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Assessing the Evidence: Climate Change and Migration in the United Republic of Tanzania Dr Fanny Thornton – on behalf of Ms Julia M. Blocher

Climate change impacts

- The United Republic of Tanzania has already warmed up to 2 degrees C since 1981.
- Climate change is leading to more extreme and erratic rainfall.
- The north has become wetter and the south has become drier due to change in short rains season (vuli)
- Long rains season has declined throughout East Africa

 Warming by end of century (2079–2099), under optimistic (top) and high-end (bottom) scenarios





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Migration Context: Core Indicators



> High urban growth: 5.22% / year

- Significant development gains:
 Poverty has declined overall as
 GDP grew. Yet many people
 clustered around the poverty line
 are vulnerable to shocks
- Inequality is growing: 58% of the urbanites are high-wealth while
 ~80% of rural inhabitants are lowwealth



Migration – Core Dynamics

- > Long history of dynamic migration in Tanzania
- Climate change affects livelihoods which affects propensity to move elsewhere
- Migration a widely practiced strategy to cope with and adapt to shocks and stresses, and to avail economic opportunities
- > It can have positive and negative consequences
- > Rural to rural and rural to urban migration predominates in Tanzania
- Climate change interacts with these existing patterns changing and likely intensifying them
- Also immobility: low-income households are less likely to migrate in the face of financial constraints and limited assets



Numbers

- Internal climate migration in Tanzania could reach up to 16.6 million by 2050 (Groundswell, 2021) – worst case scenario (best case: ca 10 million)
- > = 14% of projected population
- Regional: Lake Victoria Basin (LVB) countries could see as many 38.5 million people moving as a consequence of slow onset climate impacts (Rigaud et al. 2021a)
- > = nearly 11% of the population



Hotspots?

- Climate in- and out-migration hotspots in Tanzania will emerge as early as 2030 – and then grow (Groundswell, 2021)
- Areas where population movements are considered high certainty across the scenarios modelled
- Primary <u>climate in-migration</u> hotspots are in the north, particularly around Lake Victoria, in cities such as Mwanza, Magu, and Geita
- > Many climate in-migration hotspots coincide with areas of high poverty
- Climate out-migration (incl decreasing growth) hotspots are concentrated in the east and south and include Dar es Salaam, Arusha, Korogwe, Dodoma, and Morogoro
- > Causes are water stress and sea level rise



> Visualization of review of current research on migration in URT



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PIK



- Research on the influence of environmental and climatic factors on migration shows mixed results:
- In some cases, environmental stress increases the propensity to migrate while in other cases migration decreases.
- Quantitative analyses also show mixed results for how weather shocks change migration patterns, depending on region and scale probability increases or decreases.
- Context and household attributes are likely to account for different vulnerabilities, capacities, and responses.



> Schematic overview of climate-migration concepts:

how people deal with hazards and co-stressors, and which role mobility play in their strategies



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Conclusions

- Climate change is likely to lead to forced immobility in the short term & permanent migration in the long term.
- Heat & droughts may cross critical thresholds threshold for migration.



Without significant adaptation measures, severe livelihood impacts are likely across the country and adaptation in situ and through internal migration may fail.





Recommendations

Advance climate change adaptation measures:

- Beat the heat: find ways to help rural and urban communities cope in the short term.
- Combine tradition with technology to improve sustainable resource management in the medium and long term.
- Grow and regrow forests for resilient communities in the long-term and in anticipation of possible high-end warming scenarios.
- Take different vulnerabilities of livelihood groups into account to target policies and programmes to people of different needs and capacities.





Recommendations

Improve the development potential of migration:

- Develop a policy on internal migration management that includes an evidence-based approach to climate-related migration.
- Enhance the development potential of migration by reducing the cost of remittances.





Recommendations

Improve data quality for both climate change and migration to understand current and future trends:

- Enhancements to the weather station infrastructure, data collection methods, and central processing of the data;
- › Modifications to the census questionnaire;
- > Improvements to migration data and research;
- Evidence is key to policymaking on migration as well as to climate change adaptation, and each should inform the other.





Thank you!

Find the publication on the IOM Bookstore

https://publications.iom.int/books/assessing-evidenceclimate-change-and-migration-united-republic-tanzania

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