



हरकोर्ट बटलर प्राविधिक विश्वविद्यालय

नवाबगंज, कानपुर - 208002, उ.प्र., भारत

HARCOURT BUTLER TECHNICAL UNIVERSITY

NAWABGANJ, KANPUR - 208002, U.P., INDIA

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100+
YEARS
1921 - 2021



SDG 14: Life Below Water

(Conserve and sustainably use the oceans, seas and marine resources for sustainable development)

1. Objective

Life below Water is one of important goal that focuses on the conservation and sustainable use of oceans, seas, and marine resources. Oceans cover more than 70% of the Earth's surface, playing a critical role in regulating the climate, providing food and livelihoods, and supporting biodiversity. However, human activities have significantly impacted marine ecosystems, leading to pollution, overfishing, and habitat destruction. SDG 14 aims to address these issues and ensure the health of oceans and marine life for future generations.

2. Key Areas of Life below Water

(a). Marine Pollution:

- **Reducing Pollution:** A major concern for marine ecosystems is the pollution of oceans, particularly plastic waste. An estimated 8 million tons of plastic enter the ocean every year, harming marine species and ecosystems.
- **Waste Management:** Reducing the amount of waste entering the oceans through improved waste management practices, recycling, and the reduction of single-use plastics.
- **Oil Spills and Toxic Chemicals:** Preventing oil spills and toxic chemicals from reaching marine environments is critical to preserving marine life.

(b). Sustainable Fishing:

- **Overfishing:** Overfishing is a serious problem that depletes fish stocks and damages marine ecosystems. Sustainable fishing practices aim to ensure that fish populations are maintained at healthy levels and that fishery practices do not harm the environment.
- **Illegal, Unreported, and Unregulated (IUU) Fishing:** Combatting IUU fishing helps to protect marine biodiversity and supports sustainable fishery management.

(c). Marine and Coastal Ecosystem Conservation:

- **Protecting Coral Reefs:** Coral reefs are incredibly biodiverse and vulnerable to climate change, pollution, and human activities. Protecting and restoring coral reefs is essential for maintaining marine biodiversity.
- **Marine Protected Areas (MPAs):** Establishing MPAs helps safeguard critical marine ecosystems from human activities, allowing for the recovery of marine species and habitats.



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- **Mangroves, Seagrasses, and Wetlands:** These coastal ecosystems act as important buffers against storms, protect biodiversity, and provide carbon storage, making their conservation crucial.

(d). Sustainable Marine Resources:

- **Responsible Resource Extraction:** Sustainable extraction of marine resources, such as minerals, oil, and gas, must be carried out in a way that minimizes environmental impact and supports marine ecosystem health.
- **Promoting Blue Economy:** The concept of a "blue economy" refers to using marine resources sustainably to boost economic growth while preserving marine ecosystems and promoting social well-being.

(e). Marine Research and Monitoring:

- **Scientific Research:** Increased investment in scientific research on marine life, ecosystems, and ocean health is crucial for understanding the impacts of human activities and climate change on the oceans.
- **Monitoring and Data Collection:** Improving data collection and monitoring systems helps governments and organizations make informed decisions about conservation and sustainable use of marine resources.

(f). International Cooperation:

- **Global Partnerships:** Ocean conservation requires international cooperation, as marine ecosystems are shared across borders.
- **Sustainable Development Goals Synergy:** Addressing these goals in conjunction with other goals (like climate action, life on land, and sustainable cities) ensures an integrated approach to ocean conservation.

3. Global Impact and Trends

1. **Marine Biodiversity Loss:** Overfishing, habitat destruction, and climate change threaten marine biodiversity. Many species, including fish, mammals, and coral species, are at risk of extinction.
2. **Plastic Pollution:** The massive amounts of plastic waste entering the oceans each year are one of the biggest threats to marine life. Microplastics, in particular, have entered the food chain, affecting both marine animals and humans.
3. **Ocean Conservation Movements:** Growing awareness about the importance of ocean conservation is driving movements and policies aimed at reducing plastic use, promoting sustainable seafood, and protecting marine environments.



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4. Initiatives implementation by the University

- a) The University prohibits the use of single use plastic items on the campus.
- b) The University installed the Rain water harvesting systems in hostel premises to promote sustainable collection of water.
- c) Solar Panels were installed on the rooftop of Girls' Hostel. University