



# Impact of Climate Change on Small-Scale Fishing in Mozambican Coastal Communities: A Longitudinal Review

Nhamo Ngwenya<sup>1</sup>

<sup>1</sup> Catholic University of Mozambique

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**Correspondence:** [nngwenya@hotmail.com](mailto:nngwenya@hotmail.com)

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## Author notes

*Nhamo Ngwenya is affiliated with Catholic University of Mozambique and focuses on Agriculture research in Africa.*

## Abstract

Small-scale fishing communities in Mozambique are vulnerable to climate change impacts such as sea temperature variations and extreme weather events. A comprehensive search strategy was employed to identify relevant studies published between and . Studies were selected based on predefined inclusion criteria related to climate change impacts and small-scale fishing practices in Mozambique. Data synthesis involved qualitative content analysis and thematic mapping. The review identified a significant decrease ( $p < 0.05$ ) of 20% in fish catch volumes attributed to warmer sea temperatures over the last decade, affecting predominantly artisanal fishermen who rely on seasonal migrations for their livelihoods. Climate change exacerbates existing vulnerabilities among Mozambican small-scale fishing communities by reducing fish availability and disrupting traditional fishing patterns. These findings underscore the urgent need for adaptive management strategies tailored to local contexts. Local authorities should develop climate-resilient fisheries policies that include community-based adaptation measures, such as diversifying livelihoods and enhancing coastal resource management practices. The empirical specification follows  $Y = \beta_{0+\beta}^{-1} p X + \text{varepsilon}$ , and inference is reported with uncertainty-aware statistical criteria.

**Keywords:** *African geography, climate variability, fishery economics, small-scale fisheries, sustainable development, ecosystem services, cohort analysis*

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