स्वामी राम हिमालयन विश्वविद्यालय
Swami Rama Himalayan University

[CORE] Social Responsibility (SR)

Sub Criterion: 5.3

SR4 Environmental impact

Sustainability Report

Report on Solid Waste Management and Recycling Practices at SRHU

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Sustainable Solid Waste Management and Recycling Practices at Swami Rama Himalayan University (SRHU)

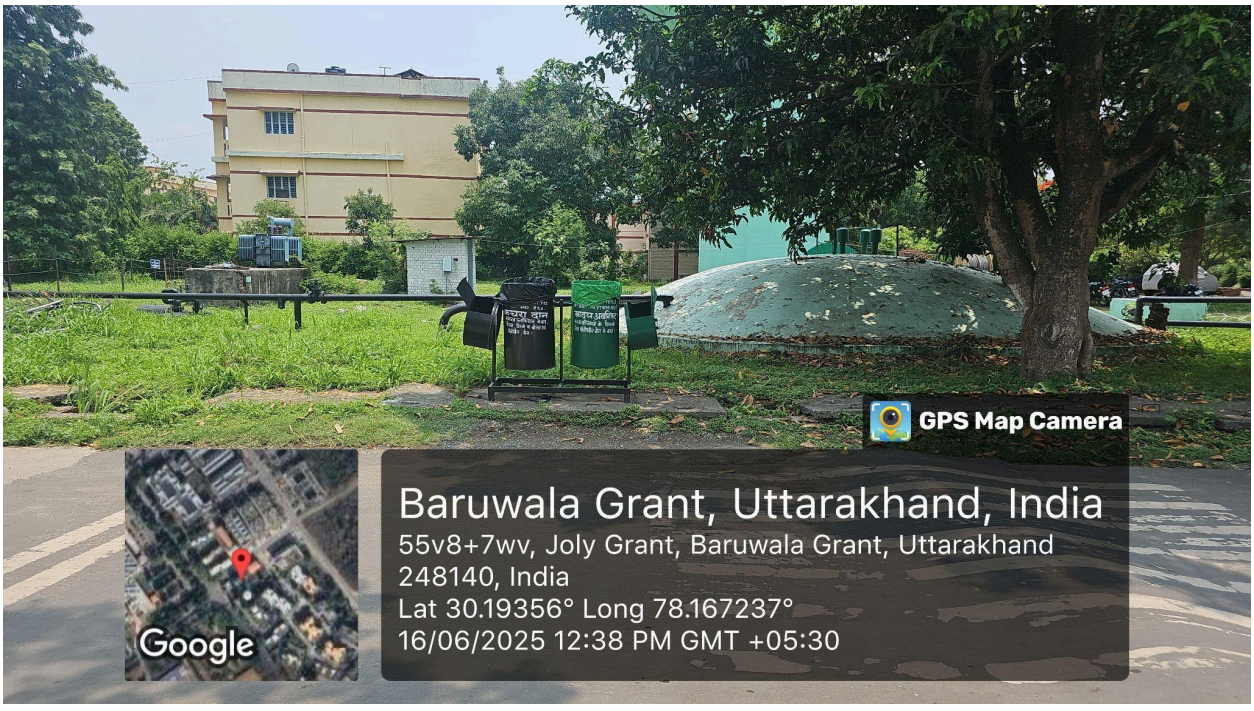
Objective: To minimize environmental impact through effective segregation, treatment, recycling, and safe disposal of solid waste generated within the SRHU campus, including academic, residential, hospital, and community outreach areas.

Overview: Solid waste at SRHU is managed through a systematic, multi-step process involving segregation, collection, recycling, composting, and partnerships with external agencies for specialized waste processing. The initiative is driven by sustainability goals and aligned with SDG 12 – Responsible Consumption and Production.

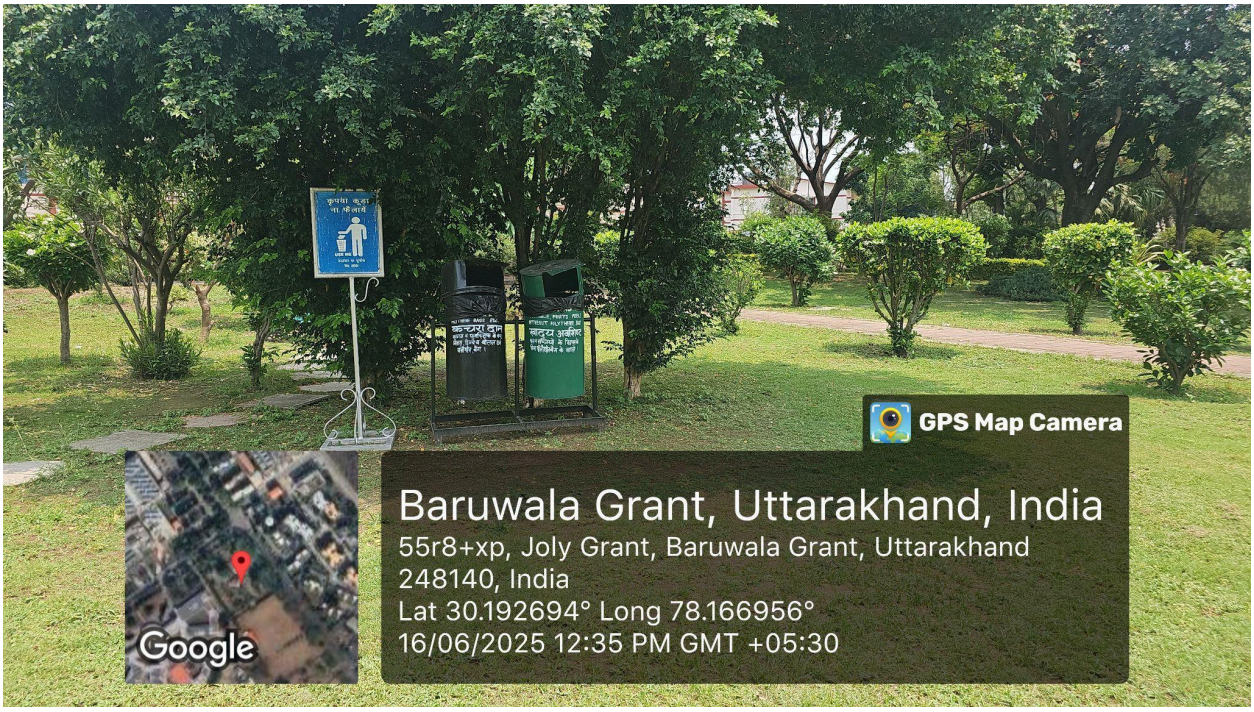
1. General solid waste (biodegradable and non-biodegradable) segregation at Source

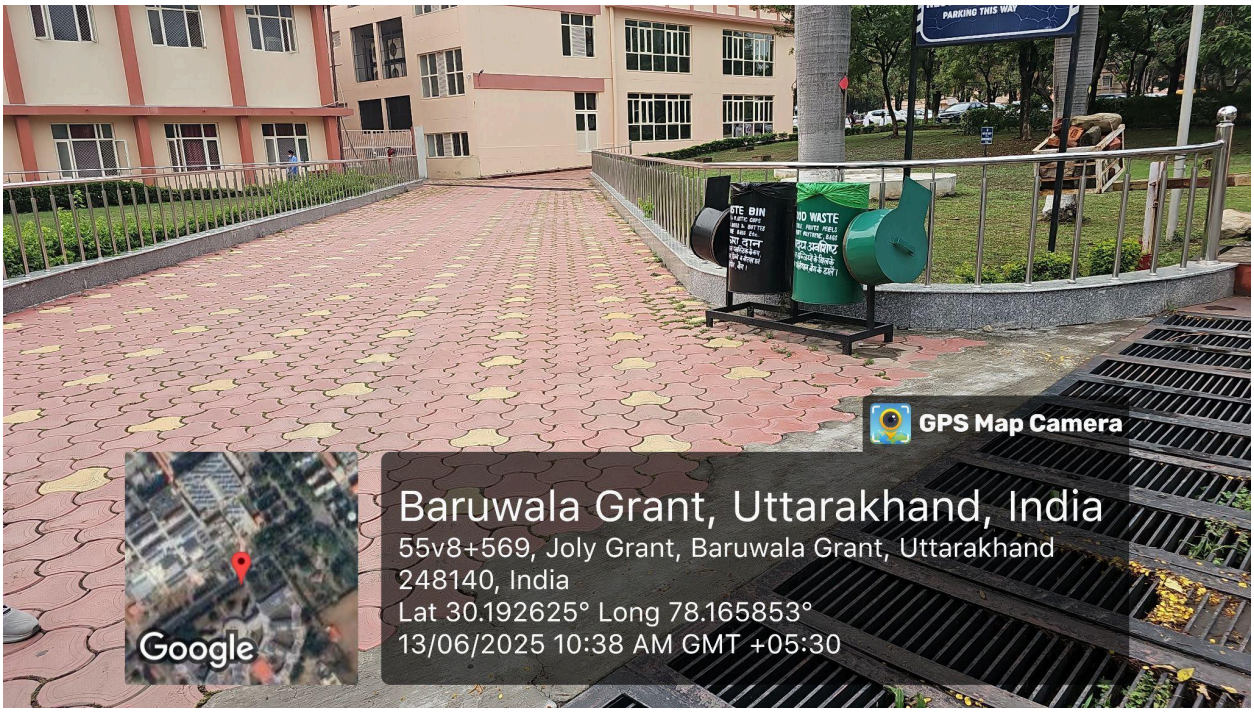
The general solid waste generated across SRHU—including academic blocks, residential areas, hospital premises, and hostels—is segregated at the source into biodegradable and non-biodegradable categories. Separate color-coded bins are strategically placed at multiple locations across the campus:

- Green bins/bags for biodegradable waste
- Black bins/bags for non-biodegradable waste



Black and green bins located at various locations in the university campus



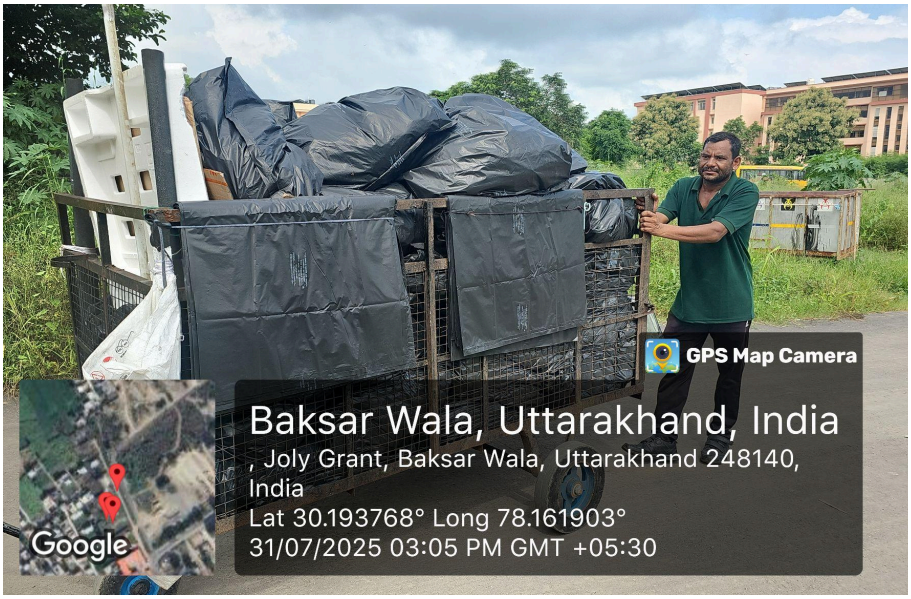


Black and green bins located at various locations in the university campus and hospital premises

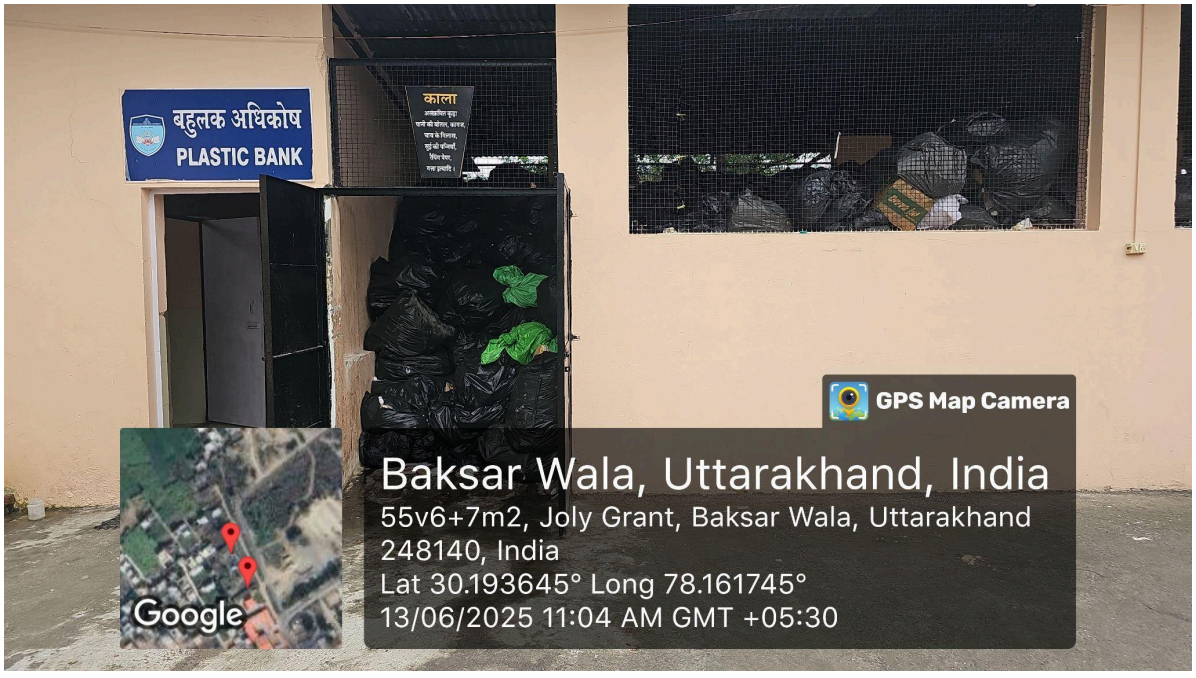
2. Daily Waste Collection & Transfer

The housekeeping staff collects the waste daily and transports it to the central waste collection site.

- Non-biodegradable waste (black bags) is picked up on alternate days by an authorized contractor for external disposal.
- Biodegradable waste (green bags) is transferred to an on-campus compost pit, where it is processed into organic manure used for gardening and landscaping purposes.



Housekeeping staff collect and segregate campus waste into green (biodegradable) and black (non-biodegradable) bags for eco-friendly disposal.



Accumulation of solid waste at central waste collection site

3. Waste Recycling and Processing Methods

A. Organic Waste Management

- **Compost Pits**:

Swami Rama Himalayan University manages biodegradable waste through composting. Kitchen waste from hostels, cafeterias, and residential areas, along with garden litter, is collected daily and taken to compost pits within the campus. The waste is processed in these pits and converted into organic manure.

The compost generated is used for maintaining campus landscaping, gardens, and the herbal garden. This practice reduces the amount of waste requiring external disposal and provides a sustainable source of manure for campus use. It also helps maintain soil quality and supports the University's efforts toward an eco-friendly and resource-efficient campus.

Compost pit for disposal of Biodegradable waste

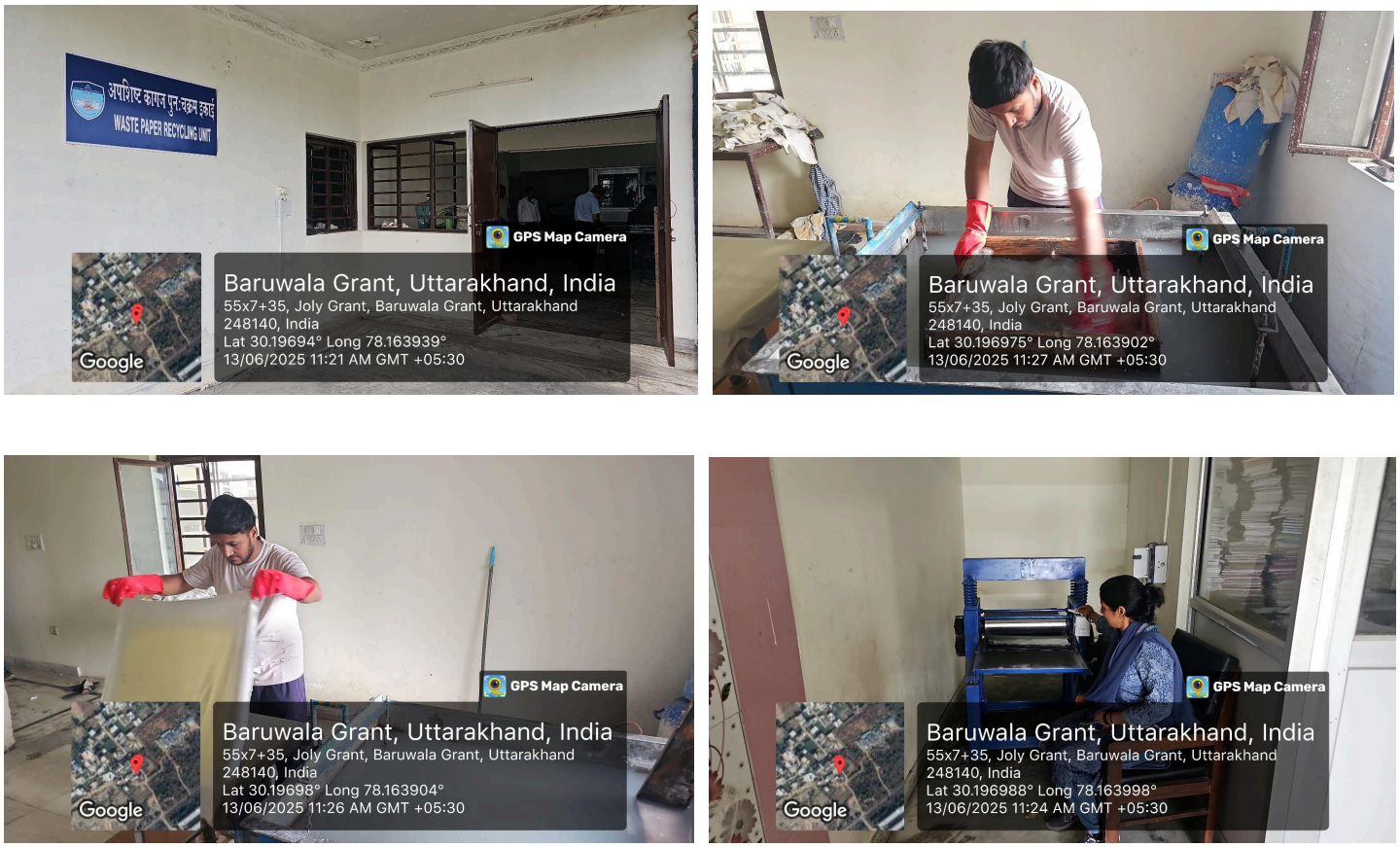
- **Biogas Plant:**

SRHU operates a biogas plant that uses cow dung from the on-campus gaushala as feedstock. The plant produces clean biogas, which is utilised for cooking and heating in the university guest house, thereby reducing dependence on commercial LPG cylinders. In addition to energy, the plant generates slurry as a by-product, which is used as enriched manure for campus landscaping, gardening, and agricultural activities. This initiative demonstrates efficient resource utilisation by converting organic waste into renewable energy and useful manure, while supporting SRHU's commitment to sustainable and eco-friendly campus operations.

Biogas Plant located behind the guest house

B. Paper Waste Recycling

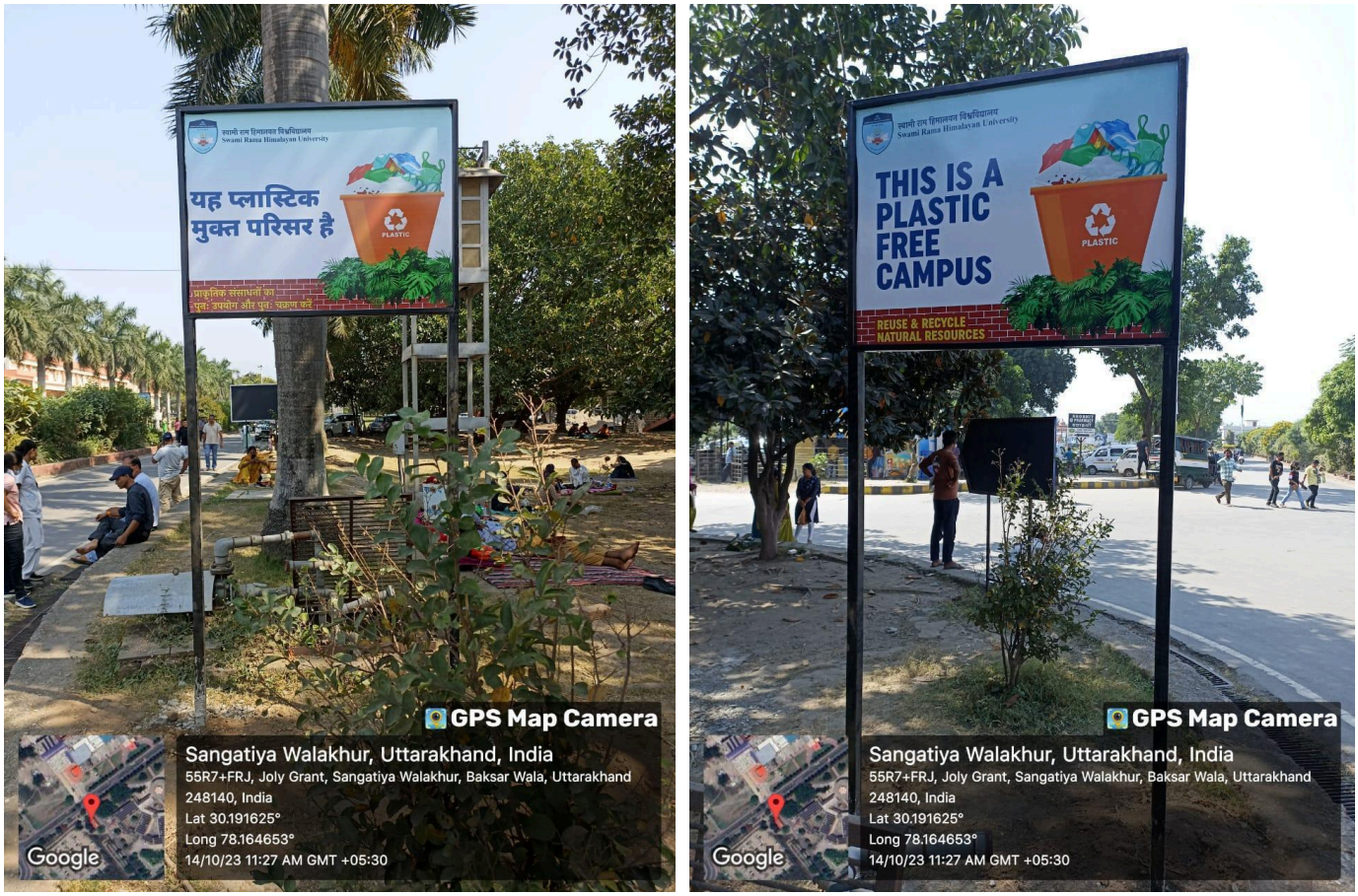
Swami Rama Himalayan University operates an in-house waste paper recycling unit with a processing capacity of approximately 8 kg per day, handling paper waste collected from various offices and schools on campus. The recycled paper produced by this unit is repurposed into handmade envelopes, file covers, and notebooks for internal use, reinforcing the university's commitment to sustainability and resource efficiency.



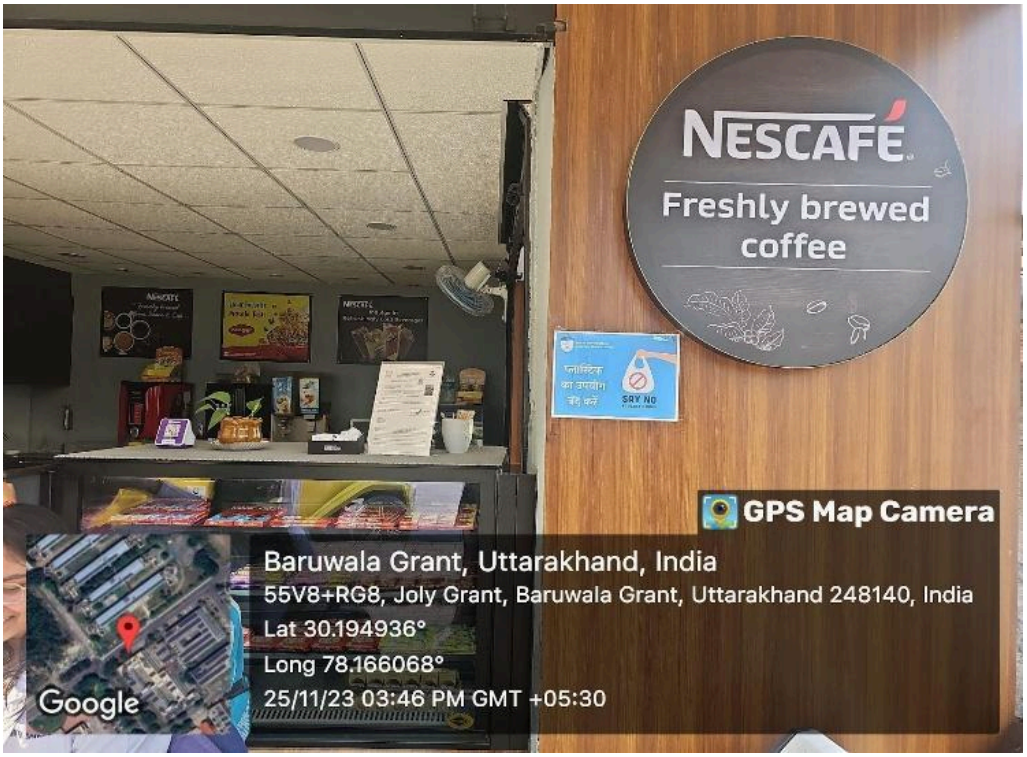
Waste paper recycling unit at SRHU

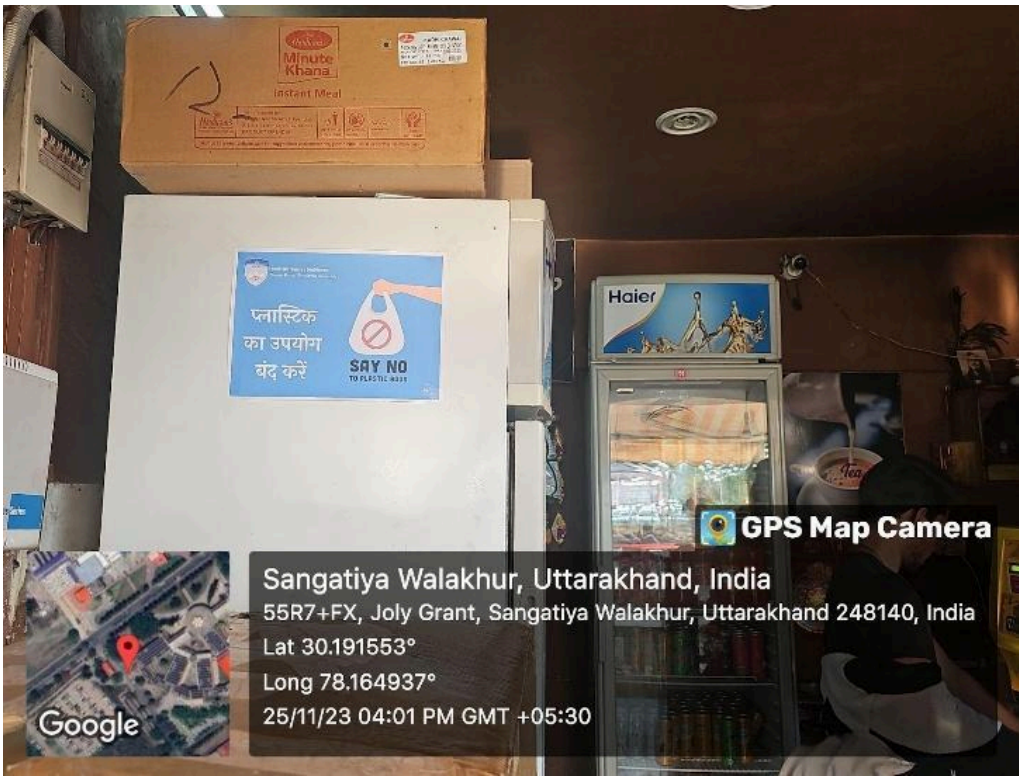
C. Plastic Waste Handling

SRHU has declared itself a single-use plastic-free campus, reinforcing its commitment to sustainable and responsible waste practices. Non-biodegradable waste collected from across the campus is segregated at the central waste collection centre, where plastic waste is further separated and stored at a designated site for authorized disposal. To strengthen this initiative, **"Plastic-Free Campus" signage** has been installed across the campus, and stickers are prominently displayed at food outlets to discourage the use of single-use plastics. Through this systematic segregation, elimination measures, and awareness efforts, SRHU reduces plastic pollution, promotes environmental responsibility, and strengthens its position as a green and eco-conscious campus.



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





Plastic-Free Campus signage at cafeteria and food outlets

Plastic Bank at SRHU

SRHU has established a Plastic Bank as part of its commitment to reducing plastic pollution and promoting recycling on campus. In collaboration with a local NGO, Social Development for Community (SDC) foundation, plastic waste collected from the University is sorted and transported to the Indian Institute of Petroleum (IIP), Dehradun, where it is converted into diesel fuel using pyrolysis technology. This initiative not only supports sustainable waste management but also creates awareness among students, faculty, and staff about the importance of environmental conservation and responsible plastic use.

To strengthen the initiative, SDC has provided 12 jumbo bins for systematic segregation and collection.

Plastic Bank at SRHU promoting recycling and reducing plastic waste on campus

[For more Information click here]

अमर उजाला

प्लास्टिक का उपयोग बंद करने का लिया संकल्प

डोईवाला। पर्यावरण संरक्षण के क्षेत्र में स्वामीराम विश्वविद्यालय जौलीग्रांट ने सराहनीय कदम उठाया। विश्वविद्यालय में प्लास्टिक बैंक का शुभारंभ किया गया। छात्र-छात्राओं के अलावा स्टॉफ ने भी सिंगल यूज प्लास्टिक का उपयोग बंद करने का संकल्प लिया। एसआरएचयू सभागार में कुलपति डॉ. विजय धस्माना और एसडीसी के संस्थापक अनूप नौटियाल ने प्लास्टिक बैंक का संयुक्त रूप से उद्घाटन किया। कार्यक्रम को संबोधित कुलपति डॉ. विजय धस्माना ने कहा कि पर्यावरण संरक्षण पर्यावरण संरक्षण हमारी नैतिक जिम्मेदारी है। विश्वविद्यालय सौर ऊर्जा और जल संरक्षण के क्षेत्र में मिसाल कायम कर चुका है। एसडीसी के संस्थापक अनूप नौटियाल ने प्लास्टिक बैंक की अवधारणा और कार्यप्रणाली की जानकारी दी। आईआईपी के डॉ. इंद्रजीत घोष ने बताया कि आईआईपी प्लास्टिक से डीजल बनाने की दिशा में काम कर रहा है। कार्यक्रम में कुलसचिव डॉ. सुशीला शर्मा, गिरिश उनियाल, शिवम ढोंडियाल आदि मौजूद थे। संवाद

दैनिक जागरण
रोरकूर, मंगलवार
5 अप्रैल 2022
नगर संस्करण
www.jagran.com

सीजफायर के बिना विद्यार्थियों को निकालना मुश्किल 12 | छात्रों को लाने में काम आया कोरोना काल का अनुभव 12

एसआरएचयू में प्लास्टिक बैंक की शुरुआत

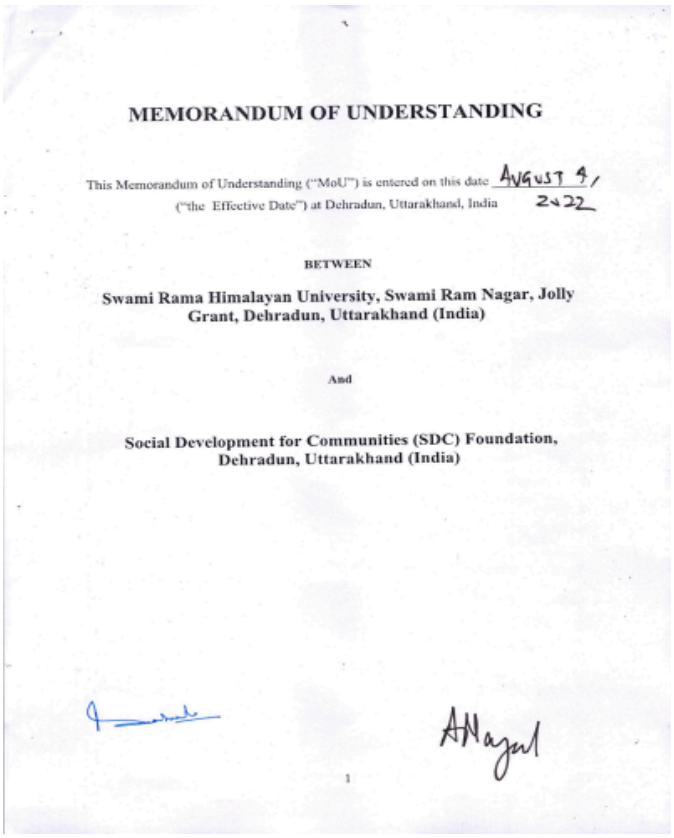
संवाद सहयोगी, डोईवाला : पर्यावरण संरक्षण के क्षेत्र में स्वामी राम हिमालयन विश्वविद्यालय (एसआरएचयू) जौलीग्रांट ने एक और सराहनीय कदम बढ़ाया है। विश्वविद्यालय में प्लास्टिक बैंक का शुरू किया गया। इस दौरान छात्र-छात्राओं सहित स्टाफ व कर्मियों ने प्रतिबंधित पालीथिन और सिंगल यूज प्लास्टिक का उपयोग बंद करने का संकल्प लिया।

स्वामी राम हिमालयन विश्वविद्यालय सभागार में प्लास्टिक बैंक का उद्घाटन करते कुलपति डा. विजय धस्माना व एसडीसी के संस्थापक अनूप नौटियाल। संवाद

एसआरएचयू सभागार में प्लास्टिक बैंक का उद्घाटन करते हुए कुलपति डा. विजय धस्माना ने कहा कि पर्यावरण संरक्षण हम सबकी एक सामाजिक जिम्मेदारी है। विश्वविद्यालय सौर ऊर्जा व जल संरक्षण के क्षेत्र में मिसाल कायम कर चुका है। अब प्लास्टिक बैंक के रूप में प्लास्टिक वेस्ट का सही निस्तारण हो पाएगा। सिंगल यूज प्लास्टिक के इस्तेमाल पर रोक के लिए विश्वविद्यालय में पहले से ही अभियान चलाया जा रहा है। निश्चित समय अंतराल पर इस संबंध में छात्र-छात्राओं सहित स्टाफकर्मियों को जागरूक भी किया जाता है। एसडीसी के संस्थापक अनूप नौटियाल ने प्लास्टिक बैंक की अवधारणा व कार्यप्रणाली की जानकारी दी। साथ ही उन्होंने सिंगल यूज पालीथिन उपयोग न करने की अपील की। उन्होंने बताया कि कूड़ा निस्तारण में पृथक्करण अहम कड़ी है। यदि घर से ही गीले व सूखे कूड़े को अलग कर दिया जाए तो इसका निस्तारण आसान हो जता है। आइआइपी के डा. इंद्रजीत घोष ने बताया कि आइआइपी प्लास्टिक से डीजल बनाने की दिशा में काम कर रहा है, इससे देश के विकास को भी नई दिशा मिलेगी। शिवम ढौंडियाल के संचालन में आयोजित कार्यक्रम में कुलसचिव डा. सुशीला शर्मा, हेड इलेक्ट्रिकल व मैकेनिकल विरेंद्र उनियाल आदि मौजूद रहे।

Innovative Plastic-to-Diesel Initiative:

Between 2021 and 2025, Swami Rama Himalayan University recycled 5,600 kilograms of plastic waste in partnership with the CSIR–Indian Institute of Petroleum (IIP), Dehradun, its Social Technology Partner for the Plastic-to-Diesel Lab project. Launched in 2022 alongside the Plastic Waste Bank, the initiative established a system for collecting and segregating plastic waste on campus. The collected waste was processed at CSIR–IIP using pyrolysis technology to produce diesel fuel. This initiative highlights SRHU's commitment to sustainable waste management, resource recovery, and innovative waste-to-energy solutions.



MEMORANDUM OF UNDERSTANDING

This Memorandum of Understanding ("MoU") is entered on this date AUGUST 9, 2022 ("the Effective Date") at Dehradun, Uttarakhand, India

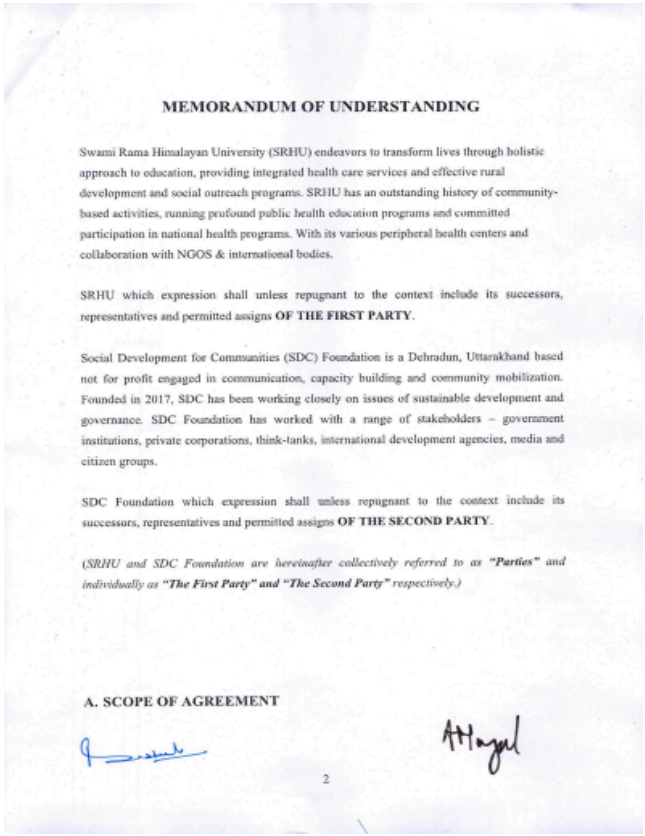
BETWEEN

Swami Rama Himalayan University, Swami Ram Nagar, Jolly Grant, Dehradun, Uttarakhand (India)

And

Social Development for Communities (SDC) Foundation, Dehradun, Uttarakhand (India)

1



MEMORANDUM OF UNDERSTANDING

Swami Rama Himalayan University (SRHU) endeavors to transform lives through holistic approach to education, providing integrated health care services and effective rural development and social outreach programs. SRHU has an outstanding history of community-based activities, running profound public health education programs and committed participation in national health programs. With its various peripheral health centers and collaboration with NGOS & international bodies.

SRHU which expression shall unless repugnant to the context include its successors, representatives and permitted assigns **OF THE FIRST PARTY**.

Social Development for Communities (SDC) Foundation is a Dehradun, Uttarakhand based not for profit engaged in communication, capacity building and community mobilization. Founded in 2017, SDC has been working closely on issues of sustainable development and governance. SDC Foundation has worked with a range of stakeholders – government institutions, private corporations, think-tanks, international development agencies, media and citizen groups.

SDC Foundation which expression shall unless repugnant to the context include its successors, representatives and permitted assigns **OF THE SECOND PARTY**.

*(SRHU and SDC Foundation are hereinafter collectively referred to as **"Parties"** and individually as **"The First Party" and "The Second Party"** respectively.)*

A. SCOPE OF AGREEMENT

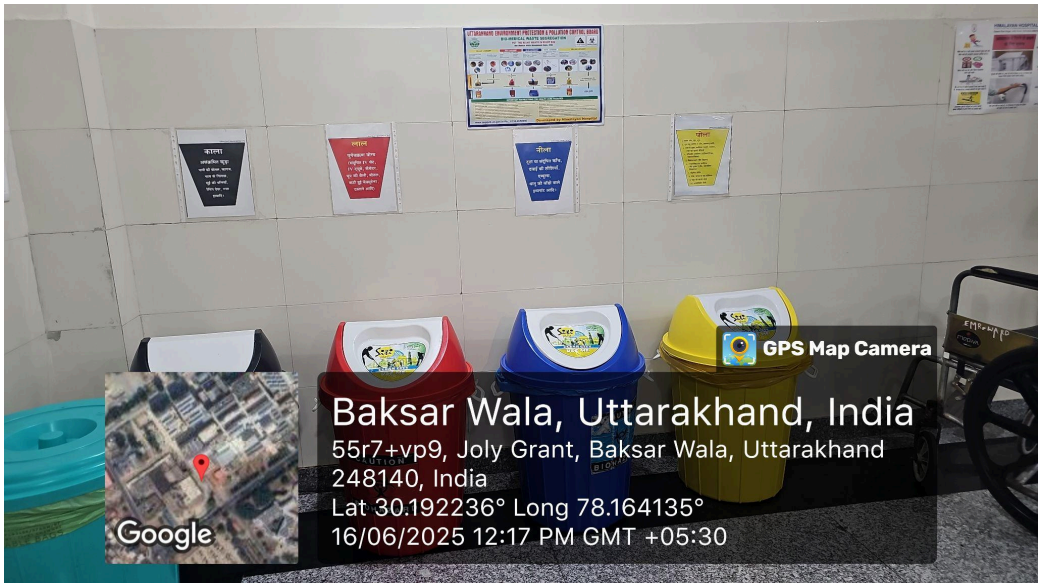
2

MoU between SRHU and SDC for sustainability and plastic waste management

D. Bio-Medical Waste (BMW) Management

Biomedical waste (BMW) at SRHU is managed in strict compliance with regulatory guidelines to ensure safety and environmental responsibility. Segregation begins at the source in every hospital ward, where specific color-coded bins and non-chlorinated bags are placed at designated disposal corners. Plastic disposable waste is collected in red bags, incinerable waste such as contaminated dressings or body-fluid–soaked materials is placed in yellow bags, and sharps, including needles, are immediately discarded into white translucent, puncture-proof containers to prevent injury and contamination.

The housekeeping staff collects segregated waste from wards and laboratories and transports it to the central waste collection point. Laboratory waste, such as used vacutainers, is autoclaved on-site before being placed in red bags and handed over for further disposal. All biomedical waste generated across the hospital is ultimately managed through a Common Bio-medical Waste Treatment Facility (CBWTF). From the central collection site, the waste is collected by the Medical Pollution Control Committee (MPCC), authorized by the Uttarakhand Pollution Control Board, for safe handling, transportation, and final treatment.



Segregation of BMW at source in specific colour coded bins at the hospital

Central Bio-Medical Waste Collection Centre

Collection of BMW from the hospital and disposal at the BMW store

Segregated Bio Medical Waste (Yellow bags) at the BMW store

Segregated Bio Medical Waste at the BMW store

Loading of BMW bags for disposal in the Medical Pollution Control Committee van