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THE IMPLICATIONS OF CLIMATE CHANGE ON HUMAN RIGHTS FOR VULNERABLE POPULATIONS



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The Human Cost of Climate Change: Why Vulnerable Communities Bear the Brunt

Climate change isn't just about rising temperatures and melting ice caps; it's a human rights crisis with devastating consequences. By 2050, estimates suggest climate change could displace a staggering 78 to 170 million people, with the elderly, low-income households, and those in unsafe housing facing the greatest risks in urban areas¹. A stable climate is the foundation for basic human rights like access to clean water, nutritious food, and good health. When climate disrupts these resources, vulnerable populations suffer the most. Ignoring climate change is not an option. It's a matter of justice and protecting the well-being of all. We need strong action now to safeguard our planet and ensure a future where everyone can enjoy their fundamental rights.

What is climate change and who feels it the most?

Climate change is more than just rising temperatures; it's a complex phenomenon rippling through Earth's interconnected systems, causing long-term shifts in weather patterns. Climate change refers to long-term shifts in temperatures and weather patterns resulted due to natural or human activity. Climate change disrupts how we grow food, stay healthy, find shelter, and even keep our jobs. Developing nations and island communities are more vulnerable to the impact of climate change, with rising sea levels forcing some to abandon their homes and droughts pushing others towards hunger.² The number of large wildfires doubled between 1984 and 2015 in the western United States which is a clear indication of climate change. In California, the annual area burned by wildfires increased by 500 percent between 1972 and 2018³. As climate condition worsens, it poses greater threat to vulnerable populations.

These far-reaching consequences disproportionately affect vulnerable populations the most. Vulnerable populations are groups of people who face greater risks due to various social, economic, or environmental factors. These factors make it harder for them to cope with challenges, including those brought on by climate change. With fewer resources and often facing social disadvantages, they struggle to prepare for, respond to, and recover from such crises. This includes low-income communities, indigenous peoples, children, and the elderly.

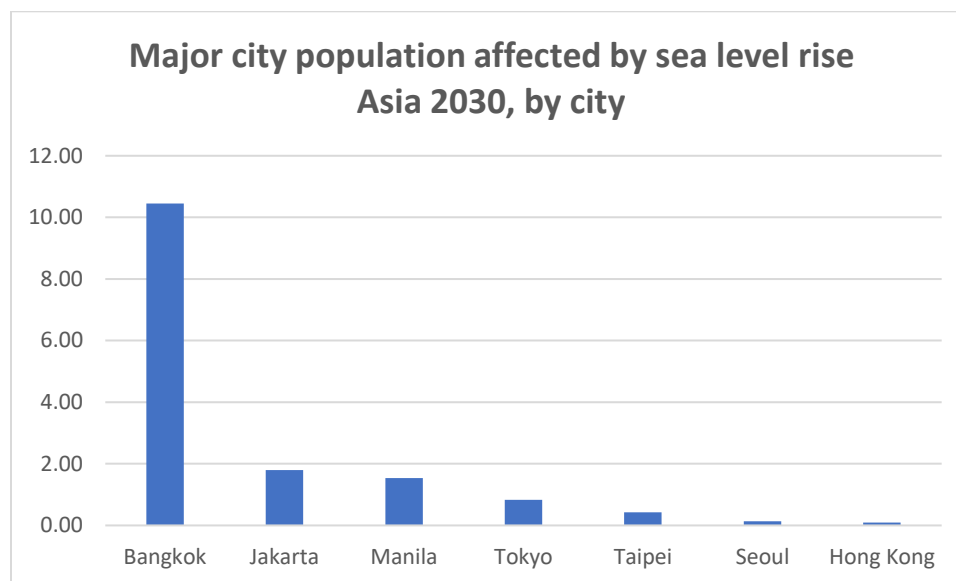
- **Indigenous communities:** This includes people with traditional ways of life who are often tied to specific environments, making them highly vulnerable to environmental changes.
- **Low-income communities:** This includes people who have limited access to healthy food, safe housing, and healthcare, making them more susceptible to climate-related health problems.
- **Children and the elderly:** This includes groups of population that are more sensitive to health problems caused by extreme weather events and pollution.
- **People with disabilities:** This includes people that may face additional challenges in evacuating or adapting to changing environments due to climate change.

¹ [Chart: Climate Change, the Great Displacer | Statista](#)

² <https://www.un.org/en/climatechange/what-is-climate-change>

³ <https://www.nrdc.org/stories/what-are-effects-climate-change#weather>

- Vulnerability can also stem from geographical locations. Bangkok, with a projected 10.45 million people affected by sea level rise in 2030, is a stark example of geographical vulnerability. Island nations in the Pacific, already facing challenges with limited resources, are particularly vulnerable to rising sea levels and stronger storms brought on by climate change.⁴ Many islands and coastal areas in Asia and the Pacific face big trouble from rising seas and stronger storms. This is because of global warming, and it makes them more likely to be hit by natural disasters.



Projected population size affected by the impact of sea level rise and flooding in seven major cities in Asia in 2030, by city (in millions)

Source: Statista, 2024

Climate change acts as an amplifier of existing inequalities. Vulnerable populations, who already struggle with poverty and limited resources, are affected the hardest by its effects. Droughts and extreme weather disrupt their food security, while rising sea levels endanger coastal communities. Without the savings or infrastructure to adapt, they're trapped in a cycle of difficulties.

Case Study- The Shrinking Ice Floes and the Future of the Alaskan Inupiat

The vast, icy plains of Alaska's North Slope have sustained the Inupiat people for generations. Now, a warming climate threatens their way of life. This dramatic shift disrupts whale and seal migration patterns, jeopardizing the Inupiat's primary food source, the very foundation of their cultural identity. The increase in surface temperature is causing a rise in sea level, a decrease in arctic ice, and a growing number of weather-related catastrophes, including storms, floods, and droughts⁵.

⁴ [Asia: major city population affected by sea level rise by city 2030 | Statista](#)

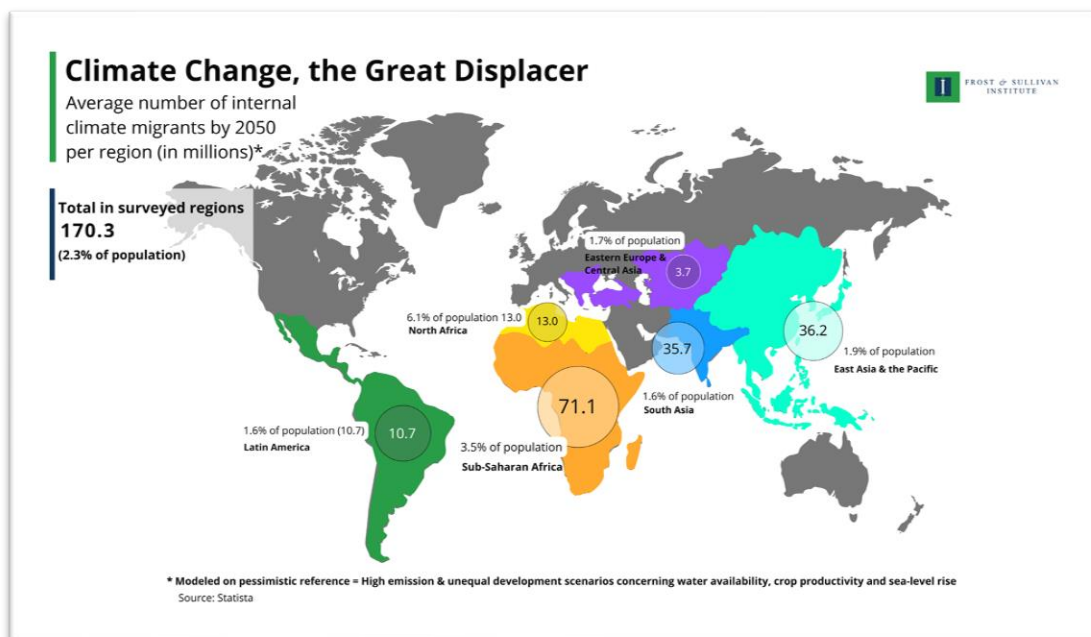
⁵ [Global climate change - statistics & facts | Statista](#)

The consequences of climate change are far-reaching. Food insecurity is a growing concern, forcing the Inupiat to rely more on imported and processed foods, which are often less nutritious and culturally unfamiliar. This shift away from natural food sources can have negative health impacts. Beyond food security, the loss of stable sea ice threatens the very core of Inupiat culture.

The future of the Inupiat remains uncertain. Rising sea levels may even force them to relocate from their ancestral homelands, further severing their ties to the land and way of life that has defined them for generations. The Inupiat are only one part of the population who are at potential risk, there are several other vulnerable populations that face similar risks due to climate change.

Implications of climate change on human rights for vulnerable populations

Climate change has become a great displacer, forcing people to migrate to unfamiliar environments leaving their homes. It is expected to force large-scale internal migration of millions of people who are potentially at risk of losing their homes, livelihoods, and cultural ties. This mass displacement will put a strain on resources and infrastructure in receiving areas. Sub-Saharan Africa, South Asia, East Asia and the Pacific, and Latin America are projected to experience the most significant displacement⁶. In 2020, South Sudan had the highest number of climate-induced displacements of vulnerable population in Africa, with almost 600,000 people affected by floods, landslides, and tropical cyclones⁷.



⁶ <https://www.statista.com/chart/26117/average-number-of-internal-climate-migrants-by-2050-per-region/>

⁷ [Africa: people displaced due to climate change 2020 | Statista](#)

The foundation of a dignified life, as outlined in fundamental human rights, is under the siege of climate change. Extreme weather events like heatwaves, floods, and droughts linked to climate change are becoming more frequent and intense, putting lives at risk. Rising sea levels threaten coastal communities, displacing people and jeopardizing their safety.

- Rise in food insecurity: Food security, a cornerstone of the right to food, is under immense strain. Changing weather patterns disrupt agricultural yields, leading to food scarcity and malnutrition, particularly in vulnerable regions. About 80% of the global population most at risk from crop failures and hunger from climate change are in Sub-Saharan Africa, South Asia, and Southeast Asia, where farming families are disproportionately poor and vulnerable.⁸ This not only threatens hunger, but also disrupts traditional food systems and cultural practices of indigenous communities.
- Increase in adverse health conditions: Access to clean water, another fundamental right, is also at risk. Climate change disrupts rainfall patterns, leading to droughts and water scarcity. Rising sea levels contaminate freshwater sources with saltwater intrusion. This lack of clean water not only contributes to malnutrition but also fuels the spread of waterborne diseases, further jeopardizing health. Speaking of health, climate change acts as a threat multiplier. Climate change-induced heatwaves, storms, and wildfires can also intensify air pollution levels, thereby raising the likelihood of complications and hospitalizations from respiratory conditions⁹. Changing weather patterns create ideal breeding grounds for mosquitos, leading to an increase in vector-borne diseases like malaria and dengue fever. Additionally, the mental health toll of climate disasters, displacement, and resource scarcity cannot be ignored.
- Housing crisis: The right to adequate shelter is also uncertain due to climate change. Rising sea levels threaten coastal communities, forcing people from their homes. Climate change leads to more frequent and severe natural disasters, like hurricanes, floods, bushfires, and droughts. These events can destroy homes, infrastructure, and livelihoods, pushing people deeper into poverty, displacing populations and creating a housing crisis¹⁰. The ability to find safe and secure shelter becomes a struggle in the face of a changing climate.

Climate change is a human rights catastrophe. From the right to life and food to access to clean water, health, and shelter, the very foundations of a dignified existence are at risk. Addressing this crisis requires not just environmental action, but a commitment to protecting the fundamental rights of all people, especially the most vulnerable, in the face of a changing climate.

Human Rights challenges faced by vulnerable populations due to climate change.

⁸ <https://www.worldbank.org/en/news/feature/2022/10/17/what-you-need-to-know-about-food-security-and-climate-change>

⁹ <https://www.sciencedirect.com/science/article/abs/pii/S0048969723049653>

¹⁰ <https://habitat.org.au/five-ways-climate-change-impacts-housing-insecurity/>

The escalating impacts of climate change pose a significant threat to the fundamental human rights of millions, particularly those already facing social and economic disadvantages. A 2022 report by the UN Office of the High Commissioner for Human Rights (OHCHR) states that climate change "has profound impacts on a wide variety of human rights, including the rights to life, health, food, water and sanitation and housing".¹¹ This violation of human rights is mostly felt by the people who lack resources and infrastructure to adapt to a changing climate. Here, are five key challenges faced by these populations and the urgent need for a human rights-based approach to address this crisis.

- Displacement and unsafe living: Climate change disrupts lives, forcing vulnerable populations from their homes due to rising sea levels, extreme weather events, and environmental degradation. This displacement leads to a loss of livelihood, cultural ties, and creates a sense of insecurity. Lake Tana, which is the source of the Blue Nile, is experiencing increasing water scarcity due to climate change and local practices due to which local farmers are struggling with erratic rainfall patterns and a drying reservoir, which negatively impacts their livelihoods¹².
- Threat to life, health, and security: The human right to life, health, and security is under siege. Increased vulnerability to disasters, the spread of disease due to changing weather patterns, and food and water insecurity threaten the basic needs of these populations, especially children and pregnant women. An article titled "Age-Friendly and Climate Resilient Communities: A Grey-Green Alliance," states that existing frameworks to address livability and wellness for aging populations typically don't incorporate climate resilience¹³, this indicates that the impact of climate change on ageing population is severe.
- Limited access to basic needs: Climate change further increases the existing inequalities. Vulnerable populations face water scarcity due to droughts, struggle with food security due to disrupted agriculture, and lack access to healthcare services, especially after displacement. A recent FAO report found that over the last 30 years an average of \$123 billion per year was lost due to disasters in agricultural crop and livestock production.¹⁴ This further increases the situation of food insecurity.
- Loss of livelihood and development: Traditional ways of life, particularly those reliant on specific environments, are disrupted by climate change. Indigenous communities are highly vulnerable as their livelihoods and cultural practices are threatened. Additionally, the economic burden of adaptation can affect development goals in vulnerable regions.

The consequences of climate change for vulnerable populations are severe. We need innovative solutions drawn with the specific needs of vulnerable populations in mind. Empowering local communities, especially those led by women and indigenous groups, to

¹¹ <https://www.ohchr.org/en/climate-change>

¹² [Water inequity lessons from Ethiopia's Tana Watershed | World Economic Forum \(weforum.org\)](https://www.weforum.org/articles/water-inequity-lessons-from-ethiopia-s-tana-watershed/)

¹³ [Climate Change Threatens the Health of Aging Adults, Researchers Say \(msn.com\)](https://www.msn.com/en-us/news/health/climate-change-threatens-the-health-of-aging-adults-researchers-say)

¹⁴ [\(5\) COP Blog 9: Climate Loss | LinkedIn](https://www.linkedin.com/pulse/5-cop-blog-9-climate-loss/)

develop solutions that are culturally appropriate and utilize their existing knowledge is the need of present times.

Future directions and best practices to protect human rights of vulnerable population against climate change.

1. Bangladesh: Early Warning Systems

Bangladesh has faced devastating cyclones for decades. However, they've reduced cyclone death by more than 100-fold since 1970 in recent years¹⁵. A key factor for their success is a warning system. They utilize a network of weather stations, community radio broadcasts, and cyclone shelters to provide timely warnings. This allows people to take precautions like evacuating or reinforcing homes, significantly improving preparedness, and saving lives.¹⁶

2. Morocco: Climate-Smart Agriculture

Morocco suffers from frequent droughts, threatening food security. To combat this, they've adopted climate-smart agriculture practices. This involves techniques like using drought-resistant crops, water-efficient irrigation, and improved soil management. These practices allow farmers to maintain yields even during droughts, ensuring food security for vulnerable populations who rely on agriculture for their livelihoods.¹⁷

3. Costa Rica: Investing in Renewable Energy

Costa Rica is a global leader in renewable energy. They've invested heavily in hydroelectric, geothermal, and wind power, generating over 99% of their electricity from renewable sources. This reduces their reliance on fossil fuels, a major contributor to climate change.¹⁸ This not only mitigates climate impacts but also positions them as a leader in the transition to a clean energy future, protecting the environment for future generations.

4. Finland: Education for Climate Action

Finland integrates climate change education into their national curriculum from a young age. This equips students with the knowledge and understanding of climate change's impact and empowers them to become responsible citizens who can advocate for climate action¹⁹. Educating future generations is crucial for long-term solutions. By fostering an informed citizenry, Finland is taking a proactive step towards a sustainable future.

¹⁵ <https://www.thenewhumanitarian.org/investigation/2021/12/2/how-Bangladesh-is-beating-the-odds>

¹⁶ <https://www.researchgate.net/publication/DisasterManagementandCycloneWarningSysteminBangladesh>

¹⁷ <https://www.worldbank.org/en/news/feature/2023/12/20/moroccan-farmers-search-for-solutions-in-the-face-of-climate-change>

¹⁸ <https://www.trade.gov/market-intelligence/costa-ricas-renewable-energy>

¹⁹ <https://finland.fi/life-society/finnish-schools-emphasise-climate-change-education/>

Conclusion

Climate change is causing a human rights crisis, especially for vulnerable populations who lack the resources to adapt. Rising sea levels, extreme weather events, and environmental degradation threaten basic rights like food, water, health, and shelter. We need to address climate change with a human rights focus. This means protecting the most vulnerable while taking action to curb climate change itself. The article highlights successful initiatives like early warning systems, climate-smart agriculture, renewable energy investment, and climate change education, offering a roadmap for future action.