# Article information:

Utility of Low-Cost Geospatial Tools for Monitoring of Water Resources for Their Conservation and Optimum Management: A Case Study of a Small River in Tripura | SpringerLink
<https://link.springer.com/chapter/10.1007/978-3-030-77572-8_13>

# Article summary:

1. Geospatial tools can be used for monitoring and conservation of water resources, especially in areas prone to natural hazards like floods and droughts.

2. Rapid urbanization and industrialization can have negative impacts on river geomorphology and water quality, leading to challenges such as pollution, depletion of groundwater quality, and urban flooding.

3. A low-cost geospatial tool-based visual time series analysis was used to study the impact of rapid urbanization on the Khowai River in Tripura, including detection of land use/land cover changes and monitoring of digital elevation maps. The study found that brick kilns established close to the riverbed were a resource-demanding enterprise with potential negative impacts on the riverbank.

# Article rating:

Appears moderately imbalanced: The article provides some useful information, but is missing several important points or pieces of evidence that would be required to present the discussed topics in a balanced and reliable way. You are encouraged to seek a more balanced perspective on the presented issues by exploring the provided research topics and looking at different information sources.

# Article analysis:

The article discusses the impact of rapid urbanization on the Khowai River in Tripura and proposes a combinatorial approach using low-cost analytical tools for impact assessment. The study highlights the need for effective monitoring of water resources to mitigate natural hazards like floods and droughts. However, the article lacks a comprehensive discussion on the potential biases and limitations of using low-cost geospatial tools for monitoring water resources.

The article presents some unsupported claims, such as the statement that "effective suggestions and mitigation strategies should be developed" without providing evidence or examples of such strategies. Additionally, while the article acknowledges that rapid urbanization has caused severe alterations in ecological parameters and rainfall patterns, it does not explore counterarguments or alternative perspectives on how urbanization may benefit local communities.

The article also contains promotional content, such as highlighting the novelty of the study methodology and suggesting that it can be replicated in resource-limited setups. While this may be true, it is important to note that low-cost tools may not always provide accurate or reliable data, which could lead to incorrect conclusions and ineffective management strategies.

Furthermore, while the article notes some potential risks associated with rapid urbanization on river geomorphology and related aspects, it does not present both sides equally by failing to discuss any potential benefits or positive impacts of urbanization on local communities.

Overall, while the article provides some valuable insights into using low-cost geospatial tools for monitoring water resources in resource-limited settings, it would benefit from a more balanced discussion of potential biases and limitations associated with these tools.

# Topics for further research:

* Potential benefits of urbanization on local communities
* Limitations of low-cost geospatial tools for water resource monitoring
* Counterarguments to the negative impacts of rapid urbanization on river ecosystems
* Effective strategies for mitigating the impacts of urbanization on water resources
* Risks associated with altered rainfall patterns due to urbanization
* Importance of accurate data in developing effective management strategies for water resources.

# Report location:

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