

14 LIFE
BELOW WATER

Progress Report (2022-23) SDG 14 Life below Water

The United Nations General Assembly's 17 Goals for Sustainable Development (SDG's) provide priorities to work towards the well-being of the Earth and its people. Integral University understands the importance and urgent nature of SDG's and is committed to contribute in achievement of SDGs. The commitment towards SDGs is reflected through the work done within departments, and other units of the university. Progress reports of SDG 14 is as follows.

Metric	Description
14.1 Research on life below water	Seas and oceans in good health are vital to human life. We depend on them for food, energy, and water, and they make up 70% of our world. However, we have been able to seriously harm these valuable resources. We must safeguard them by getting rid of pollution and overfishing, and we must start managing and safeguarding all marine species worldwide right away.12 Research articles have been published in the area of life below water.
14.2.1 Fresh-water ecosystems (community outreach)	Ecosystems in freshwater (community outreach) Provide local or national communities with teaching programs on freshwater ecosystems (water management/conservation, irrigation techniques).A Farmers Club has been established at Integral University, led by Faculty and students. The events and activities, such as water management and irrigation techniques, also involve local farmers. This club's curriculum includes outreach initiatives including workshops and internships with the goal of empowering, educating, and supporting farmers and local communities. In order to improve practices, it helps to fortify the bonds between farmers and students. For the benefit of nearby farmers and communities, Integral University hosts events on irrigation techniques and water management. Workshops and awareness campaigns aid farmers in making effective and efficient use of water resources. Integral University is engaged in water management initiatives on a local, national, and worldwide level. We urge students to take part in these kinds of activities. Researchers are encouraged to investigate the most effective water management techniques. The latest irrigation technology, government regulations, and irrigation practice subsidies are communicated to local farmers and other interested parties. Local farmers thus benefited from these initiatives and saw a significant shift in their behaviour.
14.2.2 Sustainable fisheries (community outreach)	In order to promote product processing and rehabilitation, the Integral University organised and took part in an activity that involved returning sea animals to their natural environment.
14.2.3 Overfishing (community outreach)	Overfishing(Community outreach) provides educational outreach initiatives to local or national communities to increase knowledge of destructive fishing methods, illicit, unreported, and unregulated fishing, as well as overfishing.As part of its curriculum, outreach initiatives introduce students to the local fishing community. Programs to raise awareness about overfishing, unreported or unregulated fishing, and sustainable fisheries are being planned.Students are encouraged to visit nearby fishing communities by Integral University. The benefits of sustainable fishing

	methods are explained to them. Through outreach initiatives, the fishing community was made aware of issues such as mesh size, unregulated fishing, and overfishing. Challenges are highlighted and interactions with local fish market vendors and fishermen are surveyed. There is also discussion of the livelihood dilemma. These exchanges benefited fishermen and enhanced fishing methods. These outreach initiatives also assist nearby communities.
14.3.1 Conservation and sustainable utilisation of the oceans (events)	Events pertaining to ocean conservation and sustainable use Encourage the preservation and sustainable use of the oceans, seas, lakes, rivers, and marine resources by supporting or planning events. Students at Integral University are encouraged to take part in outreach, educational, and learning initiatives that promote water conservation and sustainable use. Every event attracts the greatest number of participants and makes a significant impact on local water conservation. These outreach and beach cleaning initiatives benefited local residents, tourists, and visitors. Participating in each activity with local stakeholders increased the program's effectiveness. The children and other communities benefited from these recurring events, which helped to foster harmony with water ecosystems and the environment. Participation from student volunteers from different institutions and towns increased as a result of activities with local NGOs.
14.3.2 Food from aquatic ecosystems (policies)	Integral University has formulated a Policy for Food from aquatic ecosystems. https://www.iul.ac.in/IQAC/Policy.aspx
14.3.3 Maintain ecosystems and their biodiversity (direct work)	Preserve ecosystems and biodiversity through hands-on work Work directly to preserve and expand current ecosystems and their biodiversity, including that of plants and animals, particularly those that are in danger, through study and/or industry engagement. Numerous efforts have been made to collaborate with government agencies and industries in order to preserve and expand the current ecosystem. The Integral University campus is surrounded by a variety of property uses. Conserving biodiversity was a top priority for the university's infrastructure and surroundings. The university keeps up medicinal gardens that are accessible to both locals and tourists. Integral University worked to preserve the natural biodiversity and conducted periodic monitoring. The university hosts a number of activities to raise awareness of animal conservation, planting drives, and sapling donations. Only native species are favoured in plantation drives, which helps to preserve the current ecology. International visitors and chief guests are encouraged to plantations at Integral University. The campus's plant and fauna population increased by a factor of several.
14.3.4 Technologies towards aquatic ecosystem damage prevention (direct work)	Technologies to reduce damage to aquatic ecosystems (direct work) Work directly on techniques or technology that allow the marine sector to reduce or avoid harm to aquatic environments through research and/or industry engagement. Students and staff at Integral University collaborated on several projects, workshops, and conferences with the Art of Living river rejuvenation team.
14.4.1 Water discharge guidelines and standards	Standards and criteria for water outflow Establish water quality guidelines and criteria for discharges (to maintain water quality in order to safeguard wildlife, ecosystems, and human health and welfare). The water from the treated sewage meets Bureau of Indian Standards (BIS) requirements. Only horticultural uses are made of the treated water. The wetland near the Integral University campus does not have sewage outfall or other liquid and solid waste disposal facilities. The sewage treatment plant at Integral University cleans sewage water and recycles it for use in ground spraying, road sprinkling, and irrigation. By discharging cleaned water, this prevents harmful bacteria from growing and may safeguard aquatic plants, animals, and wildlife. Rainwater from abandoned quarries is collected by University and treated by a water treatment plant that has been erected. Rainwater is recycled and made fit for toilets and other applications. As a result, less groundwater is used, and rainwater is

	preserved.
14.4.2 Action plan to reducing plastic waste	A strategy for cutting down on plastic waste Establishes a strategy to cut down on plastic waste on campus."No use of single plastic" is promoted by Integral University, which also advocates the use of eco-friendly materials in daily life. There is a "plastic use policy" at the university. As a result, scrap materials rather than plastic are used to create temporary sign boards for yearly festivals and other activities. We utilize steel utensils, Areca Leaf Plates, and jute bags as alternatives to plastic. Plastic sales in surrounding stores and marketplaces have decreased as a result of the campus's plastic ban. It lessens the carbon footprint. Additionally, it lessens the amount of plastic that is put into the local aquatic environment.
14.4.3 Reducing marine pollution (policy)	Integral University has formulated a Policy for Reducing marine pollution. https://www.iul.ac.in/IQAC/Policy.aspx
14.5.1 Minimizing alteration of aquatic ecosystems (plan)	Reducing the amount of aquatic environment modification (plan) Make a plan to minimise changes to associated aquatic ecosystems' physical, chemical, and biological characteristics.The area around the wetland, which is on the campus of Integral University, is completely protected. Water quality and wetland wildlife are negatively impacted by building and other activities. A retaining wall separates Main University from the marsh patch. Additionally, the retaining wall keeps garbage from spilling into the marsh. If there is any excavated muck from construction activities, it must be avoided for disposal. Following treatment, the muck is utilised for horticultural and agricultural purposes. As a result, there is no chance that the wetland's soil will be washed away during the rainy season.
14.5.2 Monitoring the health of aquatic ecosystems	Regular monitoring of the water quality, flora, and fauna is ensured by Integral University. For the purpose of monitoring, conducting experiments, and raising awareness, the university has established targeted student organisations such as clubs. For the benefit of society, faculty members urge their students to conduct surveys and experimental research. The university maintains the quality level in accordance with the BIS/WHO criteria.
14.5.3 Programmes towards good aquatic stewardship practices	1. The university is dedicated to treating garbage before getting rid of any liquid or solid waste. 2. The university has specialised groups such as the Sustainability Committee, Swachh Bharat, and the Biological Waste Disposal Committee 3. IU possesses drinking water treatment, wastewater treatment, and other well-maintained facilities. 4. The university uses a water treatment system to recycle rainwater collected for irrigation, sanitation, and other purposes.
14.5.4 Collaboration for shared aquatic ecosystems	Cooperation for common aquatic environments Work together with the neighbourhood to preserve common aquatic environments.Students from the Department of Environmental Science and Integral Institute of Agricultural Science and Technology regularly visit the wetland region for fieldwork and experimental research. Routine observation of neighbouring wetlands, there is ongoing documentation of any migratory and threatened species. The study's primary goal is to recommend conservatory actions.
14.5.5 Watershed management strategy	All generated wastewater is managed by Integral University by passing it via a wastewater treatment facility. Following treatment, the water is released through outlets that have been authorised and governed by the government. The university handles and reports wastewater discharges in accordance with the guidelines set forth in the Water Pollution Control Act. The findings of water quality tests for both raw and released effluent are included in a report that the university provides annually.

