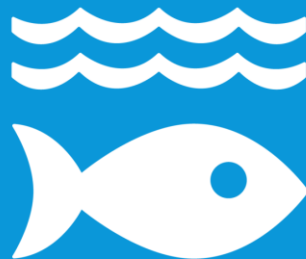




SDG 14

Life Below Water

14 LIFE
BELOW WATER



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SDG 14 Life Below Water



Unpad Revives Jatigede Reservoir’s Ecosystem Through 100,000 Nilem Fish Restocking

The “Karamba” Student Activity Unit of the Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran (FPIK Unpad), contributed to SDG 14 (Life Below Water) through a fish restocking activity held at Jatigede Reservoir, Sumedang, on Sunday, 12 May 2024. Jatigede Reservoir is an important freshwater ecosystem in West Java and home to various native fish species, including tawes, nilem, and lalawak. However, overfishing in recent years has significantly reduced fish populations, making restocking efforts essential to restore ecological balance and support biodiversity.

In this activity, UKMF Karamba collaborated with Sukamenak Village authorities, the West Java Provincial Department of Marine Affairs and Fisheries, and the Southern Regional Fisheries Office to release 100,000 nilem fish (*Osteochilus hasselti*) fingerlings into the reservoir. Nilem fish were chosen because they are endemic to Indonesia, particularly West Java, and have been cultivated in Jatigede since 2015. Before release, the fingerlings underwent acclimatization to minimize stress and improve their adaptation to the natural environment. The restocking was conducted at three strategic points located in the center of the reservoir.

According to FPIK Unpad lecturer Irfan Zidni, Ph.D., this initiative not only aims to sustain fish populations and preserve aquatic ecosystems but also serves as a community engagement effort, strengthening ties between Unpad students and local communities around Jatigede Reservoir. By increasing fish stocks, the activity is also expected to provide economic benefits for local communities, particularly fishers in Sukamenak Village.

Through this fish restocking initiative, Unpad has made a tangible contribution to SDG 14, particularly in the conservation of inland aquatic ecosystems, the protection of local biodiversity, and the promotion of sustainable fisheries management practices through collaboration between the university, government agencies, and local communities.



Mangrove Conservation to Protect Coastal Ecosystems



Mangrove ecosystems play a vital role in supporting coastal and marine biodiversity. They serve as natural nurseries for various marine species, providing essential breeding grounds, shelter, and food sources for juvenile fish and other organisms. In addition, mangrove forests help stabilize coastlines, reduce erosion, absorb carbon dioxide, and produce oxygen, making them essential for both marine life and climate resilience.

In 2024, Universitas Padjadjaran actively contributed to coastal conservation through student-led mangrove planting initiatives in Mayangan, West Java.

On May 7, 2024, students from the Environmental Department of BEM Kema Unpad visited the Mayangan mangrove conservation site following a discussion with the West Java Climate Task Force (WJCTF). During this visit, they adopted and planted 12 mangrove trees, specifically *Rhizophora apiculata* and *Rhizophora stylosa*, as part of their commitment to environmental stewardship. This activity reflects their vision to become initiators and frontliners in addressing climate and environmental crises through sustainable and tangible actions. Their involvement also aimed to inspire other Unpad students and those from different universities to participate in mangrove conservation activities.

Continuing this momentum, on November 28, 2024, the American Association of Petroleum Geologists Universitas Padjadjaran Student Chapter (AAPG Unpad SC) held a mangrove planting activity to commemorate National Tree Planting Day. The group adopted and planted 70 mangrove trees, with 45 participants actively involved. This event was part of the Wali Mangrove Legon Kulon Program, a collaborative initiative between WJCTF and Yayasan Wanadri aimed at strengthening mangrove conservation in West Java.

These initiatives significantly contribute to SDG 14 (Life Below Water) by restoring and protecting mangrove ecosystems, which are critical for maintaining marine biodiversity, supporting sustainable fisheries, and enhancing coastal resilience against the impacts of climate change. Through these actions, Unpad students demonstrate strong environmental leadership and collaborative engagement in preserving Indonesia's coastal ecosystems.

Transforming Riverbanks: Unpad Launches Leuwi Padjadjaran Ecoriparian for Sustainable Water Ecosystems



Universitas Padjadjaran strengthened its commitment to SDG 14 (Life Below Water) through the inauguration of the Leuwi Padjadjaran Ecoriparian Area at its Jatinangor Campus on Tuesday, 9 July 2024. The area was officially inaugurated by Ir. Sigit Reliantoro, M.Sc., Director General of Pollution and Environmental Damage Control of the Indonesian Ministry of Environment and Forestry (KLHK), through the signing of an inscription, followed by the signing of the official handover document and a Cooperation Agreement between KLHK and Unpad, represented by Unpad’s Vice Rector for Research and Innovation, Prof. Dr. Ir. Hendarmawan, M.Sc.

The development of the ecoriparian area is part of a broader initiative to restore and sustainably manage river ecosystems, transforming riverbanks into clean, attractive, and functional public spaces. The ecoriparian concept emphasizes community-based management, where local communities play an active role in maintaining and utilizing the area. Beyond improving the environmental quality of the river, this space also serves as a platform for environmental education and a driver of the local economy, creating multiple benefits for surrounding communities.

Director General Ir. Sigit Reliantoro highlighted that the ecoriparian approach aims to shift the community’s perception of rivers from “backyards” to “front yards”—vibrant, functional, and integral parts of daily life. This initiative encourages communities to view rivers not as dumping grounds but as living spaces that are sustainable, productive, and environmentally valuable, thereby fostering greater awareness of the importance of protecting aquatic ecosystems.

Prof. Hendarmawan emphasized that the establishment of the ecoriparian area is a tangible implementation of Unpad’s Core Scientific Pattern: “Bina Mulia Hukum dan Lingkungan Hidup” (Noble Development of Law and Environment). The initiative not only aims to enhance environmental awareness among Unpad students but also among local communities living near the campus.

Through this initiative, Universitas Padjadjaran plays an active role in supporting the conservation and sustainable management of freshwater ecosystems, aligning with SDG 14 targets, particularly in protecting inland aquatic ecosystems and increasing community participation in water resource conservation.

Marine Tourism Festival 2024



The Marine Tourism Study Program of Universitas Padjadjaran's Vocational School made a strong contribution to SDG 14 (Life Below Water) by organizing the Marine Tourism Festival (MTF) 3.0, an annual event held on 5 December 2024 at Graha Sanusi Hardjadinata, Bandung. Carrying the theme "Explore the Wonderful Marine Tourism Indonesia", the festival served as an inspiring platform for students, academics, and industry partners to share ideas, creativity, and innovations to collectively advance sustainable marine tourism.

One of the key highlights of the event was the inauguration of the Teaching Factory (TeFa) PARI TREND, which marks the transformation of the Marine Tourism Study Program under the Vocational School of Unpad. The Teaching Factory adopts a practice-based learning approach that integrates Indonesia's marine natural beauty with innovations across three main sectors: Marine Spot Tourism and Ecotourism, Marine Hospitality Industry, and Marine Creative Economic Industry. Through PARI TREND, Unpad aims to equip the younger generation with practical skills, maritime knowledge, and innovative mindsets to support the development of sustainable marine tourism.

The event also featured the signing of cooperation agreements between the Marine Tourism Study Program and various strategic partners, including Wisata Sekolah, Smiling Coral Indonesia, Mahat Masagi Unpad, and Seadoo Safari Jakarta. These collaborations aim to drive tourism product innovation, support the management of destinations based on local wisdom, empower coastal communities, and enhance the global competitiveness of Indonesia's marine tourism sector.

Additionally, MTF 3.0 presented three talkshow sessions that brought together experts and practitioners in marine tourism, marine conservation, and the creative maritime industry. These discussions explored the potential and challenges of developing marine ecotourism, innovations in marine tourism management, and the importance of cross-sector collaboration in preserving marine and coastal ecosystems.

Through MTF 3.0, Universitas Padjadjaran strengthened the role of academia and students in supporting the sustainable management and utilization of marine resources, in line with SDG 14 targets, particularly in preserving marine ecosystems, empowering coastal communities, and fostering innovation in environmentally responsible marine tourism.

Fisheries Week 11.0 “Blue Economy for Sustainability Fisheries”

The Student Association of Fisheries (HIMIKAN), Faculty of Fisheries and Marine Sciences, Universitas Padjadjaran (FPIK Unpad), made a strong contribution to SDG 14 (Life Below Water) through the National Seminar on Sustainable Fisheries, held as part of the 11th Fisheries Week. This annual academic forum has become a key platform for fisheries students to engage with pressing issues in marine and coastal resource management.



The seminar focused on critical themes closely tied to the sustainable management of aquatic ecosystems, including Blue Carbon, Measured Fishing, and Fishery Waste Utilization. These discussions aimed to deepen students’ understanding of sustainable fisheries practices and equip them with the knowledge needed to address real challenges in preserving marine biodiversity and supporting responsible resource use.



By facilitating direct interaction between students, experts, and policymakers, the seminar encouraged the exchange of knowledge and ideas on sustainable fisheries, emphasizing evidence-based strategies to maintain the health and productivity of Indonesia’s marine ecosystems. The focus on measured fishing reflects a commitment to responsible harvesting methods that help sustain fish stocks, while the blue carbon discussions highlight the importance of protecting coastal and marine ecosystems as vital carbon sinks.

Through this initiative, Universitas Padjadjaran actively supports SDG 14, particularly in the areas of conserving and sustainably using marine resources, supporting ecosystem-based management, and building capacity among future fisheries professionals to ensure the long-term health of Indonesia’s aquatic ecosystems.