

Report on

# Sustainable Development Goal 12



RESPONSIBLE CONSUMPTION AND PRODUCTION



In pursuit of the United Nations Sustainable Development Goals , SRHU has demonstrated a strong institutional commitment to SDG 12 – Responsible Consumption and Production. This goal emphasizes the need to reduce ecological footprints by changing the way goods and resources are produced and consumed. SRHU has actively integrated sustainability principles into its operations, infrastructure, and academic ethos. From renewable energy adoption and waste management systems to sustainability education and responsible procurement practices, the University aligns its actions with global targets, setting a benchmark for higher education institutions striving for environmental stewardship and circular economy leadership.

#### **Solar Energy Adoption and Sustainable Power Systems**

Swami Rama Himalayan University (SRHU) has made remarkable progress in embedding sustainability into its operational framework through the adoption of renewable energy systems, directly supporting SDG 12: Responsible Consumption and Production. By systematically replacing conventional energy with clean solar power, SRHU has reduced its carbon footprint while enhancing resource efficiency. Over the past three years, the University's rooftop solar power plants have generated 7,160,055 kWh of clean energy, resulting in cumulative savings of approximately ₹2.51 crore. During this period, the contribution of solar power to the University's total energy demand ranged between 14.76% and 17.43% annually. SRHU has also exported more than 3.74 lakh kWh back to the grid, reflecting responsible energy production and community support. These efforts align with SDG Target 12.2, which advocates for sustainable management and efficient use of natural resources, and Target 12.4, emphasizing the reduction of environmental impact through cleaner production.

In a major milestone, the University commissioned a 1 MW rooftop solar plant on 17 August 2024 under a Power Purchase Agreement (PPA), utilizing advanced monocrystalline dual-side solar panels spread across 4,500 sq.m. The system is expected to generate over 136,000 kWh per month,



significantly reducing dependence on fossil fuels. Complementing this initiative, SRHU has also installed a 50,000 LPD solar water heating system across its hospital facilities, hostels, and research wards. This shift from electric to thermal solar heating has saved an estimated 22.5 lakh kWh of electricity over three years—equivalent to ₹1.28 crore in cost savings—while also reducing thermal energy demand by 8,100 GJ. These resource-efficient systems not only enhance institutional resilience and sustainability but also demonstrate SRHU's strategic alignment with SDG Target 12.5, which promotes substantial waste and resource reduction through preventive practices and innovation.



Installation of New Solar Power Plant at Swami Rama Himalayan University



Aerial view of Solar panels at HIMS (Google Maps)





Rooftop solar panels at Swami Rama Himalayan University harnessing renewable energy to promote sustainability and reduce carbon footprint.



Rooftop Solar water heater at SRHU

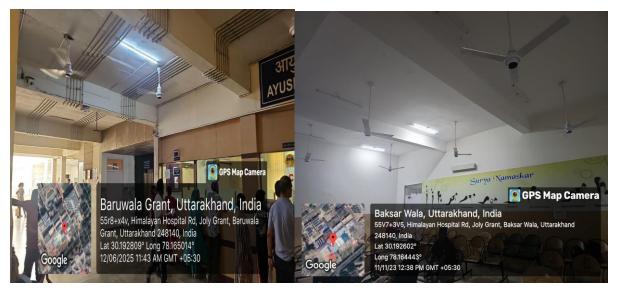


SRHU has completely transitioned to LED lighting across classrooms, offices, hostels, and hospitals—delivering energy savings of up to 80% compared to traditional lighting. This upgrade is complemented by the installation of motion-sensor-based smart lighting systems in key buildings, ensuring illumination is only active when needed, thereby minimizing electricity wastage. In a major initiative, the University replaced 2,000 conventional ceiling fans with energy-efficient 32W BLDC fans, leading to annual energy savings of approximately 304,608 kWh. These fans not only reduce power consumption but also offer longer service life, lower noise, and reduced maintenance, reflecting the University's long-term approach to sustainable operations.



Implementation of LED lighting at the University office as a step promoting energy efficiency







Energy-efficient BLDC (Brushless Direct Current) fans within hospital premises to enhance energy conservation

To enhance climate control and thermal efficiency, SRHU has installed over 800 BEE-rated inverter air conditioners and integrated Variable Frequency Drive (VFD) pumps, Heat Recovery Wheels, and Mechanical Ventilation with Heat Recovery (MVHR) systems within its centralized HVAC units. These systems adjust output based on real-time demand and reclaim up to 85% of return air



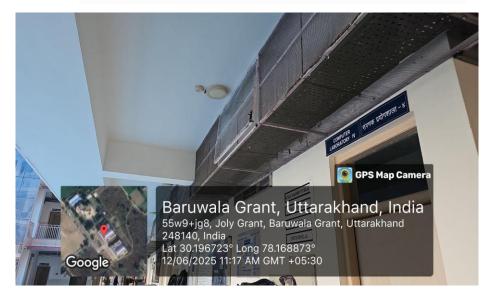
temperature, resulting in 25–50% energy savings in air-conditioning loads. The replacement of an outdated 378 TR AC unit with a BEE star-rated system using eco-friendly refrigerant R-407 has further optimized energy use, reducing electrical load by 102.06 kW and saving 44,702 kWh annually.



Power Saving AC at Audiometry room, Himalayan Hospital

Moreover, SRHU has integrated Passive Infrared (PIR) sensors and smart automation controls across key areas of the campus, ensuring lighting and energy use are tightly regulated based on occupancy. Even in critical backup systems, SRHU employs nine CPCB-compliant diesel generators equipped with Automatic Mains Failure (AMF) and load synchronization technology. This ensures the generators run only when necessary, curbing excess fuel use. In 2024–25, diesel generators contributed just 2.59% of total energy demand, with emissions consistently tested and found within permissible NABL-certified limits.





Motion based sensor lights at Engineering college building



9 Diesel generator sets with Automatic Mains Failure panels and load synchronization system

#### **Promoting Sustainable and Low-Emission Mobility**

The University has taken proactive steps to promote environmentally responsible mobility solutions on campus, aligning with SDG 12, particularly Targets 12.2 and 12.4 which emphasize efficient resource use and reduction of environmental impact. Recognizing the importance of sustainable transportation,

SRHU actively encourages the use of bicycles and electric vehicles (EVs) as clean, low-emission alternatives to conventional motor vehicles.





Restricted vehicle entry as part of sustainable urban planning measures aimed at reducing environmental impact

The campus is equipped with wide internal roads and restricted motor traffic, making it safe and conducive for cycling. To support this initiative, an e-bike rental facility is available for students, offering convenient and affordable access to electric bikes for commuting between academic buildings, hostels, and University services. This system not only reduces the campus's carbon footprint but also promotes healthy and energy-efficient travel.





E-bike rental facility available for students to commute sustainably across the campus

In addition to e-bikes, the University has also integrated electric vehicles (EVs) into its campus transportation network for use by faculty, staff, and visitors. These vehicles operate under an energy-managed system and reflect SRHU's broader commitment to green infrastructure and smart campus development. Together, these mobility initiatives reduce reliance on fossil fuels, enhance air quality, and demonstrate SRHU's leadership in advancing sustainable practices within the higher education sector—making tangible progress toward the objectives of SDG 12.



Electric vehicle deployed for intra-campus transport, supporting sustainable mobility initiatives and reducing carbon emission



#### Water Usage Optimization and Conservation Measures at SRHU

The University has embraced a resource-conscious approach to campus development, with a strong emphasis on water conservation and reuse—core tenets of SDG 12. Recognizing the increasing pressure on freshwater resources and the need for efficient water use, SRHU has implemented an integrated water management strategy to reduce dependency on municipal supply while improving operational sustainability. The campus has 21 rainwater harvesting structures, including 16 recharge pits, 2 borewell recharge units, and 3 new pits added in 2024–25 to enhance capacity. These systems help recharge the groundwater table using rainfall, which averages 2,073.3 mm annually. One standout project is the 150 KL underground rainwater harvesting tank at the Medical College, which supports water reuse in 119 toilets and 138 bathroom taps, resulting in the reuse of approximately 9.45 lakh liters/year and groundwater recharge of about 1.57 crore liters/year.



Rain water harvesting pit no 15 near School of Pharmacy, SRHU





**Underground water tank at SRHU** 



**Recharge Pit near University Office** 

Complementing these systems, SRHU operates a 1 MLD Sewage Treatment Plant (STP) and a 90 KLD Effluent Treatment Plant (ETP) using advanced MBBR and aeration technologies. Treated water is



repurposed for landscape irrigation and green belt maintenance, significantly reducing the demand on freshwater sources. These measures embody a circular water economy model, minimizing waste while optimizing resource recovery. Through these conservation and reuse efforts, SRHU demonstrates best practices in institutional sustainability, echoing the principles of SDG 12.2, 12.4, and 12.5. The University not only reduces its environmental footprint but also serves as a replicable model for efficient resource use and eco-conscious planning in higher education.

#### **E-Waste Management**

SRHU has implemented the e-waste management policy as prescribed by the state government, ensuring the environmentally responsible disposal of electronic waste. Non-functional and obsolete electronic devices—such as computers, CPUs, monitors, keyboards, mice, and other outdated equipment—are systematically collected and stored in a centralized e-waste storage facility located on campus.

In adherence to regulatory standards, this e-waste is periodically transferred to certified and authorized vendors for safe and responsible disposal, under the framework of a formal agreement. This structured process not only guarantees compliance with environmental regulations but also reinforces the University's commitment to sustainable waste management and eco-friendly campus practices. A certificate of e-waste disposal is provided by the vendor to the University for Official Records, ensuring accountability and compliance with environmental standards.



#### NAAC A+







E-waste store - promoting responsible consumption and production



SRHU has official membership with Anmol Paryavaran Sanrakshan Samiti, a recognized organization certified by the Uttarakhand Environment Protection and Pollution Control Board (UEPPCB) for responsible e-waste management and it certifies SRHU as an authorized participant in activities related to e-waste collection, storage, dismantling, recycling, refurbishing, and disposal. This affiliation supports the University's efforts to minimize electronic waste through environmentally sound practices

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SRHU is a certified member for e-waste management by Anmol Paryavaran Sanrakshan Samiti, promoting responsible disposal

#### **Waste Management and Recycling**

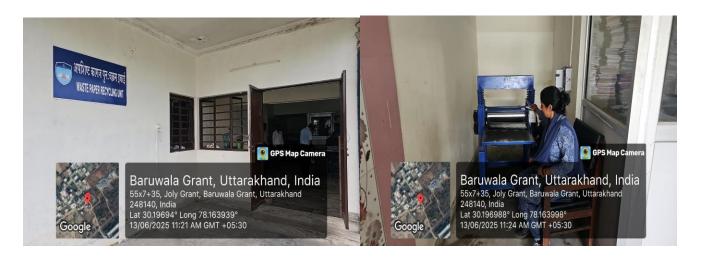
Waste management and recycling are prioritized across SRHU through a multi-pronged approach that includes recycling, composting, and energy recovery. An in-house waste paper recycling unit processes



around 8 kg of waste paper daily, converting it into handmade paper for University use, including envelopes. The campus also manages biodegradable waste through compost pits that produce organic manure used in gardens and the nursery. A bio-gas plant near the guest house processes cow dung and vegetable waste into clean energy for cooking, exemplifying SRHU's commitment to a circular economy and natural resource efficiency.



A worker at SRHU's in-house unit converting waste paper into handmade paper, advancing circular economy practices



Waste paper recycling unit at SRHU





Compost Pit Site aiding conversion of organic waste into nutrient-rich compost to support sustainable landscaping and responsible waste management



Compost Pit at SRHU promoting on-site composting of biodegradable waste to support sustainable waste management and soil enrichment



#### **Plastic-Free Campus Initiative**

To further reduce environmental pollution, SRHU has undertaken a strong Plastic-Free Campus Initiative. The use of single-use plastics has been restricted, and "Plastic-Free Campus" signage has been installed to raise awareness among students, faculty, and visitors. In addition to behavioral change, innovative projects like the Plastic Waste Bank and plastic-to-diesel recycling initiative demonstrate the University's commitment to responsible plastic disposal and environmental sustainability. From 2021 to 2025, Swami Rama Himalayan University recycled a total of 5,600 kg of plastic in collaboration with CSIR-IIP, its Social Technology Partner for the Plastic-to-Diesel Lab project. This initiative, launched alongside the 'Plastic Waste Bank' in 2022, reflects the University's commitment to sustainable waste management and innovative recycling solutions. Through this partnership, collected plastic waste was processed into fuel, supporting both environmental conservation and technological advancement in plastic waste utilization.

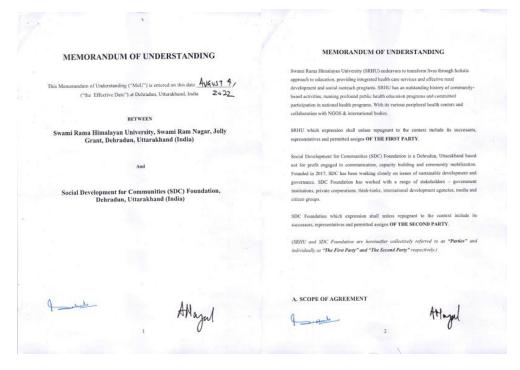


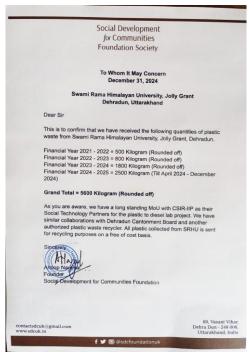




Plastic-Free Campus signage at Swami Rama Himalayan University promoting sustainabil







MoU between SRHU and SDC for sustainability and plastic waste management



#### **Solid Waste Management**

SRHU employs a structured solid waste management system to ensure proper handling and processing of campus-generated waste. Waste is segregated at the source using color-coded bins—green for biodegradable and black for non-biodegradable waste. Collected organic waste is composted on-site, while recyclable waste is processed for reuse. The University also integrates these efforts with its biogas, reinforcing the sustainable management of solid waste and reducing landfill dependency.



Color-coded waste segregation bins which enables efficient disposal of waste





Black and Green Bins located at various key locations promoting source-level waste segregation of biodegradable and non-biodegradable waste



Biogas Plant at SRHU for clean energy production, supporting resource sustainability



#### **Green Campus and Sustainable Landscaping**

Environmental sustainability at SRHU is further supported through thoughtful landscaping and green campus development. Landscaping incorporates native and drought-resistant plant species that require minimal water and maintenance. Tree plantation drives enhance biodiversity, air quality, and provide natural shading. These green practices align closely with SDG targets focused on efficient use of natural resources and significant waste reduction.



Snippets of lush green campus supporting biodiversity











Numerous varieties of trees, shrubs and seasonal plants across the University premises supporting fauna







Harela Celebration 2025 at SRHU – fostering cultural awareness and promoting sustainable consumption through tree planting



Annual Harela Celebrations at SRHU – honoring cultural heritage and promoting sustainability in line with SDG 12



#### NAAC A+











RDI at SRHU leads community-driven tree plantation drives, empowering locals in ecological restoration and supporting SDG 12 through grassroots environmental stewardship



#### Research and innovation

The University demonstrates a strong commitment to advancing SDG 12 through its prolific research output, as evidenced by the 97 research articles published in Scopus-indexed journals during 2024-2025. These publications span a diverse range of topics directly aligned with SDG 12, including sustainable materials, circular economy, waste valorization, green nanotechnology, sustainable agriculture, and energy storage innovations. The breadth and depth of this research reflect the University's dedication to promoting sustainable practices, fostering innovation, and addressing critical environmental challenges through science and technology. This robust scholarly activity underscores the University's role as a leading institution driving sustainable development via impactful research.

List of research publications for 2024-2025:

SN	PUBLICATION TITLE	DOI
1.	Experimental investigation on the spectral, mechanical, and thermal behaviors of thermoplastic starch and delaminated talc-filled sustainable bio-nanocomposite of polypropylene	10.1515/jmbm-2024-0031
2.	Mapping of radionuclides for radiological impact assessment in cultivated soil of Punjab, India	10.1016/j.apradiso.2025.111881
3.	A feasible chemo preventive approach involves the use of zinc-coated curcumin with a carrageenan matrix for improved stability, solubility, and bioavailability	10.1515/polyeng-2024-0066
4.	Spatial distribution analysis of soil radioactivity using gamma-ray spectroscopy and radiological inferences	10.1140/epjs/s11734-025-01645-5
5.	Corrigendum to "Comprehensive review of sustainable utilization of Arenga obtusifolia Griff. as a food"	10.1016/j.jafr.2024.101619
6.	Advancements in energy storage applications: harnessing	10.1007/s43939-024-00161-y



	the potential of fish industry waste	
7.	Sal (Shorea robusta) seed oil: A sustainable alternative for cocoa butter and edible oil	10.1016/j.fufo.2025.100655
8.	Modern spectroscopic techniques for drug discovery and environmental sustainability	10.4018/979-8-3693-7473-3
9.	Near-infrared spectroscopy for nutrient analysis in manure: Techniques, applications, and innovations	10.4018/979-8-3693-7473-3.ch012
10.	Ficus auriculata Lour., an underutilized nonconventional alternative fruit to Ficus carica with nutraceutical potential	10.1007/s43621-024-00480-3
11.	Anti-diabetic potential of Rubus species: linking conventional knowledge with scientific developments: a review	10.1186/s43014-024-00263-3
12.	A comparative investigation of ultrasonication and magnetic stirring methods for green synthesis of zinc oxide nanoparticles using Punica granatum peels	10.1038/s41598-025-04926-0
13.	Prospective observational study on antibiotic sensitivity of endotracheal tip cultures in ICU patients	10.18231/j.ijca.2025.015
14.	Harnessing nanotechnology for sustainable agriculture: From seed priming to encapsulation	10.1016/j.plana.2024.100124
15.	Burden and trend of drug resistant tuberculosis: Is the onus on isoniazid monoresistant TB now?	10.1016/j.ijtb.2025.06.015
16.	Efficient tagging strategies for software resources on information repositories	10.1201/9781003561651-65
17.	The Human Side of Sustainability: Behavioural Economics in Climate Action and Neutrality	10.1007/978-3-031-83250-5_15



18.	Serving local produce in homestays for socio-economic development in Uttarakhand	10.4018/979-8-3373-0427-4.ch011
19.	Hospital-associated effluents: the masked environmental threat that needs urgent attention and action	10.1007/s42452-024-06456-2
20.	A state-of-the-Art review on edible electronics: Next- generation technologies for biocompatible and ingestible devices	10.1016/j.tifs.2025.104880
21.	Advancements of UV-Vis spectroscopy in drug discovery:  Illuminating insights and applications	10.4018/979-8-3693-7473-3.ch005
22.	Plant-microbes-nanofertilizers and their interactions for plant growth promotion and stress management	10.1016/B978-0-443-22285- 6.00007-0
23.	Exploration of techno-functional properties and metabolomic profile of Scleroderma texense (Phutuki Mushroom): a comparative study with Agaricus bisporus (white button mushroom)	10.1007/s44187-025-00291-z
24.	Transforming Carbohydrates Through Multicomponent Reactions: Advances and Applications	10.1002/slct.202406015
25.	Design expert based optimization of the pyrolysis process for the production of cattle dung bio-oil and properties characterization	10.1038/s41598-024-57843-z
26.	Evaluation of radon emanation coefficient in different types of building materials of different grain sizes	10.1016/j.apradiso.2025.111973
27.	Hathkargha: balancing scarcity marketing and customer satisfaction in the digital age	10.1108/EEMCS-10-2024-0419
28.	Exploration of compositional, functional, nutraceutical, and metabolites of Ram kandmool (Agave sisalana Perrine)	10.1016/j.ijbiomac.2025.142095



	for potential application in food systems	
29.	Environmental restoration of polyaromatic hydrocarbon- contaminated soil through sustainable rhizoremediation: insights into bioeconomy and high-throughput systematic analysis	10.1039/d4va00203b
30.	Insights into Extraction methods of pigments from Celosia cristata L. flower: A review	10.1016/j.jafr.2024.101599
31.	Correction to: Advancements in energy storage applications: harnessing the potential of fish industry waste	10.1007/s43939-025-00187-w
32.	ANODIZING PROCESS FOR ENHANCING CORROSION RESISTANCE OF ALUMINIUM ANODES IN 1M NaOH ALKALINE SOLUTION	10.31788/RJC.2025.1819076
33.	Isolation and Characterization of Plant Growth Promoting Endophytes from Linum Usitatissimum	10.30564/re.v7i2.9406
34.	In vitro propagation, synthetic seeds production and clonal fidelity assessment of regenerants of endangered herb  Rheum emodi	10.25303/1912rjbt070078
35.	Spectroscopy: A powerful tool for evaluating soil fertility and assessing soil health	10.4018/979-8-3693-7473-3.ch014
36.	Millet biofortification for enhanced iron content: Roadmap for combating hidden hunger	10.1016/j.jafr.2025.101654
37.	Patient dose survey and determination of diagnostic reference levels for routine computed tomography examinations in Uttarakhand, India	10.1016/j.apradiso.2025.111875



38.	Enhancing the functionality of extruded snack (namkeen) using indigenous ingredients of Uttarakhand, India: A predictive modelling approach for shelf-life optimization	10.1007/s44187-025-00333-6
39.	Cannabidiol Vaping-Associated Multifocal NSCLC in a 24- Year-Old Female: A Case Report	10.1016/j.jtocrr.2025.100789
40.	Phyto-mediated Biogenic Silver Nanoparticles Using Ficus Geniculate for Biomedical Application	10.1007/s11244-025-02125-9
41.	Exploring Papaya Byproducts: A Step toward Circular Economy and Sustainability	10.1021/acsfoodscitech.4c00872
42.	Synthesis and characterization of sustainable hybrid bio- nanocomposite of starch and polypropylene for electrical engineering applications	10.1515/jmbm-2025-0038
43.	Green chemistry revolutionizing sustainability in the food industry: A comprehensive review and call to action	10.1016/j.scp.2024.101774
44.	Multispectroscopic and computational insights into amyloid fibril formation of alpha lactalbumin induced by sodium hexametaphosphate	10.1038/s41598-024-80897-y
45.	Harnessing probiotic foods: managing cancer through gut health	10.1007/s10068-024-01638-5
46.	A study of women entrepreneurs as catalysts for sustainable development An inspirational story of Uttarakhand well known "Mushroom Girl"	10.1201/9781032725581-6
47.	Integrating circular economy in smart cities: Challenges and pathways to sustainable urban development	10.1108/978-1-83797-957- 820241006
48.	Slaughterhouse blood: A state-of-the-art review on transforming by-products into valuable nutritional	10.1016/j.fbio.2024.104644



	resources and the role of circular economy	
49.	Green Synthesis of Al2O3 Nanoparticles from Agro-Waste as a Sustainable Approach	10.1109/HISET61796.2024.00045
50.	Conversational artificial intelligence at industrial internet of things	10.1002/9781394200801.ch11
51.	Encapsulation of debittered pomelo juice using novel  Moringa oleifera exudate for enrichment of yoghurt: A  techno-functional approach	10.1016/j.foodchem.2024.139937
52.	Impact of Artificial Intelligence (AI) in Bioremediation of Dairy Effluent by Microalgae and the Potential Application of the Produced Lipid Byproducts	10.1002/9781394272266.ch11
53.	Comprehensive review of sustainable utilization of Arenga obtusifolia Griff. as a food	10.1016/j.jafr.2023.100945
54.	Evaluation of secondary metabolites, nutraceutical potential and amino acid profile of fresh dates (Phoenix dactylifera) alcoholic beverage	10.1007/s44187-024-00137-0
55.	Nanoparticles as a Tool for Alleviating Plant Stress:  Mechanisms, Implications, and Challenges	10.3390/plants13111528
56.	Imperative Role of Artificial Intelligence and  Nanotechnology in Healthcare Sector for Sustainable  Development	10.1002/9781394272266.ch6
57.	Advanced technologies for realizing sustainable development goals: 5G, AI, big data, blockchain, and Industry 4.0 application	10.2174/97898152566801240101
58.	Micro-algae: Revolutionizing food production for a healthy	10.1016/j.jafr.2023.100939



	and sustainable future	
59.	Human exposure to uranium through drinking water and its detrimental impact on the human body organs	10.1007/s10653-024-02150-9
60.	Harnessing the potential of microbial keratinases for bioconversion of keratin waste	10.1007/s11356-024-34233-6
61.	Biochar production methods and their transformative potential for environmental remediation	10.1007/s42452-024-06125-4
62.	Structural and functional insights into Dioscorea esculenta (Suthni) flour: a comparative analysis with potato flour for potential application in bakery product	10.1007/s11694-024-02880-5
63.	Fishers 4.0: Revolutionizing Contemporary Fisheries  Management through Industry 4.0 Integration	10.1109/HISET61796.2024.00054
64.	Influence of Medical Practitioners' Attitude on the Prescription Behaviour for Generic Medicines	10.1177/09720634231225015
65.	Optimizing microbial strain selection for pyrethroid biodegradation in contaminated environments through a TOPSIS-based decision-making system	10.1038/s41598-024-59223-z
66.	Biofortification as a solution for addressing nutrient deficiencies and malnutrition	10.1016/j.heliyon.2024.e30595
67.	Himalayan fruit and circular economy: nutraceutical potential, traditional uses, challenges and opportunities	10.1186/s43014-023-00220-6
68.	Nutritional, techno-functional properties, and metabolite profiling of Arenga obtusifolia griff. (Tassey) flour in the formulation of functional food	10.1016/j.fbio.2024.105502



69.	Green human resource management and environmental performance: mediating role of green innovation – a study from an emerging country	10.1108/FS-04-2021-0094
70.	Sustainable solutions for food security: Evaluating pre- treatment technologies in the growing fruits and vegetables industry of India	10.1016/j.scp.2024.101580
71.	Optimization of pretreatments to enhance quality characteristics and storage period of kinnow (Citrus reticulata Blanco) using response surface methodology	10.1038/s41598-024-80555-3
72.	Comparative performance of biofire pneumonia panel and standard culture-based methods for diagnosing pneumonia in critically ill patients: Impact on antibiotic stewardship	10.1016/j.ijmmb.2024.100564
73.	Revitalizing elixir with orange peel amplification of alginate fish oil beads for enhanced anti-aging efficacy	10.1038/s41598-024-71042-w
74.	State-of-the-art non-destructive approaches for maturity index determination in fruits and vegetables: principles, applications, and future directions	10.1186/s43014-023-00205-5
75.	Exploring the potential of novel Bacillus sp. G6: Isolation, characterization, and optimization of biosurfactant production from oil-contaminated soil	10.1016/j.molliq.2024.124013
76.	Exploring pharmacological properties and food applications of Asparagus racemosus (Shatavari)	10.1016/j.focha.2024.100689
77.	Investigating chemical pre-treatment methods:  Valorization of wheat straw to enhance polyhydroxyalkanoate (PHA) production with novel isolate  Bacillus paranthracis RSKS-3	10.1016/j.heliyon.2024.e31572



78.	Editorial: Potential of the plant rhizomicrobiome for bioremediation of contaminants in agroecosystems	10.3389/fpls.2024.1397360
79.	Review of Design Issues, Applications, and Architecture of Wireless Sensor Networks	10.1109/HISET61796.2024.00055
80.	Rhizomicrobiome as a potential source of microbial inoculants for use in in vitro biotization mediated acclimatization of micropropagated plants	10.1016/B978-0-443-23691- 4.00015-4
81.	limpact of Microorganism-Based Bioremediation on the Fauna and Flora of Different Matrices	10.1201/9781003310136-18
82.	Application of Artificial Intelligence for the Success of Supply Chain Operations in the Age of Data Analytics	10.1109/ICSD60021.2024.10751637
83.	Medicinal Plants of South and Southeast Asia; Bombax ceiba (Red silk cotton)	10.1016/B978-0-443-13769- 3.00001-7
84.	LED fluorimetric analysis of uranium in potable groundwater and associated health concerns	10.1007/s10967-024-09770-6
85.	Agricultural Innovations using IOT - A Comprehensive Review	10.1109/ICAC2N63387.2024.10895 646
86.	Edible Flowers: Health Benefits, Nutrition, Processing, and Applications	10.1016/C2022-0-02601-5
87.	Traditional and Underutilized Fruits and Vegetables for Attaining Zero Hunger	10.1007/978-3-031-51647-4_8
88.	Microbial Technology for Agro-Ecosystems: Crop Productivity, Sustainability, and Biofortification	10.1016/C2021-0-03424-6
89.	Using Artificial Intelligence (AI) Analyzing Recent Advancements in the Anti-Cancerous Properties of Edible	10.1002/9781394272266.ch10



	Mushrooms and Their Association with the Mode of Action of Polysaccharides	
90.	Effect of Engineered Nanoparticles on Rhizospheric Microbes	10.1007/978-981-97-2355-3_3
91.	Valorization of wastewater through bioremediation approach	10.1016/B978-0-443-27376- 6.00010-4
92.	Nutraceutical Potential of Staple Food Crops	10.1002/9781394241576.ch16
93.	Role of Citrus Juice Sacs	10.1007/978-981-99-8699-6_11
94.	Intelligent IoT-Enabled Real-Time Monitoring System for Logistics Management	10.1109/ICCSC62048.2024.1083033 2
95.	Probiotics in Aquaculture	10.1201/9781003408543-7
96.	Withania somnifera extract reduces gastric cancerous properties through inhibition of gankyrin in cellular milieu produced by Helicobacter pylori and Epstein Barr virus	10.1080/07391102.2023.2252096
97.	Evaluation of polysaccharides, proteins, total phenolic content and antioxidant property of Hypsizygus ulmarius cultivated on varying substrate	10.1109/HISET61796.2024.00062



#### **Certifications and Quality Standards**

In recognition of its sustainability practices, SRHU maintains active ISO 14001:2015 (Environmental Management) and ISO 50001:2018 (Energy Management) certifications. These standards ensure consistent environmental monitoring, performance audits, and continuous improvement. SRHU's adherence to these standards underscores its long-term commitment to quality, compliance, and environmental responsibility.



SRHU receives ISO 14001:2015 and ISO 50001:2018 certifications, reaffirming its commitment to sustainable environmental and energy management practices