



SRI SRI UNIVERSITY

2024



**Aquatic Life, Water, Pollution, Conservation,
Restoration, Marine, Awareness, Policy. plastic reduction**

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About us

Sri Sri University is located on the bank of the Kathjodi River (an arm of the Mahanadi River) and has wetlands in its vicinity. Sri Sri University is 80 km away from the coastal line (Puri district, Odisha) of the Bay of Bengal.

Within this haven, enveloped by the embrace of wetlands, Sri Sri University unfolds a narrative of academic distinction, offering programs at the crossroads of science and agriculture. Under the esteemed purview of the Faculty of Sciences and Faculty of Agriculture, it proudly hosts B.Sc. Hons. (Environmental Science), B.Sc. Hons. (Agriculture), and B.Sc. (Hons) Horticulture. In response to contemporary challenges, the university stands fortified with specialized centers, including the Sri Sri Centre for Advanced Research on Water Resources and Environmental Management, and the Sri Sri University Resource Centre for Climate Change & Sustainability Education & Practices.

Venturing beyond traditional academic boundaries, Sri Sri University actively engages with local communities, farmers, and non-governmental organizations, forging collaborative initiatives that integrate students into the forefront of meaningful research. Acknowledging the paramount importance of oceans in sustaining life on Earth, the university confronts the pressing issues faced by marine ecosystems worldwide.

Initiating this exploration into the critical sphere of oceans, Sri Sri University underscores that more than 3 billion people depend on marine and coastal diversity for their livelihoods. In the face of overexploited fish stocks and escalating carbon emissions leading to heightened ocean acidity, Sri Sri University stands resilient in addressing these challenges. The repercussions extend beyond coastal regions, impacting even those distanced from the ocean, as plastic pollution leaves an indelible mark, with 13,000 pieces of plastic per square kilometre in our oceans.

Within this complex narrative, Sri Sri University aligns its mission with the Sustainable Development Goals, particularly focusing on SDG-14, which aims to manage and protect life below water (www.undp.org). Through innovative approaches and unwavering dedication, the university actively contributes to the pursuit of these goals, epitomizing a commitment to safeguarding and preserving life below water for generations to come.

Education

Sri Sri University has established itself as a pioneering institution in water conservation and environmental sustainability, weaving these crucial elements into the fabric of its educational mission. Through its comprehensive approach, the university has created a unique ecosystem where academic excellence meets practical environmental stewardship. At the heart of this mission are two global resource centers dedicated to advancing water-related education and research, with the Sri Sri Center for Advanced Research in Water Resources and Environmental Management (SSCARWREM) leading specialized programs for both industry professionals and students.

The university's academic programs reflect its deep commitment to environmental education. The B.Sc. (Hons) Agriculture program offers extensive coursework in environmental studies, disaster management, soil and water conservation engineering, and climate change adaptation. Similarly, the B.Sc. (Hons) Environmental Science program provides an in-depth study of water resource management, freshwater ecosystems, and aquatic biodiversity, and environmental impact assessment. These programs are designed not just to impart theoretical knowledge but to create a practical understanding of environmental challenges and solutions.

Community engagement forms a vital pillar of Sri Sri University's mission. The institution has developed several innovative initiatives, including a Farmers Club led by Agriculture and Horticulture students, which serves as a bridge between academic knowledge and practical farming. Through its W20 vertical, the university has successfully empowered over 120 rural women with knowledge about climate change adaptation and sustainable agricultural practices. Regular educational webinars on waterborne diseases further demonstrate the university's commitment to public awareness and community welfare.

Research and collaboration have been instrumental in advancing the university's environmental goals. Through a strategic partnership with ICAR-CIFA and active participation in national and international water management events, Sri Sri University maintains its position at the forefront of environmental research and advocacy. Students regularly participate in significant conferences, also organising the **National Conference like Mahanadi River; Environmental Challenges and Way Forward**, gaining valuable exposure to current environmental challenges and solutions.

The practical implementation of the university's initiatives has yielded remarkable results in local communities. Through systematic technology transfer and information dissemination about government policies and irrigation subsidies, the university has helped transform local farming practices. The institution takes pride in its hands-on approach to water management and

conservation training, ensuring that theoretical knowledge translates into practical benefits for the community.

Perhaps most significantly, the impact of Sri Sri University's programs can be seen in the tangible changes within local communities. The strengthened bonds between academic and farming communities have led to improved agricultural practices and enhanced environmental awareness. The university's comprehensive approach has not only elevated the standard of environmental education but has also created a ripple effect of positive change throughout the region. Through these sustained efforts, Sri Sri University continues to demonstrate how educational institutions can play a pivotal role in advancing environmental sustainability while nurturing community development.

This holistic integration of academic excellence, practical application, and community engagement positions Sri Sri University as a model institution for environmental education and sustainable development. By preparing environmentally conscious professionals while simultaneously addressing immediate community needs, the university exemplifies how higher education can be a powerful catalyst for positive environmental change and community empowerment.



Plate 1. National Conference on Mahanadi; Environmental Challenges and Way Forward

Puri Beach Cleaning and Awareness Campaign

An Activity under Sustainability Championship Award, 2024



A snapshot from the Puri Beach Cleaning Program, jointly hosted by Sri Sri University's Faculty of Engineering and Technology (FET) and Faculty of Sciences (FoS). In attendance were 700 participants from diverse backgrounds, including students from schools like KIIT, KISS, SOA, and locals from the community. Additionally, experts from City University of New York contributed to the event's intellectual exchange. Amidst the collaborative efforts, school children and local residents joined hands to make a significant impact on beach cleanliness and environmental awareness.

Organised by: Team Renew Rangers



Plate 2. Beach cleaning program with City University, New York



Plate 3. Educational Program on Environmental Impact Assessment



Plate 4. Eco-club -Awareness camp for saving the ecosystem



Plate 5. Celebration of National Science Day

Action

In its ongoing commitment to address critical water resource challenges, particularly concerning Life Below Water, Sri Sri University's Faculty of Science (Environmental Science) has established itself as a leading voice in environmental discourse. The institution marked a significant milestone with its **National Conference on Mahanadi: Environmental Challenges and Way Forward** held on December 18-19, 2023. Building on this momentum, the University is set to host another crucial gathering - the **National Conference on Challenges to Life Below Water: Achieving Sustainable Development Goals (SDGs)** scheduled for December 13-14, 2024.

These conferences serve as vital platforms, effectively bridging the gap between various stakeholders in the environmental sector. By bringing together policymakers, government officials, research organizations, and domain experts, the university has created a dynamic forum for meaningful dialogue and collaboration. The discussions encompass pressing issues facing our marine ecosystems, including the far-reaching impacts of climate change on coastal regions, strategies for preserving marine biodiversity, and the implementation of ecosystem-based adaptation approaches.

At its core, these initiatives reflect Sri Sri University's broader vision of strengthening coastal community resilience while facilitating knowledge exchange across India's thirteen coastal states. The conferences not only highlight current environmental challenges but also foster innovative solutions through collaborative engagement, making them instrumental in advancing sustainable coastal management practices and marine conservation efforts across the nation.




जल शक्ति मंत्रालय
MINISTRY OF JAL SHAKTI


SRI SRI UNIVERSITY
 LEARN • LEAD • SERVE

14 LIFE BELOW WATER



National Conference on

Challenges to Life Below Water: Achieving Sustainable Development Goals (SDGs)

13-14 DEC, 2024

| | | | |
|---------------|---------------------------------|--------------------------|-----------------------------|
| Themes | Water Quality and Pollution | Developmental Activities | Water Governance |
| | Agricultural Practices | Carrying Capacity | Conservation and Management |
| | Fish and Fisheries | Sand Mining | Other Related Aspects |
| | River Regulation and its Impact | Socio-economic Aspects | |

Fees: INR 1000 (after acceptance of abstract)



SCAN TO SUBMIT



Deadline for abstract submission
20th September 2024



Deadline for full paper submission
1 November 2024

Contact

-  Conference. fos@srisriuniversity.edu.in
-  8455001805
-  Ward No.3, Sandhapur, Godisahi, Cuttack, Odisha 754006

Chief Organizer

Dr Jay Prakash Bhatt
Dean, Faculty of Science

Organizing Secretary

Mr Satyajeet Arya
Assistant Professor, Faculty of Science

 / SriSriU SriSri.University

Plate 6. Our upcoming national conference with a special theme on Life Below Water

Sri Sri University's commitment to *environmental stewardship* extends deeply into marine conservation and community engagement. The institution has developed a comprehensive approach to *environmental awareness*, particularly focusing on *sustainable fishing practices and coastal ecosystem preservation*. Through carefully designed programs, students are encouraged to engage directly with local fishing communities, creating meaningful dialogues that bridge academic knowledge with real-world practices.

A distinctive feature of the university's approach is its *hands-on educational initiatives*. Students regularly conduct surveys and engage in discussions with local fishermen and fish vendors in nearby markets, gaining invaluable insights into both ecological challenges and livelihood concerns. These interactions provide students with a nuanced understanding of the delicate balance between *environmental conservation and community sustenance*. Through these engagements, students learn about critical issues such as the importance of proper mesh size regulations, the dangers of overfishing, and the long-term benefits of sustainable fishing practices.

The university's water conservation initiatives have created significant ripples throughout the local community. Every event and activity within the university premises incorporates water

conservation principles, setting a strong example for sustainable resource management. This commitment extends beyond campus boundaries through various outreach programs, including beach cleaning drives that benefit local communities, visitors, and tourists alike. The active involvement of local stakeholders has been crucial in amplifying these conservation efforts.

Collaboration stands as a cornerstone of Sri Sri University's environmental initiatives. The institution has forged strong partnerships with local non-governmental organizations (NGOs), leading to increased volunteer participation from both its own students and those from other colleges. This inter-community cooperation has created a powerful network of environmental advocates, ensuring that the message of responsible water use and conservation reaches a broader audience.

In alignment with its environmental ethos, Sri Sri University maintains a strict vegetarian policy on campus. As outlined in the Handbook for the Academic Year 2023-24, the consumption of aquatic-derived foods, including fish and prawns, is prohibited, and only vegetarian dishes are prepared in campus kitchens. This policy reflects the university's holistic approach to environmental conservation and sustainable living practices.

Through these multifaceted initiatives, Sri Sri University has created a comprehensive framework for environmental education and conservation. The impact of these programs extends far beyond the immediate campus community, fostering a deeper understanding of environmental stewardship among students and local residents alike. By combining educational initiatives with practical conservation efforts and community engagement, the university continues to make significant strides in promoting sustainable environmental practices and preserving aquatic ecosystems for future generations.

Water-sensitive waste disposal

Sri Sri University is committed to sustainable water management practices. The university has implemented a cutting-edge bio-sewage treatment plant that efficiently processes wastewater, repurposing it for irrigation, road sprinkling, and ground spraying. This innovative approach not only reduces harmful bacteria but also safeguards wildlife and aquatic ecosystems.

To further conserve water, the university harnesses rainwater by reclaiming abandoned quarries and treating it for use in toilets and various applications. This practice reduces groundwater dependency and promotes the conservation of precious water resources.

The university rigorously monitors water quality and discharge, adhering to stringent guidelines set by the Bureau of Indian Standards (BIS) and the World Health Organization (WHO). This ensures the highest standards of water quality and responsible water management.

Environmental Stewardship and Marine Pollution Prevention

Sri Sri University actively engages in environmental conservation efforts, including beach cleaning and river rejuvenation initiatives. The university imparts essential knowledge to students and staff about pollution prevention during visits to beaches and rivers, fostering a culture of environmental responsibility.

The university also supports local and regional awareness campaigns aimed at reducing marine pollution, highlighting its dedication to preserving aquatic ecosystems.

Plastic Reduction and Waste Management

Sri Sri University is at the forefront of combating plastic pollution through a comprehensive reduction policy. This includes promoting reusable alternatives, restricting single-use plastics, and encouraging plastic-free events. The university also collaborates with local businesses to prioritize sustainable packaging materials.

Preserving Local Ecosystems

Sri Sri University is dedicated to preserving shared wetlands by erecting a mid-height boundary wall to protect the delicate ecosystem and its biodiversity. Access to the wetlands is restricted to maintain the pristine natural environment, with strict prohibitions on artificial lighting or electrification near the area.



Plate 5. Safe waste disposal programme

QUALITEK LABS PRIVATE LIMITED
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E-mail id: customerservices.bbsr@qualiteklab.com; Phone: 0674-2952347

TEST REPORT

ULR No.: IC9292300008098F Format No.: QLB/MSP/QA/012/F001/01
Test Report No: QLB/TR/EW/2023/02253 Report issue date: 29/06/2023
Sample Submitted/Drawn: Submitted

Customer Details:
Name: SRI SRI UNIVERSITY
Address: Cuttack, Odisha-754005, Cuttack, Odisha, India-754005

Sample Details:
Sample Name/type: DRINKING WATER Item code: NA
Sample qty. received: 1 LTR Sample registration no.: QLB/EW/2023/02253
Batch no/lot no: SINDHU-3 Sample conditions: Good
Mfg. license no.: NA Packing description: Intact
Mfg. date/Exp. date: NA Sample receipt date: 24/06/2023
Ref (WO) no.: NA Sample registration date: 24/06/2023

Sampling Details:
Sampling done by: NA Sampling plan/method: NA
Date & time of sampling: NA Sample item: NA
Location of sampling: NA Quantity sampled: NA
Environmental conditions during sampling: NA Any deviation occurred during sampling: NA

Analysis Details:
Analysis start date: 24/06/2023 Analysis end date: 28/06/2023

| Sr. No | Test Parameters | Unit of measurement (UOM) | Test Method | Specification | Test Result |
|-------------------------------|-----------------|--------------------------------|----------------------------|---|---------------|
| Discipline: Chemical | | | | | |
| Group : Water | | | | | |
| 1 | pH Value | - | IS : 3025 (Part -11)-1983 | 6.5 - 8.5 | 6.92 at 25 °C |
| Discipline: Biological | | | | | |
| Group : Water | | | | | |
| 2 | E. Coli | Detected or Not detected/100ml | IS :15185:2016 | Shall not be detectable in any 100 ml of sample | Not detected |
| 3 | Total Coliform | Detected or Not detected/100ml | IS :15185:2016 | Shall not be detectable in any 100 ml of sample | Not detected |

Remarks : 1.0 NA; Not Applicable, 2.0 Specification given as per IS 10500:2012.

Reviewed by: **Mr. Biswaji Mondal**, Designation: Group Leader-QA
Authorized by: **Mr. Saumya Kanta Pradhan**, Designation: General Manager

Disclaimer :

- The test result relates only to the samples tested and applicable parameters, endorsement of product is neither inferred nor implied.
- The report shall not be reproduced except in full without approval of the laboratory & cannot be used as an evidence in the court of law and should not be used in any advertising media without special permission in writing.
- The sample is analyzed at Qualitek Labs Private Limited, Bhubaneswar and the testing has been performed to the best of our ability and our responsibility. This certificate reflects our findings at the time and place of testing.
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Website: www.qualiteklab.com
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Sampling Details:
Sampling done by: NA Sampling plan/method: NA
Date & time of sampling: NA Sample item: NA
Location of sampling: NA Quantity sampled: NA
Environmental conditions during sampling: NA Any deviation occurred during sampling: NA

Analysis Details:
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Plate 6&7. Water quality report of different locations of Sri Sri University



Plate 8,9&10 Alternate materials of plastic like Jute Bags and paper bags are used inside the campus.

Maintaining the Local Ecosystem

Preserving Wetland Ecosystems

Sri Sri University is dedicated to the meticulous preservation of shared wetlands. A thoughtfully designed mid-height boundary wall safeguards these delicate ecosystems from encroachment and disruption. Access to the wetlands is restricted to maintain their pristine natural state, with strict prohibitions on artificial lighting or electrification near the area.

Careful consideration is given to drainage and waste disposal locations to minimize any impact on the wetland ecosystem. This reflects the university's commitment to the harmonious coexistence of education and nature.

Water Resource Management

Sri Sri University demonstrates a commendable approach to water resource management through a range of efficient practices. These include rainwater harvesting, wastewater and sewage treatment, and controlled drainage systems. The university actively engages students in awareness campaigns to minimize water consumption, such as upgrading taps with air filters, resulting in a significant 25% reduction in water usage.

Cutting-edge technology, like sensor-based toilets, is implemented to curtail water wastage, contributing to enhanced water conservation efforts. The university's long-standing practice of drip irrigation for horticulture significantly contributes to water conservation, maintaining a low annual water consumption rate.

Waste Management

Sri Sri University is committed to treating all waste before disposal. The university boasts well-maintained infrastructure, including a Bio-Sewage Treatment Plant, Wastewater Treatment Plant, and other facilities, ensuring responsible waste management.

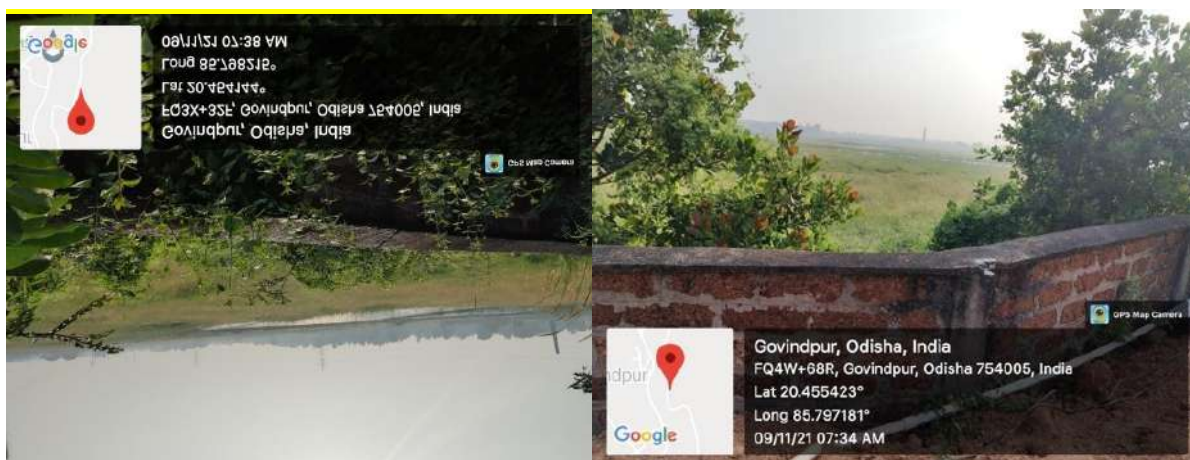




Plate 11,12&13. Adjacent wetland and water treatment infrastructure at Sri Sri University



Plate 14. Students collect samples from the canal for water quality analysis



Plate 15. Local village women made aware of climate change, water usage, and agriculture

Conclusion

Sri Sri University exemplifies a steadfast commitment to environmental stewardship, with a particular focus on aquatic ecosystems. This commitment is evident in various initiatives, including the preservation of wetlands, sustainable water resource management, and collaborative efforts for shared aquatic ecosystems.

The university's meticulous efforts in safeguarding wetlands from encroachment, implementing stringent conservation measures, and involving students in hands-on activities for water quality analysis showcase a dedication to maintaining the delicate balance of local ecosystems.

Sri Sri University's exemplary water resource management practices, including rainwater harvesting, wastewater treatment, and innovative technologies like sensor-based toilets, underscore a holistic commitment to responsible water usage. The integration of cutting-edge solutions and proactive measures, such as drip irrigation and water conservation structures, not only reduces the environmental impact but also sets a benchmark for sustainable practices.

The collaborative engagement with the local community, particularly in the context of shared aquatic ecosystems, demonstrates a broader vision of environmental stewardship. Through student-led initiatives, awareness campaigns, and systematic research on groundwater quality, Sri Sri University actively involves the academic community and neighboring residents in fostering a harmonious coexistence with the aquatic environment.

By consistently implementing the 3R concept (Reduce, Recycle, Reuse) and upcycling rainwater for various purposes, Sri Sri University has achieved an impressive 65% reduction in water consumption. This proactive approach to waste management and water conservation aligns seamlessly with the university's overarching commitment to environmental sustainability.

Sri Sri University serves as a beacon of inspiration, showcasing that a harmonious relationship between education and nature is not only possible but crucial for the preservation of life below water. Through its comprehensive initiatives, the university not only contributes to the well-being of local ecosystems but also instills a sense of responsibility and environmental consciousness in its students, fostering a sustainable legacy for generations to come.