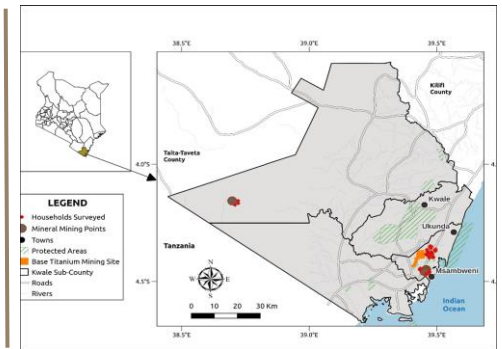


POLICY BRIEF

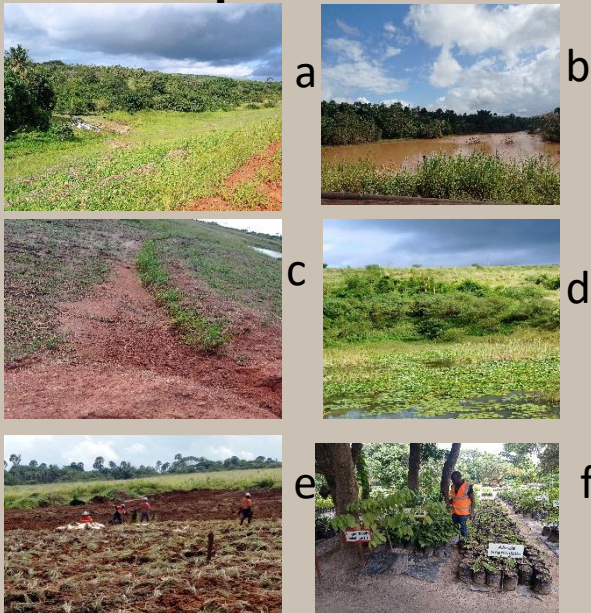
Credit for all images: Author

NATURE-BASED SOLUTIONS FOR HABITAT RESTORATION IN THE MINING SECTOR OF KWALE COUNTY, KENYA

Mining operations in Kenya have resulted in environmental pollution and ecological degradation, negatively affecting local communities. Habitat restoration aims to rehabilitate and restore these degraded landscapes to a natural or more ecologically useful state (Aronson *et al.*, 2020). Nature-based Solutions (NbS) – actions which involve working with nature to solve societal problems – can help restore these mined landscapes. While governance (institutions, processes and structures) is an important pillar for sustainable environmental restoration plans (Shwekelela, 2022), governance of the mining sector in Kenya does not consider NbS for habitat restoration.



Overview of possible NbS



Legend: (a) Biodiversity corridor, (b) Silt Traps, (c) Constructed wetland, (d) Soil bunds, (e) Dune construction (f) Indigenous tree species restoration

POLICY RECOMMENDATIONS

1. Regulatory Framework
2. Incentives and Support
3. Collaboration and Partnerships

1. The development of new **laws** and **policies** will promote the use of NbS for habitat restoration in the mining sector of Kwale County
2. Governments can introduce **incentives** such as tax breaks or subsidies to encourage mining companies to invest in nature-based habitat restoration practices
3. Policies can promote **collaboration** and **partnerships** between government agencies, mining companies, NGOs and local communities to facilitate the effective implementation of NbS

KEY FINDINGS

Awareness of NbS

Titanium, silica sand and gemstones are some of the minerals extracted in Kwale County. Over half of the 123 respondents in the study area of Kwale County expressed awareness of NbS. The respondents stated they had participated in the restoration of indigenous tree species, wetland construction, silt dams, soil bunds and dune constructions. Over half of the 123 respondents in the study area said that NbS are useful in restoring the ecological integrity and usefulness of a mined area.

Contribution to SDGs

NbS for habitat restoration make substantial contributions to SDG 2 (*Zero Hunger*), SDG 3 (*Good Health and Well-being*), SDG 6 (*Clean Water and Sanitation*), SDG 13 (*Climate Action*), SDG 14 (*Life on Land*) and SDG 16 (*Promote Just, Peaceful and Inclusive Societies*). Understanding the potential of NbS to contribute to the global sustainability agenda is vital for effective planning and implementation.

Use of local knowledge

The study underscores that indigenous and local knowledge has been used in implementing nature-based initiatives for habitat restoration. For instance, respondents say that trees which they believe to contain medicinal benefits have been planted in the established biodiversity corridor within Base Titanium's mining lease.

NOTE

Research on NbS is essential for informing policies and engaging communities in habitat restoration efforts in mining areas. By emphasizing evidence-based approaches and collaboration between researchers, policymakers and local stakeholders, we can work towards achieving successful and sustainable restoration outcomes while preserving our natural environment.

CONCLUSION

The study found that Nature-based Solutions for habitat restoration are being used in the mining sector of Kwale County. However, a governance framework for the evaluation of their impacts on transparency, rule of law and accountability is lacking. This study recommends that policymakers, researchers and local stakeholders collaborate in order to formulate a governance framework for the planning and implementation of NbS projects. This will foster the adoption of nature-based habitat restoration approaches, and ensure that their benefits are fully felt.

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