

Financing and equity of climate adaptation of urban sanitation

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What are the impacts of climate change on 'real' urban sanitation systems?

Method: Systematic review and failure mode analysis

Key findings

- Literature does not adequately represent reality of urban sanitation systems and neglects operational challenges
- Insular knowledge clusters, lack of citywide perspective and consideration of complex and already stressed sanitation systems
- Evidence contradicts past research suggesting that even poor households are generally able to adapt their onsite sanitation technologies to changing climate conditions by their own means



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How equitable are investments for adapting urban sanitation systems to climate change?

Method: Cross-case document analysis complemented by key informant interviews

Key findings

- Climate-resilient sanitation is paid for by the traditional sources of sanitation funding: tariffs, taxes, transfers and household investments
- Debt-financing of sanitation adaptation often relies on repayment through customer bills with insufficient considerations of affordability
- The lack of appropriate accounting for the lifecycle costs of resilient infrastructure threatens to mortgage future generations
- 'Greening' of adaptation financing neither shift nor redistribute the financial risk more equitably, nor does it result in cheaper repayment for the customers.

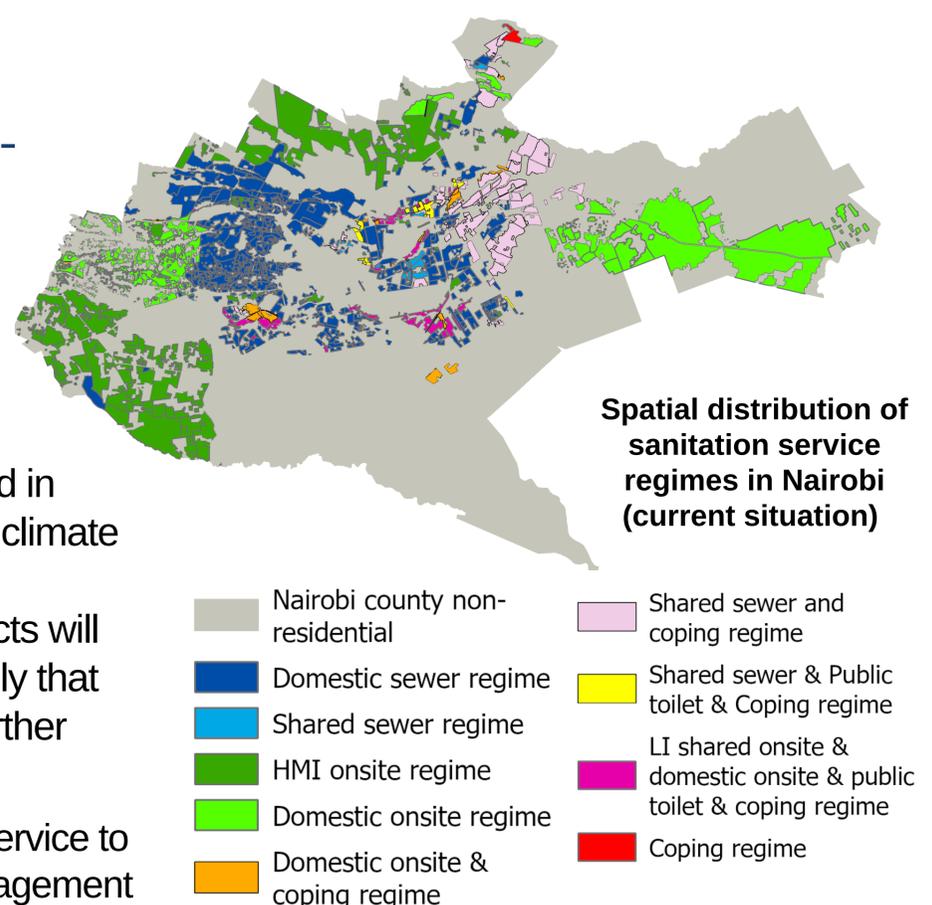
Submitted - currently under review

How likely is it that climate adaptation of urban sanitation systems increase sanitation - inequalities?

Method: Case study of Nairobi, Kenya mainly based on document and GIS analysis

Preliminary findings

- Currently, climate adaptation is not adequately reflected in sanitation planning, and sanitation is not considered in climate adaptation
- Despite the additional stress that climate change impacts will put on the sanitation service regimes in Nairobi it is likely that the sector will follow a *'business-as-usual'* approach further entrenching inequalities
- There is a strong focus on expanding sewerage and lipservice to inclusive sanitation and improving the current (mis-)management of non-sewered sanitation is not backed by concrete actions



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