

Project Indonesia - Kri

Rubble field stabilization and coral restoration

 Kri, Raja Ampat, West Papua -0°34'15.1"S 130°38'05.7"E

Base Info

Project type: Coral Restoration

Partner: www.theseapeople.org

Funding: www.v-sun.de



Budget
25,000 USD



Size / area
1000 m²



Start Date
April 2023



Duration
24 months

Background

With the ongoing impacts of climate change, corals are facing difficulties with growth, reproduction and survival against severe weather events such as bleaching, tropical depressions and sea-level rise. Coral restoration efforts are the logical step to jumpstart a regeneration process to bring back coral cover and diversity.

Additionally, using Mineral Accretion Technology (MAT) aids with survival rates of small coral fragments to boost the speed of growth and build resilience against these climate-induced stressors.

In parallel, the marine environment will benefit from these active coral restoration efforts by increasing coral cover, fish abundance, and higher biodiversity in the entire ecosystem.

Objective & Outcomes

- To stabilize 250 m² of coral rubble fields
- To double the area every 6 months
- To plant 15 – 20,000 coral fragments every year
- To increase the fish population and habitat
- To rescue the natural reef from coral rubble smothering



Implementation

Approach

Coral rubble stabilization is and will be an integral part of coral restoration. This grass root approach by placing wire fence mesh on the ocean ground and powering by the mineral accretion technology (MAT) is a novel approach. Initiating with 250 m², and attaching around 5,000 corals will bring back a reef in a relative short time. The primary source of coral used to populate the degraded areas will be corals of opportunity, attached directly into the mesh and potentially secured by wire as well as cable-ties. A collaboration with local reef guardians is key for maintenance and expansion.

Milestones

Month 1: Installation of 500 m² wire mesh

Month 1: Installation of MAT equipment

Months 1-2: Coral planting

Months 2-6: Monitoring

Months 6-24: Knowledge transfer and training of local stakeholders, expansion to other areas in the region

Deliverables

- Stabilized coral rubble mesh
- Trained local stakeholders
- 20,000+ corals planted
- Habitat creation
- Shoreline protection

