

Reporting Initiative on Climate, Health Water and the Environment

Input for thematic report “Too Dirty, Too Little, Too Much: The Global Water Crisis and Human Rights”, 10/11/2020

Jan van de Venis, Just Law, Leida Rijnhout, Stakeholder Forum, Tobias Schmitz, The Freshwater Monitor

1. Please provide examples of ways in which water pollution, water scarcity and floods are having adverse impacts on human rights. Adversely affected rights could include, among others, the rights to life, health, water and sanitation, food, culture, livelihoods, non-discrimination, a safe, clean, healthy and sustainable environment, and indigenous peoples' rights.

On the topic of water quality and water pollution, it is worth pointing out that water quality is crucial to environmental health as well as to the progressive realisation of the right to health. CESCR General Comment no. 15 on the Right to Water makes reference to water quality. States have a duty to ensure that natural water resources are protected from contamination by harmful substances and pathogenic microbes. In respecting, protecting and fulfilling the right to water, water quality is an indicator which applies in all circumstances, i.e. the water required for each personal or domestic use must be free from micro-organisms, chemical substances and radiological hazards. Nevertheless, the United Nations World Water Development Report 2017 noted that the quantity of wastewater produced and its overall pollution load are increasing worldwide. More than 80% of the world's wastewater is released into the environment without treatment, adversely impacting on human and animal health, reducing aquatic biodiversity and harming ecosystems. The World Bank's 2019 report 'Quality Unknown: The Invisible Water Crisis' has reaffirmed the growing but hidden problem of water quality, in particular highlighting gaps in data collection and monitoring which provide the information upon which public policy for the promotion of health and the protection of ecosystems can be built.

Water quality is inextricably intertwined with environmental sanitation. One of the key mandates of the World Health Organisation from its origins has been the promotion of environmental sanitation i.e. the promotion of hygiene and the prevention of disease related to environmental factors. The safe disposal of human excreta, the safe transport and effective treatment of sewage, and the safe management of other forms of household waste are all integral to environmental hygiene in settled environments. The human right to sanitation entitles everyone, without discrimination, to have physical and affordable access to sanitation, in all spheres of life, that is safe, hygienic, secure, socially and culturally acceptable and that provides privacy and ensures dignity. Nevertheless, sanitation does not enjoy a high priority within most government policies, and its implementation is often fragmented across a range of government departments. Currently more than 2.5 billion people worldwide do not have access to sanitation, amounting to some 35% of the world population. Environmental sanitation encompasses not just one's own personal hygiene but its safe disposal such that the pathogens and chemical substances contained in human waste do not negatively impact on the health of others or of the natural environment. In times of high rainfall, unsafe sanitation systems can be overloaded, spreading the risk of disease and overloading local ecosystems with nutrients. Many natural watercourses, lakes, estuaries and coastal regions are being overloaded with nutrients, leading to rapid growth of certain plants species such as water hyacinth and algae, the reduction on oxygen levels in water, and the dying of fish and other aquatic species.

Wetlands are at the centre of a nexus between water, climate and biodiversity and deserve a special mention. Wetlands play a crucial role in supporting global biodiversity, in storing carbon, and in regulating the water cycle both in terms of water quantity and water quality. Nevertheless, wetlands are the most rapidly declining ecosystems in the world. More than 70% of the wetlands present in 1700 had been lost by 2000 and currently disappear at a rate three times faster than global forest loss. Within the group of wetlands, peatlands are particularly important from the point of view of climate mitigation by virtue of the fact that despite only covering 3% of the world's land area, they absorb twice as much carbon as all of the world's forests put together. Wetlands have natural water purification properties, collecting and filtering sediment, removing excess nutrients, and supporting chemical detoxification. Wetlands are so effective at removing excess nutrients and at purifying water that many municipalities have built artificial wetlands to support the treatment of wastewater before its release back into the environment. Wetlands have the capacity to absorb water in times of flood and release it slowly after peak rainfall events, acting as a buffer against the natural variability in precipitation. Therefore, wetlands play a crucial role in climate adaptation. Also, wetlands are very important resources from the point of view of livelihoods. More than 1 billion people worldwide depend on wetlands for their living through rice cultivation, fishing, sourcing of building materials, medicinal plants, dyes, fruits, reeds and grasses, the provision of recreational and leisure activities and transportation. The protection and restoration of wetlands is therefore inextricably intertwined with social and economic rights such as the right to food, the right to work, the right to health and the right to water. It has been argued that ecosystem based approaches that integrate land and water resources management to promote conservation on their own can deliver at least 33% of the CO₂ emission mitigation needed to achieve the 2030 goals of the Paris Agreement. Clearly, wetlands sit the centre of the nexus between water climate and biodiversity and are central to the CBD, the UNFCCC and the UNCCD.

Water scarcity has various dimensions: it has a strong geographical dimension, due to a physical mismatch between centres of water demand and sources of water supply, and it has a temporal dimension, due to the variation of water availability from one season to another and from one rainfall event to another. However, water scarcity is also distributional, in the sense that there are very large inequalities between individuals and groups in society with respect to the quantity of water they can access on a regular basis. Water scarcity is also demand driven, in the sense that the continuous growth of freshwater water demand in consumption and production centres requires a continuous investment in water supply infrastructure. In a growing number of areas around the world, despite the fact that more than 100 000 'large' dams have been constructed on earth affecting the stream flow of two thirds of the world's rivers, urban centres and agricultural areas are beginning to face the upper limits of supply. Already, two thirds of the world's population (4.1 billion people) live under conditions of water scarcity for at least one month of the year. There are currently 36 countries facing extreme water shortages and recently, major cities such as Cape Town, Chennai, Harare, Nairobi and Sao Paulo have had to face the prospect of 'day zero': the day that supply of a city simply runs out. By 2025, half of the world's population is predicted to live in areas with permanent water scarcity. At the same time, it must be recognised that 70% of global water consumption is locked into agriculture. Many water scarce countries have adapted their water legislation to embrace a flexible permit system and have limited the rights of the agricultural sector to the benefit of other economic sectors, setting annual targets for water demand reduction in agriculture (ref. Jordan, Tunisia, Uzbekistan).

Water is also needed to support animal health. The world's pastoralists depend on watering points for animals to sustain animal life and promote their health, which in turn supports the livelihoods of communities living in arid and semi-arid areas throughout the world.

2. How has climate change exacerbated water-related problems?

Climate presents an obstacle to the realisation of water related human rights. These go beyond the right to water for personal and domestic uses, including the right to sanitation, the water required to produce sufficient food, the control of indigenous peoples over natural resources including water, and the rights of present and future generations to a healthy environment. Balancing these - sometimes competing- rights requires an integrated approach already catered for in water law along with additional tools such as water permit systems and minimum flow guarantees.

Water is the main medium through which climate change impacts upon human populations, animals (wild life and domestic) and ecosystems. Climate change impacts on peoples' rights to water and sanitation by causing floods and droughts, changes in precipitation and temperature extremes that result in water scarcity, contamination of drinking water and the spread of disease. Climate projections indicate that extreme precipitation events, heatwaves and droughts will become more intense and frequent. Melting glaciers will first increase streamflow, placing pressure on upland lakes and man-made infrastructure and eventually result in lower flows. Higher temperatures affect water quality, such as through harmful algal blooms in lakes and estuaries which provide livelihoods as sources of fish and other foods.

Water, climate change and human rights are therefore strongly interconnected areas and it is with increasing urgency that decision makers and practitioners require not only analysis of these interconnections but especially *clear pathways to reduce risks* and maximise the protection offered to citizens, especially those of vulnerable groups.

The UN World Water Development Report 2020 was dedicated to water and climate change and its opening statement declares that "climate change will affect the availability, quality and quantity of water for basic human needs, threatening the effective enjoyment of the human rights to water and sanitation for potentially billions of people". It recommends that human rights principles should be integrated into water stewardship principles and integrated water resources management (IWRM). In 2019, the WWDR had highlighted three key water related impacts of climate change, i.e. (i) increases in water related disasters, (ii) increases in areas suffering from water stress and (iii) increases in poor water quality related fatalities. This year, the United in Science 2020 report shows that 90% of the impact of natural disasters is water related. By 2050 the number of people at risk from floods will increase from its current level of 1.2 billion people to 1.6 billion. In the early 2010's, 1.9 billion people or 2.7% of the global population will be living in water scarce areas.

3. To protect a wide range of human rights, what are the specific obligations of States and responsibilities of businesses in terms of addressing water pollution, water scarcity and floods? Please provide specific examples of constitutional provisions, legislation, institutions, regulations, standards, policies and programmes that apply a rights-based approach to preventing, reducing, or eliminating water pollution, water scarcity and floods. Please include, inter alia, any instruments that refer directly to the right to a healthy environment and/or the rights to clean water and adequate sanitation.

Over the past decade emphasis was placed on clarifying the obligations of state and non-state actors, otherwise known as 'structural indicators': the legal instruments and institutional mechanisms in place for the promotion and protection of human rights. Human rights treaty

bodies and Special Rapporteurs have clarified state obligations in relation to climate change. The 2015 Paris Agreement, hailed as a major landmark in international climate negotiations, contained the first explicit reference to human rights.

Many states have recognised the human right to water - either indirectly through the ratification of relevant treaties such as the Convention on the Rights of the Child, the Convention of the Elimination of all forms of Discrimination Against Women and the International Convention of Economic, Social and Cultural Rights - or directly by introducing water and sanitation as a constitutionally guaranteed rights. What is often overlooked in the context of the right to water is the broader environmental approach to the management of the water cycle that acts as an enabling environment for the progressive realisation of this right. It is worth quoting par 28 of GC 15 in its entirety:

“States parties should adopt comprehensive and integrated strategies and programmes to ensure that there is sufficient and safe water for present and future generations.²² Such strategies and programmes may include: (a) reducing depletion of water resources through unsustainable extraction, diversion and damming; (b) reducing and eliminating contamination of watersheds and water-related eco-systems by substances such as radiation, harmful chemicals and human excreta; (c) monitoring water reserves; (d) ensuring that proposed developments do not interfere with access to adequate water; (e) assessing the impacts of actions that may impinge upon water availability and natural-ecosystems watersheds, such as climate changes, desertification and increased soil salinity, deforestation and loss of biodiversity;²³ (f) ²² See footnote 5 above, Agenda 21, chaps. 5 ,7 and 18; and the World Summit on Sustainable Development, Plan of Implementation (2002), paras. 6 (a), (l) and (m), 7, 36 and 38. ²³ See the Convention on Biological Diversity, the Convention to Combat Desertification, the United Nations Framework Convention on Climate Change, and subsequent protocols. E/C.12/2002/11 Page 11 increasing the efficient use of water by end-users; (g) reducing water wastage in its distribution; (h) response mechanisms for emergency situations; (i) and establishing competent institutions and appropriate institutional arrangements to carry out the strategies and programmes.”

This very important passage in GC 15 points to the linkages between the right to water and key tenets of water resources management that are well embedded in both international and national legislation. In fact, one source of the legal basis of the human right to water and its extraterritorial application can be found in international water law. A comprehensive analysis of the normative basis for the human right to water requires reading the ICESCR in conjunction with the rules and principles of international water law and environmental law.

Key aspects of international water law are rooted in soft law which, in the case of water, has in fact had considerable impact on national water legislation. Landmarks such as the 1972 Stockholm declaration, the 1977 Mar Del Plata declaration, the 1992 Dublin Statement, or the 1997 UN Watercourses Convention make (in)direct reference to the human right to water and locate it within operational mechanisms for IWRM as a key vehicle to manage different and competing claims on water at the level of the hydrological cycle. The 1997 Convention on the Law of the Non Navigational Uses of International Watercourses contains principles such as the obligation to not cause significant harm and the principle of equitable and reasonable utilisation which imply the maintenance of environmental flows in international river basins, i.e. water needed to support ecosystem maintenance. The watercourses convention also indicates that resolving international water conflicts should be done in such a way as to give special regard to ‘vital human needs’ including both the water required to sustain human life and the water required for the production of food to prevent starvation. These provisions are consistent with environmental human rights guarantees. Similarly the Convention on the protection and use of transboundary watercourses and international lakes (Helsinki Convention) of 1992 contains a provision that States should ensure that

transboundary waters are used with the aim of ecologically sound and rational water management, conservation of water resources and environmental protection. The Helsinki Convention has a specific protocol on water and health which is aligned with the human right to water aimed at the protection of human health by reducing water related diseases and managing water quality. The latter Convention is open to accession for States outside the European Union.

However the emphasis to date by special procedures mandate holders on *structural indicators* (i.e. laws and policies) is to the detriment of process indicators related to budgets, government data collection and monitoring tools and reporting methodologies, assessments of institutional capacity and/or bottlenecks - that translate long lists of obligations into the desired outcomes. Three domains of action are particularly important to clarify process indicators: National Adaptation Plans of Action, Nationally Determined Contributions, and Integrated Water Resources Management. The next phase of realisation of these rights requires close attention to boosting the operational mechanisms of ecosystems protection at catchment level as well as implementation of the Dublin principle of subsidiarity by paying attention to the empowerment and integration of human rights within local, community controlled Water User Associations and reforming water permit systems to prioritise their needs.

A key challenge currently is that climate change, water and human rights are governed by separate international and national legal regimes as well as distinctive institutional settings, which complicates action in areas where they intersect. It is therefore crucial to highlight areas of commonality upon which integrated action can be built. Where uncertainties remain, recourse to the courts is possible: already, more than 800 climate related cases have been heard worldwide, often linking to human rights guarantees.

4. If your State is one of the 156 UN Member States that recognizes the right to a safe, clean, healthy and sustainable environment, has this right contributed to preventing, reducing, or eliminating water pollution, water scarcity and floods? If so, how? If not, why not?

The Netherlands has not recognised the right to a clean and healthy environment, but it has recognised the right to water. Water quality in the Netherlands is declining as a result of nitrate enrichment of agricultural soils, undermining the functioning of ecosystems in protected areas. As the Urgenda case has made clear, the Netherlands is running behind on its climate commitments. In recent years with warmer summers and longer periods of low rainfall, the country has been experiencing water shortages leading especially to low groundwater levels.

5. Please provide specific examples of good practices in preventing, reducing, or eliminating water pollution, water scarcity and floods. These examples may occur at the international, national, sub-national, or local level. Examples may involve water quality and quantity monitoring; guaranteeing procedural rights (e.g. public access to water quality information, public participation in decision-making about proposed uses of water, access to remedies); water use and water quality legislation, regulations, standards, and policies; and initiatives to reduce water consumption and/or water pollution from specific sectors (e.g. agriculture, electricity generation, industry, transportation, domestic use). Where possible, please provide evidence related to the implementation, enforcement, and effectiveness of the good practices.

A leading case in Africa that is contributing to conservation, the restoration of protected areas, the sequestering of carbon, the stabilisation of the water cycle, the reduction of floods, the improvement in water quality through nature based solutions, and the lifting of local communities out of poverty is the Upper Tana Nairobi Water Fund. It is innovative in the sense that the concept of a utility-based water fund for conservation activities has been piloted at scale on the African continent. The emerging results after five years are promising and serve to highlight the fact that an integrated approach to water cycle analysis can in fact guide strategic investments that have positive impacts on water quantity and quality. As at the current moment some 2.5 million trees have been planted, the project area is contributing to a reduction in emissions of the order to ten megatonnes of CO₂ equivalent through improved cropland management, establishment of agroforestry systems, cultivation of perennial crops, avoided degradation of agricultural land, and improved agricultural production and nutrient management. In addition, 20 000 farming households have been lifted out of poverty through a participatory programme converting farms on forest margins to agroforestry, stimulating communities adjacent to the forests to attach value to conservation and reversing the trend of deforestation in the area. This example is being repeated in Kenya, Tanzania, and South Africa currently.