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Conference Abstract

The gender data gap in invasion science

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Abstract

The impacts of biological invasions vary across genders, and are shaped by divisions of labour, access to resources, and social roles that differ across regions and cultures. The 2023 IPBES Thematic Assessment on Invasive Alien Species acknowledged gender-differentiated impacts, but only a small number of case studies provide insight into these dynamics, and for most biological invasions such gender-differentiated impacts remain largely unknown. Here we examine how this gender data gap manifests. Women, particularly in the Global South, often encounter emerging invasions first through subsistence activities such as weeding, fuelwood collection, water gathering, and small-scale fishing, yet their observations rarely enter formal monitoring systems. Aggregated data obscures who within a household bears the burden of the negative impacts caused by invasions. Moreover, market-based valuations capture commercial losses but

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overlook the unpaid labour, loss of subsistence production, time costs, and health burdens borne disproportionately by women. These gaps have direct consequences for management: when impacts are neither detected nor measured, resources flow through established channels such as extension services and landholder networks, which often bypass women. Closing this gap is a matter of effectiveness as much as equity. Enabling women to collect data, mobilising those data, and disaggregating collection and analysis by gender would sharpen estimates of invasion impacts and direct resources to those who encounter or bear them most directly. Extension services designed around women's schedules and constraints would reach a wider share of affected labour. Valuation methods that count unpaid labour and subsistence production would reveal the full scale of invasion impacts and strengthen the case for investment in prevention and control. These shifts would not divert resources from management; they would make it more effective.

Keywords

Sex-disaggregated data, invasion impacts, gender equity,

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Conflicts of interest

The authors have declared that no competing interests exist.