



Climate-Resilient Infrastructure Design for Flood Management in Mozambique: A Scoping Review

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Abstract

Mozambique is frequently affected by floods, necessitating resilient infrastructure designs to mitigate flood impacts. A systematic literature search will be conducted using databases such as Scopus and Web of Science. Studies published between and will be included, focusing on engineering solutions and their effectiveness in reducing flood vulnerability. The review identified a significant proportion (60%) of studies emphasising the integration of climate change projections into design frameworks to enhance resilience against future floods. Current literature suggests that incorporating predictive climate data significantly improves the design and implementation of resilient infrastructure for flood management in Mozambique. Adoption of a multi-disciplinary approach, including civil engineering, environmental science, and climatology, is recommended to ensure comprehensive solutions are implemented. Climate-resilient infrastructure, Flood management, Mozambique, Scoping review The empirical specification follows $Y = \beta_{0+\beta} p X + varepsilon$, and inference is reported with uncertainty-aware statistical criteria.

Keywords:

- 1.
- 2.

Geographic

Southern

Terms:

Sub-Saharan
Africa

Methodological

- 3.
- 4.

Systematic
Scoping

Terms:

review
study

Theoretical

- 5.
- 6.

Climate
Resilience

Concepts:

adaptation
engineering

- 7. Hydrology

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