



Aga Khan Health Services

Kenya - Tree planting: Aga Khan Hospital-Mombasa's contribution to mangrove forest restoration

In line with the Aga Khan Development Network (AKDN)'s commitment to climate change mitigation and protecting the environment and biodiversity, the Aga Khan Hospital-Mombasa (AKH-Mombasa) (115 beds) began the 'Adopt-a-Site Tree Planting Program' in 2019. This initiative supported a call by the Kenyan National Government in May 2018 to all institutions, private sector and communities for the national tree-planting campaign, "Panda Miti, Boresha Maisha", with a target of 10% tree cover within 5 years.

Using GIS satellite imagery, aerial photography and the involvement of scientists, sites for restoring peri-urban mangroves forests in Mombasa were identified. The species selection was guided by existing indigenous varieties: *Rhizophora mucronata* and *Ceriops tagal* trees.

Mangrove forests are key ecosystems which sustain and secure coastal communities. They provide nutrition through fish and honey, and serve as a source of livelihoods. Mangroves also reduce coastal erosion, and the impacts of storms, and flooding, and play a key role in mitigating climate change. These forests have exceptional carbon-capturing capacity, as they absorb and store up to five times more carbon than terrestrial forests via trunks and branches like other forests but also through their root systems. Furthermore, the risk of fire in mangroves is far less likely than other forests¹².

Working with other stakeholders including, Big Ship team, the Aga Khan Foundation, the Agha Khan Academy, Diamond Trust Bank (DTB), local administration, Jaffery Academy, Mombasa County Government, KFS - Kenya Forest Service and local community groups, the AKH-Mombasa planted mangroves along Tudor creek. This far, a total of around **3.9 ha** has been restored with almost **12,000** trees planted.

Carbon emissions were calculated using the AKDN's carbon management tool.

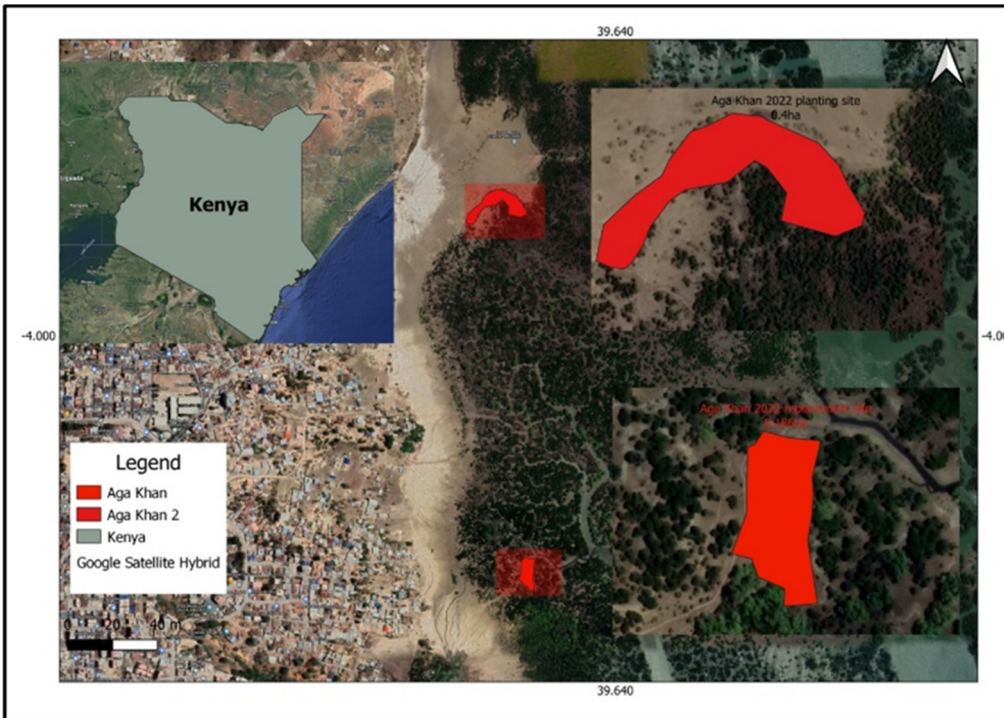
View the video of this project and some of the people behind it:
<https://youtu.be/fghBlbZq2bg?si=gp0gN33Hmv3L19oK>

Table: Summary of tree planting activities by AKH-Mombasa

Date	No. of trees planted	Area restored (ha)	Species distribution
Oct 2019	520 seedlings	0.2368	<i>Bruguiera gymnorrhiza</i> 200, <i>Ceriops tagal</i> 120, <i>Rhizophora mucronata</i> 200
Feb 2020	2270 seedlings	0.772	1310 <i>Rhizophora mucronata</i> , 960 <i>Ceriops tagal</i>
Nov 2021	4138 seedlings	1.300	2500 <i>Rhizophora mucronata</i> , 1638 <i>Ceriops tagal</i>
Nov 2022	5000 seedlings	1.571	3450 <i>Rhizophora mucronata</i> , 1550 <i>Ceriops tagal</i>
Total	11,928	3.8798	<i>Rhizophora mucronata</i> – 7,460 <i>Ceriops tagal</i> – 4,268 <i>Bruguiera gymnorrhiza</i> – 200

¹ <https://doi.org/10.1371/journal.pone.0107706>

²UNEP: <https://www.unep.org/news-and-stories/story/inside-look-beauty-and-benefits-mangroves>



Map showing the peri-urban mangrove area restored by AKH-Mombasa



Tree planting and growth monitoring activities