Fisherfolk perspective on processes affecting vulnerability: climate and policy intertwine in small-scale fisheries in Southern Brazil

Denis Hellebrandt
d.hellebrandt@uea.ac.uk
School of International Development, University of East Anglia, NR4 7TJ

This research presents evidence on how the vulnerability of fisherfolk is affected by the combined impact of climate variability and fisheries policy. Our argument is framed by a critical perspective on the relationship between fisheries and poverty, and links to literature which emphasise how policies which minimise fishers' exposure and susceptibility to shocks may be more relevant than initiatives seeking to maximise wealth generation in SSF. Our study was carried out in the Patos Lagoon estuary, Southern Brazil, in six months of fieldwork in 2008 and 2009. SSF in the study area target mostly shrimp (F. paulensis), but also other coastal species which enter the estuary. It is estimated that 3500 people depend directly on those fisheries, including trade and processing of shellfish. Fisheries governance is based on co-management, which has set regulations controlling season closure, gear type and minimum fish and shellfish size. Our work was based on Grounded Theory methodology, which fits the goal of eliciting fisherfolk's views on vulnerability with minimal use of pre-determined concepts. Quantitative data collection consisted of a survey of 60 households in urban and rural contexts (n=120 fisherfolk). Qualitative data was gathered in participant observation and in-depth interviews with 12 fishers. Survey data, field notes and transcripts were coded and analysed through concept mapping. Three categories of inter-related hazards emerged from the analysis: (1) Overcapacity was associated to incentives from credit supporting new entrants and increased use of bottom trawling. (2) Climate variability was related to coupled rainfall and wind patterns, with direct effect on target abundance and range. Its high impact was explained by non-compliance to regulations, result of the mismatch between rigid formal rules and fishing strategies adapted to uncertain climatic and ecological conditions. (3) Pressure on estuarine stocks was linked to the virtually absent control over the excessive fishing capacity of the industrial coastal fleet. Those patterns were independently confirmed by the different methods applied. Our findings resonate with other studies which stress how vulnerability is determined by the compounded effect of ecosystem and policy processes. We argue that increased adaptive capacity, and more just and sustainable SSF depend on our ability to integrate fisherfolk's perspectives in policy-making.

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