

Strengthening Blue Carbon Ecosystem Conservation and Community Livelihood through **Carbon Credit Schemes - Mikoko Pamoja Project** in Kenya



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Values of Mangroves and Seagrass

- Harvestable goods
 - Poles and fuel wood
- Biodiversity conservation
 - Fisheries
 - Marine mammals
- Shoreline protection
- Climate regulation
 - Carbon sequestration

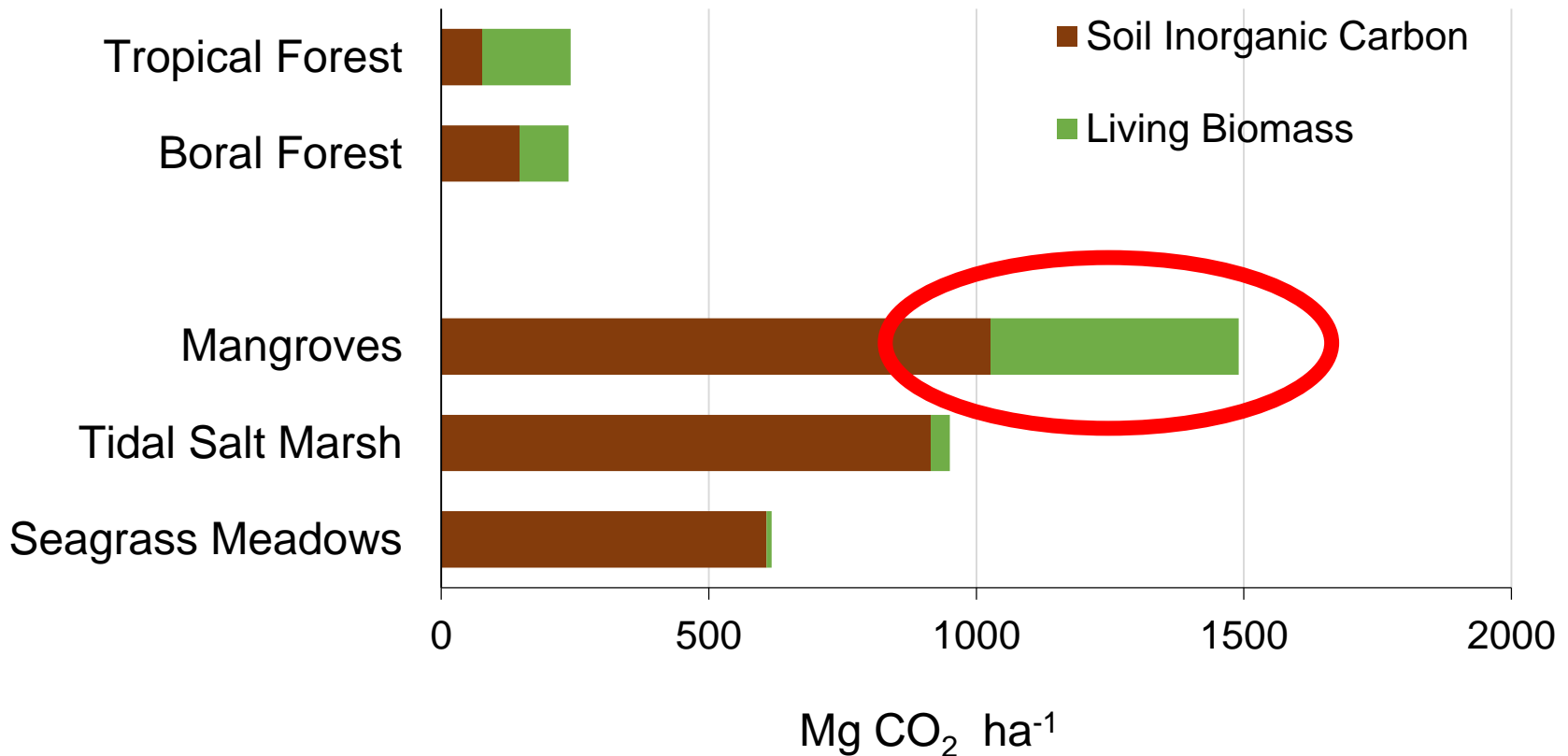
Threats

- Deforestation
- Coastal erosion
- Sedimentation
- Unsustainable fishing patterns



Carbon at risk

- Blue carbon = carbon in coastal wetlands (mangroves, saltmarsh and seagrass)



(Fourqurean *et al.* 2012; Pendleton *et al.* 2012)

Mikoko Pamoja

- “Mangroves Together”
- The first mangrove PES project in the world
- A community-led project in south coast Kenya

Objective: Restoration and protection of mangroves through sale of **carbon credits**

- Verified for 20yrs by **Plan Vivo standards**
- Carbon sold into voluntary market = 2,250 tCO₂ (Income = 12000 USD)



Project location

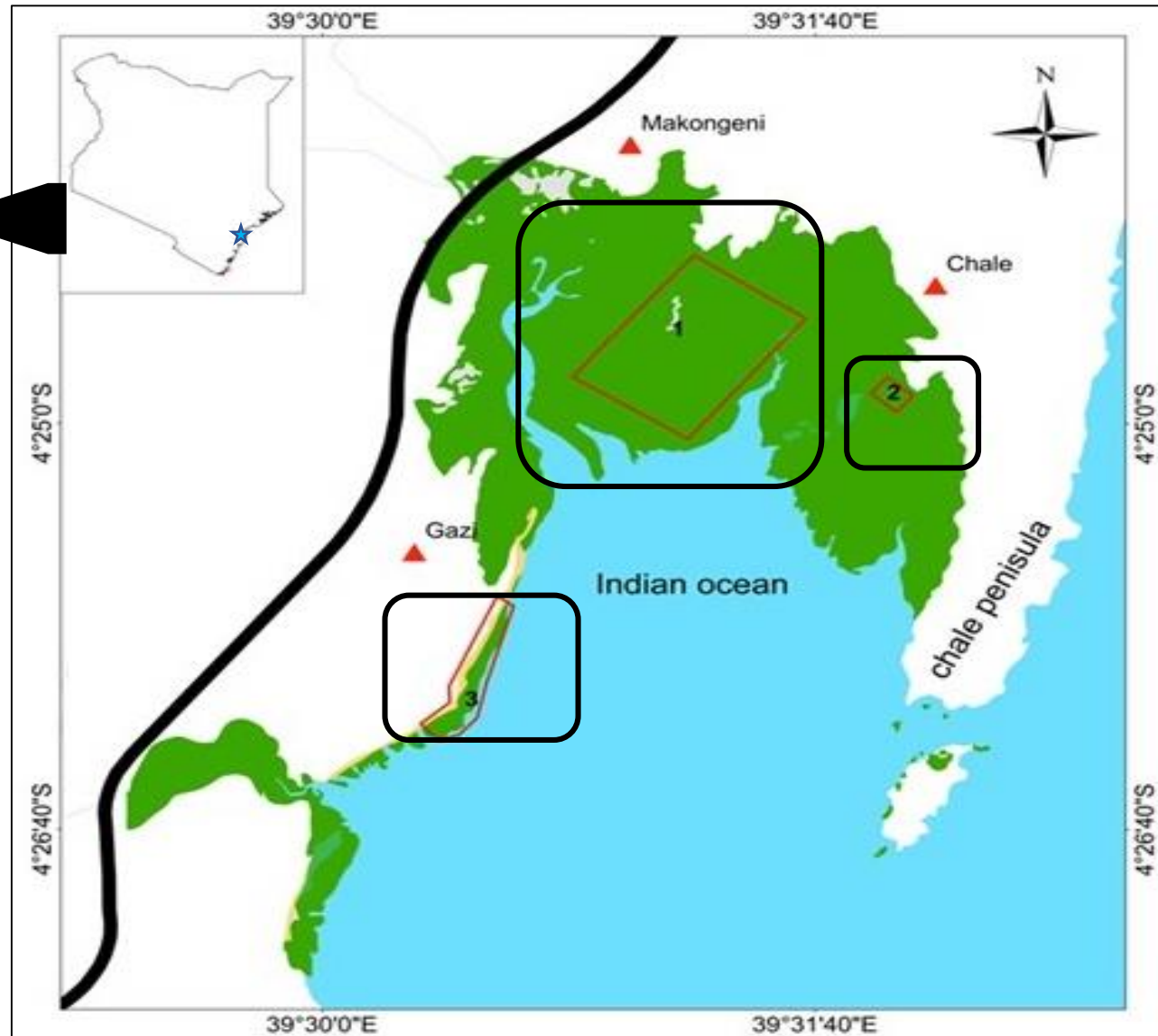


- Gazi Bay, Kenya
- 615 ha of mangrove forest
- 117 ha is protected

1. Avoided deforestation (107 ha)

2. Plantation (10 ha)

3. Planting (0.4 ha/yr)



Methods



Vegetation analysis:

- Ten 10m x 10m permanent plots
 - Tree dbh, height, species
 - Regeneration classes
 - Carbon benefit (IPCC guidelines)



Monitoring

- 1m x 1m quadrat sampling in the plots for:
 - Crabs – burrow count and size class
 - Molluscs- count and measure length



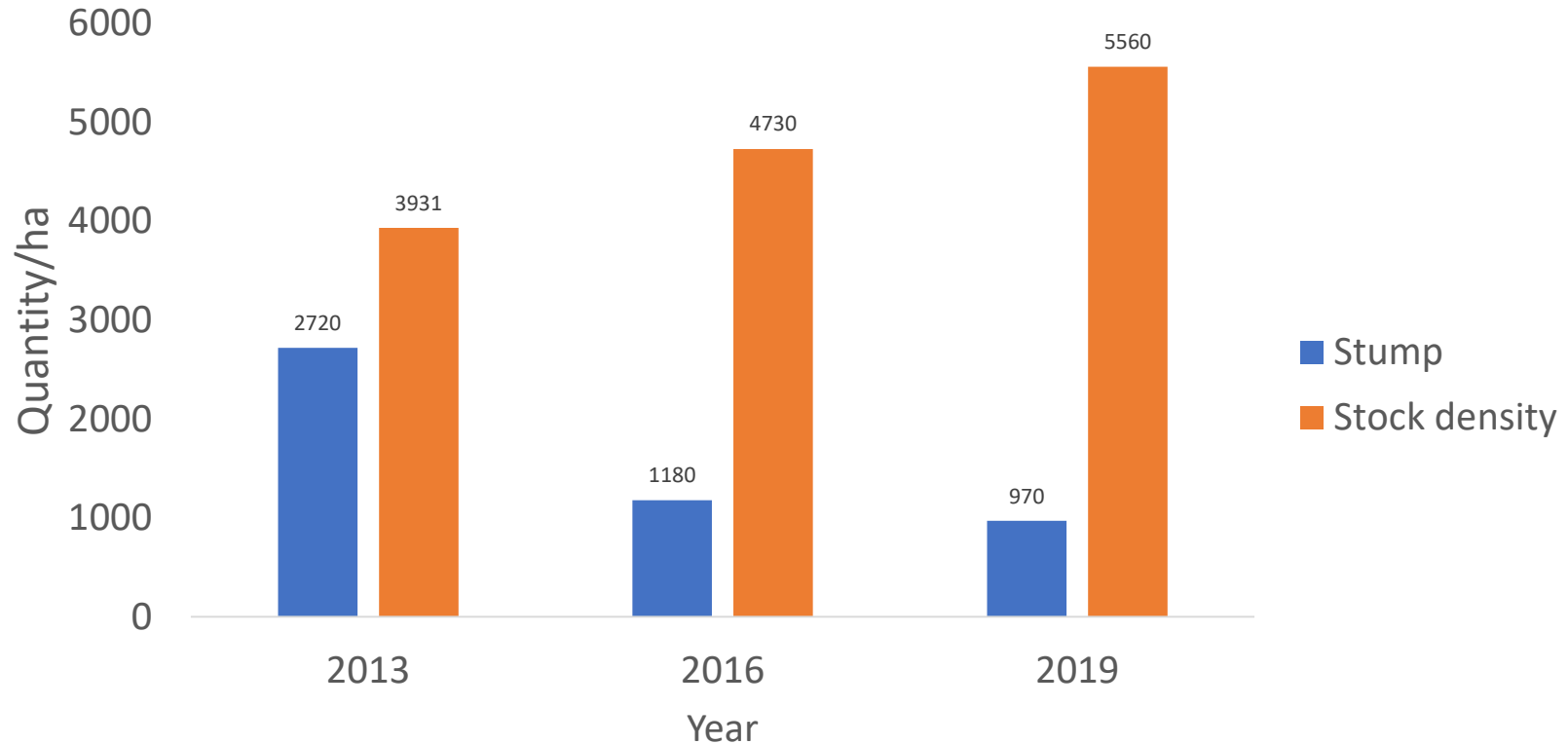
Capacity building

- Impact indicators
 - Water
 - Education
 - Livelihood
- Household surveys, interviews and focus groups



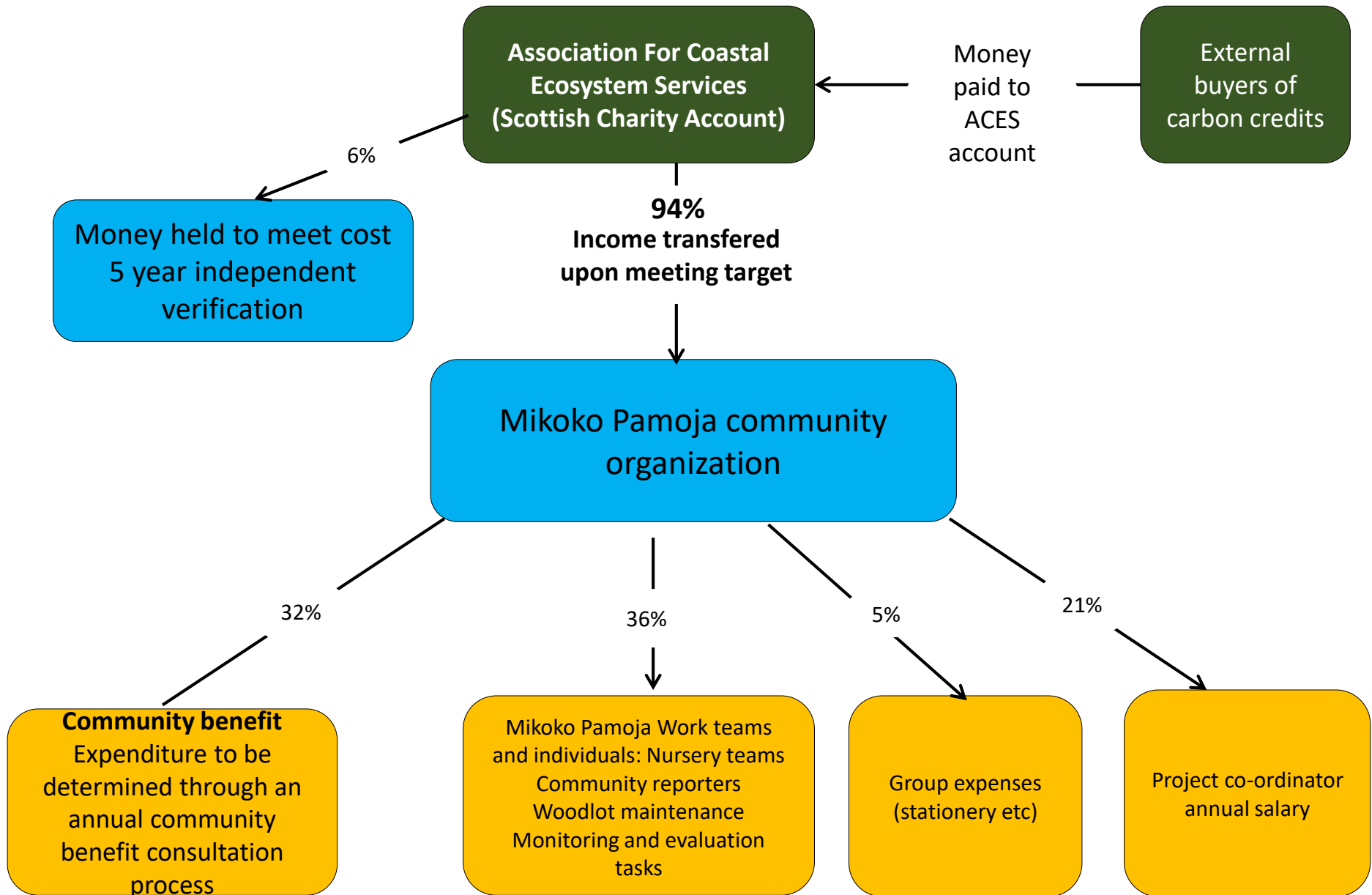
Reduction in Pressure

Mangrove stumps and stock density within the protected area

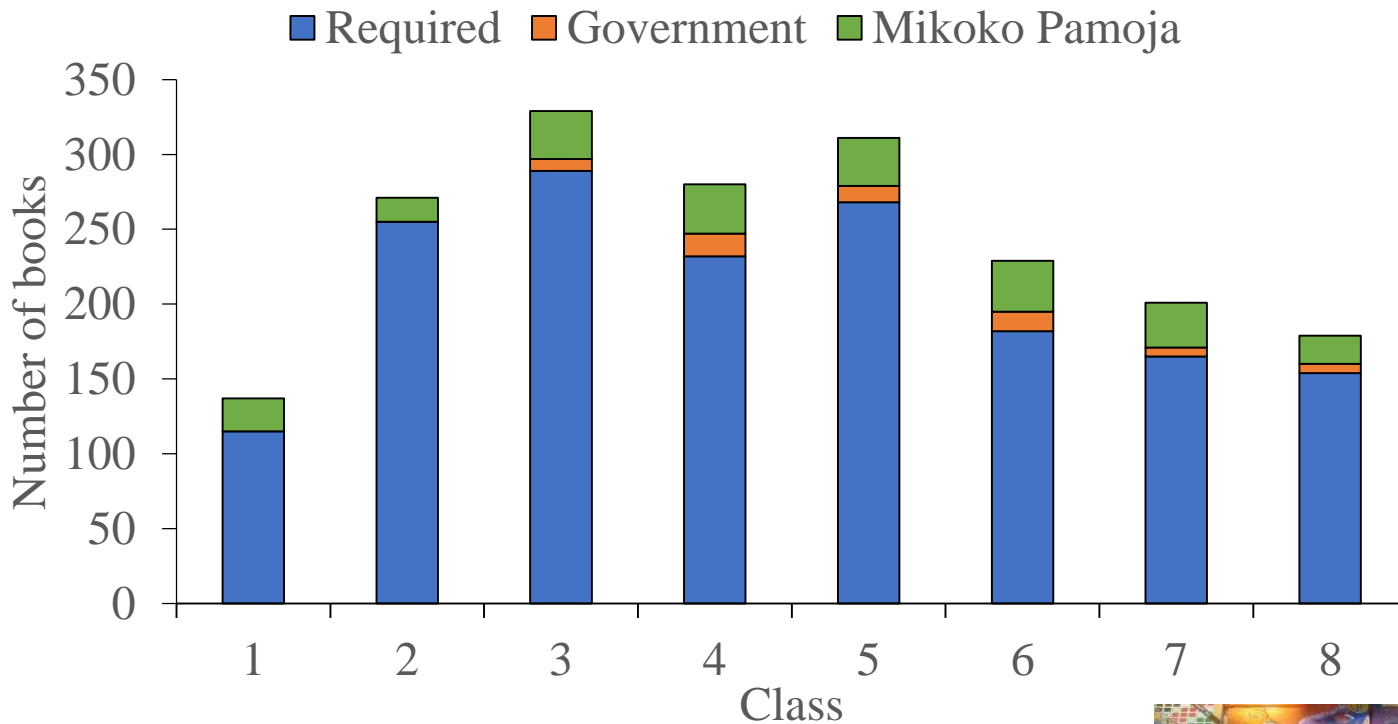


- Protects 117ha
- Replanted over 10,000 mangroves
- Sequestered over 10,000 tCO₂

Mikoko Pamoja: Benefit Sharing



Community benefits: local schools



- Purchase of books
- Ocean literacy promotion through training
- Purchase of desks
- Provision of water



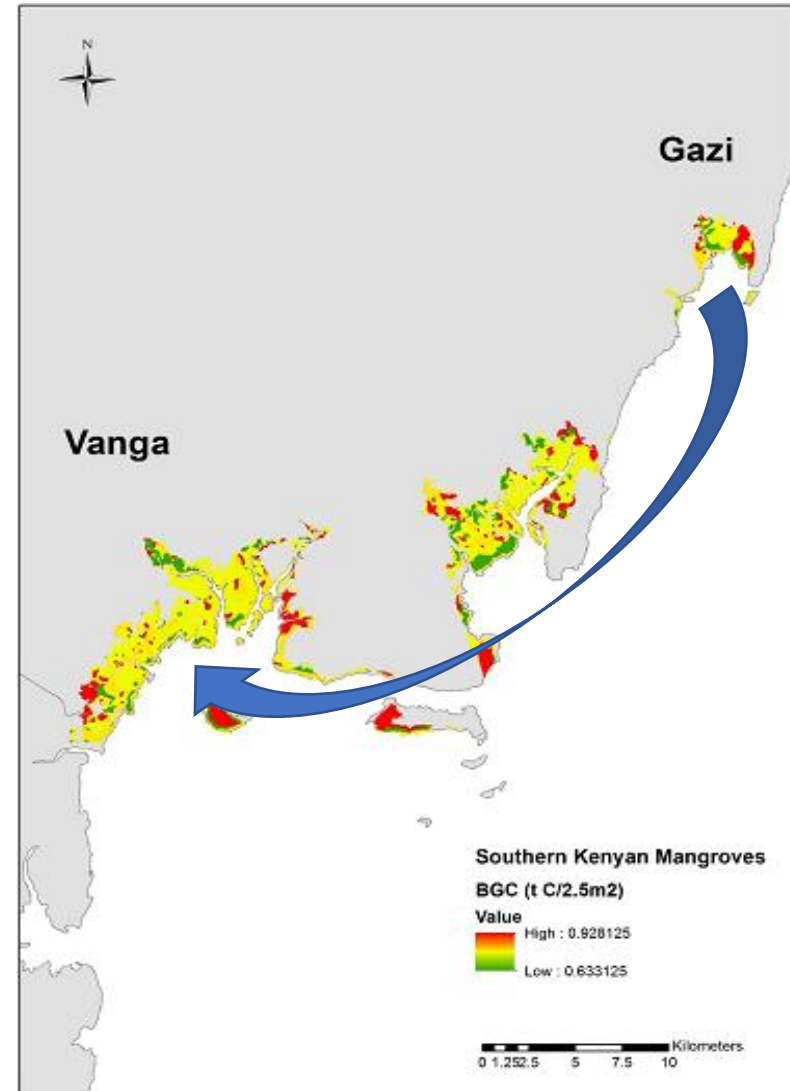
Community benefits

- Purchase of water storage tanks, creation of water points and piping
- Employment of locals (Forest guards, project coordinators)
- Community tourism
- Purchase of furniture to local hospitals



Project Milestone

- Offsetted more than 10,000 t CO₂
- Increased community income
- Equator Prize award winner 2017
- **Replicating** Mikoko Pamoja in other areas
- **Bundling** seagrass ecosystem services



Acknowledgement

Mikoko Pamoja Committee members and the community

Project Coordinators: Rahma Rashid, Josephat Mtwana and Uthman Sadik

Association of Coastal Ecosystem Services (ACES)





Thank you

