



MARINE INNOVATION HUB

DOMINICAN REPUBLIC

INNOVATION & TECHNOLOGY

The loss of coral reefs around the world requires new approaches, tools, and technologies to support large-scale coral conservation and restoration. While various innovative solutions have been developed at a smaller scale, the transition to field application is currently being hindered by regulatory constraints and a lack of infrastructure for testing.

To face these challenges, Fundación Grupo Puntacana (FGPC), Fundación Dominicana de Estudios Marinos (FUNDEMAR) and The Nature Conservancy (TNC), will build a hub for marine innovation in the DR that will support coral conservation and restoration efforts in the Punta Cana and Bayahibe regions that can serve as the go-to site to test tools that can help scale coral conservation and restoration efforts so that they can later on be replicated at a local or regional level.

The Hub facilities at FGPC and FUNDEMAR that will include in-water and onshore coral nurseries, and laboratory spaces for experimentation.

PROJECT GOALS

- Once completed and operating at full capacity, the new land-based nursery at FGPC will have the capacity to produce 23,000 coral fragments per year, while the new facilities at FUNDEMAR will be able to generate 2-3 million coral larvae per year.



Coral Fragments



Coral Embryos

- Test technology and molecular biology tools aimed at supporting large-scale coral conservation and restoration developed by five groups (four supported by this grant, and one supported by another Oceankind grant), which will include cameras and hydrophones to monitor reefs, Aerial Unmanned Vehicles (AUVs) to deploy larvae, automation tools to reduce the per-unit cost of growing and planting coral, omics approaches to identify resilient corals, and probiotics to increase resistance to Stony Coral Tissue Loss Disease (SCTLD).
- Grow the Hub's partnerships in the region and around the world by hosting a capacity training workshop with practitioners.

