

Project Indonesia - Batanta

Nature-based solutions for shore-line defense

 Batanta, Raja Ampat, West Papua -0°78'84.4"S 130°50'23.2"E

Base Info

Project type: Coral Restoration | Mangroves

Partner: [Pulau Dayan Homestay](#)

Funding: www.v-sun.de



Budget
16,000 USD



Size / area
150m²



Start Date
April 2024



Duration
12 months

Background

Coastal erosion threatens to wash away parts of Konstantinus' land, and the loss of reef and mangrove ecosystems nearby have exacerbated these effects.

Previous mangrove planting attempts failed as increased storms and larger waves washed away the propagules, preventing them from binding the sediment and protecting the shore. And years of dynamite fishing until 2016 have destroyed the reef, with storms continuing to damage the remaining structure.

It's important that we help Konstantinus by attempting to reverse decades of environmental damage, in order to protect this valuable corner of the world, and his livelihood.

Objective & Outcomes

- 4 coral nurseries to replenish the degraded house-reef
- Shore-line barriers to prevent continued loss of valuable land
- Mangrove planting for long-term beach stabilisation
- Repair the conservation school for local kids & homestay guests
- To engage and educate international guests



Implementation

Approach

Our restoration project combines several strategies to enhance ecosystem resilience. We'll create in-situ coral nurseries to grow coral fragments with desirable traits from various genera, aiming to boost reef resilience with increased coral cover and diversity. Additionally, we'll plant mangrove propagules along about 30 meters of coastline in front of the homestay to serve as natural barriers against wave action and prevent sand erosion beneath the huts. To protect these young mangroves as they establish and grow roots, we'll place several breakwater structures in front of them. Our collaboration with Konstantinus (local partner) will be crucial to see this project's success.

Milestones

Month 1: Installation of coral nurseries

Month 1: First breakwater x mangrove planted

Month 6: Up to 6 breakwaters and thousands of mangroves planted

Months 2-12: Nursery maintenance and monitoring

Month 12: 2,400 corals out-planted, repopulating 4 nurseries

Deliverables

- 2,400 corals planted
- 30 x 5 m of mangrove planted
- Decreased erosion
- Trained local partner (Konstantinus)
- Community engagement and education