



WATER DILEMMAS:

The cascading impacts of water insecurity in a heating world

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This briefing paper presents findings from Oxfam’s recently commissioned research on climate predictions for 2040 and 2050 in the Middle East, the Horn, East and Central Africa (HECA), West Africa and Asia regions. Analyses show how temperature increases will influence water insecurity in these regions and the potential impacts on food security, the spread of diseases, and other factors. This briefing paper also reveals severe under-investment by national governments and donors in water, sanitation and hygiene (WASH) systems, with critical implications not only for water security but also for poverty and inequality. Oxfam is calling for urgent action to increase investments in sustainable, climate-adapted water management for the people who are most at risk from the worsening climate crisis.

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For further information on the issues raised in this paper please email advocacy@oxfaminternational.org

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Oxfam GB, Oxfam House, John Smith Drive, Cowley, Oxford, OX4 2JY, UK.

Cover photo: This photo is of a mother and her child who represent thousands of climate vulnerable communities living in the coastal belt of Bangladesh. The photo highlights the gendered impact of the water crisis, as it is often women and children who bear the burden of collecting water for their families. Credit: Jahangir Alam/Oxfam in Bangladesh.

EXECUTIVE SUMMARY

The climate crisis is a water crisis. As the world heats, increased evaporation leads to more moisture-laden air, heavier storms and shifting patterns of rainfall. In a cruel twist, this increase in moisture means that more people will lack access to clean water, as predictable rainfall gives way to cycles of drought and flooding, and disease-carrying insects move to new areas. The impact of these changes will be greatest on women, who usually bear the responsibility for managing the water supply, sanitation and health within households. In many countries, decreasing water availability, accessibility and sustainability – also referred to as ‘water insecurity’ or ‘water stress’ – is already significantly affecting people’s lives. It is leading to failed or delayed harvests, livestock losses, increasing poverty, growing conflict (at local and geopolitical scales), increased risks of sexual and gender-based violence (SGBV), and the forced migration of households and communities.

The backdrop of this water crisis is a bleak climate injustice story. Rich polluting nations continue to heat our planet, while the nations that are least responsible for global warming bear the brunt of its consequences. Water insecurity is not only caused by climate change and its effects, but also by countries and donors having grossly under-invested in water-management systems for decades.

This briefing paper reveals the water-critical scenarios facing 20 climate hotspot countries in four regions of the world under the so-called ‘middle of the road’ scenario in which the global temperature rises to 2.7°C by the end of the century. The regions covered by this paper are the Horn, East and Central Africa (HECA), West Africa, the Middle East and Asia. Findings show that the climate crisis will have dramatic effects on water insecurity through changes in temperature, precipitation, surface runoff, river discharge, crop yields and disease burden – all of which will make life even more precarious for people in marginalized or vulnerable contexts.

The paper describes how today’s water-management systems are particularly underfunded in these regions, and how the COVID-19 pandemic put them to the test. Water insecurity is not just driven by climate change but by countries and donors’ woeful spending on water-management systems. Oxfam’s research builds the case that, with proper investment, countries will not only build water systems that are more resilient to climate change, but that will also tackle hunger, poverty and inequality.

Oxfam calls on governments to cooperate urgently to:

- Drastically reduce emissions;
- Invest in water security and sustainable water management;
- Prioritize efforts to reach Sustainable Development Goal (SDG) 6;
- Support those most at risk through early warning systems and anticipatory action;
- Compensate those most affected by the climate crisis; and
- Provide emergency assistance to save lives and support development.

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Oxfam is an international confederation of 21 organizations, working with its partners and allies, reaching out to millions of people around the world. Together, we tackle inequalities to end poverty and injustice, now and in the long term – for an equal future. Please write to any of the agencies for further information or visit www.oxfam.org

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