

Gender, climate change and water connections

Description

While the connections between gender and water and between water and climate have been illustrated through research, the connection between gender, climate and water has received less attention from a scientific point of view. WEDO's ongoing research initiative, described below, aims to analyze the links between gender, climate and water in order to provide a basis for the inclusion of a gender component in projects related to climate change adaptation/mitigation and water resources.

Making the case: gender, climate and water connections

Across the world, women and men access, manage, use and benefit from water differently, and because of gender discrimination and disparity, women and men's relationship to water is unequal. In many households, women are the primary users and managers of water for reproductive activities including cooking, cleaning, subsistence agriculture, health and sanitation; men primarily use water resources for income-generating activities such as large scale farming and agriculture or livestock.¹

Poverty and the feminization of poverty impact water use. Poor women use "common property" resources, such as rivers and lakes, to access water more often than do men, or women with higher incomes.² The time spent by women and girls on collecting water from these sources often prevents them from gaining an education and earning a formal wage, entrenching them in poverty. Land ownership ultimately influences decisions over management and distribution of income from existing or potential water resources. As women own less than 2% of land globally, their potential for decision-making power over water resources is low.

Climate change threatens to exacerbate the inequalities between women and men's relationship to water. The impacts of climate change on precipitation are projected to cause more extreme flooding and droughts, resulting in pollution of freshwater resources and increased water scarcity. Rising sea levels will intrude on coastal freshwater resources. Deterioration in water quality and quantity will impact food availability and water access and utilization, particularly among poor rural farmers, of which women comprise 43%³, especially in communities of Asian and African river deltas.⁴

Research Initiative

WEDO is in the process of developing and testing a methodology to link climate change, water and gender.⁵ The objectives are to understand the effect of the gender-differentiated impact of climate change on the water resources sector and to use the results to inform and influence adaptation programs and projects to be more gender-responsive – contributing to both gender equality and poverty eradication. As indicated above, there is a lack of scientific evidence linking the existing, disproportionate, gendered burden of water collection and management with the expected impacts of climate change.

This particular initiative is focused on the ECOWAS⁶ region. In the ECOWAS region about 67 per cent of the population uses an improved source of drinking water and 60 per cent of households are

¹ Women's Environment and Development Organization (WEDO), *Untapped Connections: Gender, Water and Poverty*, 2003.

² Swiss Agency for Development and Cooperation, *Gender & Water: Mainstreaming gender equality in water, hygiene and sanitation interventions*, 2005.

³ Food and Agriculture Organization (FAO), *The State of Food and Agriculture: Women in Agriculture: Closing the gender gap for development*, 2010-11.

⁴ Intergovernmental Panel on Climate Change (IPCC) Technical Paper VI, *Climate Change and Water*, 2008.

⁵ The methodology has been developed, in part, with funding from United Nations Population Fund (UNFPA)

⁶ The Economic Community of West African States (ECOWAS) includes 15 countries: Benin, Burkina Faso, Cape Verde, Cote D'Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Niger, Nigeria, Senegal, Sierra Leone, Togo

within 15 minutes of a drinking water source (75% in urban areas and only 50% in rural areas). Only five countries in the region are on track to meet the MDG drinking water target.⁷ Data from The World's Women 2010 report⁸ shows that in sub-Saharan Africa 63% of women in rural areas are responsible for water collection compared to 11% of men; in urban areas 29% of women are responsible for water collection compared to 10% of men. In countries with less of a gender gap, the proportion of men and women collecting water is more equal.

Time use data for eight countries from the least developed regions confirm that, compared to men, more women are involved in water collection and their average time burden is greater. For example, in Guinea, women spend 30 minutes collecting water, and men spend just 8 minutes. This time use data offers a basic measure of women's burden in households but also demonstrates that the gender-specific time burden is associated with other factors such as age, employment or economic status.

Methodology

WEDO's initial methodology is based on fairly limited data available through the World Bank database and the UNDP climate country profile. Data sources were chosen because of their coherence in collection. However, there is a need to set up and make available new data sources in order to improve the results of the methodology. Time use data on water resource use and management is necessary, as is sex-disaggregated data on social indicators such as representation in decision-making spheres (business, education, government), access to information (media available, literacy rates, educational attainment, freedom to access), and access to resources (land ownership rights, labor force participation, salary, etc).

Results

The results of the research, although premature, first demonstrate that, in the long term, climate change negatively impacts water availability through changes in temperature and precipitation. Increased temperature and low levels of precipitation have negative effects on availability of water resources, decreasing water availability. A second step, not yet finalized, attempts to adapt an existing gender parity index to quantify the level of gender equality in each country and link the gender parity index to the climate impact on water availability or access; this will clarify the linkages and illustrate the potential negative effects of climate change on gender equality. Ultimately, the project aims to document how climate change and gender inequality intersect with water availability. In doing so, climate adaptation efforts in the water sector will be better able to incorporate activities and goals that take gender issues into account and ensure activities do not exacerbate inequalities.

Challenges and Recommendations

Gaps in data collection and availability confound the development of this methodology. Sex-disaggregated data is limited, particularly data available in the same format across countries and regions. To complete surveys and populate the necessary data fields will take some (few) years and concerted, organized effort. Additional research is required to well-define indirect relationships among social and environmental factors so that the gender parity index can accurately illustrate coping ability in the face of climate change. In its current stage, the gender parity index is limited to available formatted ECOWAS data on education, parliamentary representation and participation in the labor force, but it will need to be expanded to ensure legitimacy. The implementation of regional and national adaptation programmes will need to be flexible and be able to incorporate new information to better address social inequities and improve overall effectiveness in dealing with climate change and water resources. Incorporating a gender perspective should be a requirement in the upcoming development of medium- and long-term adaptation planning and strategies.

⁷ Millennium Development Goal 7 – Target 3: “Halve, by 2015, the proportion of the population without sustainable access to safe drinking water and basic sanitation”

⁸ United Nations Statistics Division, *The World's Women 2010: Trends and Statistics*, 2010.