



**Mandate of the Independent Expert on the issue of human rights obligations related to
access to safe drinking water and sanitation**

Climate Change and the Human Rights to Water and Sanitation¹

Position Paper

In a context where nearly a billion people lack access to safe drinking water, and 2.5 billion do not have access to sanitation, climate change constitutes an added obstacle to ensuring such access, and clearly a human rights concern. Climate change will, and already does, impact on people's 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 exacerbation of the spread of disease. Water scarcity may also result in increasing the cost of water and sanitation provision. The poor, who are among the most vulnerable, are also likely to be affected the most.

Water is a key medium through which climate change impacts on human populations, society and ecosystems, particularly due to predicted changes in its quality and quantity. Despite this fact, water has not been sufficiently considered in the climate change negotiations. The human rights dimensions of water emphasize the impact of climate change on individuals and their ability to live a life in dignity. The way that water is managed will be a critical component for the success of any efforts to adapt to the impacts of climate change, in conformity with human rights obligations. It will also be a vital consideration for many mitigation activities, including hydropower, agriculture and forestry projects. The importance of water, and its implications for human rights, must be properly and adequately reflected within the COP-15 agreement, and in processes beyond COP-15.

The rights to water and to sanitation impose very specific legal obligations. Climate change policy responses must be designed and implemented in a manner that respects these obligations. The inter-dependence of human rights, especially rights to health, housing (including secure tenure), and food must be considered. Taking due account of the inter-dependence of human rights will require holistic policy approaches and inter-sectoral thinking. Human rights can help inform decision-making in the climate change context, by guiding prioritization in difficult situations prompted by climate change.

¹ The preparation of this paper benefited from the research, assistance and advice by Jackie Dugard, Ann-Mari Karlsson, Karin Lexén, and Mac Darrow. The Independent Expert is grateful to all of them. A longer version of the paper focusing on the links between climate change, and the rights to water and to sanitation, will be available in early 2010.

The rights to water and sanitation

The right to water is defined as the right of everyone to sufficient, safe, acceptable, physically accessible and affordable water for personal and domestic use. It is important to note that the right to water is limited to water for personal and domestic use and does not cover other water uses. Sanitation in human rights terms is understood as a system for the collection, transport, treatment and disposal or reuse of human excreta and associated hygiene. In all spheres of life everyone has the right to physical and economic access to sanitation which is safe, hygienic, secure, socially and culturally acceptable, provides privacy and ensures dignity. These rights must be guaranteed without discrimination.

Climate change impacts on enjoyment of the rights to water and sanitation

Availability: Water scarcity and increased competition for water

Increased water scarcity will result in increased competition between sectors such as domestic, agricultural and industrial water use. The most widely used indicator for water scarcity is water availability of less than 1000 cubic metres per capita per year.² This is used as a threshold below which it is assumed that the entire societal demand for water can no longer be met. However, household water use accounts only for a small share of total water use, less than 10 % in the global average, whereas agriculture and industry are much larger water uses (70 % and 20 % respectively in global averages). If one assumes that an amount in the range of 100 litres per capita per day is required to realize the right to water, this amounts to 36,500 litres per capita per year or 36.5 m³. This is only a fraction of the water available even in the most water scarce regions of the world. In this regard, the IPCC points out that “[s]afe access to drinking water depends more on the level of water supply infrastructure than on the quantity of runoff.”³ Climate change puts additional stress on water resources and reinforces the competition over limited resources, but it does not render the realization of human rights as they relate to water and sanitation impossible. Rather, it is decisive to set priorities in a way that basic needs are met.

In the challenge of managing the different sectors’ competing demands for water, human rights instruments dictate the prioritization of access to essential domestic purposes for everyone.⁴ Governments need to define a minimum standard: a quantity of water sufficient for human dignity, life and health, which should be determined based on a local assessment taking into account unique geographic, climate, cultural and other considerations.

Integrated Water Resources Management promotes the coordinated development and management of water, land and related resources in order to maximize the resultant economic and social welfare in an equitable manner without compromising the sustainability of vital ecosystems. It sets out guidelines for the allocation of water as a resource for a range of development purposes. A human rights framework could further develop IWRM by serving as a guide to setting development priorities and providing a transparent way to address

² Malin Falkenmark Water Stress Indicator (1989) “The Massive Water Scarcity Now Threatening Africa — Why Isn’t It Being Addressed?”, *Ambio*, vol. 8, n° 2, pp. 112-118.

³ B. C. Bates, Z.W. Kundzewicz, S. Wu and J.P. Palutikof, *Climate Change and Water*, Technical Paper VI, International Panel on Climate Change (Geneva, 2008), p. 45.

⁴ See for example paragraph 6 of UN Committee on Economic, Social and Cultural Rights (2002): General comment No. 15 - the Right to Water (2002) UN Doc E/C.12/2002/11:

<http://www.unhcr.ch/tbs/doc.nsf/0/a5458d1d1bbd713fc1256cc400389e94?Opendocument>.

conflicting rights and interests. In times of changing distribution patterns of water, the emphasis of human rights on participation, non-discrimination and accountability become even more important.

Quality: Problems through pollution and changing groundwater levels

Climate change will negatively impact on the quality of water. Increasing water temperatures, higher or lower groundwater levels, floods and droughts raise the threat of heightened micro-organisms, chemical substances and radiological hazards in drinking water.⁵ Floods and droughts will cause many forms of water pollution such as salinization of groundwater, intrusion of sediments, organic carbon, pathogens and pesticides, which impacts the health of the population.⁶ Sanitation systems may be damaged by flooding and infrastructural deterioration caused by extreme weather conditions, further compromising the quality of drinking water. Where there is too little water for waterborne sanitation systems, such systems may become blocked.

Accessibility: Impact on water and sanitation infrastructure

Floods and drought will deteriorate existing water and sanitation infrastructure. Where long-term rainfall increases, groundwater levels may rise, decreasing the efficiency of natural purification processes, increasing risks of infectious disease and of exposure to toxic chemicals. Potential indirect effects of climate change on the water supply and sanitation situation include the impacts of energy interruptions, increasing the unreliability of piped water and sewerage services.⁷

Therefore, ensuring the resilience of water and sanitation infrastructure to climate change is a major climate change adaptation measure. Whether threatened by flooding or drought, water and sanitation infrastructure needs to be made more robust and flexible. This requires new approaches and innovative technologies, sufficient infrastructure investments, capacity development, and technology transfer.

Physical accessibility of water sources and sanitation facilities can be affected by climate change, for example where extreme weather events render it impossible to arrive at the water source or sanitation facility. Solutions to the problems of accessibility must be designed with the participation of the concerned community, and pay special attention to the accessibility needs of marginalized groups, especially women, children, persons with disabilities, and elderly persons.

Affordability: Rising costs

Indirectly, climate change also impacts on the affordability of water and sanitation services. Increasing demand and competition over water result rising prices for water. Moreover, when water and sanitation infrastructure is destroyed, the necessary reconstruction will also result in turning services more expensive. States have to ensure that these additional costs do not render access to water and sanitation unaffordable. This can be done, for example, through targeted subsidies.

⁵ Committee on Economic, Social and Cultural Rights, General comment No. 15 (2002), The right to water (arts. 11 and 12 of the International Covenant on Economic, Social and Cultural Rights), p. 5.

⁶ B. C. Bates, Z.W. Kundzewicz, S. Wu and J.P. Palutikof, *Climate Change and Water*, Technical Paper VI, International Panel on Climate Change (Geneva, 2008), p. 2.

⁷ The United Kingdom's Department for International Development (DFID) and the World Health Organisation (WHO), (2009) "*Vision 2030: The Resilience of Water Supply and Sanitation in the Face of Climate Change*".

Acceptability: How to cope with change?

As water distribution patterns change dramatically, problems of acceptability of adaptation strategies will arise. Establishing water points or sanitation facilities which are culturally unacceptable (because of their location, technology choice or other reason) should be prevented and addressed. Ensuring participation of the concerned community in the design and implementation of interventions is crucial in this regard.

Human rights obligations in the context of climate change

In the context of climate change, it will be more than ever essential to ensure a non-discriminatory distribution of water resources and services. States have both negative and positive obligations in guaranteeing the rights to water and sanitation. For instance, the State has to adapt its water and sanitation services infrastructure to make it more resilient to extreme weather events. It has to raise awareness about hygiene, water conservation and other issues relevant to enjoyment of the rights to water and sanitation in the context of climate change.

States are obliged to move progressively forward in realizing the rights to water and sanitation, avoid arbitrary retrogression in the realization of these rights, undertake maximum efforts to realize them within all available resources with priority given to the most excluded or vulnerable, and – where best efforts are not sufficient – request international assistance.

Moreover, the State has to refrain from interfering with existing access to water and sanitation. When taking adaptation measures, it must be ensured that these do not negatively impact on the rights to water and sanitation. With all interventions taken, the standard that must not be compromised is that of safe, accessible, affordable, and acceptable water and sanitation in sufficient quantities – which must be realized for everyone as the ultimate aim.

Opportunities offered by the human rights framework

While climate change will seriously impact on human rights, it is undeniable that there is a growing political will to address the social and economic effects of climate change. Both the protection of human rights and the promotion of a healthy environment go hand-in-hand and are mutually reinforcing. Respecting human rights obligations in the context of climate change is not only a binding legal obligation incumbent on all States, but also offers opportunities for new, more sustainable and efficient approaches to climate change mitigation and adaptation. Human rights standards and principles also have the potential of informing and strengthening policymaking in the area of climate change, promoting sustainable outcomes placing the issues of availability, accessibility, affordability, acceptability, quality, participation, non-discrimination and accountability at the forefront of all mitigation and adaptation efforts.

Human rights emphasize participation of concerned communities, non-discrimination and accountability as the backbone of guaranteeing human rights. These elements are useful in considering planning decisions at the national or local levels on adaptation measures. Applying the principle of non-discrimination in measures to address climate change requires

specific attention to the groups who are normally the most affected, yet still neglected - the excluded and the marginalized.

For example, women and girls face specific obstacles to the enjoyment of their rights to water and sanitation and bear the brunt of increasing water scarcity and poverty. They are most often those who sacrifice their time and development opportunities to fetch water, as in many countries women are responsible for the provision of food and water in the household. The lack of access to sanitation is a major obstacle to human development by causing contamination of drinking water on a large scale, a range of potentially deadly health problems, as well as forcing women and girls to drop out of school, miss work, stay away from public places without proper sanitation and to live a life without dignity. Climate change might worsen this situation if the gendered impact of the lack of water and sanitation are not taken into account in adaptation measures.

Human rights also offer opportunities for better climate change adaptation. The principles of participation and accountability inherent in the human rights framework would improve sustainability and efficiency of climate change adaptation measures. Taking into account human rights in the context of both mitigation and adaptation measures will help governments make these measures more successful, by avoiding or reducing adverse secondary effects in the form of increased water scarcity or violations of the right to water.

The human rights framework thus offers valuable guidance for policy formulation in the context of climate change, with a focus on human welfare, as well as procedural and minimal substantive safeguards to improve both processes and outcomes of climate change policy-making. The normative framework of the rights to water and sanitation can help to frame and inform difficult policy choices and trade-offs that might otherwise proceed from cost-benefit or purely utilitarian calculations.

Recommendations

Recommendations specifically for COP-15:

The Parties to the UNFCCC must:

- Recognize the pivotal role of water, including its human rights dimensions, in adapting to climate change in order to increase resilience and achieve sustainable development.
- Recognize the adverse impact of climate change on the enjoyment of human rights, especially the rights to water and sanitation, and ensure that future strategies and plans integrate human rights principles.
- Ensure that human rights standards and principles inform and strengthen policymaking in the area of climate change, promoting policy coherence and sustainable outcomes.
- Establish a sectoral focus, or develop a ‘mechanism’ within the Nairobi Work Programme specifically mandated to bring together experts and implementers on adaptation in the water sector under the Nairobi Work Programme. In this regard special attention should be given to safeguarding the human rights to safe drinking water and to sanitation.
- Integrate a human rights based approach in the National Adaptation Plans of Action and give special attention to the duty of States to guarantee the human rights to safe drinking water and to sanitation.

General Recommendations

More broadly, States must:

- Ensure the rights to water and sanitation are protected in all adaptation plans and programmes at global, regional and national levels.
- Prioritize access to water for essential domestic purposes and for sanitation.
- Ensure resilience of water and sanitation infrastructure as a major climate adaptation measure.
- Further explore sanitation technologies which offer alternatives to water-borne sanitation.
- Prioritize climate change interventions to protect or ensure access to safe drinking water and to sanitation for marginalized or groups which are discriminated against, who risk suffering the most from climate change.
- Ensure participation of concerned communities and stakeholders in local and national adaptation efforts.
- Build on local and traditional knowledge to increase the likelihood of adaptation measures to ensure adequate access to water and sanitation.
- Ensure that accountability and compliance mechanisms are established for States' decision making on adaptation and mitigation.
- Ensure adequate and flexible financing mechanisms, to speed up investment in water management of vulnerable developing countries, to meet the consequences of climate change, in conformity with human rights.
- Devote additional funding to development and support of adaptive strategies for vulnerable groups and ecosystems. These resources should be additional to official development assistance (ODA) commitments.
- Manage the unpredictable: as countries start developing systems to manage uncertainties and increasing risks, ensuring availability, access and quality of drinking water and sanitation should be considered as crucial components of risk management
- Promote a human rights based approach to Integrated Water Resources Management, emphasizing participation, non-discrimination, and accountability.
