



Water Scarcity and Conflict Mitigation in Egypt's Nile Basin: A Mixed Methods Investigation

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Abstract

Water scarcity in the Nile Basin poses significant challenges to peace and stability in Egypt, a country heavily dependent on this resource for agriculture, industry, and domestic use. The research employs both qualitative interviews with stakeholders and quantitative analysis of socio-economic data from multiple years, providing a comprehensive understanding of the issues at hand. Analysis reveals that water scarcity disproportionately affects marginalized communities in rural areas, leading to increased tensions and occasional outbreaks of violence. This is particularly evident among small-scale farmers reliant on irrigation systems. The mixed methods approach highlights the complex interplay between resource availability and social dynamics, underscoring the need for targeted interventions to prevent future conflicts. Policy recommendations include implementing water management reforms that prioritise equitable access and sustainable usage, alongside community-based conflict resolution mechanisms.

Keywords: Nile Basin, Geographic Information Systems (GIS), Participatory Action Research, Social Network Analysis, Conflict Transformation Theory, Quantitative Data Collection Techniques, Qualitative Interviews

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