# **Project Palau**

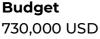
Coral restoration using Mineral Accretion Technology

🚫 Koror, Palau - 7°21'20.05" S 134°26'34.03"E

### **Base Info**

Project type:	Coral Restoration
Partner:	adb.org & palauppr.com
Funding:	<u>Asian Development Bank</u>











Start Date November 2024



## Background

Palau's coral reefs are under threat from climate change, habitat degradation, and predator outbreaks. Together with ADB and Palau Pacific Resort (PPR), we are restoring PPR's house-reef with Mineral Accretion Technology (MAT). Our focus is on increasing coral cover and recolonising Acropora communities and decreasing the reef's background mortality through predator management - all in order to safeguard it against current and future threats.

The project also builds local capacity in Palau for reef conservation, as well as contributing to science through new research on MAT's carbon sequestration potential. The next steps include coral transplantation and research expansion creating a scalable conservation model to protect Palau's reefs for future generations.

## **Objectives & Outcomes**

- Create a MAT coral nursery with 108 structures
- Mitigate a suspected Crown-of-thorns (COTs) outbreak
- Develop and operate long-term restoration monitoring •
- Carbon sequestration research paper
- Capacity build for 3-year handover
- Replicate applicable interventions in Palau

## Coralive

## Implementation

#### Approach

Asexual coral propagation using MAT is the chosen method for increasing reef resilience at PPR. Three separate circles are deployed to make up the 600 m<sup>2</sup> nursery area, made up of an inner circle of 12 tables and outer layer of 24 pods, in each. Carefully selected corals from locally available genera (mainly Poritids), as well as relocated Acropora species from healthier donor sites will be planted on these structures to grow, and then will be out-planted. Entire pods will be out-planted for instant reef relief, whereas hard substrates will have individual colonies out-planted. An estimated total of 3,500 corals will be out-planted yearly. Propagation methods will be supplemented by regular predator control of Crown-ofthorns starfish

### Milestones

Month 1: Site assessment & procurement

Months 2-3: Baseline monitoring

Month 3: Installation of MAT structures

Months 4: Power supply & coral relocations

Months 5: Nursery population & monitoring

Months 36: Project handover (capacity build, research, out-planting up until this time)

#### Deliverables

- Coral cover increased by 5%
- Fully trained local staff
- 10,000+ corals planted
- Research paper
- Comprehensive monitoring protocol