are considered. Additionally, each indicator needs

to be precise and theoretically relevant, but also comparable, comprehensible, and consistent, as well as continuously provided by its data source to meet the model's requirements for transparency and reproducibility.

## The calculation of the results

Alongside structural changes, methodological adjustments were integrated into the model to enhance the transparency and reproducibility of the WorldRiskIndex calculations: Firstly, robust algorithms ([King et al. 2001](#); [Honaker / King 2010](#)) are applied to estimate plausible values for all missing data in the indicators. These algorithms analyze correlations between values of individual countries across years and indicators. To maximize the plausibility of the estimates, this process includes an additional 150 indicators beyond those of the WorldRiskIndex. Following this, an Ordered-Quantile-Transformation ([Barlett 1947](#); [Van der Waerden 1969](#)) is applied to the completed indicators. This transformation prevents skewed distributions or outliers from distorting the calculations before all indicators are normalized to a range of values from 0 to 100 (min-max normalization). Higher values indicate more adverse circumstances or initial conditions. Subsequently, these values are aggregated according to the structure of the WorldRiskIndex, using geometrical averaging. Rounding to the second decimal simplifies the calculations. For easier accessibility, the values of individual spheres and dimensions are categorized into five classes whose limits were determined based on the last 20 years (median of the quintiles). For detailed explanations of the new methodology of the WorldRiskIndex, see [Weller \(2022\)](#).

This year, only the indicators of the vulnerability sphere were updated, as updating the exposure sphere requires data from recent population censuses, which will only be made available by data sources in the next few years. However, this has little impact on the results of the WorldRiskIndex, as changes in the exposure sphere can only result from shifts of hazard zones and changes in the spatial distribution of populations, and both phenomena tend to manifest their effects over long periods, spanning decades.

Furthermore, a concern raised by many readers was addressed this year: It was noted that analyses of temporal dynamics based on the WorldRiskIndex were previously hindered by the fact that while the annual calculations of the WorldRiskIndex are always based on the most recent data available, many data sources offer updates and corrections for preceding years over time. This occasionally led to discrepancies between WorldRiskIndex results and the raw data from these data sources. Starting this year, an additional longitudinal dataset, which will be updated annually, is introduced alongside the raw and results data of the current report. This will allow users to analyze the time series of each element in the model, starting from 2000. In the tradition of previous reports, both data sets are available on the WorldRiskReport website and, starting this year, via the UN-OCHA HDX platform.

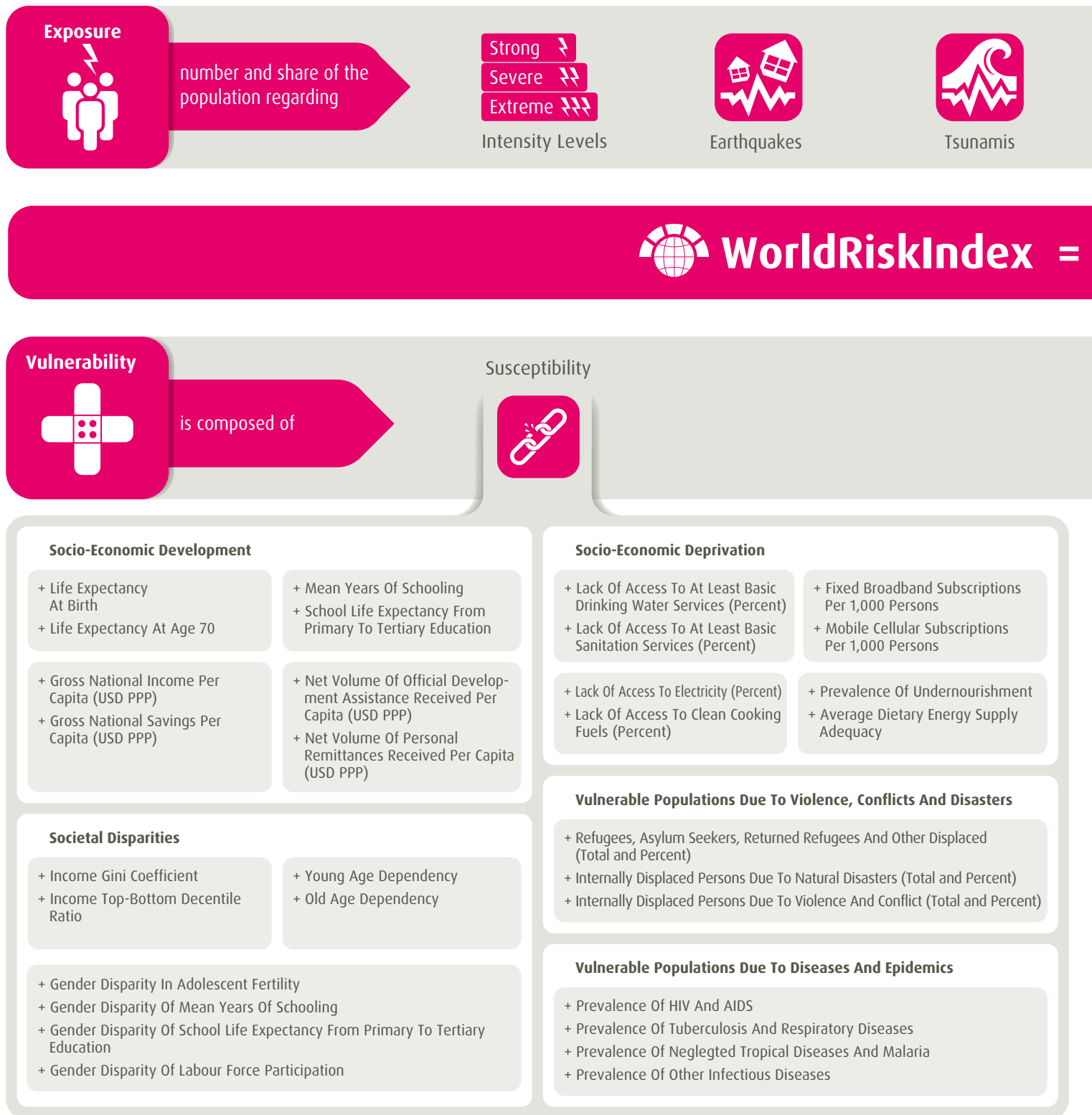
## The results of the WorldRiskIndex

The main result in recent years has been that global disaster risks are distributed very heterogeneously, and they are strongly linked to aspects of poverty and inequality. Specifically,

those countries whose risk profiles are characterized by climate-sensitive exposure will be facing higher risks in the future. Accordingly, the global risk hotspots are expected to shift



# The Structure of the WorldRiskIndex



\* These dimensions are not currently considered due to insufficient availability of indicators.  
The unweighted geometric mean is used to aggregate the indicator values at all levels of the WorldRiskIndex.

Figure 6: The Structure of the WorldRiskIndex



Cyclones



Coastal Floodings



Riverine Floodings



Droughts



Sea Level Rise

# Exposure × Vulnerability

## Lack Of Coping Capacities



### Recent Societal Shocks

- + Population Affected By Disasters In The Last 5 Years (Total and Percent)
- + Population Killed In Conflicts In The Last 5 Years (Total and Percent)

### State And Government

- + Control Of Corruption
- + Rule Of Law
- + Government Effectiveness
- + Political Stability And Absence Of Violence And Terror

### Health Care Capacities

- + Medical Doctors And Practitioners Per 1,000 Persons
- + Nursing And Midwifery Personnel Per 1,000 Persons
- + Hospital Beds Per 1,000 Persons
- + Current Health Expenditures Per Capita (USD PPP)
- + Maternal Mortality Rate
- + U5 Child Mortality Rate

Infrastructure\*

Social Networks\*

Material Protection\*

## Lack Of Adaptive Capacities



### Education

- + Government Expenditure On Primary And Secondary Education Per Capita (USD PPP)
- + Number Of Teachers In Primary And Secondary Education Per 1,000 Students
- + Gross Enrolment Rate In Primary And Secondary Education

### Research

- + Government Expenditure On Research And Development Per Capita
- + Personnel In Research And Development Per 1,000 Persons
- + Gross Enrolment Rate In Tertiary Education

### Long-Term Health And Deprivation Effects

- + Years Lost Due To Unsafe Water And Sanitation Sources
- + Years Lost Due To Particulate Matter Air Pollution
- + Years Lost Due To Child And Maternal Malnutrition
- + Children Without Third DTP Dosage (Percent)
- + Children Without Third Polio Dosage (Percent)
- + Children Without Second Measles Dosage (Percent)

### Investment Capacities

- + Gross Fixed Capital Formation Per Capita (USD PPP)
- + General Consumer Price Instability (Rate)

Disaster Preparedness\*

Climate Change Mitigation\*

in the coming decades. This year, however, the hotspots are once again located in the Americas and Asia, as reflected in the top ten countries with the highest risk values: the Philippines, Indonesia, India, Mexico, Columbia, Myanmar, Mozambique, Russia, Bangladesh, and China. The risk profiles of these countries show complex interactions of multiple exposures and high intensities.

Compared to last year, the analysis shows that Russia ranks 8th, while Pakistan is no longer among the countries with the highest risks. Apart from these changes, the composition of the group remains unchanged. Concerning exposure, the results show similarities: seven countries with the highest risks also rank among the ten countries with the highest exposures—alongside Pakistan, Vietnam, Papua New Guinea, and Madagascar, which belong to the extended top group in both spheres. However, a very high exposure does not always correlate with very high risks, as South Korea and Italy—or to a lesser extent, Japan and the USA—demonstrate. These countries can noticeably reduce their disaster risks through their medium to low vulnerabilities. The composition of the ten countries with the highest vulnerabilities also remains relatively stable, although this group now exclusively contains African countries due to Mali now ranking among them instead of Afghanistan.

Overall, the results reveal three phenomena that account for the majority of year-on-year changes: The analysis shows that economic and gender-related disparities increased in the wake of the Covid-19 pandemic. Many of these disparities have persisted and continue to impact the vulnerability of numerous countries. Additionally, a widespread decline in childhood immunization rates since the onset of the pandemic is recovering at a slow pace, with noticeable differences across the globe shaping adaptive capacities. In terms of coping capacities, unstable consumer goods prices caused by the Covid-19 pandemic and the start of the war in Ukraine have been the most impactful factors. This particularly affects countries whose capacities had already been compromised before these events.

The stability of the global risk distribution (Figure 6) is evident as the Americas, once again, have the highest median of all continents at 9.67. This arises from the fact that 37 percent of American countries have a very high exposure value, while 40 percent display a high to very high vulnerability. However, the risk is distributed very unevenly: North, Central, and South America each have a multiple of the global median, while only the Caribbean is significantly below this reference value.

Asia ranks second in the continental risk comparison. With a median of 4.97, it is slightly below last year's value, yet remains well above the global risk median. It maintains the second position in terms of exposure and vulnerability. This can primarily be attributed to high-risk countries such as the Philippines, India, Indonesia, Myanmar, China, and Bangladesh. However, eight Asian countries are in the lowest risk category—notably, Bahrain and Singapore, which are among the ten countries with the lowest risks worldwide. In terms of vulnerability, only Afghanistan and Yemen find themselves in the top group, closely followed by Syria, Myanmar, the Philippines, Pakistan, India, Bangladesh, Iraq, Indonesia, and Lebanon, which constitute the extended top group of the highest vulnerability. Aside from Indonesia and Bangladesh, all these countries display high or very high vulnerabilities across all three categories. Therefore, these countries are at risk of depleting social capacities due to the mid-term effects of conflicts (Afghanistan, Yemen, Syria, and Myanmar) or cyclical extreme events (the Philippines, Indonesia, and Pakistan), thus further exacerbating their poor rankings.

In third place is Africa, whose risk median of 4.39 is highly affected by the risks in North Africa, where very high vulnerability intersects with relatively high exposure. Across all parts of Africa, vulnerability consistently surpasses the global median. However, the risk remains substantially lower compared to the risk hotspots in the Americas and Asia. Globally, Mozambique stands as Africa's sole representative among the ten countries with the highest risk values. Additionally, Somalia, Madagascar, Egypt, Tanzania, Libya, and Kenya also belong to the highest risk class. The formative nature of

## The global data gap in the field of diversity

Reliable, comprehensive and disaggregated data are an important prerequisite for comparative analysis of disaster risks and for needs-based disaster prevention and response. In the context of diversity, however, there is a lack of global data sets that reflect different dimensions of diversity and thereby show the specific needs and resources of certain social groups in different countries and regions.

### Causes of the insufficient global data situation

One of the main reasons for the poor availability of global data is a varying understanding of diversity and its various dimensions, as well as differences in national approaches to data collection: Globally, for example, personal data are generally disaggregated by gender. In the UN Women Data Hub and the Gender Data Portal of the World Bank, international Organizations seek to bundle gender-specific data on designated platforms (UN Women 2022, World Bank 2022). However, non-binary gender categories are rarely ever listed in these data sets, as the spectrum of possible gender identities highly depends on the social and cultural construction of gender in the respective country. Therefore, when in doubt, global data sets rely on a binary system in order to ensure comparability of different states and regions. In other dimensions of diversity, such as ethnic and social origin or sexual orientation, there can be even more variation in country-specific conceptions. Provided that relevant data are collected at all, there are usually few attempts of harmonizing it.

Social and cultural perceptions of certain manifestations of diversity lead to structural discrimination and stigmatization in

some contexts. This not only undermines the fundamental rights of those affected (article 2.1), but also aggravates existing data gaps: for example, same-sex sexual acts, especially between men, are prosecuted in more than 60 countries worldwide. In countries such as Iran, Saudi Arabia or Brunei, even the death penalty can be imposed (Human Rights Watch 2023). Therefore, the LGBTQIA<sup>+</sup> community is usually completely invisible in the census data collected at the national level in these countries. While indices such as the Gender Inequality Index of the United Nations do address structural discrimination on a meta-level and can provide rough indications on the protection needs of marginalized groups (UNDP 2023), humanitarian actors are often left alone with the task of determining the form and scale of these needs in the specific disaster context (article 2.4). Limited resources and capacities for data collection at the national level can exacerbate this problem.

### Effects in case of disaster: „What isn't counted, doesn't count“

The poor global data situation can undermine the efficiency of humanitarian action and protection: In the aftermath of the 2015 Nepal earthquakes, the lack of (disaggregated) data led to an insufficient number of aid distribution points which were accessible for people with disabilities (Lord et al. 2016). This not only compromises effective and needs-based support, but, at worst, also reproduces or reinforces existing patterns of discrimination. The lack of availability of global data also complicates the (statistical) analysis of the relationship between the degree of inclusion and diversity and the disaster risk of a society.

### Challenges and recommendations

In response to the outlined risks, investments in the collection and provision of disaggregated data have already increased, yet there is still a lack of coordination structures (Chaplin et al. 2019). While a couple of platforms seek to pool existing data sets (see above), there is no institution explicitly mandated to clean, harmonize and process that data. Meanwhile, specialized help organizations are trying to fill data gaps on their own, for example Save the Children with its Group-based Inequality Database, which relies entirely on disaggregated data and captures group-based inequalities of children in about 80 countries (Save the Children 2023).

Although reliable, detailed and disaggregated data are an important prerequisite, their availability (alone) does not guarantee more effective and needs-based disaster management: Gender specific data, for example, do not provide any information on gender roles and relations (European Institute for Gender Equality 2023), which are crucial to understanding power relations and (protection) needs in disaster situations. Therefore, as a holistic and intersectional approach to disaster management, not only does the availability of data in the field of diversity need to be fundamentally improved, but the existing data also needs to be complemented by participatory ways of working as well as and local and context-specific knowledge.

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vulnerability for Africa becomes evident when compared with exposure: Only 30 percent of the continent's countries display high to very high exposure, while nearly 80 percent of the continent is in the highest two groups of the vulnerability sphere. This is reflected by the ten countries with the highest vulnerabilities worldwide: Somalia, South Sudan, the Central African Republic, Chad, the Democratic Republic of Congo, Niger, Mali, Mozambique, and Ethiopia—joined by Yemen as the sole exception, as it's not situated in Africa. Africa's current safeguard against higher risk values arises from its relatively low exposure. However, this scenario is unlikely to persist due to the impacts of climate change and increasing periods of heat and drought.

With a median of 4.07, the continent of Oceania retains its fourth rank. Notably, it hosts two local risk hotspots: Australia and New Zealand, alongside Papua New Guinea and the Solomon Islands, both located in Melanesia. In contrast, the Poly- and Micronesian islands of Tuvalu, Palau, and Nauru fall into the lowest risk class. Once again, Oceania mirrors Africa, as the continent's risk profile is decisively shaped by exposure. This is evident from the fact that only Papua New Guinea has a high vulnerability, while Australia, Papua New Guinea, New Zealand, and the Solomon Islands have very high exposure values.

Within the continental ranking, Europe is once again the only continent that ranks considerably below the global medians across all areas of the WorldRiskIndex. However, there are notable variations among countries within Europe: Eastern and Southern Europe's vulnerabilities are up to twice as high as those in Northern Europe, while Northern Europe's exposition is only exceeded in Southern Europe. This difference stems from the fact that one-third of Southern European countries—Italy, Greece, Spain, Portugal, and Albania—fall into the two highest exposure classes, whereas most Northern European countries, except for Great Britain, have very low vulnerabilities. Overall, Europe finds itself in a favorable position, although the anticipation of increased droughts, severe weather, and storms over the next few decades is likely to lead to a notable increase of risk values. Furthermore, the war in Ukraine, which has yet to

be fully represented in the indicators, has visibly exacerbated vulnerabilities for Russia and Ukraine. It can be presumed that future reports will also reflect changes in the vulnerability of neighboring countries, as conflicts and crises not only impact the parties involved but also strain the capacities in their respective regions.

Essentially, these results align with the findings of previous WorldRiskReports. However, they merely represent the status quo of complex developments that can span multiple years to decades. To depict latent trends and illustrate the potential of trend analyses, smoothing splines with penalization ([Eilers and Marx 1996](#)) have been applied to estimate smooth trend curves for the continental medians from 2000 to 2023 (Figure 7). This analysis shows that (1) disaster risks and their components have changed dynamically since 2000, (2) the trajectories of individual regions are remarkably similar, and (3) despite high variability in the medians, latent trends in the components suggest emerging shifts in regional hotspots. Due to the extreme stability of the exposure sphere, whose values only alter when population numbers or distribution change or hazard zones shift, which, however, are not observable within the analysis period, this aspect is not taken into account in the following sections.

Concerning the evolution of the risk medians, three distinct dynamics emerge: Asia and Europe have shown a steady, linear increase in their trend curves since 2000, with the relative increase for Asia being notably stronger than Europe's. In contrast, Africa and Oceania show a dynamic that was initially characterized by a strong decrease in risks until 2010, before a reversal occurred, and both continents experienced higher risks once again—although in both cases, these remained well below their initial levels. Only the Americas show a trend curve that deviates from those of other continents in terms of both level and dynamics: An increase until 2007 was followed by a sharp risk reduction until 2010. Subsequently, a prolonged phase of stable increase ensued, ultimately bringing the continent back to its initial level by 2020. Only in recent years has there been a slight decline in risk.



Analyzing the trend curves for the vulnerability sphere reveals three distinct patterns as well. The long-term trends for the Americas and Europe remain relatively stable, despite brief decreases and increases. This stands in contrast to Africa and Asia, whose smoothed trend curves indicate a slight increase in vulnerability from 2000 onward before a reversal of the trend began in 2010 and 2015. Following these reversals, both continents experience rising trends; however, it's worth noting that vulnerability has been noticeably reduced in both cases. Oceania, on the other hand, displays a dynamic that seems to be a blend of both groups. It initially declines like the trends observed in the Americas and Europe until 2005. Subsequently, it rises in a manner comparable to the trends seen in Africa and Asia.

The influences depicted by these trends are evident in the figures representing the three vulnerability components. Notably, a universal reduction in susceptibility is discernible until 2010. Subsequently, Europe, Oceania, and Asia managed to stabilize their levels. However, susceptibility in Africa and the Americas underwent significant increases, especially in the case of the Americas, where it even exceeded the initial level. In terms of the lack of coping capacities, only Oceania's trend stands out, portraying showing an increase in capacities by nearly one-third during the first decade of analysis, followed by a subsequent reversal and eventual stabilization at the present level. Concerning the lack of adaptive capacities, Asia and Europe stand out, as Asia was initially able to reduce its deficits from 2010 to 2015 before experiencing

	WRI	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
<b>Africa</b>	<b>4.39</b>	<b>0.7</b>	<b>30.53</b>	<b>30.4</b>	<b>14.68</b>	<b>59.83</b>
Central Africa	4.52	0.86	51.44	34.66	58.41	59.29
East Africa	3.93	0.55	32.96	33.59	15.08	61.31
North Africa	10.12	3.91	32.88	17.59	48.09	46.12
South Africa	1.97	0.14	26.7	23.92	12.83	51.41
West Africa	2.99	0.44	28.61	31.19	13.48	62.46
<b>The Americas</b>	<b>9.67</b>	<b>4.29</b>	<b>20.23</b>	<b>21.14</b>	<b>11.29</b>	<b>45.75</b>
Caribbean	3.01	0.79	13.41	9.19	8.49	41.57
Central America	15.64	9.36	27.03	31.75	12.22	50.46
North America	20.82	32.74	13.48	10.73	6.78	34.01
South America	13.77	8.96	25.33	26.68	12.47	47.02
<b>Asia</b>	<b>4.97</b>	<b>1.6</b>	<b>21.88</b>	<b>14.75</b>	<b>12.6</b>	<b>44.39</b>
Central Asia	2.15	0.22	18.43	15.1	10.92	41.72
East Asia	12.75	9.96	11.79	14.11	11.54	23.43
South Asia	5.92	1.6	31.12	27.73	55.86	45.75
Southeast Asia	14.04	8.64	22.83	16.01	13.65	46.38
West Asia	3.86	1.02	18.62	12.63	16.37	41.34
<b>Europe</b>	<b>2.4</b>	<b>0.49</b>	<b>9.28</b>	<b>6.97</b>	<b>5.55</b>	<b>35.42</b>
Eastern Europe	1.87	0.21	14.05	8.4	8.67	39.7
Northern Europe	2.52	0.72	7.59	6.41	2.19	27.6
Southern Europe	2.88	0.59	11.89	8.23	7.29	35.7
Western Europe	1.15	0.17	7.75	5.6	3.21	28.91
<b>Oceania</b>	<b>4.07</b>	<b>1.23</b>	<b>14</b>	<b>9.77</b>	<b>10.96</b>	<b>39.27</b>
Australia / New Zealand	17.79	24.6	12.92	7.37	10.32	30.28
Melanesia	12.86	7.71	21.66	17.18	12.19	52.98
Micronesia	2.69	0.5	13.53	9.79	5.44	45.2
Polynesia	2.94	0.81	10.67	9.56	11.02	29.2
<b>World</b>	<b>4.13</b>	<b>1.05</b>	<b>20.23</b>	<b>14.97</b>	<b>11.88</b>	<b>45.94</b>

Figure 7: Comparison of the medians of the country groups (based on WorldRiskIndex 2023)

a return to baseline levels. In contrast, Europe shows a modest exponential increase from 2015 onwards, which will likely bring the continent to the level of Oceania in the upcoming years.

Due to the focus on the medians of the continents, this analysis remains relatively general, as aspects such as the regional distribution

of risk, its driving factors, and the dispersion across the continents are not explicitly considered. However, it is evident that latent dynamics exist, which will impact the ranking of continents in the coming decades. Furthermore, these results serve as examples of possible analyses across components, regions, and years, leveraging the new longitudinal data set.

## Chances and limits of the WorldRiskIndex

The main idea of the WorldRiskIndex is to raise awareness of the relevance of social capacities in reducing disaster risks, to offer orientation for practitioners in preventing humanitarian crises, and to assist decision-making when it comes to the allocation and prioritization of resources. The index is supposed to foster an understanding that the emergence and progression of disasters are greatly influenced by the social conditions of the people, regions, and countries affected.

With the release of the new WorldRiskIndex, the major weaknesses of the previous model were addressed through new approaches and procedures, and the transparency of the calculation was increased. Given the nature of index models, a few aspects cannot be completely avoided: complex issues are reduced to individual values, which offers the advantages of rapid orientation, easier communication, and visualization of results, but also carries the risk that subtle aspects may be lost or obscured in the course of the reduction.

Additionally, the model has deficiencies in the areas of “infrastructure”, “social networks” or “material security” due to a lack of data availability. Moreover, it should be noted that the WorldRiskIndex specifically assesses the risk of disasters resulting from extreme natural events and the negative impacts of climate change. Therefore, other types of risks such as conflicts, wars, or pandemics are intentionally considered only partially or not at all, since, on the one hand, their drivers differ in many ways from those of risks due to natural events and, on the other hand, their explanatory approaches are

difficult to integrate into the concepts, structures, and processes of the WorldRiskIndex.

Concerning the availability of data, it has to be noted that global indicators may contain missing values as well as delays between collection, processing, and publication. This results from the fact that resources for collecting data are often redirected in times of crisis, and data sources often fail to collect and provide data of smaller countries in the necessary quality. Accordingly, up-to-date data are not available for all 193 member states of the United Nations, which particularly affects small countries and countries in need and crises. Although these challenges are taken into account by estimating missing values, it must be acknowledged that the results of the affected countries inherently carry a level of uncertainty, despite the efforts to ensure high precision and plausibility.

Another weakness of the model is that metadata of the indicators often do not show whether and, if so, which territories (e.g. overseas territories, exclaves) are included in the data. To mitigate this issue, external territories were not attributed to their respective sovereign entities to minimize inaccuracies arising from this discrepancy. However, this was not possible for all countries: In these cases, population-weighted averages were calculated where separate values were available for these countries and territories. Due to differences in the treatment of the territories of Kosovo, Palestine, and Taiwan, an allocation was made to the territories of Serbia, Israel, and China for reasons of methodological consistency. It is imperative to note, however, that this approach is solely for methodological reasons and does not reflect political positions,

the endorsement, or acceptance of international legal and political claims.

Regarding the strengths of the WorldRiskIndex, the new longitudinal data set alone offers numerous analytical possibilities that provide insights into structural influences and temporal dynamics of disaster risks. With the ability to integrate new elements into the model more rapidly than before, one of the focuses in the upcoming years will be to develop models for new hazard types, such as heat and cold waves and landslides. Additionally, new vulnerability

factors, including disparities in access to essential civil supply infrastructure between urban and rural populations, will be integrated into the WorldRiskIndex. As a result, the new WorldRiskIndex not only facilitates a wide array of analyses but can also be leveraged for complex strategy and policy decisions. However, it should be noted that qualitative approaches should always be included in addition to the WorldRiskIndex to obtain the broadest possible basis for decision-making and to be able to compensate for potential uncertainties that could arise from the reduction in complexity.

BLACK LIVES  
TRANS MATTER

TRANS IS  
AUTIFUL





# 4 Requirements and Recommendations

Bündnis Entwicklung Hilft  
and  
Institute for International Law  
of Peace and Armed Conflict

The repercussions of extreme natural events and other crises affect the wellbeing, security, and development of societies, particularly those members who are most exposed to risk. Relief measures aim to protect and assist all people, irrespective of the factors that exacerbate their vulnerability.

For disaster management measures to fulfil that aim, it is crucial that they are inclusive and based on an awareness of diversity. This means that emergency plans, evacuation strategies, and aid measures have to take people's diverse needs and identities into account. This can be achieved by working with representatives of the communities concerned, NGOs, and civil society organizations to gain a better understanding of their needs and incorporate their perspectives into the planning process. Moreover, an intersectional approach to disaster risk management can help create an in-depth understanding of vulnerability and its causes and contribute to more targeted and effective strategies for specific groups in crisis contexts. Intersectionality helps reveal social differences and power structures that reproduce structural inequalities in crisis situations and lead to mutually reinforcing vulnerabilities.

Currently, however, considering the vulnerability of specific (groups of) individuals as an intersectional, dynamic phenomenon makes it difficult to predict who is in most urgent need of assistance in certain risk and crisis situations. Research has a key role to play here. Further investigation is required in order to understand precisely how vulnerabilities develop during crises and to provide a more nuanced view of vulnerable groups in society. Adopting participatory data-collection methods in this work will ensure that groups' perspectives are rendered visible, their resources can be leveraged, and their specific needs addressed. Research can help, for instance, to develop specific guides and prevention initiatives, recruit specially trained

staff, and make provisions for differences within groups deemed vulnerable. Such analyses are essential to ensuring sustainable diversity awareness, disaster response interventions that do not discriminate against anyone on the grounds of origin, status, or capability, and, indeed, humanitarian disaster response measures that do not intensify existing inequalities.

## Include vulnerable groups in planning processes

- + Including vulnerable groups in the planning, implementation, and evaluation of projects is vital to effective disaster management and the establishment of diversity-aware guidelines and programs. Their participation can take the form of inclusive consultations, partnerships, or representation in decision-making processes.
- + The knowledge, abilities, and capacities of indigenous groups should be acknowledged and leveraged in the creation of early warning systems and in other disaster risk reduction efforts. Their experience and traditional knowledge can provide valuable input for context-specific strategies designed to have a lasting impact.
- + Local capacities need to be strengthened by integrating migrant perspectives and mobility into disaster risk reduction strategies. Migration-to-migration learning, cross-border emergency plans, and crisis warning systems need to be promoted.
- + Girls and young women are key to the success of strategies aimed at a lasting reduction in disaster risk. They know best what support they require and where their biggest challenges lie. Direct support for local organizations led by girls and young women must therefore be stepped up.



- + The capacities of people with disabilities and the organizations representing them must be strengthened. Training and support can help people with disabilities work better with humanitarian partners, stand up effectively for their rights, and make an active contribution to inclusive disaster response.

#### **Promote research and detailed data collection**

- + Data collected (on food security, for example) needs to be disaggregated by gender, age, and disability to make it easier to evaluate the effectiveness of interventions. Meaningful gender, age, and disability markers are a prerequisite for this.
- + Governments and donors must invest in diversity data collection and improve the coordination, categorization, and harmonization of the data. The needs of different target groups can only be properly assessed and addressed if differentiated data is available.
- + Participatory approaches to research and data collection need to be encouraged. Methods such as participatory action research or community mapping identify the needs and resources of different groups in a collaborative process and counteract biases arising from power imbalances in the data collection and research process.

#### **Assume responsibility for climate justice**

- + Those primarily responsible for the global climate crisis, specifically the governments of the United States of America, Australia, Europe, and China, and the main carbon-emitting industries must shoulder their responsibility for the damage caused by the climate crisis. This could take the form of reparations, for instance.
- + Both disasters themselves and the long-term effects of climate change have an unequal impact on different people—within and between societies. Economic measures such as radical debt relief for countries in the Global South, or the establishment of a global fund for climate change adaptation and social protection, can empower

countries (particularly those marked by high social inequality) to develop effective strategies to adapt to climate change and protect the livelihoods of all groups in society.

#### **Recognize and implement legal frameworks**

- + National and international disaster management frameworks must lend more weight to intersectional approaches and perspectives. Through these, the structural causes of inequalities can be addressed and the (protective) effect of legal instruments focusing on specific groups can be maximized.
- + The United Nations Office for Disaster Risk Reduction (UNDRR) has drafted practical guidelines as an aid to governments seeking to integrate protection strategies (for members of the LGBTQIA\* community, for instance) at the local and regional level as well as the national level. These guidelines must be implemented and complied with. Any frameworks that already exist have tended to be too abstract and lacking specific requirements.
- + Labor and social rights must be strengthened, protected, and enforceable in order to reduce social inequality and ensure decent working conditions for all. It is absolutely crucial that mechanisms be installed to monitor and enforce these rights so as to prevent abuse and exploitation.
- + Cooperation and coordination between governments, the private sector, civil society organizations, higher education institutions, research centers, communities, and businesses must be made easier to enable the development of comprehensive disaster risk reduction strategies that make provisions for vulnerable groups' rights. As part of these efforts, assistance needs to be given to create guidelines or training modules that provide specific support for policy implementation.

Appendix

# WorldRiskIndex 2023 Overview

Classification	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
very low	0.00 – 1.84	0.00 – 0.17	0.00 – 9.90	0.00 – 7.17	0.00 – 3.47	0.00 – 25.28
low	1.85 – 3.20	0.18 – 0.56	9.91 – 15.87	7.18 – 11.85	3.48 – 10.01	25.29 – 37.47
medium	3.21 – 5.87	0.57 – 1.76	15.88 – 24.43	11.86 – 19.31	10.02 – 12.64	37.48 – 48.04
high	5.88 – 12.88	1.77 – 7.78	24.44 – 33.01	19.32 – 34.16	12.65 – 39.05	48.05 – 59.00
very high	12.89 – 100.00	7.79 – 100.00	33.02 – 100.00	34.17 – 100.00	39.06 – 100.00	59.01 – 100.00

Since 2022 the WorldRiskIndex and its elements will use fixed thresholds for the classification of countries to enable medium- and long-term trends analyses. These threshold values for the WorldRiskIndex and each dimension were calculated as the median of the quintiles from the results of the last 20 years.

Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
1.	Philippines	46.86	39.99	54.92	51.21	58.84	54.98
2.	Indonesia	43.50	39.89	47.43	45.46	50.59	46.38
3.	India	41.52	35.99	47.89	37.79	55.86	52.04
4.	Mexico	38.17	50.08	29.09	44.78	12.28	44.76
5.	Colombia	37.64	31.54	44.93	39.65	50.01	45.75
6.	Myanmar	36.16	22.43	58.28	52.14	58.83	64.54
7.	Mozambique	34.61	18.10	66.17	65.78	64.15	68.65
8.	Russian Federation	28.20	28.35	28.05	14.97	39.00	37.81
9.	Bangladesh	27.29	16.57	44.93	35.30	57.88	44.39
10.	China	27.10	64.59	11.37	14.75	11.54	8.63
11.	Pakistan	26.45	13.11	53.38	40.23	60.92	62.06
12.	Papua New Guinea	26.30	18.84	36.71	56.19	13.85	63.58
13.	Peru	25.55	16.65	39.22	27.28	46.96	47.10
14.	Somalia	25.09	8.55	73.63	67.49	82.11	72.02
15.	Yemen	24.39	9.12	65.24	60.26	69.29	66.50
15.	Viet Nam	24.39	26.73	22.25	21.55	12.50	40.90
17.	Madagascar	23.59	18.38	30.27	25.97	15.27	69.94
18.	Ecuador	23.58	14.57	38.15	26.41	44.16	47.60
19.	Bolivarian Republic of Venezuela	23.47	19.52	28.22	25.04	14.60	61.45
20.	United States of America	22.47	39.59	12.75	11.16	5.71	32.54
21.	Nicaragua	21.76	18.71	25.31	21.37	14.04	54.02
22.	Australia	21.54	31.21	14.87	8.12	14.54	27.85
23.	Thailand	21.09	14.32	31.07	16.01	48.79	38.38
24.	Japan	20.86	43.67	9.96	11.43	5.09	16.97
25.	Iran (Islamic Republic of)	19.72	12.49	31.12	19.92	57.99	26.08
26.	Canada	19.17	25.89	14.20	10.29	7.84	35.48
27.	Panama	18.82	15.89	22.29	26.40	10.81	38.82
28.	Egypt	17.76	10.74	29.38	11.85	46.49	46.04
29.	Honduras	16.79	8.82	31.95	39.35	14.55	56.97
30.	Turkey	16.17	8.90	29.38	12.63	48.58	41.34
31.	United Republic of Tanzania	16.08	5.49	47.09	33.66	55.22	56.18
32.	Argentina	14.88	11.54	19.18	13.98	10.76	46.93
33.	Solomon Islands	14.82	9.62	22.82	17.82	12.32	54.15
34.	El Salvador	14.49	7.30	28.75	37.10	12.16	52.68
35.	Chile	14.06	12.86	15.37	9.97	9.04	40.30
36.	Malaysia	14.04	8.64	22.83	15.90	20.01	37.42
36.	New Zealand	14.04	17.99	10.96	6.62	6.09	32.70
38.	Libyan Arab Jamahiriya	13.93	4.94	39.26	23.84	53.86	47.13
39.	Kenya	13.71	3.27	57.52	58.22	57.81	56.55

Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
40.	Brazil	13.47	6.37	28.47	36.84	12.37	50.63
41.	Dominican Republic	12.92	7.05	23.68	22.87	11.88	48.86
42.	Dem. People's Republic of Korea	12.75	7.22	22.52	14.11	13.76	58.81
43.	Costa Rica	12.48	9.89	15.76	22.86	10.88	15.73
44.	Syrian Arab Republic	12.24	2.53	59.20	48.72	71.32	59.70
45.	Guatemala	11.71	4.29	31.99	40.45	14.37	56.33
46.	Cameroon	11.15	2.08	59.74	58.44	61.53	59.29
47.	Angola	11.04	2.37	51.44	33.47	58.21	69.87
48.	Vanuatu	10.90	5.80	20.49	13.77	12.06	51.81
49.	Republic of Korea	10.84	9.96	11.79	8.71	8.04	23.43
50.	Djibouti	10.68	4.25	26.85	23.79	14.42	56.42
51.	Sudan	10.27	1.65	63.91	60.01	63.64	68.36
52.	Italy	9.97	8.69	11.43	7.96	5.25	35.77
53.	Morocco	9.96	7.63	12.99	14.98	12.02	12.17
54.	Democratic Republic of Congo	9.73	1.37	69.11	70.92	69.24	67.21
55.	Haiti	9.67	2.78	33.65	35.88	15.43	68.85
56.	Spain	9.64	7.77	11.97	6.97	7.38	33.35
57.	Algeria	9.52	2.62	34.61	18.06	49.69	46.20
58.	Tunisia	9.47	2.88	31.15	17.12	44.18	39.97
59.	Iraq	9.23	1.72	49.55	36.65	66.59	49.85
60.	Nigeria	9.17	1.32	63.74	57.49	66.17	68.06
61.	South Africa	9.14	3.13	26.70	29.12	12.83	50.97
62.	Mauritania	9.01	2.91	27.89	23.17	15.14	61.82
63.	Saudi Arabia	8.76	5.25	14.63	5.43	19.79	29.16
64.	Greece	8.58	8.25	8.93	8.82	8.09	9.98
65.	Cambodia	8.19	2.47	27.18	29.66	13.65	49.62
66.	Guyana	8.13	2.63	25.14	28.67	11.85	46.79
67.	Timor-Leste	7.79	2.93	20.71	13.36	12.60	52.77
68.	Cuba	7.76	4.57	13.19	12.73	10.32	17.47
69.	Belize	7.61	2.50	23.14	21.14	12.15	48.24
70.	Eritrea	7.58	2.30	25.01	18.65	14.58	57.55
71.	Oman	7.53	6.68	8.48	14.18	4.81	8.94
72.	France	7.39	2.70	20.23	8.46	29.38	33.29
73.	Guinea	6.86	1.47	32.02	31.77	14.61	70.72
74.	Suriname	6.72	1.78	25.36	26.95	11.29	53.62
75.	Fiji	6.41	2.79	14.74	16.53	11.43	16.95
76.	Albania	6.23	2.29	16.95	11.51	11.28	37.51
77.	Sri Lanka	5.92	1.60	21.88	18.92	12.10	45.75
78.	Belgium	5.83	1.84	18.49	8.03	27.21	28.91
79.	Namibia	5.68	1.32	24.43	23.57	12.03	51.41
80.	United Kingdom	5.66	2.58	12.43	6.76	7.59	37.40
81.	Senegal	5.49	1.05	28.66	30.60	13.00	59.16
82.	Sierra Leone	5.32	3.07	9.23	8.09	6.93	14.04
82.	Portugal	5.32	1.09	25.96	18.99	13.61	67.72
84.	Republic of Congo	5.24	0.57	48.18	34.66	58.41	55.24
85.	United Arab Emirates	4.97	3.77	6.56	4.09	2.23	30.91
86.	Ethiopia	4.85	0.36	65.44	64.71	62.02	69.83
86.	Gambia	4.85	0.67	35.10	56.53	12.79	59.82
88.	Uruguay	4.80	1.54	14.96	9.61	8.33	41.86
89.	Bahamas	4.78	1.51	15.10	8.56	9.67	41.57
90.	Croatia	4.77	1.57	14.48	8.54	9.60	37.03
91.	Gabon	4.52	1.50	13.62	15.80	3.28	48.80

Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
92.	Federated States of Micronesia	4.37	1.12	17.07	10.00	10.90	45.63
93.	Netherlands	4.32	2.20	8.47	5.60	3.28	33.07
94.	Germany	4.30	1.99	9.28	7.02	3.21	35.42
95.	South Sudan	4.25	0.25	72.19	73.20	68.79	74.71
96.	Poland	4.22	1.73	10.28	5.20	5.21	40.15
97.	Guinea-Bissau	4.13	0.67	25.48	18.97	13.39	65.09
98.	Afghanistan	4.02	0.25	64.59	56.02	78.19	61.52
98.	Ukraine	4.02	0.48	33.63	18.78	42.11	48.11
100.	Israel	3.93	0.88	17.57	11.13	16.37	29.77
101.	Lebanon	3.86	0.38	39.12	21.99	46.97	57.95
102.	Jamaica	3.84	1.10	13.41	8.89	5.55	48.87
103.	Tonga	3.77	1.33	10.67	9.56	11.41	11.13
104.	Georgia	3.69	0.73	18.62	15.32	9.28	45.41
105.	Jordan	3.65	0.57	23.33	13.73	19.98	46.26
106.	Mauritius	3.60	0.73	17.77	12.43	9.82	45.94
107.	Cyprus	3.56	1.02	12.43	7.26	7.45	35.48
108.	Antigua and Barbuda	3.51	1.20	10.26	5.46	5.16	38.31
109.	Equatorial Guinea	3.37	0.86	13.20	11.06	3.58	58.05
110.	Central African Republic	3.36	0.16	70.67	75.77	64.55	72.17
111.	Romania	3.33	0.71	15.60	9.25	8.68	47.28
112.	Ireland	3.25	1.45	7.30	4.59	3.43	24.76
113.	Malawi	3.17	0.35	28.64	25.65	14.03	65.31
114.	Montenegro	3.13	0.83	11.80	8.37	4.39	44.66
115.	Burundi	3.03	0.16	57.38	47.46	59.56	66.84
116.	Dominica	3.01	0.79	11.49	7.03	5.27	40.98
117.	Ghana	2.99	0.34	26.34	28.76	12.17	52.22
117.	Liberia	2.99	0.54	16.52	20.20	3.53	63.23
119.	Plurinational State of Bolivia	2.98	0.35	25.30	28.14	13.47	42.71
119.	Trinidad and Tobago	2.98	0.49	18.08	12.41	11.31	42.11
121.	Zambia	2.94	0.81	10.65	9.74	2.54	48.87
121.	Samoa	2.94	0.28	30.78	34.17	13.91	61.36
123.	Chad	2.90	0.12	70.25	70.25	70.16	70.33
124.	Norway	2.89	1.06	7.90	6.55	3.18	23.67
125.	Kuwait	2.88	1.05	7.92	5.98	2.58	32.21
126.	Uganda	2.80	0.23	34.19	50.05	13.77	57.99
127.	Lao People's Democratic Republic	2.79	0.38	20.42	10.35	13.61	60.47
128.	Seychelles	2.76	1.03	7.40	4.34	2.50	37.38
129.	Kiribati	2.75	0.69	10.95	9.79	2.80	47.94
130.	Latvia	2.74	0.79	9.49	9.29	2.29	40.13
131.	Comoros	2.73	0.33	22.51	12.92	14.75	59.83
132.	Sweden	2.72	1.05	7.05	3.80	5.55	16.65
133.	Rwanda	2.69	0.50	14.47	12.33	5.44	45.20
133.	Marshall Islands	2.69	0.16	45.27	33.52	45.17	61.26
135.	Bosnia and Herzegovina	2.63	0.34	20.28	14.13	11.51	51.26
136.	Armenia	2.61	0.23	29.68	14.22	41.24	44.57
137.	Barbados	2.58	0.48	13.87	6.99	8.49	44.93
138.	Nepal	2.57	0.25	26.35	27.73	13.01	50.73
139.	Zimbabwe	2.52	0.20	31.73	31.54	14.88	68.08
140.	Tajikistan	2.47	0.23	26.53	34.53	11.61	46.60
141.	Saint Lucia	2.45	0.46	13.01	9.19	5.16	46.48
142.	Kyrgyzstan	2.42	0.22	26.53	33.53	11.08	50.27
142.	Saint Vincent and the Grenadines	2.42	0.43	13.67	16.01	9.71	16.42



Rank	Country	WorldRiskIndex	Exposure	Vulnerability	Susceptibility	Lack of Coping Capacities	Lack of Adaptive Capacities
144.	Bulgaria	2.40	0.30	19.15	17.48	8.65	46.46
145.	Saint Kitts and Nevis	2.33	0.53	10.20	7.18	4.83	30.63
146.	Mali	2.31	0.64	8.31	6.98	2.08	39.50
146.	Lithuania	2.31	0.08	66.43	61.03	70.18	68.44
148.	Palau	2.21	0.36	13.53	7.30	10.17	33.34
149.	Niger	2.16	0.07	66.49	68.67	67.85	63.10
150.	Kazakhstan	2.15	0.25	18.43	15.10	10.13	40.93
151.	Mongolia	2.11	0.21	21.15	18.20	11.63	44.67
152.	Azerbaijan	2.09	0.23	19.02	11.32	12.32	49.36
153.	Burkina Faso	2.01	0.07	57.64	47.61	61.45	65.44
154.	Eswatini	1.97	0.14	27.66	30.20	13.36	52.44
155.	Slovenia	1.96	0.31	12.40	7.44	7.19	35.63
156.	Cote d'Ivoire	1.86	0.13	26.59	24.41	13.03	59.13
157.	Grenada	1.85	0.31	11.02	14.34	2.55	36.61
158.	Estonia	1.84	0.43	7.87	6.70	1.92	37.87
159.	Iceland	1.81	0.55	5.97	6.26	1.71	19.86
160.	Serbia	1.75	0.17	17.92	14.15	9.57	42.49
161.	Paraguay	1.68	0.14	20.23	12.71	12.56	51.90
162.	Benin	1.60	0.09	28.56	41.20	12.87	43.94
163.	Uzbekistan	1.52	0.18	12.83	10.26	10.92	18.86
164.	Togo	1.45	0.07	30.12	32.98	13.57	61.05
165.	Finland	1.43	0.49	4.20	5.71	0.49	26.53
166.	Tuvalu	1.42	0.15	13.53	7.69	11.02	29.20
167.	Lesotho	1.38	0.07	27.35	23.92	14.02	61.02
168.	Botswana	1.35	0.09	20.12	15.74	10.37	49.91
169.	Republic of Moldova	1.33	0.10	17.72	11.78	9.73	48.54
169.	Turkmenistan	1.33	0.17	10.48	9.07	3.04	41.72
171.	North Macedonia	1.30	0.33	5.12	8.07	2.24	7.43
171.	Brunei Darussalam	1.30	0.10	16.92	9.54	10.36	48.99
173.	Bhutan	1.21	0.10	14.53	8.58	8.94	39.97
174.	Maldives	1.19	0.11	12.84	6.90	9.96	30.83
175.	Cape Verde	1.18	0.07	20.05	15.34	10.89	48.22
176.	Qatar	1.15	0.17	7.75	4.73	3.17	31.05
176.	Austria	1.15	0.15	8.84	4.44	7.98	19.53
178.	Czech Republic	1.12	0.10	12.49	7.55	6.68	38.61
179.	Switzerland	1.02	0.16	6.50	4.31	2.67	23.84
180.	Nauru	1.00	0.11	9.16	9.01	2.89	29.47
181.	Denmark	0.99	0.18	5.42	3.47	1.60	28.66
182.	Slovakia	0.95	0.10	9.02	4.59	4.08	39.25
183.	Hungary	0.94	0.11	7.98	5.33	9.22	10.36
184.	Malta	0.88	0.15	5.13	4.67	2.07	13.99
185.	Bahrain	0.87	0.14	5.42	4.85	2.61	12.55
186.	Belarus	0.75	0.05	11.14	6.49	5.83	36.57
187.	Liechtenstein	0.72	0.09	5.70	6.68	1.00	27.77
188.	Sao Tome and Principe	0.67	0.02	22.28	16.85	12.74	51.52
189.	Luxembourg	0.64	0.06	6.81	5.36	5.76	10.22
190.	Singapore	0.63	0.15	2.61	2.71	0.83	7.92
191.	San Marino	0.36	0.03	4.23	2.83	1.31	20.47
192.	Monaco	0.24	0.02	2.79	2.79	1.00	7.75
193.	Andorra	0.22	0.02	2.37	2.68	1.73	2.86

# WorldRiskIndex 2023, Countries in Alphabetical Order

Country	WRI	Rank
Afghanistan	4.02	98.
Albania	6.23	76.
Algeria	9.52	57.
Andorra	0.22	193.
Angola	11.04	47.
Antigua and Barbuda	3.51	108.
Argentina	14.88	32.
Armenia	2.61	136.
Australia	21.54	22.
Austria	1.15	176.
Azerbaijan	2.09	152.
Bahamas	4.78	89.
Bahrain	0.87	185.
Bangladesh	27.29	9.
Barbados	2.58	137.
Belarus	0.75	186.
Belgium	5.83	78.
Belize	7.61	69.
Benin	1.60	162.
Bhutan	1.21	173.
Bolivarian Republic of Venezuela	23.47	19.
Bosnia and Herzegovina	2.63	135.
Botswana	1.35	168.
Brazil	13.47	40.
Brunei Darussalam	1.30	171.
Bulgaria	2.40	144.
Burkina Faso	2.01	153.
Burundi	3.03	115.
Cambodia	8.19	65.
Cameroon	11.15	46.
Canada	19.17	26.
Cape Verde	1.18	175.
Central African Republic	3.36	110.
Chad	2.90	123.
Chile	14.06	35.
China	27.10	10.
Colombia	37.64	5.
Comoros	2.73	131.
Costa Rica	12.48	43.
Cote d'Ivoire	1.86	156.
Croatia	4.77	90.
Cuba	7.76	68.
Cyprus	3.56	107.
Czech Republic	1.12	178.
Dem. People's Republic of Korea	12.75	42.
Democratic Republic of Congo	9.73	54.
Denmark	0.99	181.
Djibouti	10.68	50.
Dominica	3.01	116.

Country	WRI	Rank
Dominican Republic	12.92	41.
Ecuador	23.58	18.
Egypt	17.76	28.
El Salvador	14.49	34.
Equatorial Guinea	3.37	109.
Eritrea	7.58	70.
Estonia	1.84	158.
Eswatini	1.97	154.
Ethiopia	4.85	86.
Federated States of Micronesia	4.37	92.
Fiji	6.41	75.
Finland	1.43	165.
France	7.39	72.
Gabon	4.52	91.
Gambia	4.85	86.
Georgia	3.69	104.
Germany	4.30	94.
Ghana	2.99	117.
Greece	8.58	64.
Grenada	1.85	157.
Guatemala	11.71	45.
Guinea	6.86	73.
Guinea-Bissau	4.13	97.
Guyana	8.13	66.
Haiti	9.67	55.
Honduras	16.79	29.
Hungary	0.94	183.
Iceland	1.81	159.
India	41.52	3.
Indonesia	43.50	2.
Iran (Islamic Republic of)	19.72	25.
Iraq	9.23	59.
Ireland	3.25	112.
Israel	3.93	100.
Italy	9.97	52.
Jamaica	3.84	102.
Japan	20.86	24.
Jordan	3.65	105.
Kazakhstan	2.15	150.
Kenya	13.71	39.
Kiribati	2.75	129.
Kuwait	2.88	125.
Kyrgyzstan	2.42	142.
Lao People's Democratic Republic	2.79	127.
Latvia	2.74	130.
Lebanon	3.86	101.
Lesotho	1.38	167.
Liberia	2.99	117.
Libyan Arab Jamahiriya	13.93	38.

Country	WRI	Rank
Liechtenstein	0.72	187.
Lithuania	2.31	146.
Luxembourg	0.64	189.
Madagascar	23.59	17.
Malawi	3.17	113.
Malaysia	14.04	36.
Maldives	1.19	174.
Mali	2.31	146.
Malta	0.88	184.
Marshall Islands	2.69	133.
Mauritania	9.01	62.
Mauritius	3.60	106.
Mexico	38.17	4.
Monaco	0.24	192.
Mongolia	2.11	151.
Montenegro	3.13	114.
Morocco	9.96	53.
Mozambique	34.61	7.
Myanmar	36.16	6.
Namibia	5.68	79.
Nauru	1.00	180.
Nepal	2.57	138.
Netherlands	4.32	93.
New Zealand	14.04	36.
Nicaragua	21.76	21.
Niger	2.16	149.
Nigeria	9.17	60.
North Macedonia	1.30	171.
Norway	2.89	124.
Oman	7.53	71.
Pakistan	26.45	11.
Palau	2.21	148.
Panama	18.82	27.
Papua New Guinea	26.30	12.
Paraguay	1.68	161.
Peru	25.55	13.
Philippines	46.86	1.
Plurinational State of Bolivia	2.98	119.
Poland	4.22	96.
Portugal	5.32	82.
Qatar	1.15	176.
Republic of Congo	5.24	84.
Republic of Korea	10.84	49.
Republic of Moldova	1.33	169.
Romania	3.33	111.
Russian Federation	28.20	8.
Rwanda	2.69	133.
Saint Kitts and Nevis	2.33	145.
Saint Lucia	2.45	141.

Country	WRI	Rank
Saint Vincent and the Grenadines	2.42	142.
Samoa	2.94	121.
San Marino	0.36	191.
Sao Tome and Principe	0.67	188.
Saudi Arabia	8.76	63.
Senegal	5.49	81.
Serbia	1.75	160.
Seychelles	2.76	128.
Sierra Leone	5.32	82.
Singapore	0.63	190.
Slovakia	0.95	182.
Slovenia	1.96	155.
Solomon Islands	14.82	33.
Somalia	25.09	14.
South Africa	9.14	61.
South Sudan	4.25	95.
Spain	9.64	56.
Sri Lanka	5.92	77.
Sudan	10.27	51.
Suriname	6.72	74.
Sweden	2.72	132.
Switzerland	1.02	179.
Syrian Arab Republic	12.24	44.
Tajikistan	2.47	140.
Thailand	21.09	23.
Timor-Leste	7.79	67.
Togo	1.45	164.
Tonga	3.77	103.
Trinidad and Tobago	2.98	119.
Tunisia	9.47	58.
Turkey	16.17	30.
Turkmenistan	1.33	169.
Tuvalu	1.42	166.
Uganda	2.80	126.
Ukraine	4.02	98.
United Arab Emirates	4.97	85.
United Kingdom	5.66	80.
United Republic of Tanzania	16.08	31.
United States of America	22.47	20.
Uruguay	4.80	88.
Uzbekistan	1.52	163.
Vanuatu	10.90	48.
Viet Nam	24.39	15.
Yemen	24.39	15.
Zambia	2.94	121.
Zimbabwe	2.52	139.

Only countries that are member states of the United Nations are considered.

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Page 8: Turkey, earthquake. Shamsuddin Noori (63) from Afghanistan with his grandson Feyaz (5). Welthungerhilfe helps people from Afghanistan with the processes of registration in Turkey. © Stefanie Glinski / Welthungerhilfe

Page 14: Nutrition camp. ICDS employees in a workshop on healthy nutrition in conversation with course participants. In the foreground on the right, Gulabi Sabar (24). © Rommel / Welthungerhilfe

Page 34: Erlinda Pillajo (49), Chairwoman of Biovida at the organic market in Cayambe, project partner: SEDAL - Fundacion Servicios para el Desarrollo Alternativo © Kathrin Harms / Brot für die Welt

Page 36: Children in the village of Hashim Rustmani in Pakistan's Sindh province © medico international

Page 38: A woman in a wheelchair and a woman with two garbage bags in the sun in Beijing, China © Zhang Kaiyv / Pexels

Page 50: Protester holds up a sign at a rally in London. © Jeff Sof / Pexels

# WorldRiskReports 2011–2022



Governance and Civil Society



Environmental Degradation and Disasters



Health and Healthcare



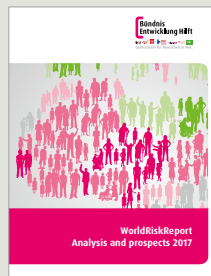
The City as a Risk Area



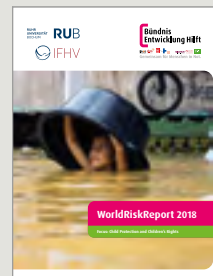
Food Security



Logistics and Infrastructure



Analysis and Prospects



Child Protection and Children's Rights



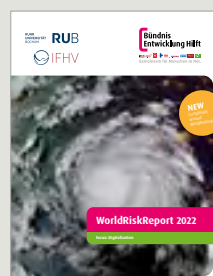
Water supply



Forced Displacement and Migration



Social Protection



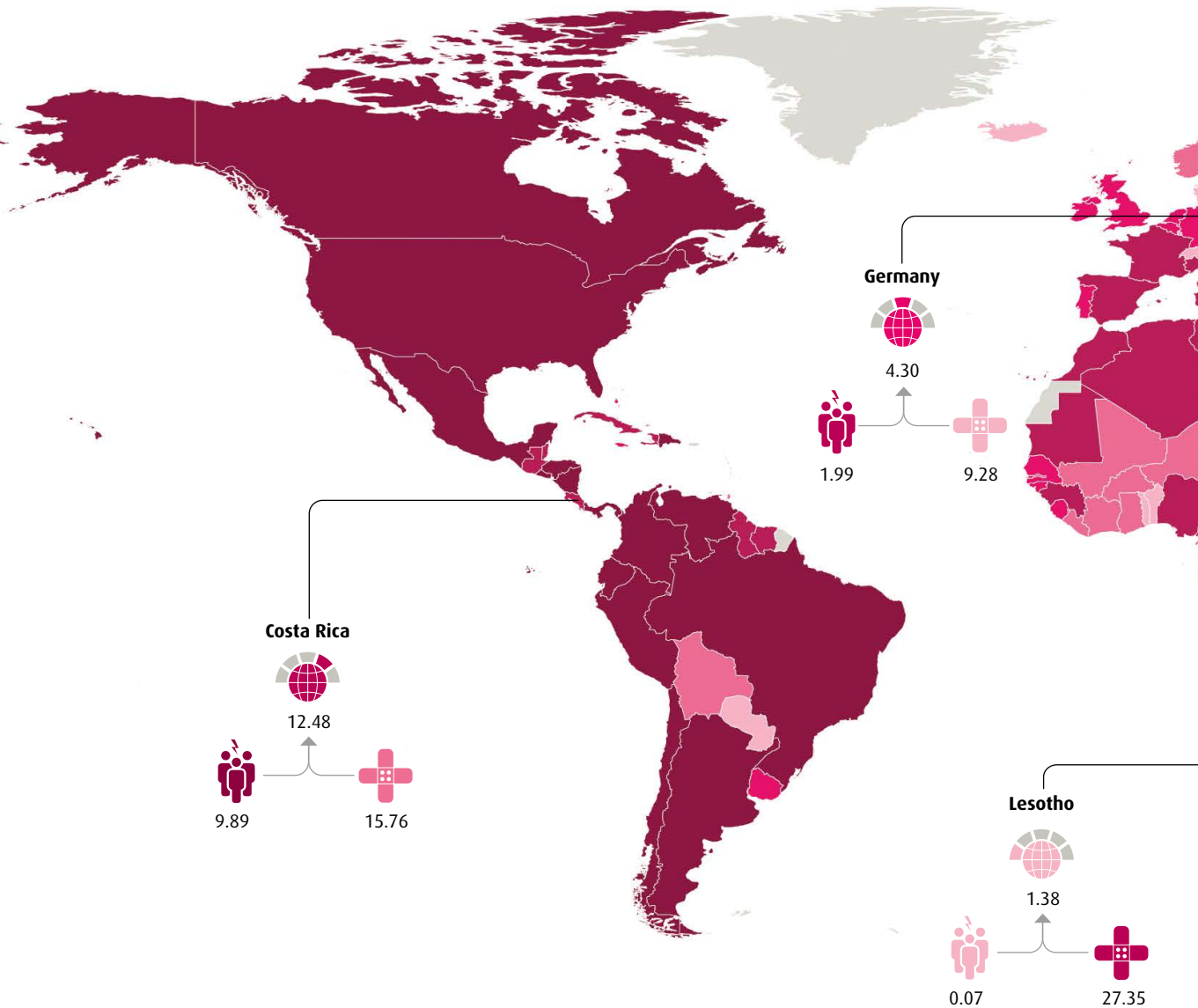
Digitalization

All WorldRiskReports are available to download at [www.WorldRiskReport.org](http://www.WorldRiskReport.org).





# WorldRiskIndex 2023



## WorldRiskIndex

	very low	0.00 - 1.84
	low	1.85 - 3.20
	medium	3.21 - 5.87
	high	5.88 - 12.88
	very high	12.89 - 100.00
	no data	



## Exposure

	very low	0.00 - 0.17
	low	0.18 - 0.56
	medium	0.57 - 1.76
	high	1.77 - 7.78
	very high	7.79 - 100.00
	no data	

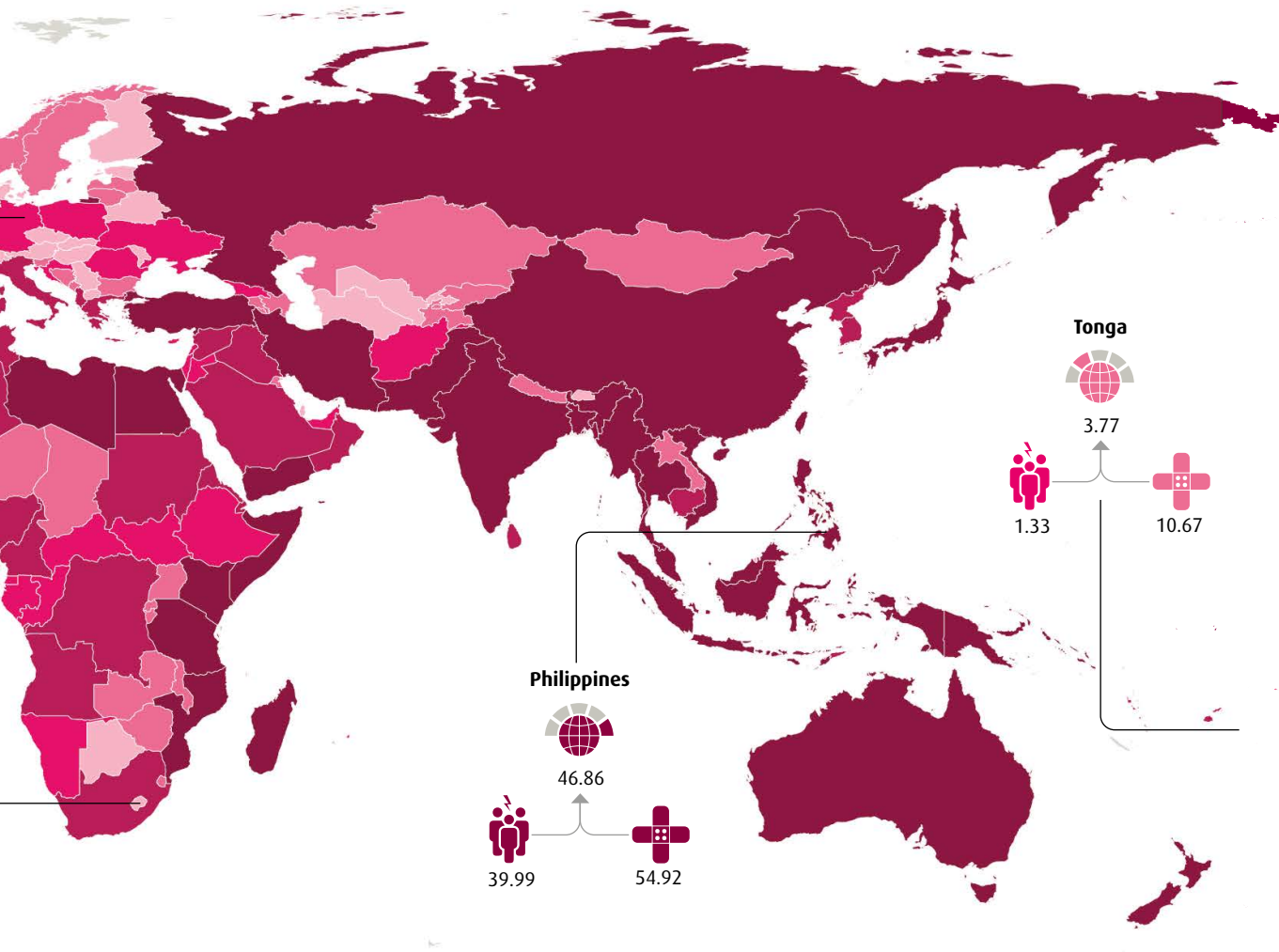


## Vulnerability

	very low	0.00 - 9.90
	low	9.91 - 15.87
	medium	15.88 - 24.43
	high	24.44 - 33.01
	very high	33.02 - 100.00
	no data	

Since 2022, the WorldRiskIndex and its elements will use fixed thresholds for the classification of countries to enable medium- and long-term trends analyses. These threshold values for the WorldRiskIndex model is always based on unweighted geometric mean values.

Data sources: IFHV's own calculation based on CReSIS, EMDAT FAO, GFDRR, IHME, IDMC, JRC, IMF, ILO, UCDP, UNESCO, UNHCR, UNSIDR, WHO, Worldbank, WorldPop, WID; detailed information



### 10 countries with highest risk

1. Philippines	46.86
2. Indonesia	43.50
3. India	41.52
4. Mexico	38.17
5. Colombia	37.64
6. Myanmar	36.16
7. Mozambique	34.61
8. Russian Federation	28.20
9. Bangladesh	27.29
10. China	27.10

### 10 countries with highest exposure

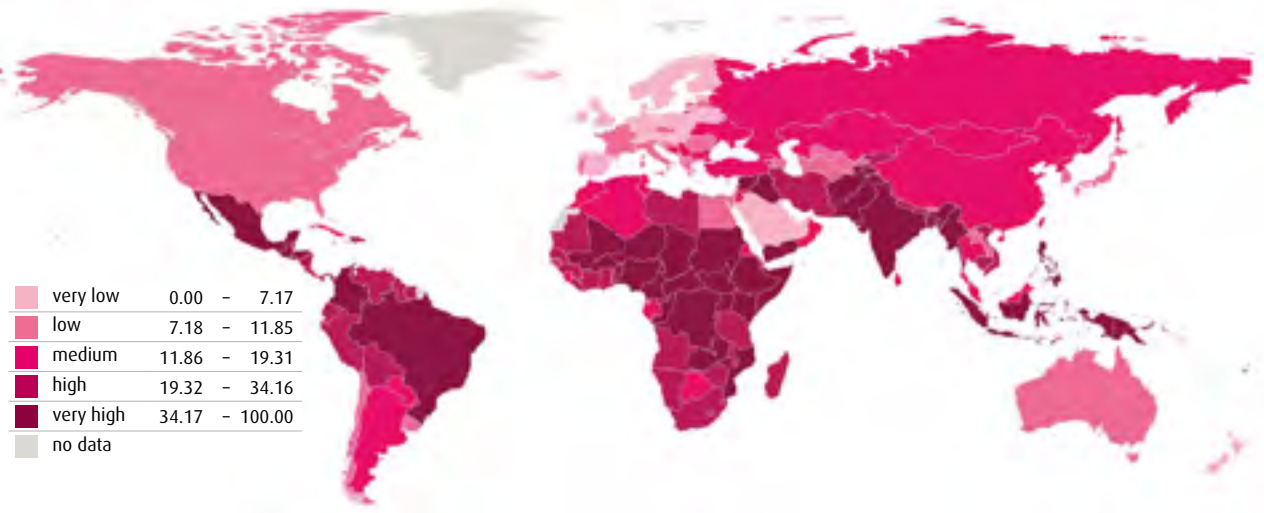
1. China	64.59
2. Mexico	50.08
3. Japan	43.67
4. Philippines	39.99
5. Indonesia	39.89
6. United States of America	39.59
7. India	35.99
8. Colombia	31.54
9. Australia	31.21
10. Russian Federation	28.35

### 10 countries with highest vulnerability

1. Somalia	73.63
2. South Sudan	72.19
3. Central African Republic	70.67
4. Chad	70.25
5. Democratic Republic of Congo	69.11
6. Niger	66.49
7. Mali	66.43
8. Mozambique	66.17
9. Ethiopia	65.44
10. Yemen	65.24

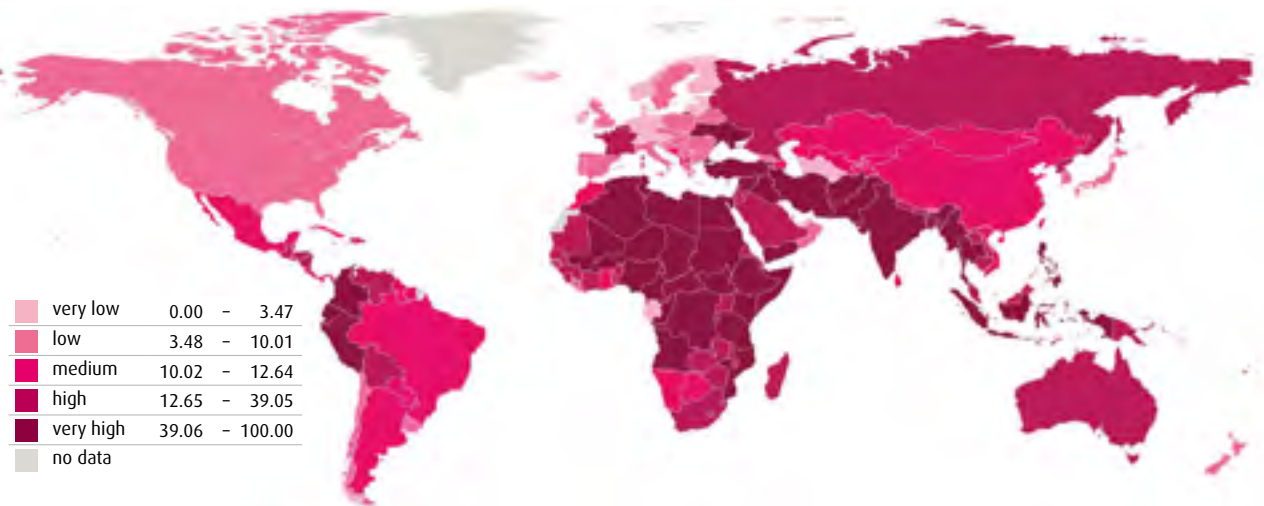
## Susceptibility

Dependent on the level of socio-economic development, social disparities, deprivations and vulnerable population groups



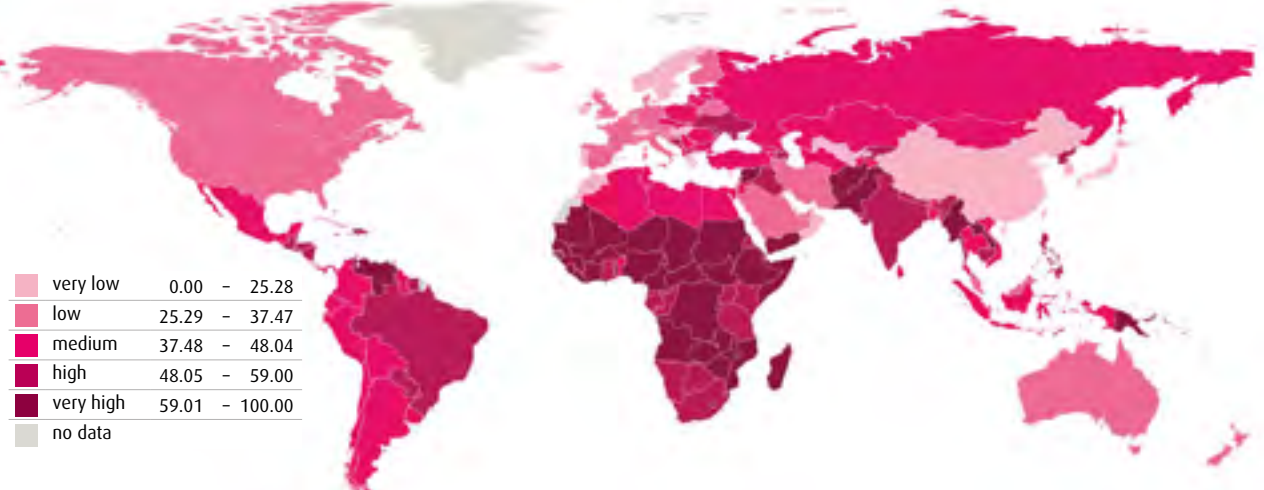
## Lack Of Coping Capacities

Dependent on social shocks, political stability and the rule of law, health care capacities, infrastructure and material protection



## Lack Of Adaptive Capacities

Related to developments in education and research, reduction of disparities, investments, disaster prevention and climate protection



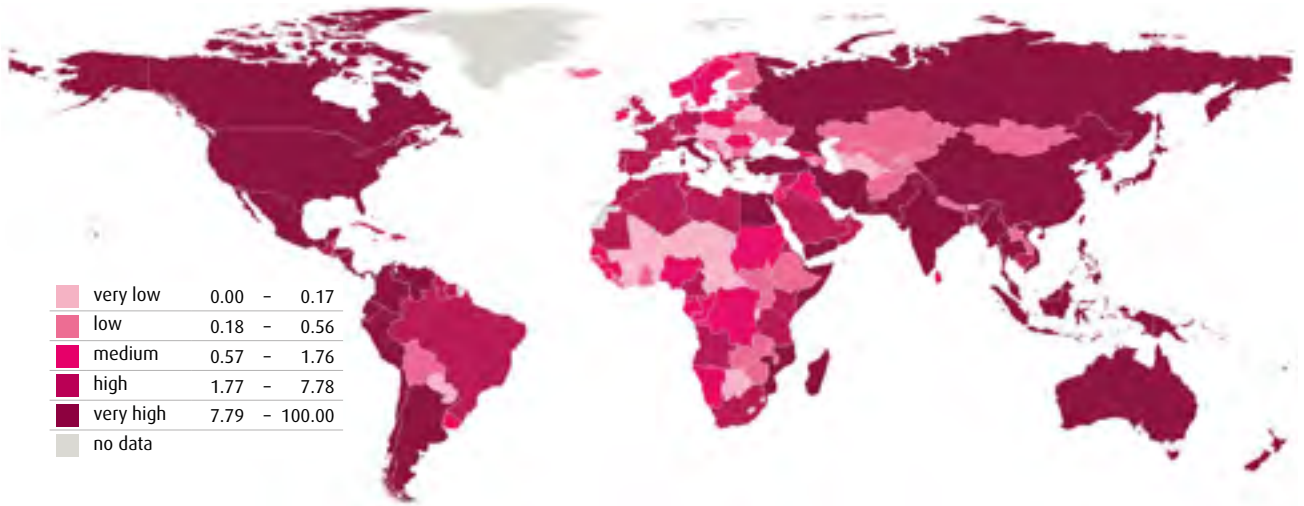
Since 2022, the WorldRiskIndex and its elements will use fixed thresholds for the classification of countries to enable medium- and long-term trends analyses. These threshold values for the WRI are always based on unweighted geometric mean values.

Data sources: IFHV's own calculation based on CReSIS, EMDAT, FAO, GFDRR, IHME, IDMC, JRC, IMF, ILO, UCDP, UNESCO, UNHCR, UNSIDR, WHO, Worldbank, WorldPop, WID; detailed information at [www.worldriskindex.com](#)



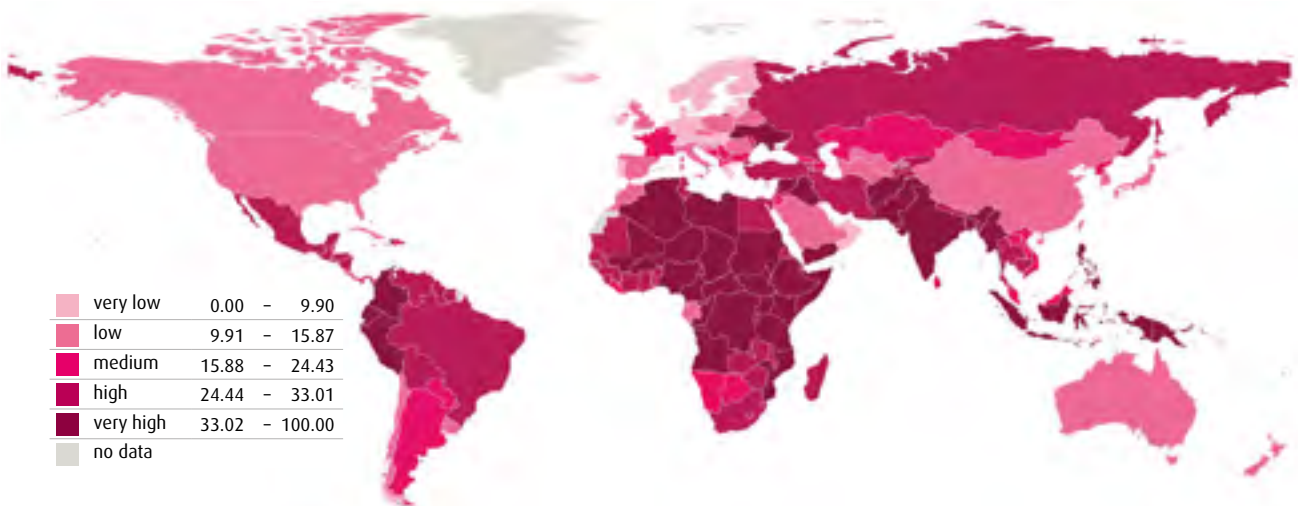
## Exposure

Sphere of exposure to earthquakes, tsunamis, coastal flooding, riverine flooding, cyclone, droughts and sea level rise



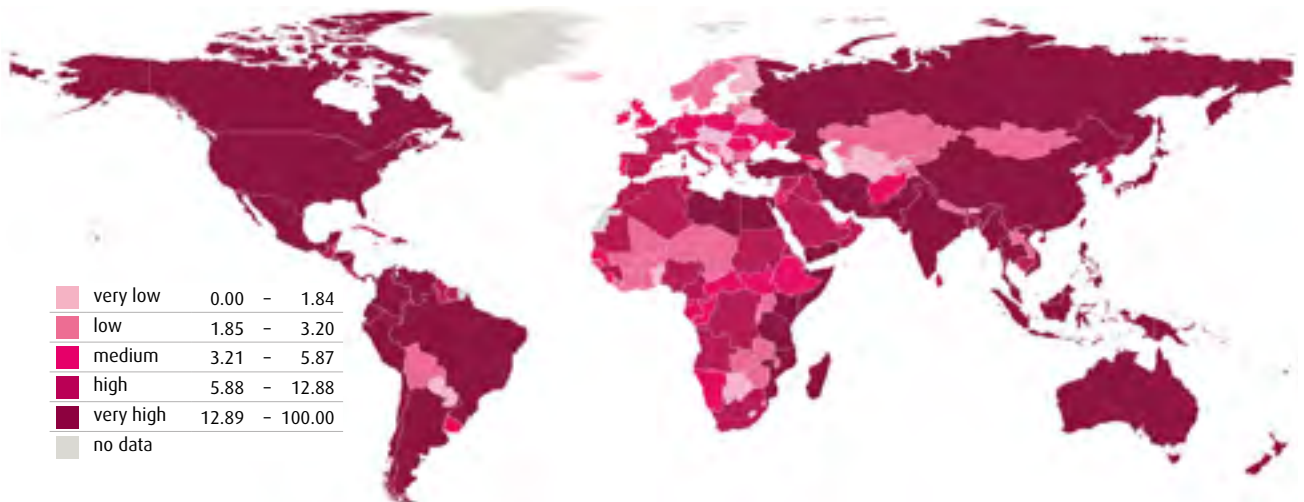
## Vulnerability

Sphere of societal vulnerability consisting of susceptibility, lack of coping capacities and lack of adaptive capacities



## WorldRiskIndex

Geometric mean of exposure and vulnerability



WorldRiskIndex and each dimension were calculated as the median of the quintiles from the results of the last 20 years. The aggregation of values across all levels of the WorldRiskIndex model is

Disaster preparedness

## Early warning

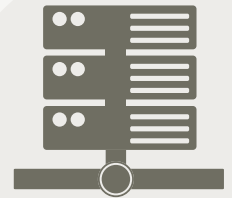
- + Easily accessible and understandable early warning systems for people of different backgrounds
- + Development of georeferenced social registries
  - Identification of communities/people most at risk
  - Development of prioritization strategies for evacuation and other assistance
- + Conduct regular evacuation drills

## Risk analysis and prevention

- + Design inclusive policies
  - Inclusion of communities in planning, design, construction and maintenance of infrastructure
  - Utilization of resettlement opportunities
  - Creation of communal (material) benefits
- + Promotion of inclusiveness and diversity in local disaster management agencies

Disaster preparedness

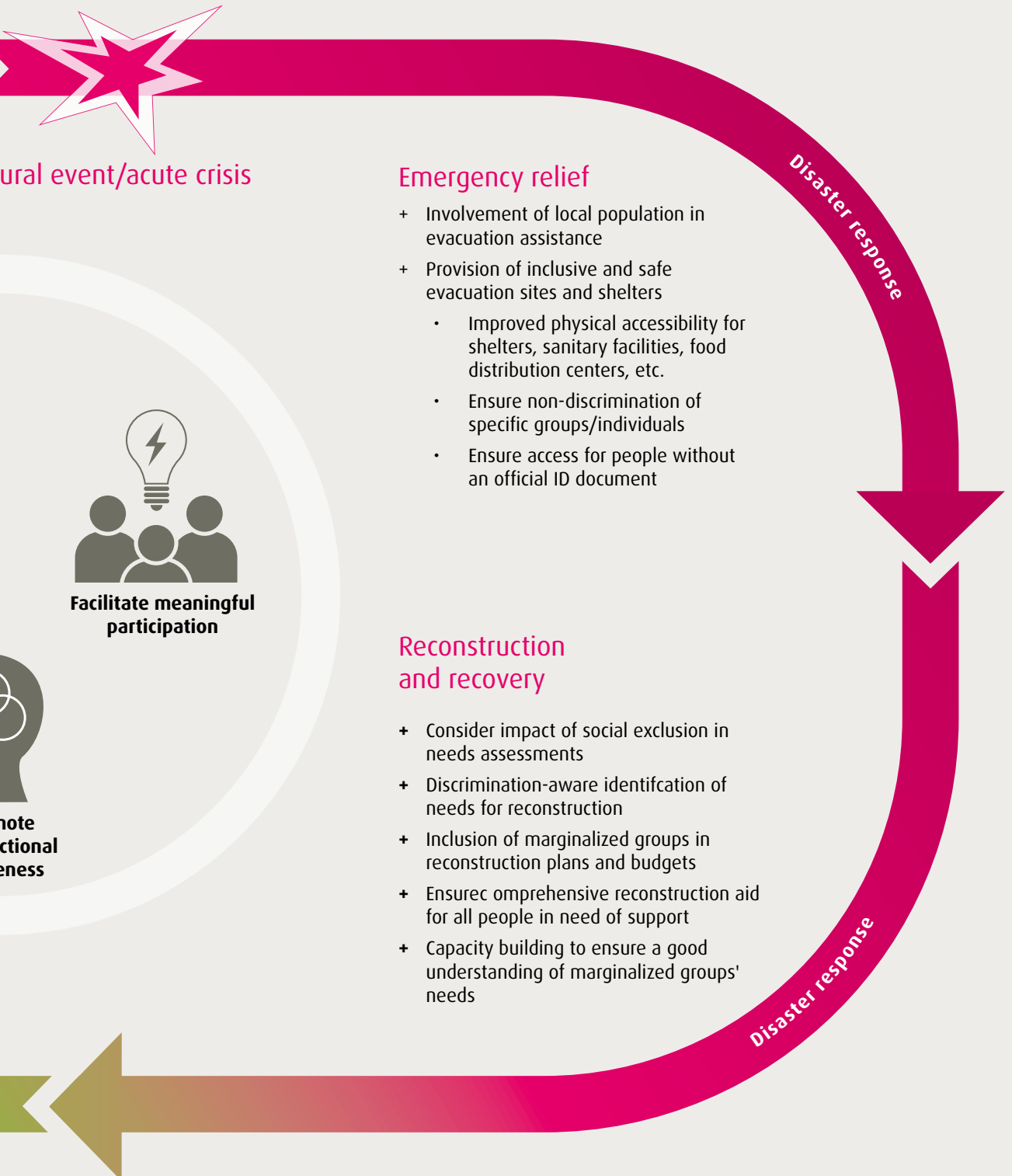
Extreme natural events

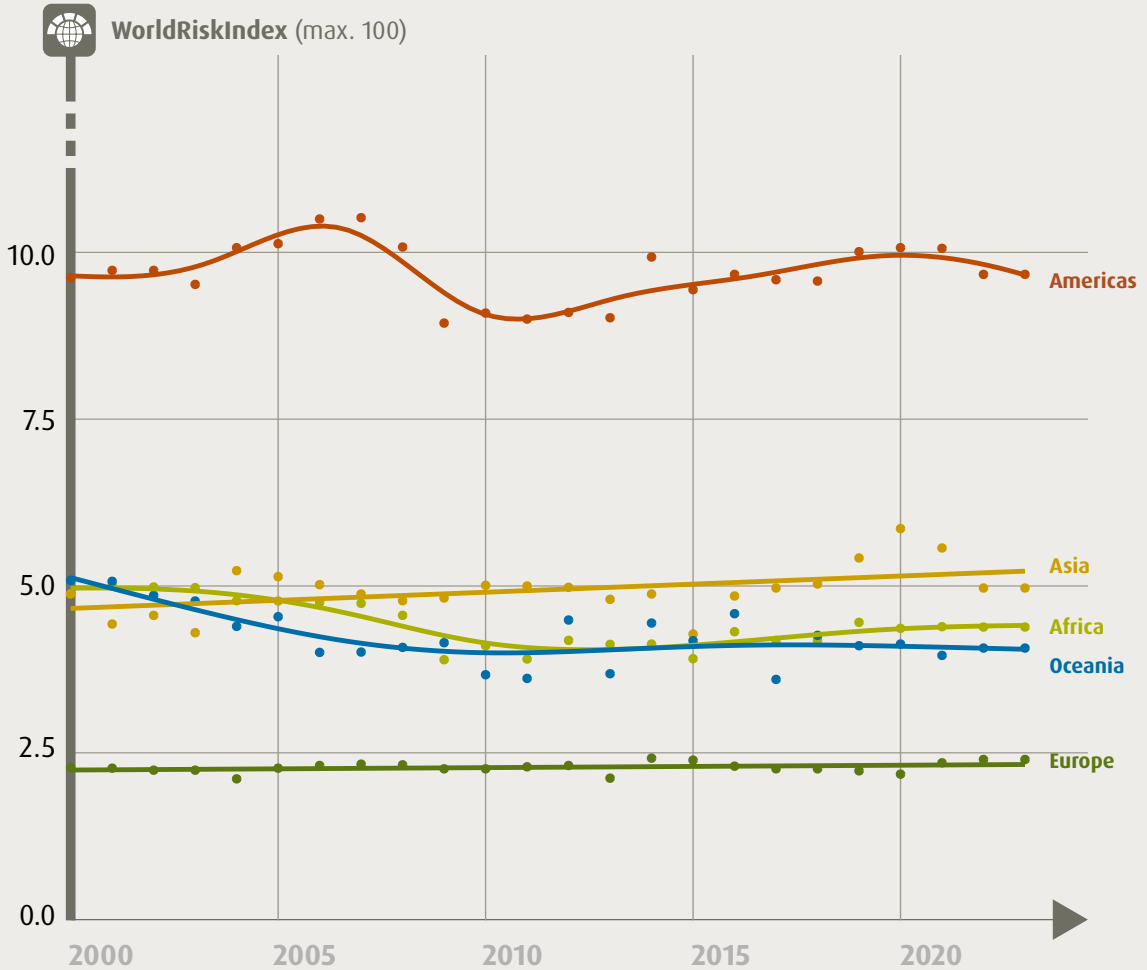


**Identify and fill  
data gaps**



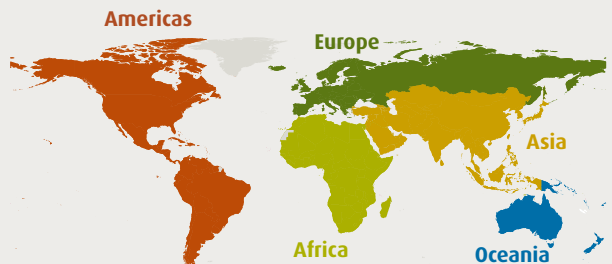
**Promote  
intersection  
awareness**






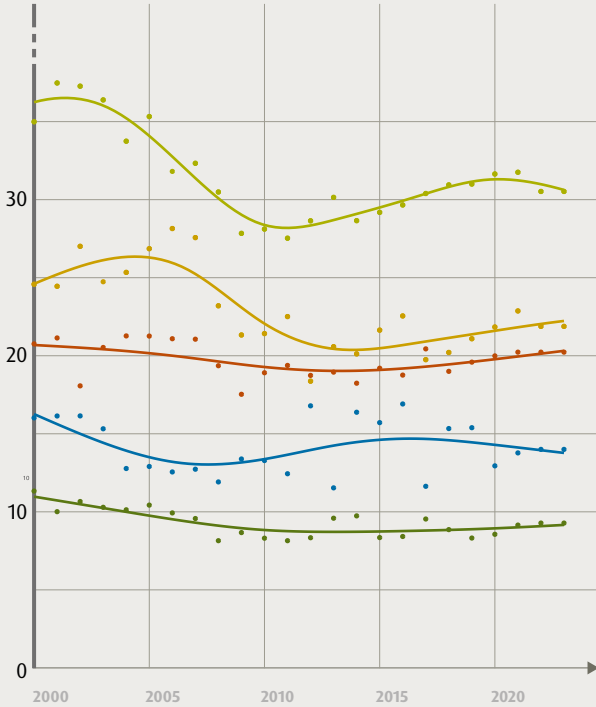
### New perspectives on global risks

The graphs show the evolution of long-term trends for disaster risks, the sphere of vulnerability, and its components, from 2000 to 2023 for the five continents. For this analysis, penalized smoothing splines (Eilers and Marx 1996) were estimated based on time series of continental median values. The spline curves are not required to pass through every data point or connect them as they only serve as auxiliary data for the estimation, making this method well-suited for inferring latent dynamics from volatile time series. The exposure sphere is not included in the visualization since its values were remarkably stable throughout the analysis period.

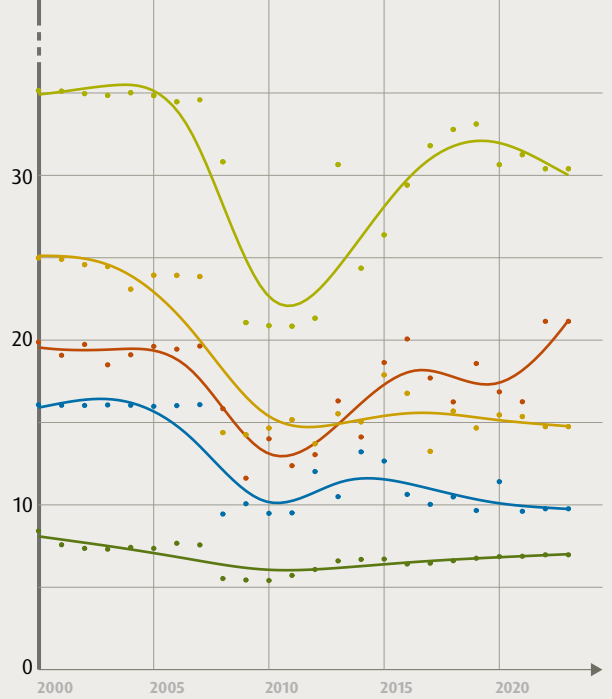



# Dynamics

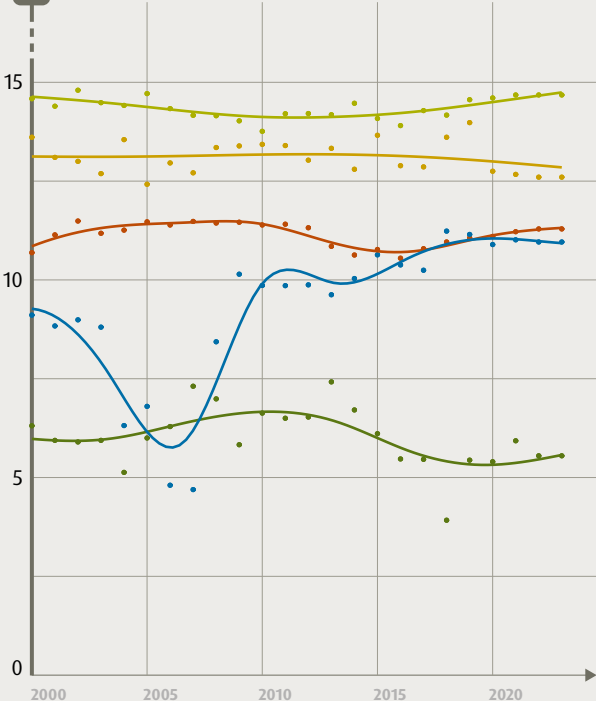
 Vulnerability (max. 100)




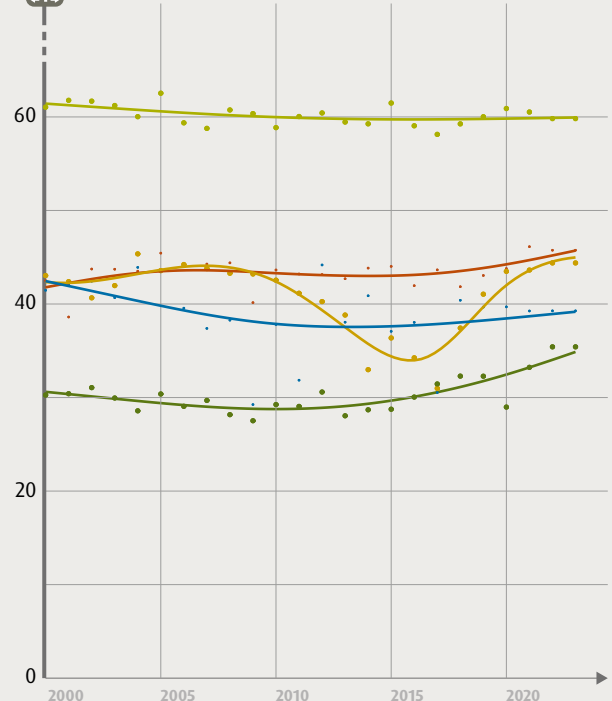
 Susceptibility (max. 100)



 Lack of coping capacities (max. 100)



 Lack of adaptive capacity (max. 100)





## Publisher

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