

PROJECT PHILIPPINES



Coralive

CORAL RESTORATION THROUGH
MINERAL ACCRETION

MALAPASCUA

11°19'41.4"N 124°06'42.4"E

PROJECT BASE INFO

Project type: Coral Nursery & Reef Restoration
Partner: Tepanee Beach Resort, PepSea
Donor: Sfaira / Tepanee
Size / Area: 500+ corals per year
Budget: 10,000 US\$
Start date: January 2023
Duration: 1 month

BACKGROUND

With the ongoing effects of climate change, corals are having difficulties to grow, spread and be prepared for severe weather events. Areas that had previously damaged are prone to not recover in less than about 20 years. Coral restoration efforts make sense to jumpstart the regeneration process. The mineral accretion technology helps survival rates of small fragments, boost coral growth speed and aids buildup of stamina against severe weather events. Stretches of coastline around Malapascua have been surveyed and identified by People and the Sea (PepSea) over recent years. Several areas are known for having little coral coverage, low amount of fish biomass, little amount of benthic life as well as invertebrates. These areas would be ideal to initiate a pilot project of mineral accretion coral restoration in cooperation with Tepanee, PepSea and if possible the local government unit.

OBJECTIVES & OUTCOMES

- To place 25 coral frames in front of Tepanee Beach Resort
- To attach 500 coral fragments onto coral structures in degraded reef areas in and beyond Tepanee Beach
- To protect the shoreline
- To increase the fish population and diversity
- Engage and educate local stakeholders and tourists

PROJECT IMPLEMENTATION

APPROACH

Coral restoration will be initiated by creating 20 steel metal reef structures, powered by the mineral accretion technology (MAT). This supports the corals through low voltage direct current electrolysis to grow 500+ coral fragments during and beyond the project timeframe. The primary source of coral used to populate the nursery will be corals of opportunity naturally broken off due to wave action or storms in the surrounding area. They will be fragmented to an average size of 7cm, ideal for attaching to the table structures. Knowledge transfer to the local stakeholders and community members for maintenance, outplanting and further restoration will be key.

MILESTONES

- Weeks 1-2: Installing a 20 mini domes powered by MAT
- Weeks 2-3: Locating and attaching coral fragments to the nursery structures
- Weeks 3-4: Knowledge transfer to local stakeholders

DELIVERABLES

- Fully populated coral structures
- Trained local stakeholders and community members
- Initiate year-round outplanting workshops



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