

SUSTAINABLE DEVELOPMENT GOALS

REPORT 2022



# SUSTAINABLE DEVELOPMENT GOALS

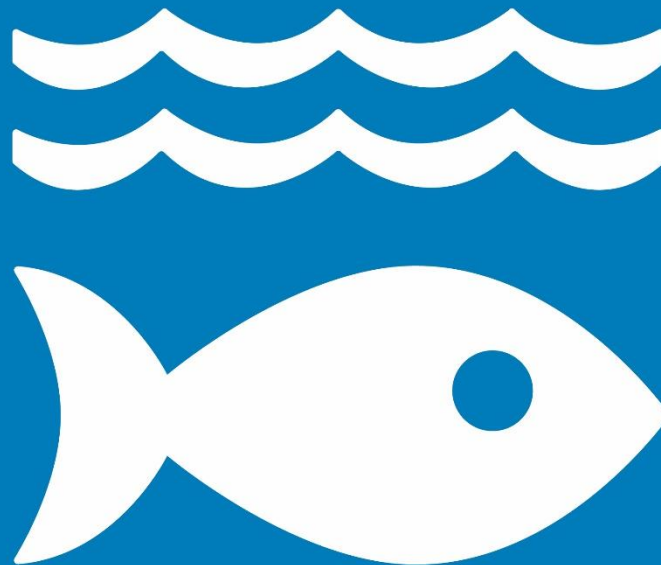


SDG 14 aims to increase the sustainable use of water resource while protecting marine ecosystems from pollution, overfishing, acidification, and other human activities. The SDG acknowledges the importance of oceans in regulating the global climate system and their importance as a source of economic, social, and environmental resources. Numerous initiatives are being run by Manipal University Jaipur's Water Management Center to address problems with fresh and salt water alike.



MANIPAL UNIVERSITYU JAIPUR  
REPORT ON SDG 14- LIFE BELOW WATER

# 14 LIFE BELOW WATER



## INTRODCUTION

The health and sustainability of our oceans and marine ecosystems are critical to the well-being of our planet. Recognizing the pressing need to safeguard life below water, Manipal University Jaipur is spearheading initiatives, research, and educational endeavors to protect and preserve marine life. The commitment to marine conservation and sustainability stands as a beacon of hope for our oceans and the countless species that inhabit them. Manipal University Jaipur is pivotal in



the global effort to protect and preserve life below water. Its contributions through research, education, community engagement, and policy advocacy play a significant role in advancing marine conservation and sustainability. The commitment of these institutions represents a beacon of hope for the oceans, fostering a collective responsibility to ensure the long-term health and vitality of life below water for present and future generations.

## Academics

Manipal University Jaipur plays a vital role in educating and raising awareness about the importance of life below water. They incorporate marine conservation into their curriculum, offering courses and programs that address marine biology, oceanography, and environmental sustainability. Moreover, universities organize public outreach events, workshops, and awareness campaigns to engage the broader community in understanding the significance of marine conservation and the threats faced by life below water.

### Subjects taught at MUJ for Life Below Water

- Plant Biotechnology.
- Biochemistry and Biophysics.
- Molecular Biology.
- Microbial Technology.
- Environmental Biotechnology.
- Bioinformatics.
- Animal Biotechnology.
- Cancer Biology



Manipal University Jaipur is at the forefront of scientific research in marine biology, oceanography, and marine ecology. It conducts in-depth studies that examine the intricacies of marine ecosystems, including biodiversity, ocean health, and the impact of human activities on marine life. Through research, Manipal University Jaipur uncovers critical insights into the challenges facing life below water and develop strategies for conservation and sustainable management.

### Activity of Manipal University Jaipur



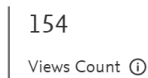
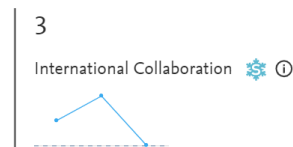
Within: SDG 14: Life Below Water | Year range used for metrics: 2020 to 2022

#### Summary

+ Add Summary to Reporting

+ Add to Reporting

#### Performance



### Activity of Manipal University Jaipur

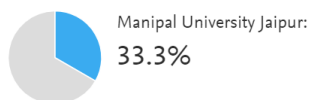


Within: SDG 14: Life Below Water | Year range used for metrics: 2020 to 2022

#### Summary

#### International Collaboration

Publications co-authored with Institutions in other countries/regions



#### Academic-Corporate Collaboration

Publications with both academic and corporate affiliations



Top 15 keyphrases by relevance, based on 9 publications







### Research Publication

Title	Times Higher Education (THE) field name
Feasibility of roof top rainwater harvesting potential - A case study of South Indian University	Physical Sciences   Engineering and Technology
Status, structure and environmental variations in semi-arid mangroves of India	Life Sciences
Seasonal Variations of Heavy Metals in the Soil Around a Coal-Fired Thermal Power Plant, South-West Coast of India	Clinical, pre-clinical and health   Physical Sciences   Life Sciences
SDG14 - Life below water: Towards sustainable management of our oceans	Business and Economics   Life Sciences   Engineering and Technology
A statistical assessment of plastic associated marine organisms found on intertidal plastic debris off the coasts of South Andaman Island of the Indian Archipelago	Physical Sciences   Life Sciences
Eco-friendly Green Corrosion inhibitors in Chloride Contaminated Natural Sea-Water: A review	Physical Sciences
Fisher Discriminant Ratio Based Classification of Intellectual Disability Using Acoustic Features	Physical Sciences   Computer Science
Scope of biopolymers in food industry: A review	Physical Sciences
Pseudomonas aeruginosa Derived Biosurfactant as a Potential Biosensor for Heavy Metal Detection: A Possibility Using Microfluidic Approach	Physical Sciences

### Grants Received in the area by MUJ faculty are

S. No.	Name of Department	Name of PI/ CO PI	Funding Agency	Projects Detail	Amount	Sanction Year
1	Biosciences	Dr. Monika Sogani	Royal Society of Chemistry, UK (RSC Research	Harnessing the potential of Polyhydroxyalkanoates (PHA) from Rhodospseudomonas palustris as sustainable	GBP £4000 (equivalent to INR 4,00,000)	Mar-22



			Fund grant)	resource for production of bioplastics		
2	Biosciences	Dr Rakesh Sharma (PI); Dr Sandeep Srivastava (Co-PI)	ICMR, New Delhi	Isolation and Characterization of Neuroactive Metabolites: Psychoactive Potential of Probiotic Lactic Acid Bacteria	~ 15,00,000	April, 2022
3	Biosciences	Dr. Mousumi Debnath	Rham food and Agro products	New products and processes from pomegranate	4,40,000	22-Jun-22

### Events at MUJ for life below water

Marine conservation efforts led by Manipal University Jaipur focus on protecting and restoring fragile marine ecosystems. These initiatives aim to preserve coral reefs, mangroves, and seagrass beds, which serve as crucial habitats for diverse marine life. Through restoration projects and protected areas, universities contribute to the preservation of these ecosystems and the biodiversity they support.

Manipal University Jaipur actively engages with local communities, and non-profit organizations to collaborate on marine conservation efforts. By forging partnerships, the institution facilitates community involvement in coastal clean-ups, conservation projects, and awareness campaigns, fostering a sense of shared responsibility and stewardship toward the oceans.

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DEMONSTRATING THE INSIGHTS OF HEALTH AND HYGIENE



EDUCATING THE CHILD ABOUT WATER AND ITS CAUSES

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**LIVE WATER LAB**  
जल ही जीवन है  
MANIPAL UNIVERSITY JAIPUR  
DIRECTORATE OF STUDENT'S WELFARE  
(ENVIRO CLUB  
REC CLUB)

In joint collaboration with  
ROTARY CLUB, JAIPUR, BAPU NAGAR  
(CLUB ID 73485, Rtd 3054)

Organizes  
DRINKING WATER TESTING  
VENUE: Begas Government School  
Time: 10:30 Am Date: 11<sup>th</sup> March, 2022

Dr. Monika Sagar  
Dr. Anurag Prasad  
Dept. of Biotechnology,  
Faculty Coordinator,  
ENVIRO CLUB, MUJ

Mr. Hemant Kumar  
Asstt. Professor,  
Dept. of Microbiology,  
Faculty Coordinator,  
REC CLUB, MUJ