

Kigamboni



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Kigamboni, a rapidly growing coastal district in Dar es Salaam, Tanzania, faces severe environmental threats from climate change and rapid urbanization. Rising sea levels, intense storm surges, and human activities such as sand mining have caused widespread coastal erosion and flooding. To address these threats, Nature-Based Solutions (NbS) focus on protecting, sustainably managing, and restoring local ecosystems to effectively address societal challenges. In Kigamboni, these initiatives leverage healthy coastal environments to protect communities from the impacts of climate change while boosting local economies. The core components of Kigamboni NbS include: (i) mangrove ecosystem restoration: Replanting native mangrove forests along degraded coastlines to build thick, natural barriers that absorb wave energy and stabilize shoreline sediments; (ii) alternative sustainable livelihoods: Introducing climate-resilient economic activities, such as sustainable beekeeping in mangrove forests and eco-friendly aquaculture and gardening along the road and in the homestead, to reduce overreliance on wild marine resources; and (iii) community-led conservation: Engaging local residents directly in monitoring and managing natural resources, ensuring long-term environmental protection and economic benefits.



Stagnant water during a flood in Kigamboni

Users and envisaged applications in the hub

The primary users in the Hub include women, youth, and the local community (e.g., fishers and mangrove conservation groups), who are the main beneficiaries and are engaging in mangrove conservation activities to identify livelihood opportunities. Other users include government and environmental agencies (e.g., the Ministry of Environment, TFS, and NEMC) that enforce laws and protect the environment, as well as academics and researchers (e.g., at Ardhi University) who generate ecological baseline data and develop climate risk indicators. The envisaged applications are: (i) Scaling and replication frameworks, where localized NbS documentation is compiled at the Hub level to build a fundable proposal pool and share local best practices across the established network of partners; (ii) Ecosystem-based adaptation modelling, where localized tools are used to monitor mangrove conservation activities and track new mangrove planting initiatives at the Hub; and (iii) Livelihood diversification toolkits, where the management of community-driven micro-projects, including low-cost beehives within the mangrove ecosystem, is strengthened to sustainably improve local community livelihoods.

Results and status



Mangrove restoration and beekeeping activities in Kigamboni



Geographic area:
Eastern of Tanzania, South
Eastern Africa

Regional climate:
Tropical wet-dry or Savanna (Aw)

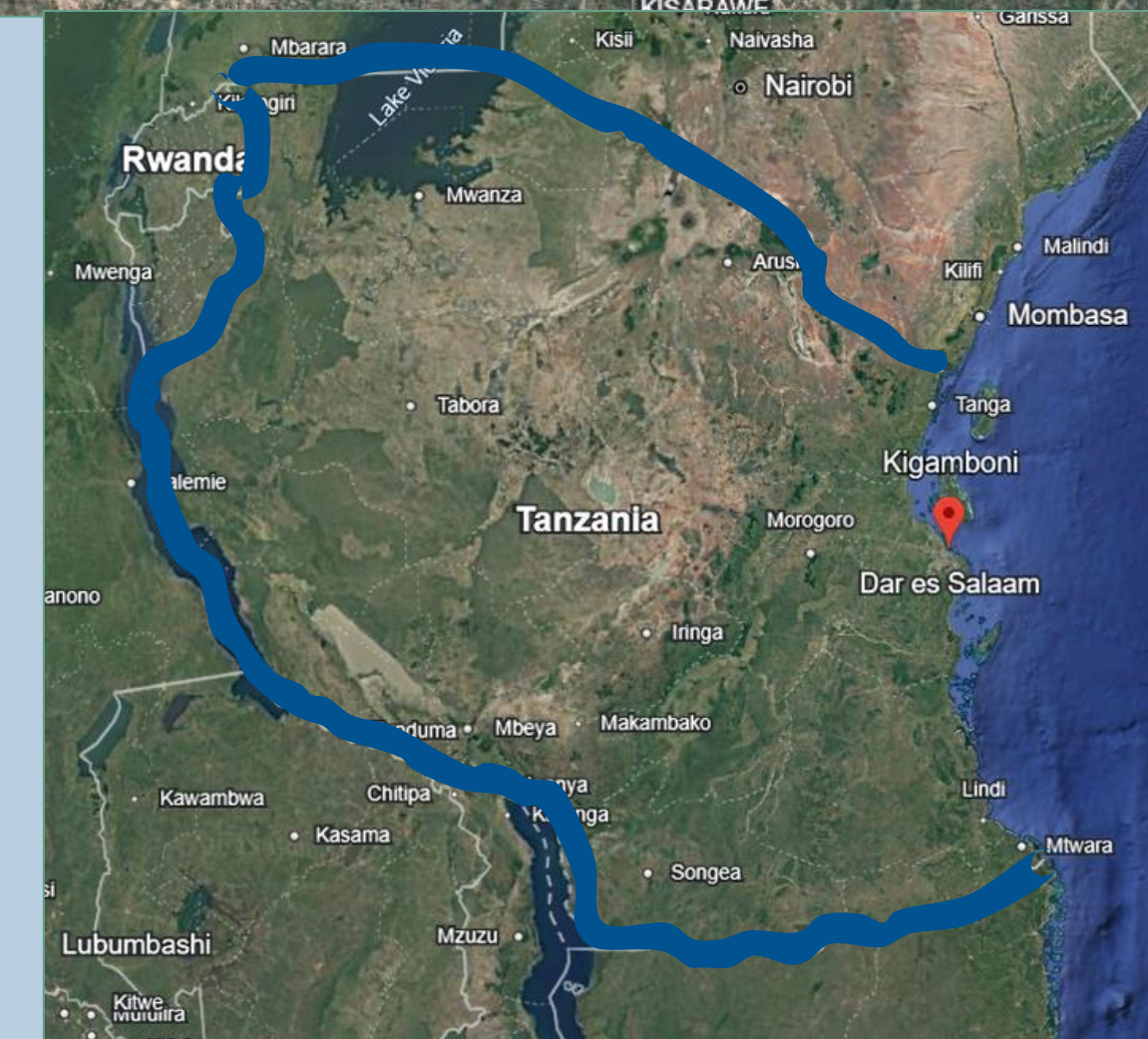
Main meteorological hazards:



Coastal erosion



Storm tides



Status

Regarding NbS, the Hub has provided technical support for the planting of more than 150,000 mangrove trees along the Kigamboni coastline. The Hub had engaged in training and building capacity in the local community through workshops and meetings. The Hub Roadmap (a localized Roadmap for the Climate-Resilient Development Network) has been finalized. An active community support group has been established through a local champion.

Next steps and final outcome

In collaboration with different actors (such as communities, municipal authorities, TMA, TFS, and NEMC), the Hub will explore opportunities to scale up restoration and livelihoods by expanding mangrove planting and beekeeping activities. The Hub will continue to build capacity and strengthen inclusivity by developing alternative skills for women and youth through a mentorship program and identifying opportunities to secure long-term capital from domestic sources. The Hub will establish and install a localized low-cost weather station to capture real-time hydrometeorological data and deploy various web-based tools (e.g., a citizen science toolkit).

The final outcome in Kigamboni is a climate-resilient, self-sustaining coastal environment in which local populations are permanently protected by nature-based infrastructure that also promotes sustainable economic growth.

Policy Briefs for Tanzania

ALBATROSS has developed a set of policy briefs, synthesising findings from a multi-level policy analysis of more than 250 national and sub-national policy documents, as well as regional and transboundary frameworks, across five Sub-Saharan African countries: Ghana, Kenya, Madagascar, South Africa, and Tanzania.



The analysis assessed the level of integration of Sustainable Development Goals (SDGs), Nature-based Solutions (NbS), Climate Services, Gender and Social Inclusion, and Indigenous and Local Knowledge (IKLK) into environmental and climate frameworks.



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