

## MMSU's Direct Efforts in Preserving Aquatic Ecosystems and Biodiversity

Mariano Marcos State University (MMSU) is dedicated to maintaining and enhancing aquatic ecosystems and their biodiversity through targeted research and active engagement with industries. MMSU conducts extensive research on mesophotic reefs, exploring their potential as refugia for reef communities facing climate-induced thermal stress and other disturbances. This research aims to understand the resilience and recovery mechanisms of these deeper coral ecosystems, providing critical data for the conservation of both shallow and deep reefs. Additionally, MMSU addresses the global challenge of Harmful Algal Blooms (HABs) by operating the HABs Watch team, which performs bi-monthly field and laboratory monitoring at key marine sites in Ilocos Norte. This initiative helps mitigate the adverse effects of HABs on marine life, fisheries, and public health by enabling early detection and management strategies. Through collaborations with local industries and participation in policy discussions, MMSU ensures that its research directly supports the preservation of threatened ecosystems and promotes sustainable practices. These initiatives collectively demonstrate MMSU's commitment to safeguarding aquatic biodiversity and fostering resilient marine environments.

## **Evidences:**

Ecological Factors Affecting Mesophotic Coral Reef Ecosystems Potential Refuge From Disturbances Semi-Annual Progress Report November 2023 to July 2024 <a href="https://www.mmsu.edu.ph/resources/1LOyzJsPdw5T9FGJjYb5YC7mT7shUEYxW/view?usp=drive\_link">https://www.mmsu.edu.ph/resources/1LOyzJsPdw5T9FGJjYb5YC7mT7shUEYxW/view?usp=drive\_link</a>

Real time monitoring and early warning for HABs using high throughput imaging and molecular methods Project Report <a href="https://www.mmsu.edu.ph/resources/1sD6gcMr1zM1168TzjyBRsZa-f\_aNTN7O/view?us">https://www.mmsu.edu.ph/resources/1sD6gcMr1zM1168TzjyBRsZa-f\_aNTN7O/view?us</a> p=drive link