



CASE STUDY: MANGROVE RESTORATION IN KENYA

Pioneering ‘social blue carbon’: Community based revenue-sharing mangrove restoration in Kenya.

Lead organisation (sponsors) and partner:

Vlinder Austria and UMITA Limited (Kenya)

Country/region: Kenya coastal regions - Kwale, Kilifi, and Tana River Counties

Overview: The Papariko project aims to restore 1,500 hectares of degraded mangrove ecosystems across Kwale, Kilifi, and Tana River Counties in Kenya, thereby sequestering approximately one million tonnes of CO₂ and fortifying local communities against climate change impacts by enhancing biodiversity and securing sustainable livelihoods.

Current status: Planting is ongoing with approx. 262ha planted as of Feb 2025; the remaining area is expected to be completed by 2027, subject to finance. Necessary consents and agreements are in place for project development such as a Community Development Agreement (including agreed carbon revenue sharing) and Kenyan Forestry Service site approval. As required under 2024 Kenyan carbon market regulations, a fresh Environmental & Social Impact Assessment will be submitted for approval in Q2 2025.

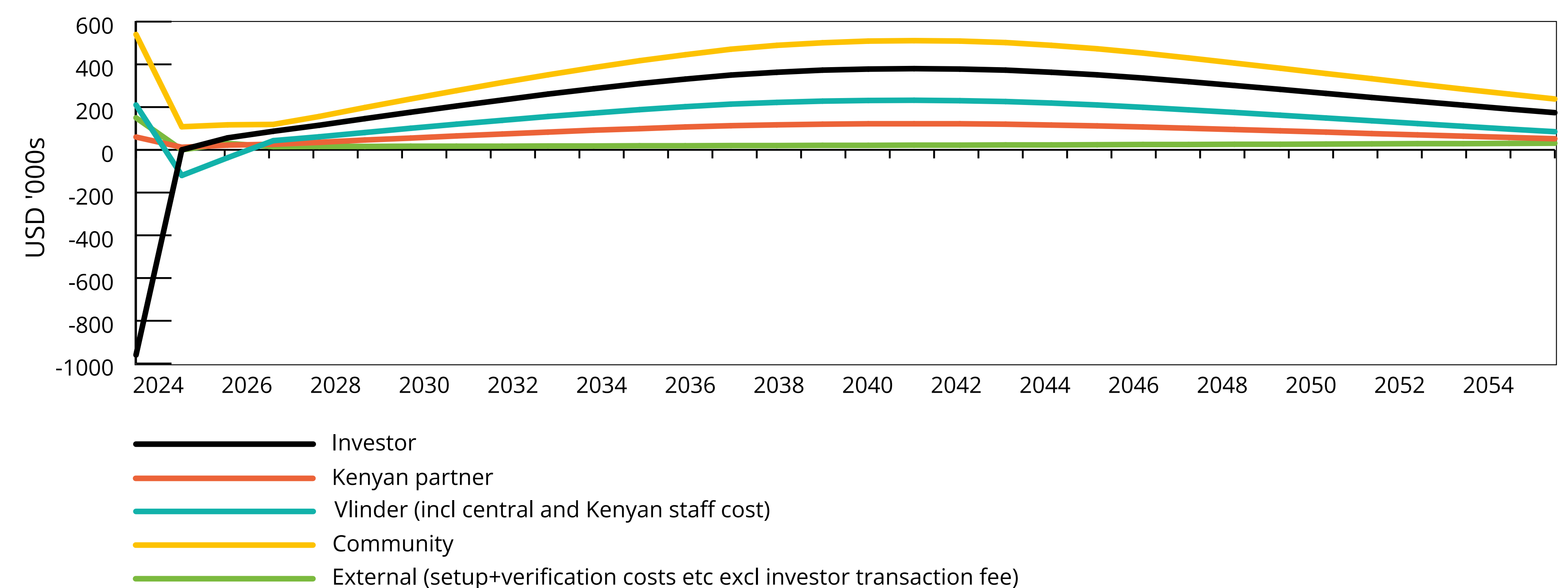
Successes or innovative features:

Vlinder’s community-based business model for mangrove restoration ensures active engagement of local stakeholders in sustainable environmental practices:

- **Achieving high initial planting success rates** - approx. 90% measured two months after initial planting.
- **Generating income and creating employment and upskilling opportunities** for the community with revenue-sharing, training and collaboration.
- **State-of-the-art environmental DNA** (eDNA) to monitor biodiversity and track climate change impacts.

Impact Measurement: The Papariko project’s monitoring and evaluation framework will assess performance against environmental and social impact indicators, updating adaptively as the project evolves, including:

Indicative 500ha/~300ktCO₂ 30 year carbon revenue sharing
(Vlinder carbon removal and price curve estimates)



- Carbon sequestered
- Extent of restored mangrove ecosystem
- Improved wellbeing and livelihood in the community, empowerment of women and young people
- Creation of new habitats for biodiversity, and increase in wildlife

Scalability and replication potential:

Papariko serves as the flagship project for Vlinder as it expands its portfolio of social blue carbon removal projects. These include a 30,000ha mangrove restoration project in Indonesia, and others across the African continent.

Sponsor estimated capital cost (current phase):

US\$4.5M

(For initial 1,500ha area)

Revenue sources:

Voluntary carbon market – Verra VCS, CCB and SDVista standards.



The Accelerator has been highly valuable in advancing our investment readiness journey [and] has been instrumental in developing our community work standards.

- **Lena Mechenkova**, Vlinder