



OUTLINE FOR PROGRESS REPORT (May 2021 – April 2023) AND FUTURE WORKPLAN AND BUDGET (May 2023- April 2025)

Progress of IOC Regional Training and Research Center on Reef Management and Restoration

The University of the Philippines Marine Science Institute as the Regional Training and Research Center Reef Management and Restoration will conduct a training workshop on coral larval reseedling from 3 to 13 April 2023. The training will be participated by eight participants from Thailand, Indonesia, Malaysia, and Vietnam. The participants will learn an alternative tool for coral restoration that can harness millions of coral larvae for the purpose of coral restoration. Details of the training are indicated below. This training would also potentially establish a regional network of researchers that monitor the patterns of coral reproduction at a regional level. The network of researchers from different countries would be able to identify coral reefs that are potentially source of coral larvae, which would be useful in coral restoration initiatives and would be an important information in examining connectivity of coral populations at a regional scale.

The University of the Philippines Marine Science Institute has a project on coral larval reseedling supported by the Australian Centre for International Agricultural Research until 2025, and will be able to continue training the IOC WESTPAC member states on coral larval reseedling techniques. In 2024 and 2025, the participants to the 2023 training workshop on coral larval reseedling should be able to establish their coral larval reseedling activities in their respective countries. This activity involves identifying timing of coral spawning, collection and fertilization of gametes, and reseedling of coral larvae. Since this would be the first time the other member states establish their own coral larval reseedling efforts, an online training can be conducted to allow the member states review the procedures in coral larval reseedling.

Provisional schedule

3 April 2023	Arrival at Ninoy Aquino International Airport, Philippines; and travel to Bolinao Marine Laboratory in Pangasinan
4 April 2023	Lecture on coral biology and ecology, including reef resilience and connectivity, and coral larval reseedling methods Upscaling coral restoration using larval enhancement method (Prof. Peter Harrison); Genomics approaches in coral restoration (Dr. Cecilia Conaco); Governance of coral reef restoration (Dr. Vanessa Baria-Rodriquez);

	<p>Reef management: preventive approach in restoration (Dr. Michael Atrigenio) [Bolinao Marine Laboratory]</p> <p>Presentations of existing coral reef restoration initiatives by participants (participants)</p> <p>Rapid sampling to assess the reproductive status of corals at the Bolinao Marine Laboratory hatchery</p>
5 April 2023	Rapid sampling to assess the reproductive status of corals; preparation of floating cages for coral rearing and culture; night assessment for coral spawning; and spawn collection [HINP]
6 April 2023	Full moon; night assessment for coral spawning; and coral larval rearing at sea [HINP]
7 April 2023	Coral larval rearing at sea; and maintenance of floating cages [HINP]
8 April 2023	Coral larval rearing at sea; maintenance of floating cages; and coral larval reseeded [HINP]
9 April 2023	Coral larval rearing at sea; maintenance of floating cages; and coral larval reseeded [HINP]
10 April 2023	Coral larval rearing at sea; maintenance of floating cages; and coral larval reseeded [HINP]
11 April 2023	Feedback workshop and planning for regional assessment of coral reproduction and reef connectivity studies [BML]
12 April 2023	No dive; preparation for travel
13 April 2023	Travel to airport

Plans for 2023

- Coral materials for restoration (spawning timing, spawn slick)

- Larval reseeded activities

Plans for 2024

- Coral materials for restoration (spawning timing, spawn slick)

- Larval reseeded activities

- Monitoring

- Climate resilient species/populations; selective breeding

Plans for 2025

- Coral materials for restoration (spawning timing, spawn slick)

- Larval reseeded activities

- Climate resilient species/populations; selective breeding

- Monitoring