

The Human Voice of Global Water Insecurity

OVERVIEW

We are living through a **global water crisis**, and a first step to address this crisis is to understand the extent of the problem. To do this, IPR anthropologist **Sera Young** and her colleagues created the **Individual Water Insecurity Experiences (IWISE) Scale**, a 12-question survey to measure global experiences of water access and use around the world. This innovative scale adds important information to current global water indicators, which measure water availability and infrastructure, in two ways. First, it is more holistic—it goes beyond drinking water access to consider how water use shapes cooking, bathing, and psychological wellbeing. Second, it is more precise: It tells us about individual experiences with water, revealing diverse experiences obscured in regional or country level measures.

In *The Lancet Planetary Health*, Young and her colleagues examine the scope of water insecurity among adults representing half of the world's population in 31 low- and middle-income countries, providing the first glimpse of the sociodemographic characteristics of the water insecure. The researchers estimate that 436 million adults of the 3 billion represented by the sample, experienced water



IPR anthropologist **Sera Young** investigates where water insecurity exists around the globe and how it impacts health and wellbeing.

insecurity in 2021. These findings give a human voice to water insecurity, and can help guide interventions to serve those most vulnerable.

FINDINGS

Rates of water insecurity varied by country and region. Across the 31 countries surveyed, water insecurity ranged from a high of 63.9% in Cameroon to a low of 3.9% in China. Sub-Saharan Africa had the highest water insecurity of any region and Asia had the lowest.

No single characteristic was always predictive of water insecurity. Individuals who earned a lower income, lived in city outskirts, and those most affected by COVID-19 were more likely to be water insecure, but there were many exceptions to these three characteristics.

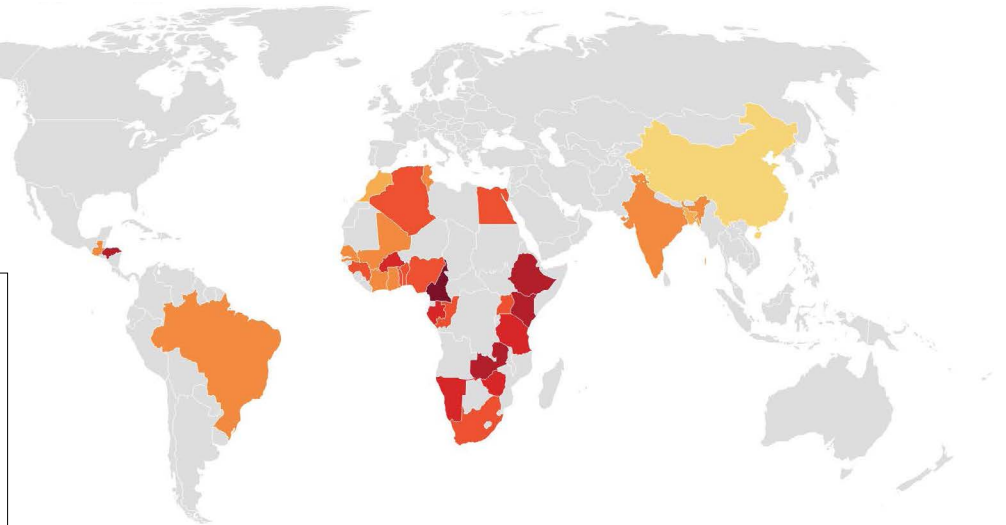
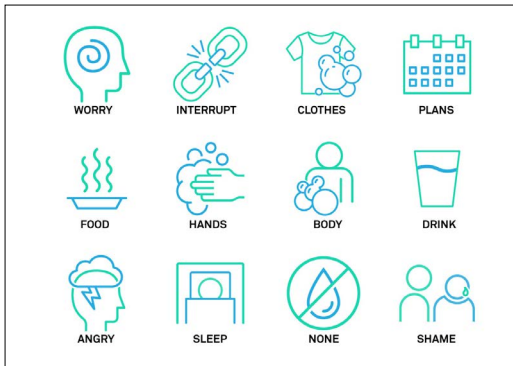
Surprisingly, men and women experienced similar rates of water insecurity in all but six of the 31 countries surveyed. Past research has shown that women are often disproportionately burdened by acquiring water and responsible for more water-intensive chores, so some might expect them to be more water insecure. But this study reveals that it is not possible to assume which groups will experience the most water insecurity.

POLICY TAKEAWAYS

- Water insecurity can be invisible if only water availability and infrastructure are measured.
- Experiences should be measured alongside standard physical water indicators in surveys, programs, and research studies.
- The IWISE Scale is useful for assessing the prevalence of water insecurity, identifying inequities, and directing resources to achieve a more water-secure world.

Where Are Experiences of Water Insecurity the Most Severe?

The Gallup World Poll asked 45,555 adults in 31 low- and middle-income countries about their individual experiences with water using the **IWISE Scale**, a 12-question survey that asked about the following activities:



Prevalence of water insecurity in 31 countries

< 5% **5%–15%** **15%–25%** **25%–35%** **35%–45%** **45%–55%** **≥ 55%**

METHODOLOGY

From September 2020 to February 2021, the Gallup World Poll administered the **IWISE Scale**, which asked how frequently individuals had 12 experiences with water in the prior year, to nationally representative samples in 31 low- and middle-income countries. The 45,555 adults surveyed lived in countries in four regions: sub-Saharan Africa, North Africa, Asia, and Latin America. Because of COVID-19 related precautions, surveys were conducted by telephone in all countries except for Mali, Senegal, and two out of three survey waves in India, where face-to-face surveys occurred. Respondents were randomly selected using stratified sampling procedures; probability sampling weights were adjusted for non-response and helped ensure estimates were representative of each country, including urban and rural areas.

REFERENCES

Young, S., H. Bethancourt, Z. Ritter, and E. Frongillo. 2022. [Estimating national, demographic, and socioeconomic disparities in water insecurity in low- and middle-income countries in 2020–2021: A cross-sectional, observational study, using nationally representative surveys.](#) *The Lancet Planetary Health* 6: e880–91.

FACTS AND FIGURES

- Roughly 14.2%, or approximately 436 million of the 3 billion adults represented by the survey sample, experienced water insecurity.
- Rates of water insecurity in the 31 countries surveyed ranged from 63.9% in Cameroon to 3.9% in China.
- Across the regions surveyed, water insecurity was highest in sub-Saharan Africa (36.1%) and lowest in Asia (9.1%).
- Women represented approximately half (51.7%) of those who experienced water insecurity. In most countries, men and women experienced water insecurity at similar levels.

Learn more about the IWISE Scale:
www.hwise.org



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