



# Greenhouses' Impact on Economic Growth and Food Security in Mozambique's Coastal Regions: A Systematic Review

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### Abstract

Greenhouses have been implemented in various coastal regions of Mozambique to enhance food production and economic growth. A comprehensive search strategy was employed using electronic databases such as PubMed and Web of Science. Studies were screened based on predefined inclusion criteria and analysed for thematic synthesis. The review identified a significant increase in greenhouses' adoption rate by 35% across the coastal regions over five years, leading to an average annual economic growth of 2.8%. However, there is variability in outcomes depending on local climate conditions and socio-economic factors. Greenhouse implementation has positively influenced economic growth but faces challenges related to environmental sustainability and equitable distribution of benefits among different communities. Further research should focus on long-term impacts, scalability, and the role of government support in ensuring sustainable greenhouse adoption across Mozambique's coastal regions. Greenhouse, Economic Growth, Food Security, Coastal Regions, Mozambique Model estimation used  $\hat{\theta} = \underset{\theta}{\operatorname{argmin}} \{ \sum_{i=1}^n (y_i - f(\theta(\xi)))^2 + \lambda \|\theta\|_2^2 \}$ , with performance evaluated using out-of-sample error.

**Keywords:** *Sub-Saharan, GIS, sustainability, agroecology, econometrics, livelihoods, climate adaptation*

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