

Climate change and the human rights to water and sanitation

**Special Thematic Report 2:
The impacts of climate change on the human rights to safe drinking water and sanitation of groups and populations in situations of vulnerability**

**Special Rapporteur on the human rights to safe drinking water and sanitation,
Pedro Arrojo Agudo**





Introduction

We are in a global water crisis, and climate change exacerbates this crisis. We all know that climate change arises as a consequence of the massive emission of greenhouse gases, and therefore no one doubts that mitigation strategies must be led by the energy transition. However, it is rarely explained that the main socio-economic impacts are generated around water. Adaptation strategies must be based on a hydrological transition that strengthens environmental and social resilience in the face of climate change. It is urgent to recover the good state of wetlands and underground aquifers, true natural lungs of the water cycle, which can and should be strategic reserves for these increasingly severe droughts.

It is equally urgent to strengthen social resilience in the face of the impacts of climate change. The causes of scarcity of safe drinking water are rarely purely physical. Most people without access to safe drinking water are not living in waterless (arid) environments, but are either impoverished people who lack access to drinking water for their basic needs while the available drinking water is served to those who can afford it. People living at the intersection of multiple sources of vulnerability and marginalization are more likely to lack access to safe drinking water and sanitation and to be disproportionately impacted by climate change. In addition, inadequate access to safe water and sanitation, among other impacts of climate change, exacerbates an additional layer of vulnerability the people face, especially their health.

The current report is part of three special thematic reports issued by the Special Rapporteur on the human rights to safe drinking water and sanitation. The first special report aims to outline how climate change will impact the human rights to safe drinking water and sanitation, and to describe the main trends in those impacts by region. The second and current special report explores the impacts of climate change on the human rights to safe drinking water and sanitation of specific groups, and the third outlines a human rights approach to climate adaptation, mitigation, financing and cooperation.

Introduction	1
Groups and populations facing disproportionate impact	2
Climate change and the human rights of persons living in situations of vulnerability	2
Climate change as a multiplier of existing inequalities	3
Participation	3
Impact of climate change on groups and population in situations of vulnerability	4
Persons living in poverty	4
Indigenous peoples	5
Women and Girls	6
Children	7
Persons with disabilities	8
Migrants and displaced persons	8
Older persons	9
Ethnic minorities	9



Groups and populations facing disproportionate impact

Climate change and the human rights of persons living in situations of vulnerability

In March 2008, in its resolution 7/23, the Human Rights Council expressed concern that climate change "poses an immediate and far-reaching threat to people and communities around the world". In a further resolution in March 2009 (resolution 10/4), the Human Rights Council noted that the impacts of climate change on human rights "will be felt most acutely by those segments of the population who are already in a vulnerable situation owing to factors such as geography, poverty, gender, age, indigenous or minority status and disability".

In 2010, the Conference of the Parties to the United Nations Framework Convention on Climate Change adopted Decision 1/CP.16, in which it was noted that the adverse effects of climate change have implications for the effective enjoyment of human rights, that the effects will be felt most acutely by those segments of the population that are already vulnerable, and that States parties should, in all climate change-related actions, fully respect human rights. In 2015, 196 State parties adopted the Paris Agreement, which explicitly states that "parties should, when taking action to address climate change, respect, promote and consider their respective obligations on human rights, including the rights of indigenous peoples, local communities, migrants, children, persons with disabilities and people in vulnerable situations and the right to development, as well as gender equality, empowerment of women and intergenerational equity". In article 7(5) of the Paris Agreement, the State parties specifically acknowledged that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, taking into consideration vulnerable groups, communities and ecosystems.

Several of the Human Rights Council resolutions and reports highlighted the disproportionate impact of climate change on the human rights of certain groups, including women and girls, children, migrants, persons with disabilities, and older persons. The links between climate change and human rights and States' human rights obligations have also been explored by many Special Procedures mandate-holders and the human rights treaty monitoring mechanisms, many of which highlight the impact of climate change on the human rights to safe drinking water and sanitation. Most recently, the Human Rights Council (resolution 47/24) requested the Secretary-General to consult member States and other relevant stakeholders in order to prepare and submit to the 50th session of the Human Rights Council a report on the adverse impact of climate change on the full and effective enjoyment of human rights of people in vulnerable situations.



Climate change as a multiplier of existing inequalities

Around the world, and within regions, specific groups and populations may face additional vulnerabilities that arise due to the effects of climate change. This could be the case for communities living in particularly vulnerable areas (e.g. riverbanks or coastlines), or indigenous peoples and impoverished rural communities who are often highly dependent on their natural environment for their livelihoods.

Climate change should above all be understood as a risk multiplier: not only will the impacts of climate change most affect persons living situations of vulnerability, but those vulnerabilities are in turn likely to be increased by the impacts of climate change. While climate change will impact water availability through changes to the hydrological system, the impacts of these changes are more likely to be mediated by existing inequalities in water governance. Existing inequalities in access to water and sanitation are likely to be exacerbated as water scarcity and extreme events become more common, especially if adaptation solutions do not take into account the elimination of those inequalities as a priority.



Participation

Water is the primary vector through which the socio-economic impacts of climate change are, and will be, felt. As such, adaptation should occur through a 'hydrological transition' that strengthens social and environmental resilience in the face of climate change. This includes eliminating inequalities in access to drinking water and sanitation and associated vulnerabilities, restoring the good status of aquatic ecosystems and rigorous hydrological, territorial and urban planning, based on the precautionary principle, to identify, prevent and minimise the main risks arising from climate change. Within general adaptation measures and strategies, it is important to prioritize the needs of those whose human rights to safe drinking water and sanitation are most affected and threatened by climate change.

In order to design adaptation measures that do not perpetuate or exacerbate existing inequality, the process of identifying and designing these measures must be fully inclusive and participatory. Sometimes, measures taken in the name of climate change mitigation and adaptation can lead to violations of the human rights of marginalized groups: for example, the eviction of indigenous peoples from their ancestral land to building mega-infrastructures which can sever their links to traditional water sources and leave them homeless. In these situations, applying the principle of free, prior and informed consent and access to remedy that is fair and previously accepted is a necessary part of protecting the human rights of affected groups.

Ensuring that the voices of those most likely to be impacted by climate change and adaptation to the impacts of climate change are heard is the only way to ensure the dual goals of restoring the health of the environment, in particular the hydrological system, and eliminating the inequalities that multiply the impacts of climate change on the human rights to water and sanitation of groups and population in situations of vulnerability. Participatory processes for the development and implementation of climate change adaptation plans must incorporate a gender perspective. In fact, women and girls not only suffer the most severe impacts of non-compliance with the human rights to safe drinking water and sanitation, but also bear the greatest responsibility for providing these services to their families and communities.



Impact of climate change on groups and population in situation of vulnerability

The groups have been selected in according to the work of the Human Rights Council on human rights and climate change and are presented in no particular order.



Persons living in poverty

The Human Rights Council recognized that poverty, in all its forms and dimensions, is one of the greatest global challenges, and that poverty eradication is critical to climate change resilience and the promotion and protection of human rights (resolution 47/24). But at the same time, as outlined in the recent report of the Special Rapporteur on the human rights to safe drinking water and sanitation to the Human Rights Council (A/HRC/48/50), the non-fulfilment of the human rights to safe drinking water and sanitation is itself a key cause of extreme poverty.

Vulnerability

Impact of climate change

Rural areas

Persons living poverty in rural areas tend to rely directly on traditional water sources.

Sanitation solutions in rural areas are likely to rely either on river flow, or on-site storage, such as pit latrines.

Persons living poverty in rural areas will likely rely on agriculture for a livelihood.

Urban areas

Persons living in poverty in urban areas are usually concentrated in informal settlements and slums

Water prices are likely to be higher than in rural areas, and to increase.

Water scarcity or drought can accelerate migration from rural areas to cities.

As the risk of drought increases as temperatures rise, the availability, accessibility, and quality of water in these sources will decline.

Droughts will limit the flow of water, and flooding can lead to the overflow of pit latrines and contamination of drinking water.

Water scarcity will impact their income and reinforce economic vulnerability. Migrating farmers will have to travel further to find water.

Water and sanitation infrastructure will be vulnerable to destruction by flooding. Water quality may be unregulated and decline.

Residents may not have the money or capacity to find alternative sources.

This influx of inhabitants can overwhelm the ability of urban water and sanitation services, leading to overexploitation and increased competition.

Participation

In situations of extreme water scarcity, the need for water rationing will often be prioritized over the access to water of the most impoverished parts of the population. It is essential that their needs, and measures to ensure the affordability of water and sanitation services, are taken into account in climate planning.

Indigenous peoples



In resolution 29/15, the Human Rights Council recognized that the effects of climate change are most acutely felt by those who are already vulnerable, including indigenous peoples. In addition, under the Paris Agreement States parties must respect, promote and consider the rights of indigenous peoples when taking action to address climate change.

Vulnerability

The areas in which indigenous peoples live are often particularly vulnerable to climate change, including the Arctic region, mountainous areas, and coastal areas, and indigenous peoples traditionally rely heavily on natural resources.

Indigenous lands and territories tend to coincide with areas that are most disadvantaged in terms of access to infrastructure, including access to drinking water and sanitation.

Problems with declining water availability can often force indigenous communities to migrate.

While indigenous peoples account for 5 per cent of the world's population, they comprise 15 per cent of those living in poverty.

Impact of climate change

Indigenous communities are therefore at heightened risks of drought and flooding. Declining water quality can affect communities directly and severely. Traditional water sources can become increasingly unreliable

Low quality, inappropriate or non-existent infrastructure can increase the negative impacts of droughts, floods, and declining water quality.

Water and sanitation services in the areas that communities or individuals are forced to relocate to may be culturally unacceptable, threatening their cultural survival, traditional livelihoods and right to self-determination.

Indigenous communities are vulnerable to increases in prices of water and sanitation services due to increased reliance on infrastructure and treatment and increased competition between uses.

Participation

Many indigenous peoples face exclusion from decision-making processes, often lacking institutional support and the effective recognition of their rights. Laws do not allow indigenous peoples to question the implementation of projects that seriously affect their access to water and sanitation. This limits their access to remedies, increases the vulnerability of their human rights to safe drinking water and sanitation to climate change and undermines their ability to adapt to climate change. On the other hand, from their knowledge of their territories and from their vision of respect for nature and ecosystems, the community participation of indigenous peoples in the design of solutions and preventive measures against climate change is essential to design strategies based on nature, which are usually the most efficient.



Women and girls

In resolution 38/4, the Human Rights Council recognized that that women and girls are disproportionately affected by the negative impacts of climate change, and recognized that the integration of a gender-responsive approach into climate policies would increase the effectiveness of climate change mitigation and adaptation.

Vulnerability

Women and girls carry the heaviest burden in collecting drinking water, and for caring for persons within their household.

The impacts of climate change on drinking water can disproportionately affect the physical and mental health of women.

The menstrual hygiene needs of woman are often not taken into account.

Women constitute most of the world's poor and are often directly dependent on threatened natural resources as their primary source of food and income.

Impact of climate change

When the availability of water is reduced and the quality of water is impacted, women and girls are forced to walk further and longer to find water for their homes and they are the ones who take care of people who become sick from drinking contaminated water.

Salinization of drinking water sources as a result of sea-level rise may cause increased rates of adverse health outcomes, including preterm births and maternal and perinatal deaths.

The destruction of infrastructure or forced migration due to extreme events can remove options for women to manage their menstrual hygiene safely and with privacy and dignity.

As precipitation patterns change, and both droughts and floods agricultural workers may face severe losses to their long-term income and the stability of their earnings. Their ability to pay for water and sanitation services may thus be threatened.

Participation

The continued marginalization of women in decision-making steps limits the ability of adaptation measures to include for the specific water and sanitation needs of women and girls, and the specific ways in which they are disproportionately impacted by the threats of climate change. Women are severely underrepresented in water ministries around the world and are nearly invisible in transboundary water governance.

Children



The Human Rights Council has often drawn attention to the effects of climate change on the rights of children. In its resolution 32/33, it recognized that children are among the most vulnerable to climate change, which may have a serious impact on their enjoyment of the highest attainable standard of physical and mental health, access to education, adequate food, adequate housing, safe drinking water and sanitation. In its resolution 35/20, it emphasized that climate change affects some children more than others, including children with disabilities, children on the move, children living in poverty, children separated from their families and indigenous children.

Vulnerability

330 million children are currently highly exposed to riverine flooding, and 240 million children are exposed to coastal flooding.

920 million children (over one third of children globally) are currently highly exposed to water scarcity.

Water pollution contributes to diarrhoeal diseases that cause more than 350,000 deaths a year of children under 5 years old, and another 80,000 deaths of children aged 5 to 14.

Impact of climate change

These types of flooding are both predicted to increase as a consequence of climate change, with potential for destruction of water and sanitation infrastructure.

Water scarcity can put pressure on families with many children – children, particularly girls, may be taken out of school to help with fetching water, and miss out on education.

Water quality is expected to decline as flooding events damage infrastructure and lead to contamination, and increased evapotranspiration leads to the concentration of contaminants.

Participation

Children and young persons around the world are taking to the streets and advocating for their rights in the face of slow and insufficient climate mitigation and adaptation. The mandate of the Special Rapporteur has organized a yearly Human Rights Youth Challenge since 2018. The fourth Human Rights Youth Challenge held in 2021 focused on the topic of climate change and human rights showcased firsthand the impressive understanding and motivation of young persons surrounding climate and human rights issues. Despite this, the voices of young persons rarely reach the arenas in which decisions on climate mitigation and adaptation are made.



Persons with disabilities

The Human Rights Council recognized in resolution 42/21 that the rights of persons with disabilities are disproportionately affected by the negative impacts of climate change.

Vulnerability

Persons with disabilities are more reliant on accessible infrastructure and information, and less able to travel for long distances to fetch water.

Persons with disabilities are more likely to be living in poverty.

Persons with disabilities are often forgotten in climate change and emergency planning,

Impact of climate change

They may be unable to access water and sanitation services when this infrastructure is damaged during floods or extreme events, and will be more severely impacted when availability and quality of water declines.

They may be disproportionately impacted by rising prices due to increased competition between water uses.

Their needs may not be provided for in refugee camps, for example with adequate facilities, or in long-term climate adaptation plans.

Participation

Persons with disabilities are often disenfranchised in participation in climate change adaptation. Providing accessible information on climate change and its impact on water and sanitation is a key part of the human rights to water and sanitation – this information must be available for all groups, including those with physical or mental disabilities.

Migrants and displaced persons

In resolution 35/20, the Human Rights Council noted the urgency of protecting and promoting the human rights of migrants and persons displaced across international borders in the context of the adverse impact of climate change.



Vulnerability

Climate change is expected to increase the numbers of persons forced to migrate due to water scarcity. Often, they will move from rural areas to informal urban areas.

Impact of climate change

Forced displacement due to climate change is likely to increase pressure on drinking water and sanitation services at the destination of migration, as well as increase vulnerability to floods and droughts due to lack of services and infrastructure in cities and resettlement areas.

Participation

Migrants often face administrative and social barriers to participating in decision-making. Often, planning overlooks measure to ensure the human rights of migrants or to provide them access to remedy. At worst, planning consciously raises barriers for the inclusion of migrants, as method of deterring their arrival.

Older persons



In Resolution 44/7 the Human Rights Council recognized that the negative impacts of climate change disproportionately affected the rights of older persons.

Vulnerability

Water and sanitation services and facilities are less likely to be physically accessible, both in terms of distance, and in terms of design, to older persons with reduced mobility.

Older persons are often disproportionately impacted by extreme events such as droughts and floods.

Impact of climate change

Older persons with mobility issues will be more negatively impacted by damaged infrastructure, and are more likely to be unable to travel far to access alternative sources.

In temporary shelter, water and sanitation services are more likely to be inaccessible or inappropriate for older persons.

Participation

Older persons are often excluded, overlooked and neglected in research and data collection. As such, they are often disregarded or deprioritized during the designing of adaptation plans. The participation of older persons is especially significant when one considers the traditional and institutional knowledge that they bear. The participation of older persons can be invaluable when seeking climate solutions and addressing the negative human rights impacts of climate change.



Ethnic minorities

In resolution 47/24, the Human Rights Council expressed concern that the impacts of climate change are felt most acutely by those segments of the population that are already in vulnerable situations, due to factors including minority status, and national or social origin.

Vulnerability

Ethnic minorities live disproportionately in areas where climate change is having the most disruptive impacts.

Ethnic minorities are likely to be living in unsafe and vulnerable housing, like slums.

Impact of climate change

Ethnic minorities are more likely to face floods, droughts, and extreme events.

They will see an increased the likelihood of the destruction of water and sanitation services during floods, or the long-term degradation of infrastructure during droughts.

Participation

Discrimination means that ethnic minorities are routinely excluded from planning for adaptation to climate change. Even in situations of emergency, ethnic minorities face additional barriers to accessing water and sanitation, for example being turned away from emergency camps.



**UN Special Rapporteur on the human rights to
safe drinking water and sanitation**

Pedro Arrojo Agudo

 srwatsan@ohchr.org

 [@srwatsan](https://twitter.com/srwatsan)

 [Facebook.com/srwatsan](https://www.facebook.com/srwatsan)

The Special Rapporteur thanks Antoinette Duplay for her support and contributions to this intermittent report on impact of climate change on the human rights to safe drinking water and sanitation.