

Socio-Economic Impacts of Climate Change and Marine Pollution on Fish-Dependent Communities of Southern Africa

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Abstract

Climate change and marine pollution are significantly impacting the fisheries sector in Southern Africa, posing serious threats to the livelihoods and health of communities dependent on fishing and aquaculture. Utilizing a systematic literature review approach, this chapter explores the socio-economic consequences of marine pollution and climate-driven changes in fish populations and fisheries on these communities. A total of 30 studies were included, revealing that marine pollution and climate change contribute to reduced fish catches, lower incomes, and diminished food security, exacerbating poverty, inequality, and other socio-economic vulnerabilities—especially for women and marginalized groups. The review also identifies key adaptation and mitigation strategies, such as climate-resilient fisheries management, livelihood diversification, and improved climate information systems. The findings underscore the urgent need for targeted actions to enhance the adaptation and resilience of fish-dependent communities in Southern Africa.