

Progress Report on SDG 14: Life Below Water

The City College of Cagayan de Oro (CCCDO) addressed Sustainable Development Goal 14: Life Below Water in 2024 through a strategic combination of direct marine conservation action and research-informed community resilience. The College actively engaged its faculty, staff, and students in initiatives like the Mangrove Planting Activity and local Coastal Cleanups, directly contributing to coastal habitat restoration and marine litter reduction in the Cagayan de Oro area.

Beyond direct action, CCCDO presented research on Community-Driven Disaster Resilience, which identified critical local vulnerabilities related to flooding and waste management. By bridging academic insight with real-world application, the College is developing educational pathways to empower coastal communities like Barangay Agusan to better protect marine ecosystems from land-based pollution and climate change impacts, thereby ensuring a sustainable approach to life below water.

Table 1: Direct Marine Conservation Initiatives

CCCDO mobilized its institutional community to participate in hands-on activities aimed at restoring coastal habitats and reducing marine pollution.

INITIATIVE	DATE/YEAR	FOCUS	KEY IMPACT
Mangrove Planting Activity	Sep 19, 2024	Coastal Habitat Restoration	Protection of local marine biodiversity, climate change mitigation
Coastal Cleanup (Gusa Coastal Road)	2024	Marine Litter Reduction	Mobilized students/employees; raised awareness about shoreline protection



Baybayani 3.0	Apr 23, 2025 (Ongoing)	Debris Removal/Awareness	Continued stewardship for ocean health
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The institution reaffirmed its commitment to environmental sustainability by actively participating in the Mangrove Planting Activity on September 19, 2024, at the Mangrove Reserve in Bonbon, Cagayan de Oro City. This initiative, which involved selected personnel, faculty, and non-teaching staff, directly contributes to coastal habitat restoration. Mangrove ecosystems are vital as they serve as natural barriers against storm surges, nurseries for marine life, and significant carbon sinks, thus supporting marine biodiversity and mitigating the impacts of climate change.

Complementing the restoration efforts, the College initiated and participated in Coastal Cleanup activities, including one at the Gusa Coastal Road in 2024. These events mobilized the college community to remove marine debris, directly tackling the issue of plastic pollution that severely threatens life below water. This commitment extended into the subsequent year with the Baybayani 3.0: Coastal Clean-Up Initiative on Earth Day 2025, which united students, faculty, and community partners in cleaning beaches and coastal waters, emphasizing collective responsibility for ocean health.

Table 2: Research on Coastal Community Vulnerabilities

CCCDO leveraged its academic resources to conduct research that informs disaster preparedness and addresses threats to marine environments caused by land-based activities.

INITIATIVE COMPONENT	DETAIL
Research Study	"Semiotic and Ethnographic Pictorial Analyses on Mapping Community Vulnerabilities..."
Conference	11th International Conference on Teacher Education (ICTED)
Target Community	Barangay Agusan, Cagayan de Oro City
Key Findings (SDG 14 Link)	Revealed community vulnerabilities related to flooding and waste management

The College presented a major research study, "Semiotic and Ethnographic Pictorial Analyses on Mapping Community Vulnerabilities: Educational Pathways for Local Disaster Preparedness," at the 11th International Conference on Teacher Education (ICTED). While framed around disaster resilience, the study utilized a participatory approach with Barangay Agusan, a local community in Cagayan de Oro, and used visual data collection (photovoice) and analyses to reveal community vulnerabilities. The findings identified threats related to flooding and waste management, two issues directly linked to coastal and marine pollution.

This research highlights the academic institution's role in addressing real-world challenges by integrating community service with academic programs. By identifying community-centered vulnerabilities, the study provides a foundation for developing targeted disaster preparedness programs,



emphasizing modules in emergency response and first aid, which are vital for coastal communities facing rising sea levels and extreme weather events. Dr. Mahinay emphasized that the goal is to "empower the community" with the skills needed to build resilience from within, creating a model that bridges academic insights with real-world applications to protect the coastal environment.

The City College of Cagayan de Oro's 2024 performance on SDG 14 demonstrates a balanced and proactive approach to Life Below Water. The College's engagement in Mangrove Planting and Coastal Cleanups provides direct, tangible benefits through habitat restoration and marine debris removal, showing a strong commitment to environmental stewardship.

Furthermore, the research presented on Community Vulnerabilities effectively links academic rigor with the practical needs of coastal populations. By uncovering and acting upon local issues like waste management and flooding, CCCDO is strategically working to reduce land-based pollution that harms marine ecosystems, ensuring a sustainable and resilient future for Cagayan de Oro's coastal and marine resources. The public documentation of all these initiatives on the CCCDO website reinforces the College's dedication to transparency and its active role in achieving the UN Sustainable Development Goals.