

# What We do -Coral Restoration Project

Coral reefs count among the world's most precious resources. Our mission is to build more cultivated corals and prevent further declines in coral reefs in Timor Leste. Surveys shows that over 50% of the world's coral reef have died in the last 30 years. Some suggest that by 2070, coral reef could be gone altogether. Predictions by the intergovernmental Panel on Climate Change (IPCC) suggest that with global warming of 1.5 C coral reef would decline by 70-90% and be virtually lost with 2C warming.

In Timor Leste, it happens during rainy season with big waves and flooding crushing all around Timor's SEA and damage the corals reef. It is important to continue restoration and farm of the corals. Marenum has started the farmed corals almost a year ago. It has been showing the growth progression overtime in few phases.

Marenum/ AL Eka Fishworld's cultured corals are located in Atabae. It is about 50 km from Dili (Capital of East Timor) or 1-1.5 hour drive from Dili with good road.

#### Phase 1 (First cultivation)

### Type of Coral - Acropora (Hard Coral)

Acropora with Arborescent (tree-like) branches that form successively at about the same length & angle. In practice a term applied to species that form indeterminate colony form (unruly thickets & tangles) that grow to fill available space rather than the more compacts cushions/clumps of corymbose (coral base). Typically they are slightly larger and a different colour (purple, green, brownish, red and many more!). They are the most diverse genus of corals, containing well over 100 species!

It started first 10 tables on June 2022. It is about 24-30 corals per table and 3-4 cm fragments each coral to plant. We farm the corals about 4-6 meter depth (shallow water)



Method of cultivation:

We cut small pieces from the branch (3-4 cm) of each fragment then plant on the coral plate (made of cement and sand with 3-4 diameter and 2mm thickness . It look like a coin form) or we use the bars steel (1mm thickness of the bar) as base tables

Then we tie each of corals with a table tie to secure it.





#### Phase 2 (Growing stage)

After 1-2 months monitory, Acropora corals grows happily about 6-7 cm height with more branches colonies where small sub-branches (branchelets) radiate from main branches.

Acropora colonies range from "staghorn" in shape becoming nearly 6ft (2m) tall, to many smaller bushy forms and might grow up to 6 ft

(2m) across that are attached to the substrate of coral tables.







## Sustainable Aquaculture



We continue to cultivate more corals by building more coral tables around Atabae. We have 30 tables so far which divide by 3 groups/phases. Each group contain of 10 tables. We hope to build 1000 tables by end of 2023 around Atabae ocean to save environments and sustain corals restoration.

Branching corals provide a three-dimensional habitat and good shelter for fish and invertebrates.







#### Whats next?

This coral restoration project, we have been working closely with the local fisherman and communities to help evaluating the corals population and find the location with less corals habitat. We recruited 4 fisherman and we would hire more in order to create job opportunity in local communities.

We hope continued support from locally and all across the globes to make this projects continues in restoring the corals for sustainability marine life presently and in future. We target 500 tables by end of the 2023 with the budget of \$8,000 USD. Together we can!

PS: We will name the table for every donors as appreciation and we will send the quarterly update via email on your coral growth progressions.





Sustainable Aquaculture

