



# Grow For It

Annual report

## Eden Reforestation Projects

Antsanitia Mangrove 1, Madagascar | Two year update

# Project period

June 2021 – June 2023

# Summary

Eden Reforestation Projects (Eden) is excited to report on two years of progress at the Antsanitia Mangrove 1 planting site. In June 2021, Eden partnered with Grow For It to plant 100,000 trees per year. As of this report:

- Eden has planted 2,365,526 trees. Additional trees were planted at this site, using Eden reserve funds, to accelerate restoration of the mangrove ecosystem.
- Eden employed an average of 117 employees per month at this site.
- Your support has enabled the teams to work 21 working days per employee per month.

# Antsanitia Mangrove 1 quick stats\*

Forest type	Coordinates*	Estimated / target planting density	Plantable area
Mangrove	15°34'48.08"S, 46°26'14.36"E	20,000 trees/hectare	331 hectares*

\*See Appendix B for site description

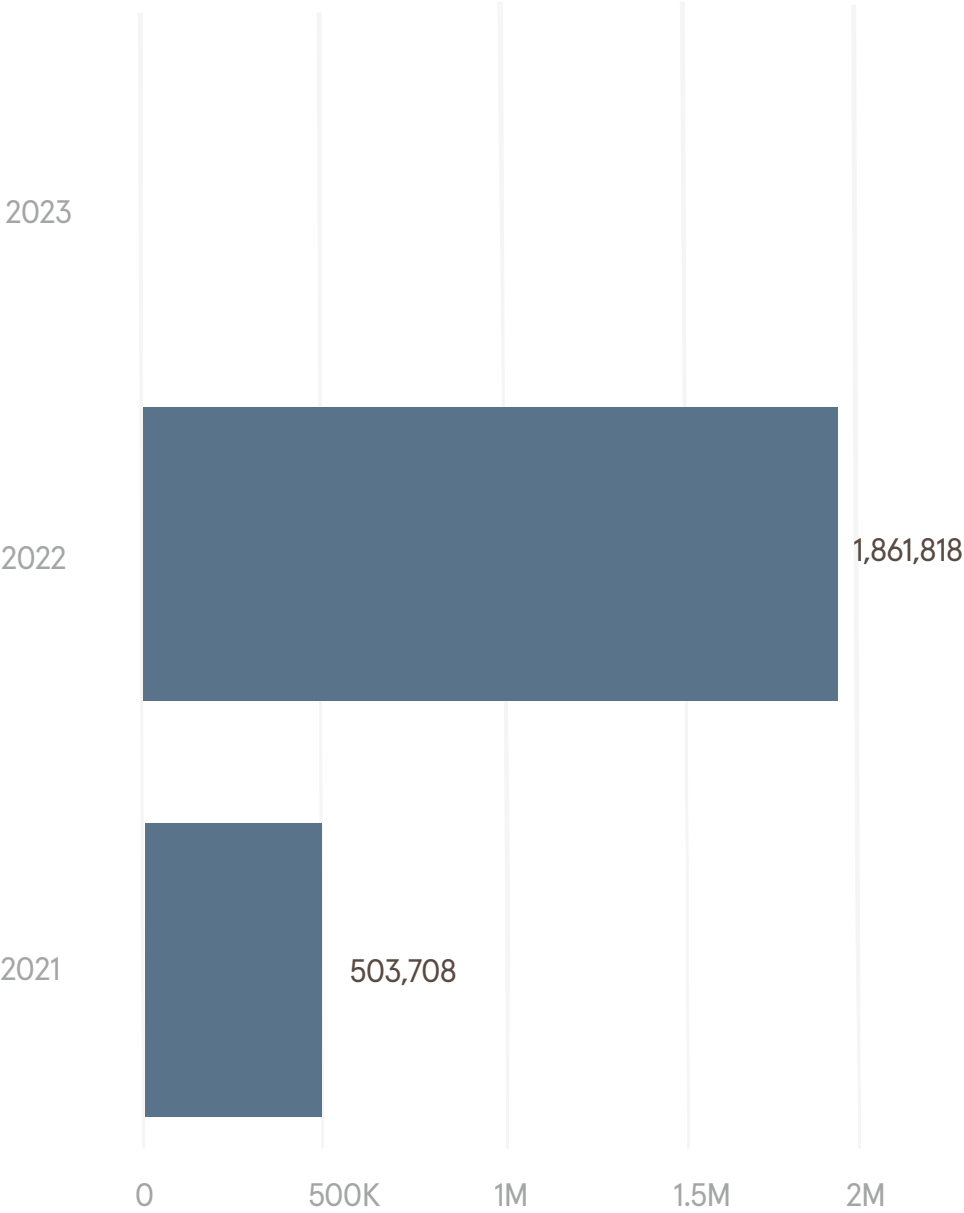
\*Confidential information that may not be disclosed outside of Eden and the intended party and may not be duplicated, used, disclosed, in whole or in part, for any purpose other than to evaluate this report.

\*The size of the polygon has increased from its initial boundaries.



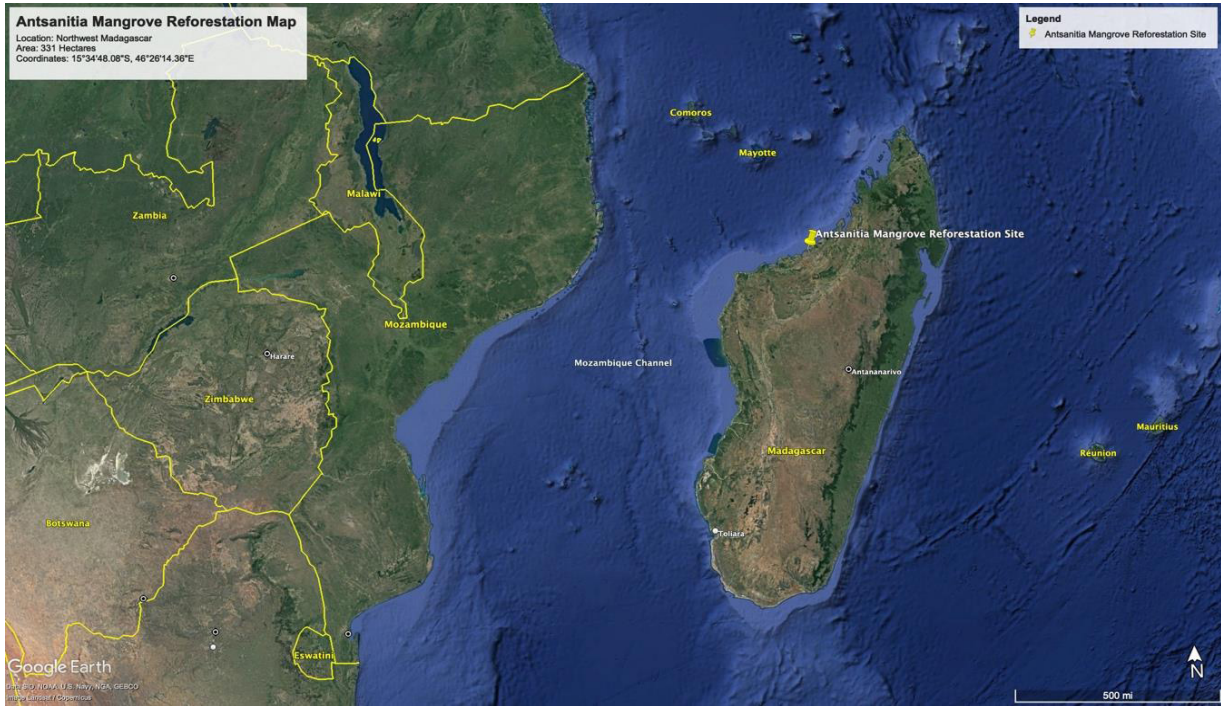
# Trees planted per year

June 2021 - June 2023\*



\*The Eden Madagascar team paused planting from January to June 2023 to conduct site audits and evaluate planting goals for 2024.

# Site maps



# Socioeconomic impacts

With generous support from Grow For It, the Antsanitia Mangrove 1 reforestation site has significantly impacted local livelihoods.

- Projects at this site have created an estimated total of 19,719 working days since May 2021.
- Mangroves provide storm-surge protection for local residents. As trees grow along rivers and coastlines, their roots will anchor into the soil and absorb swells of water during flooding or storm events.
- Reforested areas help reduce soil erosion and provide landslide protection for residents.

With a steady income, the local communities can put savings aside, invest in their households, start micro-enterprises to diversify their income opportunities, and provide healthcare and everyday needs for their families.

Additional significant socioeconomic impacts include improved diets and health due to purchasing nutritious food and increasing education as families can afford to send their children to school.



## What's next?

This phase of restoration at the Antsanitia Mangrove 1 site is complete. Throughout the remainder of this project, Eden teams will actively protect the site and replant any losses to ensure the native Mangrove ecosystem reaches its full potential. Ultimately, many of these trees will mature, producing their own seeds and helping the forest return to a point of natural equilibrium.

Eden is grateful for your support of this project in Madagascar. Your contributions help to reforest not only this site but also some of the 4 million hectares that the Madagascar government has committed to restoring by 2030 as part of the AFR100 initiative.

Thank you for helping achieve large-scale restoration and community development.



# Appendix A. Progress [photos](#)



[April 3, 2023, 7:29 AM GMT+03:00, Madagascar]



[April 3, 2023, 7:31 AM GMT+03:00, Madagascar]



[April 3, 2023, 7:171 AM GMT+03:00, Madagascar]

## Appendix B. Site description

OpenForests [link](#)

The Antsanitia Mangrove 1 site is in the rural municipality of Belobaka, on Madagascar’s northwest coast, adjacent to the Antsanitia fishing town north of the regional capital of Mahajanga. This project includes a planting area of approximately 331 hectares at the mouth of the Morira river. It is part of an important mangrove ecosystem that requires long-term protection and restoration.

The Antsanitia Mangrove 1 site is an important habitat for a variety of endangered plant and animal species. The International Union for Conservation of Nature (IUCN) has listed several of these species as critically endangered due to habitat destruction, including Coqueral’s Sifaka (*Propithecus coquerelli*). Many bird species nest and roost in the mangrove forest. Some of the endemic bird species found here include the endangered Malagasy Sacred Ibis (*Threskiornis bernieri*), and Bernier’s Teal (*Anas bernieri*). Furthermore, the mangroves are an important habitat for the Malagasy Fruit Bat (*Pteropus rufus*), which is listed as vulnerable by the IUCN, due to significant hunting pressure. The estuary is an ideal breeding ground for fish, shrimp, crabs, and other sea creatures. Mangrove forests, with their extensive root systems, play an important role in protecting coastal areas from storms and cyclones, as well as preventing soil erosion.




The majority of Antsanitia residents rely on fishing for a living, while others work at the tourist lodge near the planting site. Mangrove forests are being destroyed in this area to make way for agriculture, charcoal production, and construction materials. The degradation of mangrove forests puts the coastal population at risk of extreme weather. This also jeopardizes other valuable ecosystem services, such as breeding and nursery grounds for fish and shellfish species, threatening local communities’ livelihoods.

Eden facilitates ecosystem restoration and community development in the region by actively reforesting the estuary with mangrove species such as *Rhizophora mucronata*, *Ceriops tagal*, and *Bruguiera gymnorrhiza*. Eden works directly with communities to help mitigate climate change and support them to restore the natural environment.





## Appendix C. Species planted

Species	Description	Photo
<p><i>Rhizophora mucronata</i></p> <p>[Red Mangrove, Loop-root Mangrove, Onko Lahy]</p>	<p>A small to medium-sized tree, up to 10 m tall, with strong apical dominance. Stem up to 40 cm in diameter, straight, with distinctive aerial roots or what is also referred to as knee-roots (breathing roots), with rough reddish, brown to almost black bark and extending, bristled, light grey branches. Creamy white flowers, the fruit is single seeded, up to 70 mm long. The red mangrove is widely distributed in tropical and subtropical Africa, Asia, and America.</p>	 <p>Red mangrove. Source: Gabayi M. 2017 Dec. <i>Rhizophora mucronata</i>   PlantZAfrica. pzasanbiorg. [accessed 2023 May 22]. <a href="https://pza.sanbi.org/rhizophora-mucronata">https://pza.sanbi.org/rhizophora-mucronata</a></p>
<p><i>Ceriops tagal</i></p> <p>[Yellow mangrove, Onko vavy]</p>	<p><i>Ceriops tagal</i> is a mangrove tree species in the family Rhizophoraceae. It is a medium-sized tree growing to a height of 25 metres with a trunk diameter of up to 45 cm. The growth habit is columnar or multi-stemmed and the tree develops large buttress roots. The radiating anchor roots are sometimes exposed and may loop up in places. The bark is silvery-grey to orangish-brown, smooth with occasional pustular lenticels. The flowers are borne singly in the leaf axils; each has a long stalk and a short calyx tube, and parts in fives or sixes.</p>	 <p>Yellow Mangrove. Source: Adkins B. 2023. Rib-fruited Yellow Mangrove. [accessed 2023 May 19]. <a href="https://www.inaturalist.org/observations/146143800">https://www.inaturalist.org/observations/146143800</a></p>
<p><i>Bruguiera gymnorhiza</i></p> <p>[Orange mangrove; Large leaved Mangrove; Tsitolomy]</p>	<p>A wide-spread tree, found in tropical intertidal areas from the eastern coast of Africa, the Indian ocean islands through Asia and beyond. It belongs to the family Rhizophoraceae, and is a medium to tall tree, 30 – 35 m in height, with diameters 15 – 35 cm. This mangrove is normally a single-stemmed tree with short buttresses and characteristic “knee roots,” (horizontal roots that occasionally form above-ground loops, presumably as an aid to gas exchange for the subsurface portions of the roots). Bark is typically pale brown to grey thick, hard, and rough. Propagation is through propagules.</p>	 <p>Orange Mangrove. Source: Casliber. 2011. <i>Bruguiera gymnorhiza</i> habit. [accessed 2023 May 19]. <a href="https://commons.wikimedia.org/wiki/File:Bruguiera_gymnorhiza_habit2.jpg">https://commons.wikimedia.org/wiki/File:Bruguiera_gymnorhiza_habit2.jpg</a></p>

Thank you for your  
continued support.



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