Climate change is not gender neutral

Justice Susan Glazebrook¹

The effects of climate change are already being felt around the world, posing threats to our way of life, our health, our safety and our security.² But its effects are not spread evenly. The poorest regions of the world and those groups who are already vulnerable and marginalised will experience the greatest impacts.³ Climate change is a "threat multiplier", escalating pre-existing social, political and economic inequalities.⁴

Women represent the majority of the world's poor and are therefore more vulnerable than men to the effects of climate change. In 2021 of the 828 million people affected by hunger in 2021, some 60 percent were women⁵ and it is estimated that in 2022, globally, 388 million women and girls will be living in extreme poverty as compared to 372 million men and boys.⁶ Climate change is not gender neutral.

¹ President of the International Association of Women Judges (IAWJ) and Judge of Te Kōti Mana Nui o Aotearoa/Supreme Court of New Zealand. This speech was presented virtually at the Annual Meeting of Asociación de Mujeres Jueces de Argentina/Association of Women Judges of Argentina (AMJA) which took place on 18–19 August 2022 at La Plata, Argentina. The motto of the conference was "Igualdad. Cambio Climático. Impacto en las Mujeres" (Equality. Climate Change. Impact on Women). Given the importance of the topic, I am sorry that I was unable to attend in person. My thanks to AMJA for their hospitality and for their support. Thanks also to my clerk, Don Lye, for his assistance with this speech.

² The impacts of climate change are observed in many ecosystems (whether terrestrial, freshwater or ocean) and human systems worldwide. Regarding human systems, they include impacts on water scarcity, food production, health and wellbeing, as well as cities, settlements and infrastructure (flooding, storm, etc). See generally Intergovernmental Panel on Climate Change (IPCC) *Sixth Assessment Report: Impacts, Adaptation and Vulnerability* (Cambridge University Press, Cambridge, February 2022) — the full report is available at <www.ipcc.ch>.

³ Warming trends and droughts, in particular, pose high risk to a broad range of livelihood resources that the poor rely on for bodily health, food security and crop yield: at [8.2.1.2]. Bangladesh, a low-lying coastal country in South Asia, is one of the most vulnerable countries in the world to climate risks and natural hazards, regularly facing severe floods, cyclones, droughts, heatwaves and storm surges: at [10.3.3].

⁴ On the description of climate change as a "threat multiplier" as well as the history of the use of the term, see Sherri Goodman and Pauline Baudu "BRIEFER: Climate Change as a 'Threat Multiplier': History, Uses and Future of the Concept" (3 January 2023) Center for Climate & Security <www.climateandsecurity.org>.

⁵ Care "Food Security and Gender equality: A synergistic and understudied Symphony" (care.org, 2022). The gap between the food security of men and women has grown dramatically 2018 and, with the war in Ukraine, looks set to worsen. And even where both men and women are food insecure, women often eat last and least.

⁶ Ginette Azcona and Antra Bhatt "Poverty deepens for women and girls, according to latest projections" (1 February 2022) UN Women <www.data.unwomen.org>.

The risks are exacerbated for women who are members of vulnerable groups, such as those who are indigenous, older, LGBTIQ+ or disabled.⁷ Also particularly vulnerable are migrant women, those living in rural, remote, conflict and disaster-prone areas and women from the Global South more generally.⁸

As well as the direct effects of climate change such as food and income insecurity, there are less visible flow-on effects. In many regions around the world, women bear a disproportionate responsibility for securing food, water, and fuel. As temperatures rise, these duties are more likely to feel the effects of environmental degradation because they rely more heavily on natural resources.⁹ On average, women in developing countries already walk six km to fetch water for their families.¹⁰ Water shortages mean that they will have to carry heavy loads over increasingly long distances.

Another example is the effect on education. A study from Uganda found that adverse rainfall events mean a significant decrease in girls attending primary school.¹¹ Recent studies show that poorer households, when faced with income shocks, are more likely to marry their daughters at earlier ages, again limiting educational opportunities.¹² The Malala Fund estimates that, in 2021, climate-related events prevented at least four million girls in low and lower-middle-income countries from finishing their education.¹³ Education is a key equalising force. It increases opportunities for paid

⁷ For the purposes of brevity, this speech was unable to address the underlying issues behind the inequality experienced by women. I however emphasise that describing women as vulnerable without addressing the underlying power dynamics can contribute to reinforcing the situation instead of improving it. It will be clear from what I say that it is also crucial that an intersectional lens is applied in examining the social power dynamics underlying these inequalities.

⁸ UN Women "Explainer: How gender inequality and climate change are interconnected" (28 February 2022) UN Women <www.unwomen.org>.

⁹ Mary Halton "Climate change 'impacts women more than men'" (8 March 2018) BBC <www.bbc.co.uk> and above n 8.

¹⁰ Oxfam "World Water Day: How far would you walk for water?" (21 March 2019) <www.oxfamamerica.org>.

¹¹ Linguère Mously Mbaye "Weather Shocks and Women Empowerment" in Maty Konte and Nyasha Tirivayi (eds) Women and Sustainable Human Development: Empowering Women in Africa (Palgrave Macmillan, Cham (Switzerland), 2020) 37 at 40 citing Martina Björkman-Nyqvist "Income Shocks and Gender Gap in Education: Evidence from Uganda" (2013) 105 Journal of Development Economics 237.

¹² Mbaye, above n 11, at 40–41.

¹³ Malala Fund *A greener, fairer future: Why leaders need to invest in climate and girls' education* (March 2021) at 3. The report further projects that, at current trends, by 2025, climate change will be a contributing factor in preventing at least 12.5 million girls from completing their education each year.

employment and increases sectoral mobility. Without education, women and girls are deprived of a key means of adapting to climate change.

Simply allocating more aid to women to reduce their vulnerability addresses the symptoms but not the cause. The focus needs to be on transformative change. A crucial way to effect this change is through empowering women. Gender equality is not only a fundamental human right but it is crucial for a sustainable future, as United Nations Sustainable Development Goal Number 5 recognises.¹⁴

Women are currently underrepresented in all levels of environmental decision-making.¹⁵ This means not only that their needs and vulnerabilities may not be understood and prioritised but also that the positive benefits from their participation are lost. Women have vast knowledge and skills, including those arising from their traditional responsibilities as healers, culture shapers and carers. To situate women's participation in responsibility is to situate them in public governance.¹⁶ Involving these women in climate action has the potential to reframe and renegotiate our relationship to, and understanding of, the environment.

I give just three examples.

¹⁴ A report by McKinsey Global Institute estimated that a "full potential" scenario in which women participate in the economy identically to men would add up to \$28 trillion to global GDP by 2025 as compared to a business-as-usual scenario: McKinsey Global Institute *The Power of Parity: How Advancing Women's Equality Can Add \$12 Trillion to Global Growth* (September 2015). This amount has been contrasted with the climate finance gap (\$585 billion per year by 2020 and \$894 billion by 2030): Vaishali Sinha "We can solve climate change – if we involve women" (16 September 2019) World Economic Forum <www.weforum.org>.

¹⁵ In 2020, women composed only 15 per cent of environmental ministers globally: International Union for Conservation of Nature (IUCN) "New data reveals slow progress in achieving gender equality in environmental decision making" (1 March 2021) <www.iucn.org>. At the COP27 summit in Sharm el-Sheikh, Egypt, the gender balance across all party delegations was 63 per cent men to 37 per cent women (similar to recent COPs): Robert McSweeney "Analysis: Which countries have sent the most delegates to COP27?" (9 November 2022) CarbonBrief <www.carbonbrief.org>. Women are also under-represented in IPCC authorship (less than 5 per cent in 1990 to more than 20 per cent in 2018): Climate for women in climate science: Miriam Gay-Antaki and Diana Liverman "Women scientists and the Intergovernmental Panel on Climate Change" (2018) 115 PNAS 2060.

¹⁶ Patricia Hania and Sari Graben "Stories and the Participation of Indigenous Women in Natural Resource Governance" (2020) 32 Canadian Journal of Women and the Law 310 at 327.

First from India and Nepal, where a study found that the presence of women on forest conservation committees has had a significant positive effect on forest conditions.¹⁷ And there is evidence that committees composed entirely of women achieve better forest regeneration and canopy growth even though they tend to be in charge of the most degraded forests.¹⁸

The second example is from the Pacific. After a cyclone in 2016, a feminist coalition of diverse women-led organisations across the Pacific was created, called the Shifting the Power Coalition.¹⁹ This works to strengthen women's voices, agency and leadership in disaster preparedness and response and climate action. In 2018, the Coalition helped established Women Wetem Weta, a country-wide climate preparedness network in Vanuatu where women and girls prepare their communities for oncoming cyclones, by alerting them, relocating vulnerable individuals, as well as storing food and clean water.²⁰

And finally an example from Africa. In 1977, Wangarī Maathai started the Green Belt Movement, an indigenous grassroots organisation in Kenya focusing on reforestation, environmental conservation, community development and women's rights.²¹ That project inspired the Great Green Wall, which has the ambition of growing an 8,000km natural wonder of the world across the entire width of Africa.²² The catalyst for this project was the daily impact of desertification and climate change that is undermining the futures of millions of communities across Africa's Sahel region. The project encourages the resurgence of traditional techniques. In Burkina Faso, where the

¹⁷ Gregor Schwerhoff and Maty Konte "Gender and Climate Change: Towards Comprehensive Policy Options" in Maty Konte and Nyasha Tirivayi (eds) *Women and Sustainable Human Development: Empowering Women in Africa* (Palgrave Macmillan, Cham (Switzerland), 2020) 51 at 56 citing Bina Agarwal "Does Women's Proportional Strength Affect their Participation? Governing Local Forests in South Asia" (2010) 38 World Development 98.

¹⁸ Schwerhoff and Konte, above n 17, at 57 citing Bina Agarwal "Gender and forest conservation: The impact of women's participation in community forest governance" (2009) 68 Ecological Economics 2785.

¹⁹ See Marie Kent "Pacific Island Countries: Shifting the Power Coalition" Actionaid <www.actionaid.org.au>.

²⁰ See Milly Atkinson-Handley "Women Wetem Weta': A mechanism that is transforming women's communication in the face of natural disasters in Vanuatu" (6 December 2018) Actionaid <www.actionaid.org.au>. As the article notes, the women in Vanuatu are living and breathing the impacts of climate change which is driving an increase in the severity and frequency of disasters.

²¹ See The Green Belt Movement < www.greenbeltmovement.org>.

²² See United Nations Convention to Combat Desertification "Great Green Wall Initiative" <www.unccd.int>.

government has committed to restoring 5 million hectares of degraded land by 2030,²³ there has been a resurgence of growing plants using "zai" pits, an indigenous technique which concentrates water and nutrients. In Niger, 5 million hectares of land have been restored, delivering an additional 500,000 tonnes of grain per year: enough to feed 2.5 million people.²⁴ By 2030, the Wall aims to restore 100 million hectares of currently degraded land, sequester 250 million tonnes of carbon and create 10 million jobs in rural areas.²⁵

Rectifying the exclusion of women from public decision-making by increasing their representation may seem straightforward. But the true challenge is in incorporating women's knowledge, especially that of indigenous women and women from the Global South, in a way that is respectful, responsible and empowering, thereby supporting the value of their participation. Challenging dominant scientific and male-oriented norms embedded in governance, or indeed in climate research, will be not be easy but it is vital in order to preserve and protect our planet for future generations and secure a more equitable future. Through women, nature can have a stronger voice.

I finish with a Māori whakataukī (proverb):

E rere kau mai te awa nui nei Mai i te kāhui maunga ki Tangaroa Ko au te awa Ko te awa ko au. The river flows From the mountains to the sea I am the river The river is me.

The river gives to us and in turn we give to the river by keeping it healthy. I hope the conversations at your Annual Meeting will renew you and inspire you in your work.

²³ See Natalie Marchant "What Burkina Faso can teach us about forest restoration" (20 April 2021) World Economic Forum <www.weforum.org>.

²⁴ In Chris Reij, Gray Tappan, and Melinda Smale "Re-Greening the Sahel: Farmer-led innovation in Burkina Faso and Niger" David J Spielman and Rajul Pandya-Lorch (eds) *MillionsFed: Proven Successes in Agricultural Development* (International Food Policy Research Institute, Washington DC, 2009) 53 at 53.

²⁵ See United Nations Convention to Combat Desertification, above n 22.