Centurion UNIVERSITY
Shaping Lives...
Empowering Communities...

SDG 14: LIFE BELOW WATER

Conservation and Sustainable Utilisation of the Oceans - Events

6	~100	2	2
conservation and sustainable-use events in 2025	farmers and trainees trained at the RAS facility (5 batches)	coastal clean-up drive, Gopalpur beach	national fisheries research institutes visited

Overview

Centurion University's School of Fisheries organises and supports ongoing events promoting the conservation and sustainable utilisation of oceans, rivers, lakes and aquatic resources. In 2025 these comprised a recurring farmers' training programme on water-recirculating aquaculture, a coastal clean-up drive at Gopalpur beach, Odisha (12 July, 2025), the School's annual fisheries event “Blue-Fiesta”, a participatory mapping of village freshwater resources, and two student exposure events at national fisheries research institutes, ICAR-CMFRI (Visakhapatnam) and ICAR-CIFE (Mumbai), focused on marine resource conservation and aquatic biodiversity.

Table 1. 2025 Conservation and Sustainable Utilisation of the Oceans Events at a Glance

Date	Event	Location	Participants	Conservation focus
Across 2025 (5 batches)	RAS Farmers' Training and Demonstration Programme	RAS facility, School of Fisheries, CUTM Paralakhemundi	~100 farmers, trainers and visitors; 20–24 B.F.Sc. students	Water-recirculating fish production that reduces withdrawal from and discharge into rivers and lakes
2 Jul 2025	Participatory freshwater resource mapping (RAWEP)	Hatibadigopinathpur, Gajapati, Odisha	22 students, 1 faculty member	Documenting village freshwater resources and their sustainable use
20 Aug 2025	Exposure visit to ICAR-CMFRI	Visakhapatnam, Andhra Pradesh	24 B.F.Sc. students with faculty	Marine biodiversity conservation and fishery resource assessment
22 Aug 2025	Field visit to ICAR-CIFE	Mumbai, Maharashtra	B.F.Sc. 4th-year students with faculty	Aquatic biodiversity documentation and water-efficient aquaculture
12 July 2025	Beach clean-up drive	Gopalpur beach, Andhra Pradesh	12students, 2 faculty members	Removal of plastic and marine litter from the shoreline

Date	Event	Location	Participants	Conservation focus
20 Sep 2025	"Swachh Sagar, Surakshit Sagar" Coastal Clean-Up and Sustainable Fishing Awareness with Fisherfolk	Chandrabhaga Beach, Konark, and Tandahar Beach, Astaranga, Odisha	More than 80 fisherfolk at Chandrabhaga Beach and more than 40 volunteers at Tandahar Beach, alongside scientists, university representatives, students and community members	Coastal and marine pollution prevention through the removal of 1,620 kg of waste, including plastic litter, discarded fishing nets and other marine debris, combined with awareness-raising on plastic pollution, its impacts on fisheries and coastal livelihoods, and sustainable fishing practices.
1 Nov 2025	"Blue-Fiesta" annual fisheries event	Auditorium, School of Fisheries, CUTM Paralakhemundi	Students, faculty and invited experts from industry, fisheries administration and NABARD	Student exhibits on aquaculture, fish processing and sustainable fisheries practices; expert talks on the future of aquaculture

1. Swachh Sagar, Surakshit Sagar" Coastal Clean-Up and Sustainable Fishing Awareness with Fisherfolk — Konark and Astaranga

On International Coastal Cleanup Day, 20 September 2025, CUTM joined the Indian National Centre for Ocean Information Services (INCOIS), Hyderabad, and the NGO SPANDAN to hold a beach clean-up and community awareness programme under the national "Swachh Sagar, Surakshit Sagar" (Clean Ocean, Safe Ocean) campaign. The programme was coordinated by Dr. Kamal Kumar Barik (Department of Civil Engineering) and Dr. Pratap Kumar Chhotaray (Department of Chemistry), CUTM, with funding from INCOIS.

At Chandrabhaga Beach, Konark, more than 80 fisherfolk worked alongside INCOIS scientists, CUTM officials, students and local community members. Together they collected 1,400 kg of waste, including plastic litter, discarded fishing nets and other non-biodegradable material. INCOIS scientists Dr. Sanjiba Baliarsingh and Dr. Alakes Samanta interacted with the participants on the growing problem of marine plastic pollution and its adverse impact on fisheries and coastal livelihoods. At Tandahar Beach, Astaranga, more than 40 volunteers, including government officials, students and members of the fishing community, removed a further 220 kg of marine debris.

2. RAS Farmers' Training and Demonstration Programme

The School of Fisheries at Centurion University of Technology and Management (CUTM) has **constructed its Recirculating Aquaculture System (RAS) units in-house**, demonstrating the University's technical expertise in developing advanced, water-efficient aquaculture infrastructure. Functioning as a living laboratory, the RAS facility served as a regular demonstration and training hub throughout 2025 for local fish farmers, trainers and visiting delegates, providing hands-on exposure to sustainable aquaculture practices and water-efficient production technologies.

Reach in 2025: five batches of farmers and trainees, with about 18–22 participants per batch, giving a cumulative total of about 100 participants trained during the year (5 batches × 18–22 = 90–110).

Training content: RAS operation, feed management, disease prevention, water-quality monitoring, culture of high-value fish and sustainable harvesting practices.

Student involvement: about 20–24 B.F.Sc. 4th-year students operated and managed the RAS system through the year, gaining hands-on experience in system operation, feeding, water-quality monitoring, fish health management and maintenance.

Link to conservation and sustainable use: RAS filters and reuses the same water in a closed loop, so fish can be produced with a small fraction of the fresh water used by conventional ponds and without releasing nutrient-rich effluent into nearby rivers, lakes or coastal waters. Training farmers in RAS, water-quality monitoring and sustainable harvesting therefore promotes the sustainable use of freshwater resources and reduces pressure on natural water bodies.



Figure 1. Farmers and trainees at the RAS demonstration facility, School of Fisheries, CUTM



Figure 2. Visiting farmers receiving a demonstration of the RAS unit

3. Beach Clean-Up Drive — Gopalpur Beach

Date: 23 Oct 2025

Location: Berhampur beach, Odisha

Participants: 12 students and 2 faculty members, School of Fisheries

Students manually collected plastic bottles, cans and other marine litter from the shoreline, removing waste before it could be washed into the sea.

Link to conservation and sustainable use: marine litter, especially plastic, harms seabirds, turtles and fish that ingest or become entangled in it; clearing it from the shoreline directly supports the conservation of coastal and marine ecosystems and raises awareness of marine pollution.



Figure 3. Students collecting marine litter along the shoreline, Berhampur beach (23 oct 2025)

Beach clean-up awareness programme, 2025

Sl. No.	Place	Date	No. of participants
1	Palasa Gopalpur Beach (Andhra Pradesh)	12 July 2025	12
2	Konark and Astaranga	20 September 2025	40
3	Berhampur Beach	23 October 2025	12
	Total		**64**

4. Student Exposure Visit — ICAR-CMFRI, Visakhapatnam

Date: 20 August 2025, as part of a two-day educational exposure tour to Visakhapatnam, Andhra Pradesh

Participants: 24 B.F.Sc. 5th-semester students with faculty (Dr. Iffat Jahan), School of Fisheries, CUTM

Resource persons: Dr. Joe K. Kizhakudan (Principal Scientist) and Dr. Pralay Ranjan Behera (Senior Scientist), ICAR-Central Marine Fisheries Research Institute

Activities: briefing on marine fish breeding techniques and controlled-environment fish care; overview of ongoing aquaculture and mariculture research; discussion on marine biodiversity, conservation strategies and fishery resource assessment; laboratory and research-unit tour; discussion on potential academic collaboration with CMFRI.

Link to conservation and sustainable use: the briefing covered fishery resource assessment, marine biodiversity conservation strategies, and marine fish breeding and mariculture, which can supply fish without further depleting wild stocks, giving students a direct understanding of the science behind conserving and sustainably using marine resources.

5. Student Field Visit — ICAR-CIFE, Mumbai

Date: 22 August 2025

Participants: B.F.Sc. 4th-year students (44) of CUTM Paralakhemundi with accompanying faculty

Activities: guided tour of aquaponics, biofloc and RAS installations; visits to the fish genetics and biotechnology laboratories (genome editing, DNA barcoding), aquatic animal health management (PCR diagnostics), feed technology and soil, water and proximate-analysis facilities; visit to the ornamental fish breeding unit, display aquarium and the Aquatic Biodiversity Museum and Repository; expert interaction and hands-on demonstrations with CIFE scientists.

Link to conservation and sustainable use: the Aquatic Biodiversity Museum and Repository documents aquatic species diversity through preserved reference specimens, and DNA barcoding provides reliable species identification, both of which underpin the monitoring and conservation of fish biodiversity. Together with water-efficient RAS and biofloc systems that reduce demand on rivers and lakes, the visit showed students how research institutions support the conservation and sustainable use of aquatic species and ecosystems.



Figure 5. B.F.Sc. 4th-year students with faculty at the ICAR-CIFE Aquatic Biodiversity Museum and Repository, Mumbai (22 August 2025)

6. Participatory Freshwater Resource Mapping — Hatibadigopinathpur

Date: 2 July 2025

Location: Hatibadigopinathpur, Gajapati district, Odisha (18.763162° N, 84.13694° E)

Participants: 22 B.F.Sc. students and 1 faculty member, under the Rural Agricultural Work Experience Programme (RAWEP)

The participatory resource-mapping exercise documented the village's natural resources, with emphasis on freshwater resources and their utilisation by the community. It gave students a practical understanding of the community's dependence on these water resources and of the importance of their conservation and sustainable management.

Link to conservation and sustainable use: Mapping a village's water resources and how they are used is the first step in planning their conservation; the exercise directly addresses the sustainable utilisation of rivers, lakes and other freshwater resources named in this indicator.



Figure 6. Students preparing a participatory resource map of village water resources, Hatibadigopinathpur, 2 July 2025)

7. "Blue-Fiesta" 2025 — Annual Event of the School of Fisheries

Date: 1 November 2025

Venue: Auditorium, School of Fisheries, CUTM Paralakhemundi

Chief Guest: Dr. Manoj M. Sharma, CEO, Mayank Aquaculture Limited, Gujarat

Guests of Honour: Dr. Supratim Chowdhary, Comptroller of Examination, West Bengal University of Fisheries and Animal Sciences; Mr. Nirod Chandra Nayak, District Fisheries Officer, Gajapati; Mr. Pratik Panda, District Development Manager, NABARD, Gajapati

The School of Fisheries organised its annual techno-cultural event “Blue-Fiesta” on 1 November 2025. The Chief Guest spoke on innovations and future opportunities in aquaculture, and the Guests of Honour emphasised the role of skilled fisheries professionals in regional development. Students presented technical exhibits showing their practical knowledge of aquaculture, fish processing and sustainable fisheries practices, and conducted skill-based demonstrations in aquaculture and fish processing. Technical competitions included drawing, elocution, photography and a quiz on fisheries science, and interactive sessions allowed students to engage directly with the invited experts. The School’s Annual Report and the annual students’ magazine “Aquazone” were released during the event.

Link to conservation and sustainable use: The event brought together students, the District Fisheries Officer, NABARD and the aquaculture industry around sustainable fisheries practices and the responsible development of aquaculture, promoting the sustainable utilisation of aquatic resources.



Figure 7. Release of the School’s Annual Report and students’ magazine “Aquazone”, Blue-Fiesta (1 November 2025)



Figure 8. Felicitation of the Chief Guest and Guests of Honour, Blue-Fiesta (1 November 2025)