14.5.3. Building Local Participation in Aquatic Stewardship

Introduction

Community involvement is a practical component of aquatic conservation. Restoration activities, conservation education, and resource monitoring depend on people who can understand the issues, contribute observations, and participate meaningfully in decisions affecting the waters they use.

During Academic Year 2024–2025, Davao Oriental State University (DOrSU) supported participation through reef-building workshops with local partners in Pujada Bay, a student-led conservation forum, and a protected-area management meeting where artificial reef monitoring results were discussed. Participatory catch-trend research provides a complementary example of how fishers can contribute data to resource management.

The accounts focus on documented learning opportunities, dialogue, and research participation. They do not assume that all participants subsequently carried out independent reef deployments, that the student forum achieved measurable behavioral change, or that the same fishers participated in each of the activities described.

Giving Local Partners the Skills to Build Reefs

Restoration becomes more durable when local partners can carry the work forward. In Pujada Bay, rrreefs worked with DOrSU, the Coastal Conservation and Education Foundation (CCEF), and the freediving group Sawom on reef-building skills. Training began in August 2024, combining reef ecology with practical workshops.

CCEF also documented an Artificial Clay Reef Building Workshop in Pujada Bay on October 19, 2024. The activities connected scientific knowledge with hands-on preparation, strengthening the local capacity needed to assemble, assess, and maintain restoration structures.

The training also addressed a practical challenge in restoration: local continuity after visiting specialists leave. Familiarity with reef ecology, construction procedures, and assessment can help partner organisations participate more confidently in future work. The documented workshops establish that learning opportunities were provided. They do not, by themselves, demonstrate independent certification, deployment of additional reefs, or long-term ecological success (rrreefs, 2025; Coastal Conservation and Education Foundation, 2025).



Figure 1. Participants in the Pujada Bay Artificial Clay Reef Building Workshop documented for October 19, 2024; image reproduced in the rrreefs report and activity corroborated by CCEF's annual report. Photo credit: rrreefs / DOrSU project partners.

References

rrreefs. (2025, June). Reef impact report: February 2024–February 2025, Pujada Bay, Philippines. Retrieved from https://www.rrreefs.com/wp-content/uploads/2025/06/2025_PUJ_impact_report.pdf

Coastal Conservation and Education Foundation. (2025). 2024 annual report (p. 33). Retrieved from https://www.coast.ph/wp-content/uploads/2025/03/CCEF_Annual_Report_2024_web.pdf

Student Leaders Bring Coastal Issues Into Campus Learning

Student leaders can extend environmental learning across campus organisations. DOrSU's Bachelor of Science in Environmental Science student organisation, Green Pulse, led the second 'REthinking Impact' information, education, and communication forum at the Graduate School Library on November 6, 2024.

Partners included the Office of Student Affairs, RIC-XI, the Biology Teachers' Association of the Philippines Davao Chapter, rrreefs, the M2P2 Program, and the Eastern Mindanao Biodiversity Corridor Research Program. Sessions on responsible plastic use and artificial clay reefs connected student leadership with practical coastal conservation concerns.

A student-led forum creates an opportunity for conservation ideas to move through campus organisations and peer networks. Bringing different partners into the discussion can connect responsible consumption with habitat restoration and local biodiversity concerns. The event's immediate contribution is participation in learning and dialogue. Changes in student behaviour or continuing outreach should be assessed through subsequent activities and documented follow-up (Ang Sidlakan Publication, 2024).

References

Ang Sidlakan Publication. REthinking Impact: IEC on Biodiversity Conservation and Regenerative Development Year 2 Highlights. Official Facebook page of the DOrSU student publication (facebook.com/AngSidlakanPublication), November 2024. Retrieved from https://www.facebook.com/AngSidlakanPublication/posts/1126676452800649

Taking Reef Evidence to the People Who Manage the Bay

At DOrSU's Boardroom on July 23, 2025, the Pujada Bay Protected Landscape and Seascape Special Protected Area Management Board received reef-monitoring findings from rrreefs co-founder Hanna Kuhfuss. The discussion linked ecological results with proposed expansion sites and community engagement.

Participants also visited the university's 3D Clay Bricks Fabrication Facility and RIC-XI. This exchange gave protected-area managers a direct view of the science, production capacity, and partnerships behind the restoration effort.

Presenting observations in a management forum makes them available to the agencies and stakeholders responsible for a protected seascape. Discussion of community engagement is equally relevant because restoration takes place in waters used and valued by local residents. The meeting therefore strengthened the connection between research and governance, while the proposed expansion sites should continue to be described as proposals until deployment is documented (DOrSU PIO, 2025; Oblianda, 2025).



Figure 2. Hanna Kuhfuss presents reef-monitoring findings at the PBPLS Special PAMB meeting, July 23, 2025. Photo credit: DOrSU–Public Information Office.

References

Davao Oriental State University, Public Information Office. (2025, July 23). Marine Life Booms in Pujada Bay After Artificial Reef Installation. Retrieved from https://dorsu.edu.ph/marine-life-booms-in-pujada-bay-after-artificial-reef-installation/

Oblianda, A. S. (2025, July 29). The promise of eco-engineered reefs in coral restorations. Philippine Information Agency. Retrieved from https://pia.gov.ph/features/the-promise-of-eco-engineered-reefs-in-coral-restorations/

Fishers as Contributors to Conservation Evidence

The 2025 catch-trend study used participatory assessment to examine small-scale fishing near marine protected areas. Its relevance to stewardship is the role it gives fishers in generating information about the resources they use. Local experience and systematic recording can contribute together to conservation discussions.

This provides research context for participation alongside the university's training and educational activities. It does not establish that the same fishers attended the reef workshops or student forum. Those activities have their own sources, while the study demonstrates a distinct way for resource users to contribute to the evidence available for fisheries management (Manuel & Macusi, 2025).

References

Manuel, R. P., & Macusi, E. D. (2025). Catch trends of small-scale fishers near marine protected areas in southeastern Philippines. Marine and Fishery Sciences (MAFIS), 38(3), 389–403. https://doi.org/10.47193/mafis.3832025010706

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Conclusion

The activities reviewed for Indicator 14.5.3 demonstrate several routes through which DOrSU encourages participation in aquatic stewardship. Practical reef-building workshops provided opportunities for local partners to acquire relevant skills, the Green Pulse student forum opened conservation topics to campus audiences, and the PBPLS Special PAMB meeting connected monitoring evidence with managers and community-related discussions.

Participatory catch assessment adds an important research perspective by recognizing fishers as contributors to fisheries evidence. These examples involve different people and activities, but together they show the value of combining technical learning, student engagement, public discussion, and locally informed research.

The available sources verify these opportunities, not long-term behavior change or independent conservation results. Continued engagement, documented follow-up, and meaningful inclusion of resource users will be necessary for assessing whether these participation pathways produce sustained stewardship benefits.