



# Water Needs Peace

- 1. Imports must not cause or exacerbate conflicts over water**  
Consumers need a transparency label that will let them determine a product's water footprint.
- 2. No climate protection at the expense of water protection**  
Water resources must not be wasted or polluted in the name of climate protection.
- 3. Water must never be weaponised**  
In violent conflicts, we must prioritise protecting the civilian population's access to water.

## We can't live without water

Water is life. People cannot survive for more than a week without access to drinking water. Clean water is also essential for personal hygiene and preventing the spread of disease. That's why access to drinking water and sanitation were enshrined as a global human right by the United Nations in 2010. Water is also essential for producing food that is healthy and sufficient in quantity. For that reason, a person's right to adequate nutrition is inextricably linked to their access to water.

However, the importance of water goes far beyond ensuring basic human rights. Water scarcity not only threatens efforts to protect the climate and biodiversity, it also hinders all aspects of human development. Almost 80 percent of global jobs are predicated on access to water. Rising costs and the increasing time needed to procure water for drinking and daily use are hampering people's development opportunities, especially those of women. Water scarcity also exacerbates the growing social and economic inequality worldwide.

The truth is that there is enough fresh water available in the world to provide all people, animals and ecosystems with an adequate supply of water. However, global water resources are being increasingly stretched - or even destroyed - due to the expansion of industrial agriculture, environmental pollution, growing extraction of raw materials and rising global mobility, not to mention the global climate crisis and ongoing wars and conflicts. To make matters worse, in many cases local populations are being cut off from access to water for drinking and industry through theft of land and water. These developments are fuelling conflicts over access to and control of water resources, which are increasingly erupting in violence. Water is increasingly becoming one of the most important drivers of conflict in the twenty-first century.

## Water needs protection

Myths, rituals and religions the world over reflect the essential importance of water to all aspects of human life – an importance which, unfortunately, is not reflected in our current use of this essential resource. More water is being withdrawn from surface and groundwater reservoirs than can be replaced naturally over the long term. What's more, the water resources that are available are being strained by increasing pollution. Especially in economically poorer countries, rivers and lakes are frequently being contaminated with excess fertilisers and pesticides from agriculture, faeces and medical by-products from intensive animal husbandry, toxins from industry and mining, not to mention household wastewater. Due to their production activities, consumption habits and lifestyle, industrialised countries bear a particular responsibility for this global overuse of water resources and pollution of bodies of water. Because of global supply chains, these environmental impacts are often felt in locations far

removed from and out of sight of these consumers, namely in the Global South, where existing environmental laws are weak and often poorly enforced.

In recent years, we have also seen how climate change is massively exacerbating existing problems with the water supply. Changing precipitation patterns are leading to more frequent droughts and heavy rainfall, and water cycles are changing dramatically or even drying up completely. Rising temperatures increase evaporation and reduce the availability of groundwater and surface water, which are essential sources of the water people use to drink, ensure adequate sanitation and produce food. Due to declining rainfall, previously fertile farmland is becoming salinated, and crop yields are collapsing. And because of rising sea levels, salt water is penetrating groundwater systems and rendering entire coastal areas unusable for food production. Once again, the countries of the Global South are particularly affected, as they have few options to protect themselves against the advancing seawater.

## Access to water needs regulation

In the next few decades, one in three people worldwide will face water shortages. This increases the need to regulate water extraction and wastewater treatment. Achieving this will require co-operation between stakeholders from various government ministries and across different administrative units and levels. But the private sector, too, must be held accountable for using water resources carefully and avoiding waste and pollution, especially companies in the agricultural and industrial sectors. They must be held responsible for any damage to the water supply they cause, such as contamination or drying up of water sources, and they must rectify the damage and provide full compensation to the local people affected.

In both urban and rural areas, especially in the Global South, there is already a lack of adequate resources, infrastructure and financing mechanisms to ensure efficient and sustainable sanitation and hygiene, as well as appropriate management of water and wastewater. As a result, sufficient access to fresh water and sanitation is not available to vulnerable groups, such as economically poor households in rural regions, livestock herders without officially recognised access rights to water sources and residents of informal settlements.

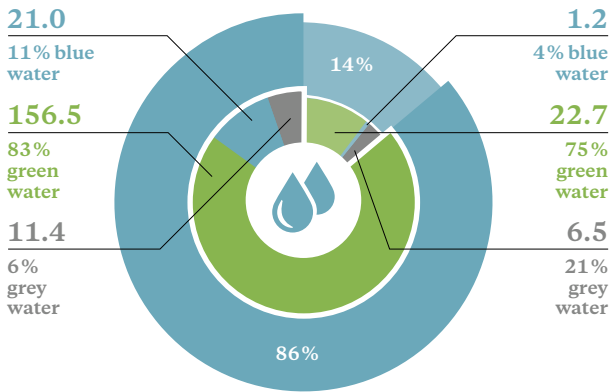
Increasing fluctuations in global water cycles are also making it more difficult and complex to manage water use at the regional and global levels. However, to date there are no adequate global structures that are equipped to coordinate or even regulate water management. The internal coordinating body of the United Nations, United Nations Water (UN Water), has only a weak mandate and no control over the actions pursued by other UN organisations. It also does not have the financial resources needed to intervene in global water management.

### The domestic and international water footprint of Germany

water consumption in billion m<sup>3</sup>

total international 189

total domestic 30



#### Blue water

Artificially supplied irrigation water, for example from lakes, rivers or groundwater sources

#### Green water

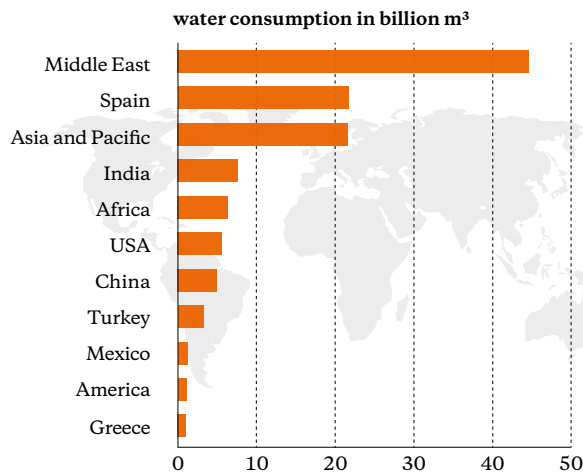
Naturally occurring rainwater and moisture in the soil

#### Grey water

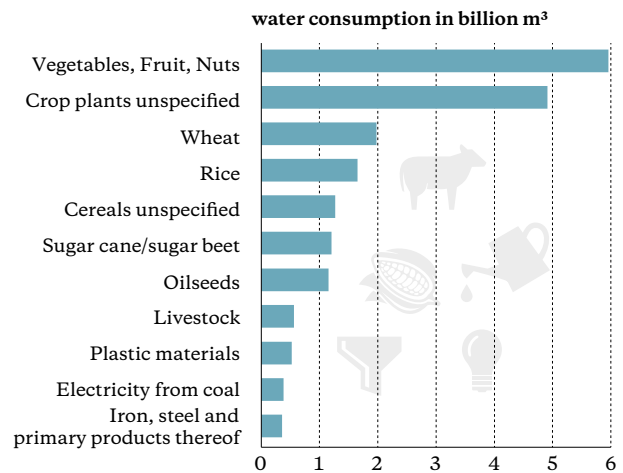
Contaminated water (e.g. by fertilisers or pesticides)



### Contributions of Germany's water footprint to the overexploitation of foreign local water resources by region



### Sectors with the highest contributions of blue water to Germany's water footprint



### Conclusion

Domestic water consumption accounts for only a small proportion of Germany's water footprint. A much larger proportion of Germany's water footprint comes from imported goods and the water used to produce them abroad. This threatens

to overextend global water resources. By consuming imported goods which require large quantities of water to make, Germany is contributing to water scarcity and the associated conflicts in other countries.

Graphic 1: German water footprint

Source: Exiobase database, Department of Sustainable Engineering at the Technical University Berlin, In: German Environment Agency (2022)

## Brot für die Welt supports water management in India

In the state of Odisha, India, the vast majority of the population makes a living from agriculture. However, land degradation, environmental destruction and resource extraction are threatening the traditional livelihoods of smallholder farmers, many of whom are already living below the poverty line. And in recent years, these people have also been struggling with the severe effects of climate change. Changing precipitation patterns and prolonged dry spells are leading to a sharp decline in crop yields in the region. During these dry periods, there is a shortage of water because only about five percent of the agricultural land receives man-made irrigation.

The Watershed Organization Trust (WOTR), an organisation supported by Brot für die Welt, is helping 1375 households in eleven villages in the Rayagada district of Odisha to set up village development committees. These committees devise and implement local measures to adapt to climate change. One important task of these

village development committees is large-scale water management. In order to make fallow land usable, the community works together to level the land, dig contours and water absorption ditches, and build stone walls to prevent water run-off and soil erosion. They also excavate reservoirs to store the rainwater. The smallholders are trained in water-saving soil management and cultivation techniques, such as drip irrigation. These measures make it possible to expand agricultural and irrigated areas, which significantly improves the food situation even in dry periods and prevents conflicts among water users. They also strengthen the village communities and promote the participation of women in decision-making within the family and at the community level.

For further information see:

<https://wotr.org/water-land/>

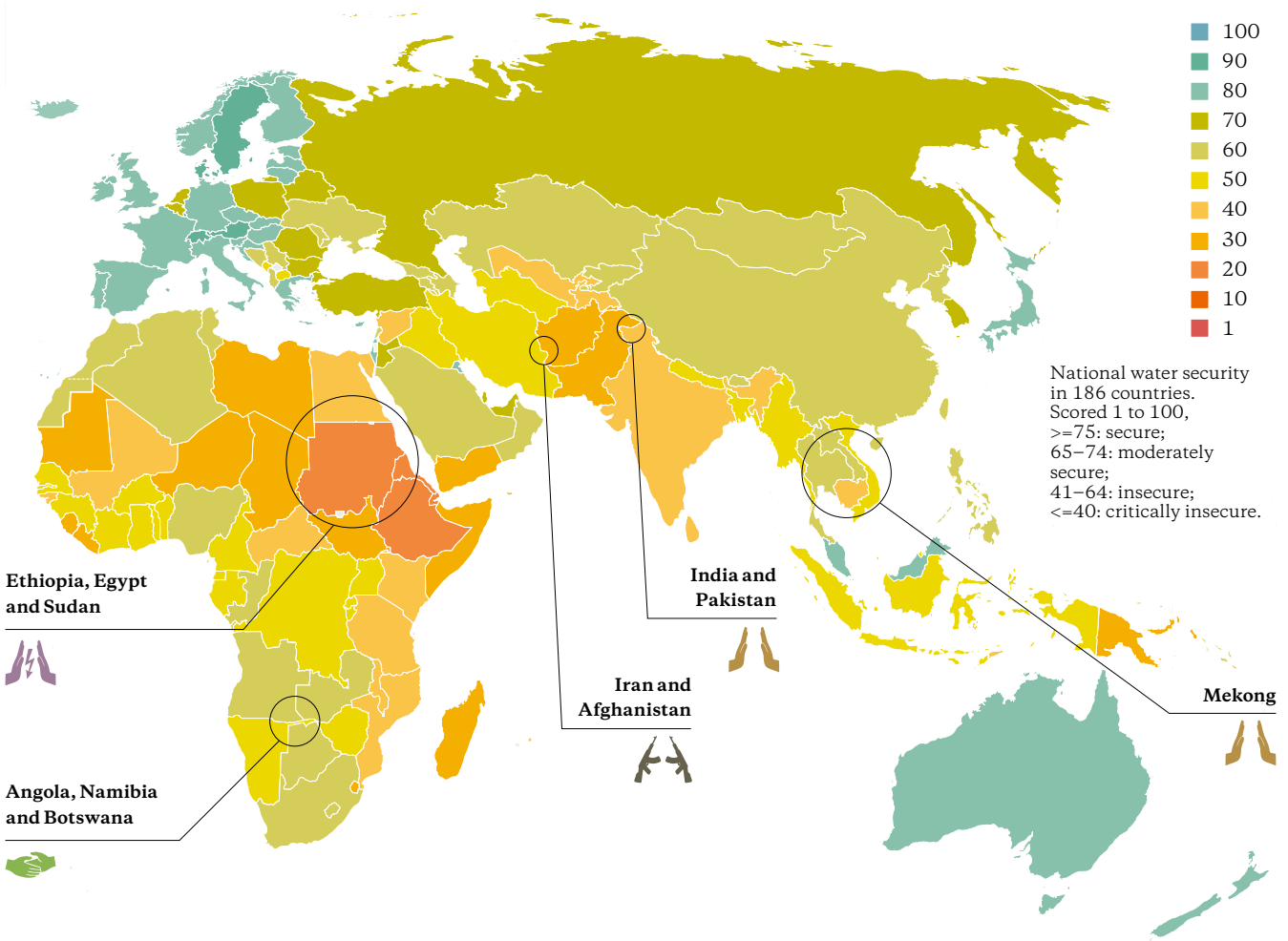
## Co-operation on water as a means to peace

Because of water's critical importance, there is a high risk that the opposing interests of different users will exacerbate existing conflicts or give rise to new, possibly violent conflicts. Conflicts over water use are occurring more often not only between local users such as livestock herders and arable farmers, but also between companies, politicians and local communities. We are seeing countless instances of people in the upstream areas of river basins polluting or using water irresponsibly, causing suffering and hardship for their downstream neighbours. Dams or water extraction for large-scale irrigation can also lead to water shortages downstream. This can give rise to social conflicts within a country or lead to conflicts and war between states. That's why co-operation on water supply and management issues is essential and usually benefits everyone involved.

Agreements at international level are becoming increasingly necessary. Today, more than three billion people are already dependent on water that flows across national borders, with over 500 cross-border aquifers being essential to securing national water supplies. 153 countries share water access with other countries, but only 24 of these countries have co-operation agreements covering all shared water access points.

Joint water management does not automatically lead to sustainable peace, but it can bring people together, promote social interaction and build trust. To achieve this, water management must adequately address the root causes of conflict,

and additional peace-building measures must be implemented. Water-related co-operation between groups or states can also be a starting point for further co-operation that goes beyond water supplies for drinking and sanitation. Specifically, cross-border co-operation on water often has a positive impact on food security. Regional water-related co-operation is also essential for climate protection, biodiversity conservation and disaster prevention. One of the key prerequisites for the peaceful utilisation of shared water resources are institutions which are accessible to and seen as legitimate by the local population – for example, local authorities that have the trust of marginalised groups and pay attention to their needs. Local water committees have also proven effective, especially when they give prominent roles to village representatives, women and indigenous groups. At the national and international levels, there is also a need for institutions that oversee the use of water by various actors based on standardised legal and political frameworks.



**Regional examples: water scarcity and conflicts**

**Angola, Namibia and Botswana**

Angola, Namibia and Botswana, which are located along the banks of the Okavango River, are renegotiating a 1994 agreement that is intended to regulate the use of water resources, strengthen co-operation and prevent conflicts. The Permanent Okavango River Basin Water Commission monitors how the river water is utilised.

**India and Pakistan**

Dating from the 1960s, the Indus Waters Treaty was an important step towards resolving water utilisation conflicts between India and Pakistan. It divided up the river system, but it did not implement a co-operative strategy for resolving conflicts. Though the treaty itself has withstood various crises, there has been much dissatisfaction in how it is implemented in practice. Climate change has only exacerbated this situation.

**Mekong**

Chinese dams along the Mekong are seen to be causing droughts in Thailand and Cambodia. But Laos, Cambodia and Vietnam have also built dams. So far, organisations such as the Mekong River Commission, in which neighbouring states co-operatively manage the river's water, and the Lancang-Mekong Cooperation Mechanism, a Chinese initiative, have prevented tensions from escalating.

**Ethiopia, Egypt and Sudan**

The Grand Ethiopian Renaissance Dam is the largest dam in Africa and was built to supply the Ethiopian population with electricity. But this has caused the countries downstream, Sudan and Egypt, to fear for their water supply. The question of who controls and is authorised to use the water of the Nile has been a contentious one for more than a decade, and it has already led to military threats from Egypt.

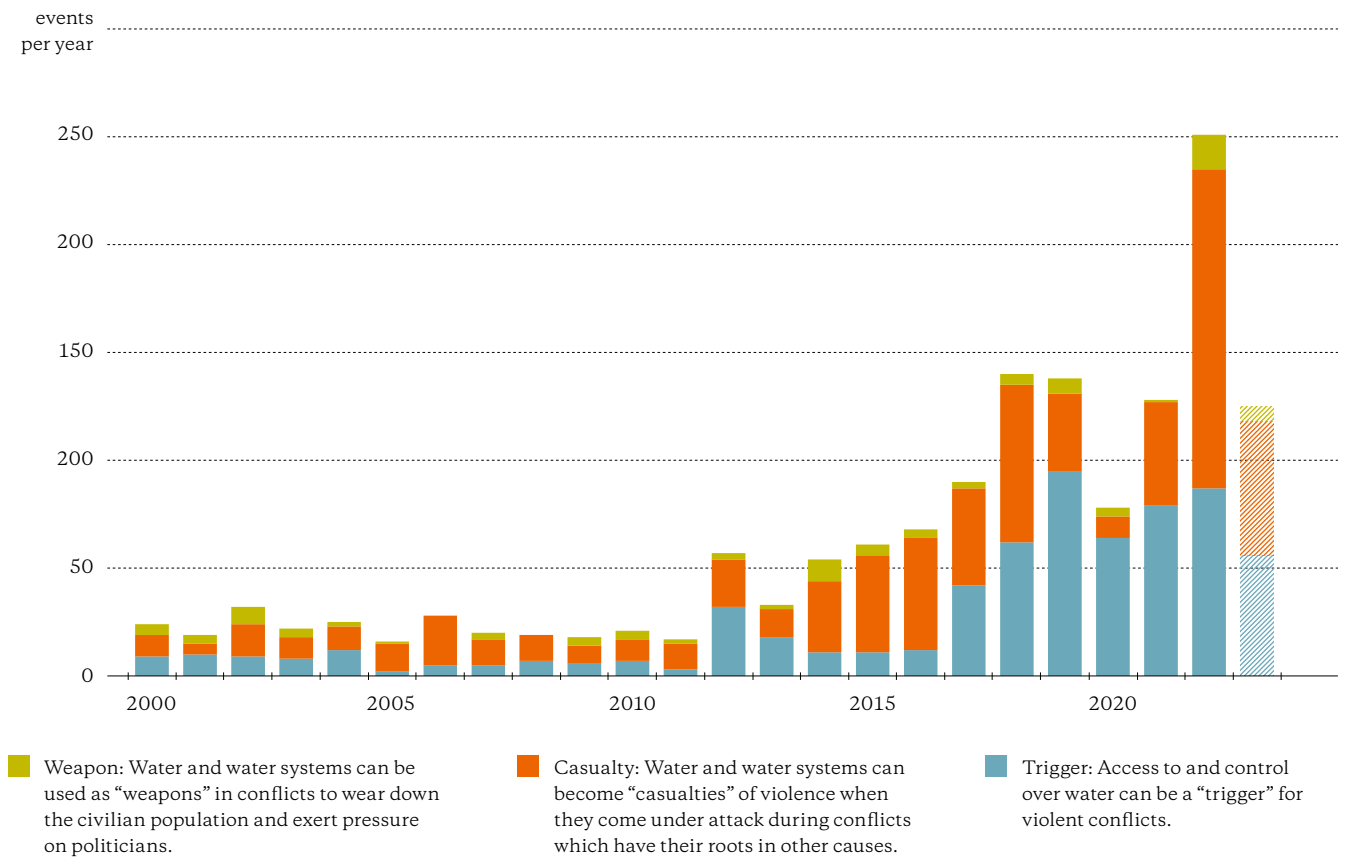
**Iran and Afghanistan**

While the Kamal Khan Dam on the Helmand River in Afghanistan is used by farmers to overcome periods of drought, the neighbouring country Iran sees its access to water under threat. Iran, for its part, builds dams and influences the inflow into Iraq. The Iranian government accuses Afghanistan of breaching a 1973 water rights treaty. This led to an armed confrontation on the border between Afghanistan and Iran in spring 2023.

- Co-operation mechanisms**
- Heightened tensions, but no escalation**
- Escalation**
- Military escalation**

**Graphic 2:** Water security by country

Source: MacAlister, C, Baggio, G, Perera, D, Qadir, M, Taing, L, Smakhtin, V. 2023. *Global Water Security 2023 Assessment*. United Nations, University Institute for Water, Environment and Health, Hamilton, Canada.



**Graphic 3:** Trends in water conflicts by type 2000–2023  
 Source: *Water Conflict Chronology*, Pacific Institute, 2023. The data for 2023 is incomplete

## Water as an object of conflict

If overuse or climate change causes water supplies to decrease drastically and abruptly, existing co-operation mechanisms are easily overwhelmed, and conflicts over water may arise. The potential for conflict over scarce water is particularly high in communities where there is great economic inequality. Problems also occur when drinking and irrigation water is polluted on a large scale and there are no institutions that can intervene to regulate water use or protect water sources from pollution. Because access to water is so essential to all aspects of life, unresolved water conflicts can easily escalate and lead to violent disputes or wars. That’s why it is important to focus on water conflicts before they have the chance to escalate. To handle these conflicts, we need to analyse in detail both the context and the interests of various stakeholders, especially marginalised groups and women, but also private and state actors at the various administrative levels. Wherever water is used, the common good should be prioritised over private economic interests and profit. This requires a legal framework based on human rights, accepted and inclusive institutions that ensure compliance with this framework, active measures to combat corruption and a clear commitment to human rights on the part of all actors.

## Water as a weapon

Water infrastructure is often damaged in the course of violent disputes and military conflicts. This destruction can have devastating effects on the supply of drinking water and on the health and food supply of the affected civilian populations, effects which often last well beyond the end of the war.

**“The Geneva Convention of 1949 and the Additional Protocols of 1977 expressly prohibit attacks on civilian, medical and agricultural infrastructure. This includes water systems.”**

**Peter Gleick in  
 Amnesty Magazine,  
 June 2022**

Again and again, we see access to water and sanitary facilities being restricted as a means of waging war. During armed conflicts, water infrastructure such as drinking water systems, sewage treatment plants, dams and irrigation channels are often targeted to exert pressure on the civilian population and politicians. Such actions usually have a disproportionate effect on the civilian population and constitute serious crimes against humanity.

## What needs to happen?

### Making water consumption transparent in production chains

Many water-intensive products such as food and clothing are imported from regions where water is scarce. However, the resulting overuse of available water resources and the serious ecological and social consequences remain hidden from the people who buy the products. The German government must establish and enforce a legal framework that will help German consumers to avoid unwittingly contributing to water crises. Standardised transparency rules are needed so that consumers can take water risks into account when making purchasing decisions. A mandatory label must be established that shows how much water was used in the production and supply chains of a product and the impact it has on the water resources available in the region. For example, the government should ensure consistent application of the Supply Chain Act (Lieferkettengesetz), which obligates German companies not to contaminate water and not to consume excessive amounts of water. Germany should also advocate for strong, binding regulations on global supply chains at the EU level. Furthermore, companies operating in the Global South should be obliged to act in a conflict-sensitive manner.

### Thinking holistically about climate, water and peace

The impacts of climate change on global water security are particularly evident in countries which are economically disadvantaged and affected by conflict and that therefore lack the institutional framework and financial means to deal with water scarcity. In the fight against climate change, every tenth of a degree counts if we are to prevent sea levels from rising further, rainfall from becoming more erratic and extreme weather events from becoming more frequent. Germany must therefore consistently advocate for climate protection in national and international policy as well as in development work. However, climate protection and water conservation must not be played off against each other, as is the case, for example, with the extremely water-intensive extraction of lithium, which is needed for the European mobility transition. What we need is a strategy which actively combines climate protection measures with the promotion of

agroecology and effective water management. Peace-building programmes, dialogue programmes and measures that reduce inequalities and social tensions are also important. Such a multi-faceted approach constitutes an important step in promoting systems geared towards sustainability and peace.

### Promoting co-operative water management

In order to provide people with safe, fair and socially and ecologically sustainable access to water, inclusive institutions must be established that create the political and legal framework for shared use of available water resources. At the local level, effective and sustainable water resource management requires that affected groups are kept well-informed and that their participation and consent are secured early on and continually in accordance with the United Nations' Free, Prior and Informed Consent (FPIC) initiative. With regard to cross-border water co-operation, it is important to promote forward-looking processes and institutions that build confidence and balance competing interests through the exchange of information and practical collaboration. Within the UN, the vague distribution of responsibilities and tasks necessitates a central body with extensive powers to coordinate the activities of the individual UN organisations. This should include an intergovernmental mechanism with the involvement of civil society actors that offers a regular platform where stakeholders can formulate objectives and evaluate processes and that acts as a forum for water diplomacy to manage and prevent conflicts.

### Water in violent conflicts

Inadequate water access is often ascribed to a lack of water infrastructure, with calls for greater financing of access to water. However, to understand the causes of ongoing water conflicts, one also requires a detailed contextual analysis that takes into account the various dynamics of the conflict, along with the actors involved and their motivations. Aspects of a conflict can be adequately addressed and remedied only if their interdependencies are known. To avoid exacerbating existing conflicts, local mediation mechanisms and traditional institutions for non-violent conflict resolution should be involved.

During violent conflicts and wars, the German government should work to protect water infrastructure in accordance with the Geneva Convention to protect the civilian population. Above all, it should provide greater support for civil society organisations that work to protect water during conflicts. Military actions that specifically target water infrastructure must be documented in detail, and the actors behind them must be held accountable.

**Legal notice**

Brot für die Welt  
 Evangelisches Werk für Diakonie und Entwicklung e. V.  
 Caroline-Michaelis-Straße 1  
 10115 Berlin  
 Phone +49 30 65211 0  
 info@brot-fuer-die-welt.de  
 www.brot-fuer-die-welt.de

**Authors** Dr Ingrid Jacobsen, Vitus Thoma,  
 Leonie Hesselmann

**Editors** Michael Billanitsch, Mareike Haase,  
 Caroline Kruckow

**Legally responsible for content** Dr Jörn Grävingsholt

**Photos** Karin Schermbrucker

**Layout** publicgarden GmbH

**Donations**

Brot für die Welt  
 Bank für Kirche und Diakonie  
 IBAN: DE10 1006 1006 0500 5005 00  
 BIC: GENODED1KDB

Berlin, March 2024

## Further literature and links

**Literature**

Federal Ministry for the Environment, Nature Conservation, Nuclear Safety and Consumer Protection (BMUV), National Water Strategy, Berlin 2023.

<https://www.bmu.de/download/nationale-wasserstrategie-2023>

Swiss Agency for Development and Cooperation (SDC): A Matter of Survival. Report of the Global High Level Panel on Water and Peace, Geneva 2017.

<https://www.genevawaterhub.org/resource/matter-survival>

German Environment Agency: Konzeptionelle Weiterentwicklung des Wasserfußabdrucks. Zur Abbildung möglicher qualitativer und quantitativer Wasserbelastungen entlang eines Produktlebenszyklus, Dessau 2022.

<https://www.umweltbundesamt.de/publikationen/konzeptionelle-weiterentwicklung-des>

United Nations University Institute for Water, Environment and Health (UNU INWEH): Global Water Security 2023 Assessment (Summary), Canada 2023.

<https://inweh.unu.edu/global-water-security-2023-assessment/>

United Nations (UN) – Water: The United Nations Global Water Conventions: Fostering Sustainable Development and Peace, Geneva 2020.

<https://www.unwater.org/news/united-nations-global-water-conventions-fostering-sustainable-development-and-peace>

United Nations (UN) – Water: Fact Sheet United Nations World Water Day, 2024.

<https://www.unwater.org/our-work/world-water-day>

**Internet:**

Pacific Institute:

<https://www.worldwater.org/water-conflict/>

Deutsche Welle:

<https://www.dw.com/de/streit-ums-wasser-kriegsgrund-oder-chance-f%C3%BCr-den-frieden/a-61332210>