





SRI SRI UNIVERSITY



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, steadfast in its commitment to promoting water conservation and life sustainability through its educational programs, embodies a comprehensive approach to tackling pressing environmental issues and fostering community involvement. The university's vision revolves around environmental sustainability and an expansive education that transcends conventional academic boundaries, as evidenced by its profound dedication to water-centric initiatives.

Central to these endeavors are the two global resource centres established by Sri Sri University explicitly for advancing education, research, and community outreach in matters related to water. These centers serve as focal points for the dissemination of knowledge and problem-solving in the intricate field of water resources.

The Sri Sri Center for Advanced Research in Water Resources and Environmental Management (SSCARWREM) plays a pivotal role in the university's mission. By spearheading specialized programs tailored for industry workers and students, with a particular focus on environmental impact assessment, SSCARWREM contributes significantly to educating and sensitizing individuals in various industries about the environmental ramifications of their operations. This proactive approach instills a sense of responsibility and awareness, shaping environmentally conscious professionals capable of driving positive change in their respective sectors.

Community outreach stands as another cornerstone of Sri Sri University's commitment to water-related causes. Within the esteemed W20 vertical, the university has orchestrated programs specifically designed to empower women in rural areas. These initiatives concentrate on climate change and sustainable agricultural practices, providing invaluable knowledge and skills to women actively engaged in agriculture. The impact of these programs has been substantial, with over 120 village women benefiting from the education and support they receive. By equipping these women with the necessary tools to adapt to changing environmental conditions, Sri Sri University enhances their resilience and empowers them to thrive in their agricultural pursuits.

In the realm of public health, Sri Sri University extends its proactive stance. The organization of educational programs on waterborne diseases in the form of webinars ensures that crucial

knowledge is widely accessible. These initiatives play a pivotal role in raising awareness about the severe consequences of waterborne diseases and educating the public about the risks they pose. By making this information readily available, the university contributes significantly to the prevention of waterborne illnesses and the promotion of public health.

Sri University's holistic approach to education and community engagement underscores its profound commitment to addressing critical environmental and health issues. These initiatives not only showcase the university's dedication to disseminating knowledge but also its determination to leave a lasting, positive impact on local communities and society as a whole. By seamlessly integrating education, research, and community outreach into its mission, Sri Sri University stands as a beacon of sustainability and positive change in the field of water resources and environmental management. Sri Sri University has established a Farmers Club, led by students pursuing B.Sc Agriculture and B.Sc Horticulture, with active participation from local farmers. Engaging in activities such as irrigation practices and water management, this club serves to educate, support, and empower farmers and local communities. As an integral part of the curriculum, outreach initiatives, including internships and workshops, strengthen the bond between students and farmers, fostering improved agricultural practices.

The B.Sc. (Hons) Agriculture program at Sri Sri University is designed to impart education on the protection of aquatic ecosystems and water conservation engineering. Covering topics such as Environmental Studies and Disaster Management, Soil and Water Conservation Engineering, Agro-meteorology & Climate Change, Rainfed Agriculture and Watershed Management, Renewable Energy, and Green Technology, the course aims to equip students with comprehensive knowledge in these crucial areas.

Similarly, the B.Sc. (Hons) Environmental Science program addresses water resource management and conservation, delving into aspects of freshwater ecosystems, including aquatic biodiversity and water pollution. Recognizing the interconnectedness with local communities, farmers, and fishermen who share these aquatic ecosystems, the university encourages students and faculty members to engage in firsthand experiences, sharing expertise and support.

Outreach programs expose students to local fisherman communities, integrating awareness initiatives on sustainable fisheries, overfishing, and unreported or unregulated fishing into the

curriculum. Sri Sri University actively organizes events focused on water management and irrigation practices for local farmers and communities. Through awareness campaigns and workshops, farmers are educated on efficient and effective water resource utilization.

Participation in local, national, and international movements related to water management remains a cornerstone of Sri Sri University's commitment. Students not only partake in these events but also extend their reach to conferences on oceans, such as the National Conference on Sustainable Coastal Management in Bhubaneshwar, Odisha organized by UNEP. where our students are actively participating. Moreover, the university has solidified its dedication to advancing knowledge and practices in the field by signing a Memorandum of Understanding (MoU) with ICAR- CIFA.

Research scholars are empowered to conduct studies on best water management practices, and the university actively disseminates state-of-the-art technologies, government policies, and subsidies for irrigation practices to local farmers and stakeholders. These initiatives have yielded tangible benefits, prompting notable changes in their actions and practices. These transformative outcomes underscore the impactful synergy between academic learning and real-world application at Sri Sri University, fostering a community dedicated to positive change in water and environmental management.



Plate 1. Community outreach prom with W20-G20



Plate 2. Educational program on Environmental Impact Assessment



Plate 3. Educational program on water borne disease



Plate 4. Students visiting the Maritime Museum at Cuttack, Odisha

Action

In the intricate realm of coastal sustainability, the proactive engagement of Sri Sri University's Environmental Science students in the National Conference on Sustainable Coastal Management in Bhubaneshwar, Odisha, in September 2022, stands as a pivotal and commendable initiative. This introduction serves as a portal to delve into their active participation, effectively bridging diverse stakeholders, including policymakers, government bodies, research organizations, and experts. The conference provided a forum for discussions covering critical topics such as the impact of climate change on coastal regions, marine biodiversity preservation, and the adoption of ecosystem-based strategies for adaptation. The overarching aim was to fortify the resilience of coastal communities and facilitate the exchange of knowledge across all 13 coastal states in India.

Furthermore, this introduction sheds light on Sri Sri University's enduring commitment to environmental awareness. The university actively encourages students to interact with local fishing communities, fostering an understanding of the benefits of sustainable fishing practices. Simultaneously, the institution is deeply engaged in outreach activities designed to educate these fishing communities about the perils of overfishing, unregulated practices, and the importance of adhering to mesh size regulations. This collective effort seeks to champion sustainable fishing practices within the community, safeguarding the long-term well-being of the ecosystem.

In addition, the introduction underscores students' proactive interactions with local fishermen and fish vendors in nearby markets. Through surveys and engaging discussions, students gain firsthand insights into the challenges confronting these communities, encompassing not only ecological concerns but also livelihood-related issues. The intricate tapestry of Sri Sri University's engagement in coastal sustainability, as detailed in this introduction, underscores its commitment to creating a lasting impact in the realm of environmental conservation and community involvement.

Sri Sri University has taken a proactive stance in fostering a culture of water conservation and sustainability among its students. The university actively encourages student participation in various educational programs, activities, and outreach initiatives emphasizing the responsible use and preservation of water resources. This commitment extends to every event within the

university's precincts, ensuring a substantial contribution to water conservation in the local and nearby areas.

The impact of these initiatives resonates beyond the university campus, benefiting local communities, visitors, and tourists through beach cleaning and outreach programs championed by the university. A notable aspect is the active involvement of local stakeholders, amplifying the overall impact. This collaborative approach ensures that the principles of water conservation and environmental stewardship are embraced by a wider audience.

These activities have become integral to Sri Sri University's engagement with students and the broader community. The benefits are multifold, enriching the understanding of students and residents, fostering harmony with nature, and enhancing the conservation of aquatic ecosystems.

Notably, the university collaborates with local non-governmental organizations (NGOs), resulting in increased participation from student volunteers not only from Sri Sri University but also from other colleges and various communities. This inter-community synergy ensures that the message of responsible water use and conservation resonates more widely, creating a ripple effect of positive change and promoting a sustainable approach to precious water resources.

The consumption of food derived from aquatic sources, including fish and prawns, is expressly prohibited within Sri Sri University's campus. The institution's student handbook, specifically the Handbook for the Academic Year 2022-23, unequivocally mandates that only vegetarian dishes are prepared in the kitchen and permitted within the campus.



Plate 5. Students are participating in community outreach at Cuttack, Odisha



Plate 6. Students participating in Quiz competition on the occasion of World Tourism Day, 2023



Plate 7. Students are participating in National Conference on Sustainable Coastal Management in Bhubaneshwar, Odisha organized by UNEP.



Plate 8. Students are interacting and collecting samples of fish from the local; fish market



Plate 9. Students involved in various activities related to aquaculture, agriculture at Sri Sri University

Water-sensitive waste disposal

Sri Sri University is dedicated to a waste-sensitive approach to water management, exemplified by the implementation of a cutting-edge bio-sewage treatment plant. This innovative facility efficiently processes sewage water, repurposing it for irrigation, road sprinkling, and ground spraying. This not only curtails harmful bacteria proliferation but also contributes to safeguarding wildlife, aquatic flora, and fauna through the responsible release of treated water.

The university goes further by harnessing rainwater through the reclamation of abandoned quarries, subjecting it to specialized treatment for use in toilets and various applications. These sustainable practices reduce groundwater dependency and foster the conservation of precious rainwater resources.

To uphold the highest water quality standards, Sri Sri University meticulously monitors water quality and discharge, adhering to guidelines established by the Bureau of Indian Standards (BIS) and the World Health Organization (WHO). These monitoring efforts, conducted at regular intervals, underscore the institution's unwavering commitment to responsible water management.

Environmental Stewardship and Marine Pollution Prevention

Sri Sri University's commitment to combat marine pollution is evident through a series of impactful initiatives. The university actively engages in beach cleaning and river rejuvenation projects, aligning with its dedication to environmental stewardship.

As part of its comprehensive approach, the university imparts essential knowledge to students and staff, emphasizing pollution prevention during visits to beaches and rivers. This educational component is vital in instilling a culture of responsibility.

Sri Sri University actively supports local and regional awareness activities aimed at reducing marine pollution, highlighting the institution's dedication to preserving the health of aquatic ecosystems and fostering a cleaner, more sustainable environment.

The university is at the forefront of combating plastic pollution through a comprehensive reduction policy. Measures include the promotion of reusable alternatives, strict guidelines on single-use plastics, and encouragement of plastic-free events on campus. Strategic partnerships with local businesses prioritize the use of sustainable packaging materials. Sri Sri University's commitment to reducing plastic waste is a collective effort to foster a culture of responsible consumption and environmental stewardship on campus and beyond.

Preserving Local Ecosystems and Wetlands

Sri Sri University diligently preserves shared wetlands by erecting a mid-height boundary wall designed to prevent disruption to the delicate wetland ecosystem and its biodiversity. Access is restricted to maintain the pristine natural environment, with stringent prohibitions on artificial lighting or electrification near the wetlands.

Careful selection of locations for drainage and waste disposal further underscores the university's commitment to preserving the existing wetland ecosystem, showcasing a dedicated approach to the harmonious coexistence of education and nature.

Systematic Monitoring and Biodiversity Conservation

Sri Sri University maintains a systematic monitoring process encompassing regular assessments of water quality, flora, and fauna. Specialized student organizations such as the eco-club and farmer clubs actively conduct monitoring, experimental projects, and awareness campaigns.

The university's faculty members inspire and guide students in undertaking experimental studies and surveys aimed at enhancing environmental conditions. Adhering to stringent quality standards set by BIS/WHO, the university ensures a high standard of quality maintenance.

Sri Sri University has crafted its own biodiversity map, providing comprehensive insights into the diverse plant and animal life within the university's domain. These initiatives exemplify the university's unwavering commitment to environmental stewardship and conservation.

The university hosts various clubs and courses, including the Eco-club, Farmers' Club, Bird Club, and Science Club, focusing on environmental issues. Regular surveys of aquatic macrophytes and faunal species are conducted, along with market surveys to check fish species availability.

Initiatives are in place to prevent wetland pollution, monitoring soil dumps, wastes, sewage outfall, and garbage. The university utilizes a bio-digestor employing anaerobic microbial inoculum to treat human waste, contributing to efficient waste management. Well-developed policies regarding the aquatic ecosystem, including reducing marine pollution and waste disposal, guide Sri Sri University's environmental efforts.

In essence, Sri Sri University's initiatives for waste-sensitive disposal showcase a holistic commitment to environmental sustainability and the protection of life below water. These actions exemplify the university's dedication to responsible water management and preservation of aquatic ecosystems, leaving a lasting positive impact on both the campus and the broader environment.

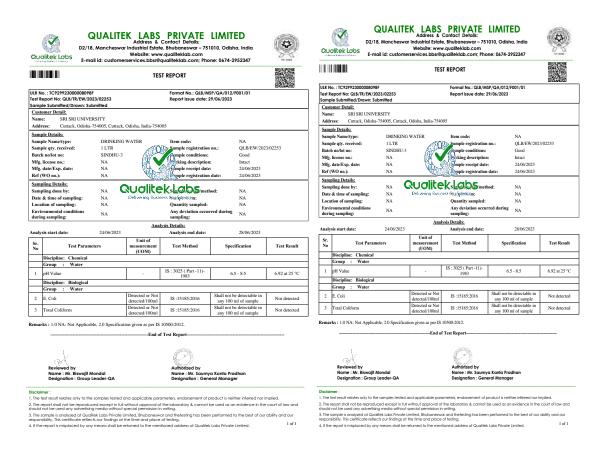


Plate 11 &12. Water quality report of different locations of Sri Sri University



Plate 13,14 &15. Alternate materials of plastic like Jute Bags and paper bags are used inside the campus.

Maintaining the Local Ecosystem

Sri Sri University is dedicated to the meticulous preservation of shared wetlands, shielding them from the encroachment of developmental activities. A thoughtfully designed mid-height boundary wall stands as a guardian, preventing any disruption to the delicate wetland ecosystem and its biodiversity.

In alignment with this conservation ethos, access to the wetlands is restricted for both students and individuals, ensuring the preservation of the pristine natural environment. Strict prohibitions are in place against artificial lighting or electrification near the wetlands, safeguarding the integrity of the natural surroundings.

Careful consideration is given to drainage and waste disposal locations, emphasizing the university's commitment to preserving the existing wetland ecosystem. This approach underscores the university's dedication to the harmonious coexistence of education and nature.

In Plates 16, 17, and 18, the symbiotic relationship between the adjacent wetland and the water treatment infrastructure at Sri Sri University is visually highlighted. Plate 19 and Plate 20 showcase students actively participating in water quality analysis, emphasizing the hands-on involvement in preserving the local ecosystem.

14.5 Water Resource Management: Sri Sri University's Exemplary Practices

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, upgrading taps with air filters, resulting in a significant 25% reduction in water usage.

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

Sri Sri University is committed to treating all waste before disposal, boasting well-maintained infrastructure, including a Bio-Sewage Treatment Plant, Wastewater Treatment Plant, and Drinking Water Treatment Plant. The university's proactive approach to waste management and water conservation aligns with its broader environmental stewardship initiatives.

Action points underscore the university's strategic use of laterite rock quarries, serving as natural reservoirs for rainwater harvesting. The collected rainwater is efficiently channelled for irrigation and agricultural purposes, utilizing micro-irrigation systems to optimize water usage.

14.5.4 Collaboration for Shared Aquatic Ecosystems: Engaging the Local Community

Sri Sri University collaborates with the local community to maintain shared aquatic ecosystems, particularly with Kath Jodi, a distributary of the Mahanadi River. Students actively participate in experimental studies, research activities, and awareness campaigns, fostering a mutually beneficial relationship among the academic community, neighbouring residents, and the aquatic ecosystem.

Their efforts result in tangible improvements in the aquatic ecosystem, promoting harmonious coexistence. Students organize awareness campaigns for residents, ensuring widespread appreciation of the positive impacts of their work. Additionally, students engage in systematic research on groundwater quality and the development of localized treatment methodologies, showcasing the university's commitment to comprehensive ecological stewardship and community involvement.





Plate 16,17 &18. Adjacent wetland and water treatment infrastructure at Sri Sri University



Plate 19. Student collect samples from the canal for water quality analysis.



Plate 20. Students collecting samples from the canal for water quality analysis



Plate 21. Local village women made aware of climate change, water usage, and agriculture.



Plate 22. Plantation ion nearby villages by Sri Sri University students

Conclusion

Sri Sri University's steadfast commitment to life below water is exemplified through a multifaceted approach encompassing the preservation of wetlands, sustainable water resource management, and collaborative initiatives for shared aquatic ecosystems. The university's meticulous efforts in safeguarding wetlands from developmental encroachment, implementing strict 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.