

Engendering Climate Justice in Aquaculture through Inclusive Nature-Based Solutions

Purpose

Through the individual cases, and dialogue across them, we aim to probe the following three questions:

i) Impact, vulnerabilities, & opportunities: Who or what is affected by climate change and how? Aquaculture is highly affected by climate change (Maulu et al., 2021). Warming water, extreme weather events, ocean acidification, pathogens, and fluctuations in water resources all pose threats to aquatic food systems and livelihoods (IPCC, 2022). In this panel, we consider the ways these changes—and responses to them—are intersectionality gendered. First, we consider differential vulnerabilities to and lived experiences of climate change along the lines of gender and other intersectional identities. Gender shapes lived experiences and perceptions of climatic risks to aquaculture production (Lebel, 2014; Lebel et al., 2020; 2021). Women are often especially vulnerable as they occupy the lowest paid and least recognized parts of aquaculture value chains (Kruijssen et al., 2018; Trevino & Murillo-Sandoval, 2021). Female aquaculture farmers frequently have reduced access to resources and capacities for climate resilience and adaptation such as information, credit, and productive capital (Adam et al., 2022). Women may also be underrepresented in decision-making in community, private sector, and government spheres. Finally, less explored are potential opportunities posed by climate change or its responses.

ii) Adaptation and mitigation: How do climate interventions – including nature-based practices –shape intersectional gender relations, and how can we make them more gender responsive? Adaptation and mitigation interventions for aquaculture such as new technologies or practices may themselves influence gender and other relations, including norms around masculinity and femininity. Adaptations may be more accessible to men. For example, warming water forces some seaweed farmers to relocate their operations into deeper water, which privileges men and higher-income individuals who have the resources and capacities to swim and operate boats (see e.g., Matoju et al., 2022). This in turn reinforces gender inequities by making women reliant on men but can also increase livelihood risks faced by men. Likewise, climate impacts can increase competition for food and income, intensifying conflicts between resource users and increasing gender-based violence (Adam et al., 2022).

Climate change and aquaculture interventions may also intersect with and rework dominant masculinities and femininities—i.e., norms around appropriate behaviours, identities, and forms of work for women and men. For example, men’s outmigration in response to climate risk may require women to assume “men’s” work, creating tensions around expectations of femininity and masculinity. How are existing adaptation and mitigation practices shaping gender relations and identities? How can we ensure that adaptation interventions are gender responsive?

iii) Supporting gender justice: How can nature-based solutions catalyze gender justice? A gender justice approach goes beyond merely reducing vulnerabilities to specific hazards towards transforming the underlying gender relations and other inequities that create vulnerability (see Cole et al., 2020). This also requires engaging not just women, but also men as important allies in gender transformation. What can researchers do to support these transformative processes at different levels – from the farm or household to national or even regional levels?

Format

Gender justice and climate justice are tightly interconnected—and both are key to inclusive and nature-based aquaculture systems and practices. In this interactive panel, we explore how gender and climate change intersect, what gender and climate just aquaculture systems and practices might look like, and how action research can play a role in catalyzing these transformations.

We foster dialogue across four Asia-Pacific nature-based solutions (NbS) projects for climate adaptation and mitigation. The cases are part of the [Nature-based Climate Solutions in Aquaculture Food Systems in Asia-Pacific \(AQUADAPT\)](#) initiative, co-funded by the International Development Research Centre (IDRC) and the Government of Canada.

- **Case study presentations (50 minutes):** 4 presentations of 10-12 minutes each (max.) on concrete case studies addressing one or more of the questions below.
- **Conceptual presentation and reflection (10 minutes):** Intervention from Dr. Sizwile Khoza on climate and gender justice and response to the cases.
- **Q&A and discussion (30 minutes)**