

Report on

# Sustainable Development

Goal 2



ZERO HUNGER



#### **Health Education and Awareness Generation Activities**

In alignment with Sustainable Development Goal 2 (Zero Hunger) and its commitment to community health, SRHU addresses the nutritional needs of vulnerable populations—particularly pregnant women, lactating mothers, and children—through structured and targeted health camps. These camps aim to improve maternal and child health outcomes by delivering preventive care, nutrition education, and direct supplementation in underserved areas with limited access to healthcare.

#### **Health Check-Ups for Pregnant and Lactating Women**

To tackle maternal and infant health challenges in remote and high-need regions, SRHU organizes comprehensive maternal health camps in villages, with a consistent schedule of every Wednesday and Saturday. These camps emphasize on:

- Early pregnancy registration
- Complete antenatal check-ups
- Timely identification and referral of high-risk pregnancies

A dedicated medical team comprising a lady doctor, nurse, pharmacist, counselor, and field supervisor delivered the following services:

- Blood pressure, blood sugar, and haemoglobin testing
- Nutritional counselling and care guidance
- Distribution of Iron-Folic Acid (IFA) and Calcium tablets

A total of 60 health camps were conducted, through which 1,756 pregnant and lactating women accessed vital services supporting maternal nutrition and care.









Maternal healthcare camps were conducted by SRHU to promote nutrition, safe motherhood, and well-being of mothers and children aligning with SDG 2



#### **Home Visits**

To ensure continuity of care beyond the camp settings and advance the goals of SDG 2: Zero Hunger, SRHU followed up with 3,204 pregnant and lactating women through home visits. Field supervisors monitored maternal and newborn health while offering personalized counselling on antenatal and postnatal care, delivery preparedness, and optimal infant feeding practices. These visits also actively involved family members—especially husbands and caregivers—to promote nutritious diets, timely health check-ups, institutional deliveries, colostrum and exclusive breastfeeding, complementary feeding, micronutrient supplementation, early recognition of high-risk symptoms, and family planning awareness, thus fostering improved maternal and child nutrition outcomes in underserved communities.



SRHU health worker conducting a home visit for newborn care—ensuring early monitoring, maternal support, and nutritional guidance

#### **Special Care for High-Risk Cases**

Special attention is given to managing high-risk pregnancies, a critical component of SRHU's maternal and child health initiative. During 2024-2025, 156 high-risk pregnant women received personalized support, including free transportation to health facilities, diagnostic



services, medical treatment, and nutritional supplementation. Early identification of such cases was enabled through targeted ASHA worker training and regular screenings.

To address severe anemia, 238 nutrition kits were distributed, prioritizing women with hemoglobin levels below 7 gm/dL. ASHAs and field supervisors consistently tracked these cases through pregnancy and postpartum, ensuring continuity of care and improved nutritional outcomes.





Nutrition kits were distributed to mothers as part of SRHU's efforts to combat maternal malnutrition and support healthy pregnancies

#### Village Health, Sanitation and Nutrition Days (VHSNDs)

Village Health, Sanitation, and Nutrition Days (VHSNDs) are held monthly on Saturdays to serve as a platform for raising awareness about available maternal and child health services,



delivering primary healthcare, and providing nutrition interventions, particularly for marginalized and vulnerable communities.

Nutrition-focused camps are organized along with counseling on family planning, healthy diets, and maternal care. A unique initiative is also undertaken, where nutritious Millet Laddoos prepared by local Self-Help Groups are distributed to pregnant and lactating women for on-site consumption. This effort not only contributes to improved maternal nutrition but also supports local women's livelihoods. During 2024-2025, participation was recorded from 1,985 pregnant women, reinforcing SRHU's commitment to SDG 2.



Women attending VHSND sessions, where essential health services, nutrition support, and counselling are provided, contributing to improved maternal well-being

#### **Community Mobilization and Sensitization**

Effective nutritional and maternal care hinges on community support and awareness. SRHU conducted regular sensitization meetings with community leaders, SHGs, parents and youth. These sessions:

- Informs communities about health rights and service availability
- Addresses myths and misconceptions around maternal and child nutrition
- Encourages use of health facilities, counselling support, and preventive programs
- Strengthenes collective responsibility for community health and adolescent well-being





Regular sensitization meetings are conducted with community leaders and Self-Help Groups (SHGs) to strengthen community engagement and promote maternal and child nutrition

## **School Health Camps**

The School Health Program is implemented in primary schools to deliver essential health services to students. As part of the initiative, 37 health camps were conducted, reaching 2,266 children who are screened for growth parameters, anemia, malnutrition, and the "4Ds"—Defects, Diseases, Deficiencies, and Developmental Delays. Students identified with health concerns are provided with appropriate care, including treatment, nutrition counselling, or referral to specialized services through the Rashtriya Bal Swasthya Karyakram (RBSK)

#### **Nutritional Support for Children of Migrant Families**

Health camps are organized at community-based centers such as Aakhar and Flying Birds, with a focus on reaching vulnerable children. At Aakhar, 243 children were screened for general illnesses and signs of malnutrition, while outreach efforts at Flying Birds engaged 76 children along with their parents. During these camps, nutrition counselling and basic treatment is provided to address minor illnesses and dietary needs, contributing to improved health awareness and early intervention at the community level.









Nutrition support and health check-ups being provided to migrant children as part of SRHU's outreach efforts to improve child health and well-being in underserved communities



#### **Nutrition Education for Adolescents**

As part of the Adolescent Health Program, nutrition is integrated as a core theme in SRHU's outreach and training initiatives. A total of 224 Peer Educators were trained on key topics such as adolescent nutrition, menstrual health, and growth. Through peer-led sessions, 7,022 adolescents were sensitized on the importance of balanced diets, anemia prevention, healthy growth, and related concerns. Additionally, Adolescent-Friendly Health Clinics facilitated growth monitoring, hemoglobin testing, and personalized nutrition counselling, reinforcing SRHU's commitment to adolescent well-being under the framework of SDG 2: Zero Hunger.





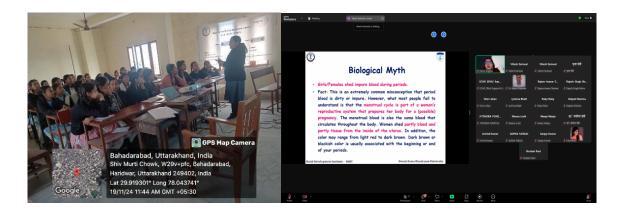
Adolescents being sensitized on balanced diets, anemia prevention, and healthy growth through peer-led sessions under SRHU's Adolescent Health Program



#### **Menstrual Hygiene & Nutritional Linkages**

Through the Menstrual Hygiene Management (MHM) Program:

- 104 teachers trained online (ECHO platform) across 13 residential schools
- Sessions included nutrition-related topics such as anemia, menstrual health, and its impact on education and well-being
- Offline sessions reached girls in slum and tribal areas, emphasizing access to nutrition,
   hygiene, and menstrual products









Teachers being trained through the ECHO platform on menstrual hygiene management. Offline sessions simultaneously reached adolescent girls in slum, tribal, and remote areas—promoting access to nutrition, hygiene, and menstrual products

#### **Comprehensive Community Development Program (CCDP)**

Swami Rama Himalayan University (SRHU) launched the Comprehensive Community Development Program (CCDP) in 2019 to promote inclusive, nutrition-sensitive, and sustainable development in the hilly rural areas of Uttarakhand. Aligned with Sustainable Development Goal 2 (Zero Hunger), CCDP seeks to enhance food security, agricultural productivity, and rural livelihoods—particularly for vulnerable and marginalized communities.

#### **Promoting Sustainable Agriculture and Livelihoods**

SRHU supported the cultivation of 20.35 quintals of diverse, high-value crops through its community-based program. The initiative focused on both cash and nutritional crops such as turmeric, garlic, chilly, and ginger, along with traditional millets like Jhangora (barnyard millet), Manduwa (finger millet), and Jakhiya (wild mustard). These climate-resilient, nutrient-rich crops are well-suited to the dry, wildlife-prone terrain of the region.



Their cultivation not only enhances local food security but also offers alternative sources of livelihood through increased production and market linkage.



Harvested ginger and turmeric as part of community-based initiative supporting the cultivation of high-value, nutrient-rich crops

To further strengthen the agricultural value chain, a Value Addition Center was established to process, sort, package, and brand local produce. Products were introduced in consumer-ready packs (100g, 250g, 500g) and marketed at urban exhibitions and expos under a local branding initiative. This strategic move reduced post-harvest wastage, improved farmer incomes, and promoted the consumption of nutritionally valuable indigenous crops among urban consumers.



Turmeric being processed and packaged at the Value Addition Center established by SRHU to strengthen the agricultural value chain



In 2024–25, the program was expanded to Malethi, where 4.374 acres (7 bighas) of previously uncultivated, barren land was brought under productive use. Nutritionally rich and high-demand crops such as onion, cabbage, green chilli, cauliflower, and ginger were sown. This expansion not only improved land utilization but also contributed to greater crop diversity and enhanced dietary diversity at the household level.



Chilli cultivation supported under sustainable agriculture initiative

Recognizing the region's temperate climate and potential for horticulture, a pilot apple orchard was initiated with the planting of 150 saplings. The orchard is expected to yield crops with high market value and nutritional benefits, offering a model that can be replicated by other local farmers. If successful, it will further strengthen nutrition-sensitive agriculture while contributing to sustainable income generation.





Pilot apple orchard established under SRHU's sustainable agriculture program aimed at diversifying nutrition and income sources through climate-resilient horticulture

#### **Promoting Livelihoods to Strengthen Food Security**

While not all livelihood initiatives are directly nutrition-related, several of SRHU's programs under the CCDP contribute meaningfully to Sustainable Development Goal 2 by enhancing household income and resilience, critical enablers of food and nutrition security. By increasing purchasing power and empowering women and youth, these interventions indirectly reduce hunger and improve overall well-being.

#### **Tailoring and Handicrafts Units**

Skill-based livelihood units such as tailoring and handicrafts have empowered women in rural and tribal communities by equipping them with income-generating capabilities. In 2024–25, 15 women were trained in tailoring and weaving at centers in Nagthat and Athoorwala. These skills not only diversified income sources but also enhanced the decision-making role of women within their households, positively influencing food choices and nutrition practices.





Women engaged in tailoring and handicrafts, empowering rural communities and indirectly supporting improved household nutrition and food security

#### **Handloom Unit**

Through the production of eco-friendly, handmade textiles, the handloom unit trained local women in traditional weaving. This initiative preserved cultural heritage while simultaneously promoting sustainable livelihoods. The resulting economic stability in rural households has contributed to improved access to nutritious food and reduced vulnerability to food insecurity.



Locals working at the handloom unit established by SRHU promoting sustainable livelihoods and contributing to household food security



#### **Integrated Skill Development Certificate Courses**

Launched in May 2024, the Integrated Skill Development Certificate Courses aimed to prepare rural youth with practical, employment-ready skills to enhance local job opportunities, reduce urban migration, and strengthen rural incomes. Conducted jointly by SRHU and the Rural Development Institute (RDI), these free courses covered key trades such as:

Course Title	Duration	Participants Trained (2024–25)
Office Assistant cum  Computer Operator	450 hours (3 months)	42
Electrician cum Plumber	470 hours (3 months)	40



Youth participating in Integrated Skill Development Certificate Courses which equips rural communities with employment-ready skills to enhance incomes, reduce migration, and strengthen food security



#### Nutritional Security for Persons with Disabilities through Inclusive Rehabilitation

SRHU's Community-Based Rehabilitation (CBR) program integrates nutrition and livelihood components into its holistic disability support framework, addressing the disproportionate food insecurity faced by persons with disabilities (PWDs) in underserved regions. Through inclusive economic empowerment initiatives, 17 PWDs were supported in launching microenterprises such as hawker carts, tailoring units, and festival-based vending, generating seasonal incomes of ₹10,000−15,000 and enhancing household food security. Ten inclusive self-help groups (SHGs) were formed—five linked to banks—enabling access to credit for food, agriculture, or small business investments.

Social protection measures were strengthened through facilitation of 30 disability certificates and 38 UDID cards, linking PWDs to entitlements such as disability pensions, subsidized rations (PDS), and education-based nutrition support. Complementary interventions further amplified the program's impact: 11 mobility aids were distributed to promote independence in food access and preparation. Through this integrated approach, the CBR program advances food security, nutrition, and dignity for persons with disabilities under SDG 2.







SRHU supported marginalized communities through hawker carts, small business investments, and distribution of mobility aids enhancing economic independence, food access, and dignity

#### **Healthy and Affordable Food Choices on Campus**

Recognizing the vital role of nutrition in supporting the overall health and productivity of its students, faculty, and staff, SRHU has implemented several initiatives to ensure access to healthy and affordable food on campus. Multiple cafeterias and canteens operate across the university, offering a wide variety of nutritious meal options at reasonable prices. These meals are prepared using fresh, locally sourced ingredients, promoting both quality and environmental sustainability. By creating a food environment that prioritizes health, affordability, and sustainability, SRHU contributes to improved dietary practices and supports the broader goals of SDG 2.





Nescafe near Adi Kailash Auditorium

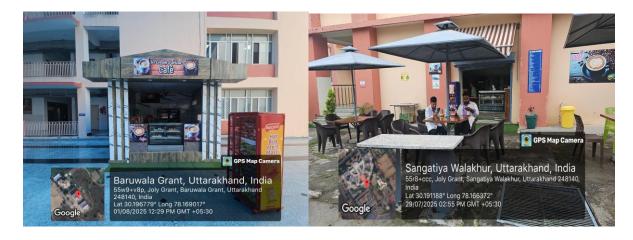
Cafe near Himalayan College of Nursing



#### Socomeda in SRHU Campus







Coffee shop in SRHU (SST)

Coffee shop in SRHU (HIMS)



**Aanchal Cafe in the SRHU Campus** 

#### **Research and Development Initiatives**

SRHU has actively contributed to advancing Sustainable Development Goal 2 through a diverse body of research encompassing nutrition, food security, sustainable agriculture, and value-added food systems. A total of 47 research publications from SCOPUS-indexed journals are mapped under SDG for 2025-2025. The research work span a wide range of themes such as bio fortification, nutraceutical potential of indigenous crops, food



innovation, sustainable farming practices, soil and plant health monitoring, food preservation technologies, and the integration of IoT in agriculture.

S.N	Publications	DOI
1.	Mapping of radionuclides for radiological impact assessment in cultivated soil of Punjab, India	<u>10.1016/j.apradiso.2025.1118</u> <u>81</u>
2.	Corrigendum to "Comprehensive review of sustainable utilization of Arenga obtusifolia Griff. as a food"	<u>10.1016/j.jafr.2024.101619</u>
3.	Sal (Shorea robusta) seed oil: A sustainable alternative for cocoa butter and edible oil	<u>10.1016/j.fufo.2025.100655</u>
4.	Near-infrared spectroscopy for nutrient analysis in manure: Techniques, applications, and innovations	<u>10.4018/979-8-3693-7473-</u> <u>3.ch012</u>
5.	Ficus auriculata Lour., an underutilized nonconventional alternative fruit to Ficus carica with nutraceutical potential	<u>10.1007/s43621-024-00480-3</u>
6.	Anti-diabetic potential of Rubus species: linking conventional	<u>10.1186/s43014-024-00263-3</u>



## NAAC A+

	knowledge with scientific developments: a review	
7.	Harnessing nanotechnology for sustainable agriculture: From seed priming to encapsulation	<u>10.1016/j.plana.2024.100124</u>
8.	The Silent Crisis: Malnutrition in Uttarakhand's Children	<u>10.55489/njcm.160720255203</u>
9.	Plant-microbes-nanofertilizers and their interactions for plant growth promotion and stress management	<u>10.1016/B978-0-443-22285-</u> <u>6.00007-0</u>
10.	Exploration of techno-functional properties and metabolomic profile of Scleroderma texense (Phutuki Mushroom): a comparative study with Agaricus bisporus (white button mushroom)	<u>10.1007/s44187-025-00291-z</u>
11.	Exploration of compositional, functional, nutraceutical, and metabolites of Ram kandmool (Agave sisalana Perrine) for potential application in food systems	<u>10.1016/j.ijbiomac.2025.1420</u> <u>95</u>
12.	Isolation and Characterization of Plant Growth Promoting Endophytes from Linum Usitatissimum	<u>10.30564/re.v7i2.9406</u>



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13.	Spectroscopy: A powerful tool for evaluating soil fertility and assessing soil health	<u>10.4018/979-8-3693-7473-</u> <u>3.ch014</u>
14.	Millet biofortification for enhanced iron content: Roadmap for combating hidden hunger	<u>10.1016/j.jafr.2025.101654</u>
15.	The interplay of heart rate variability and ventricular repolarization parameters in the obese state: a review	10.1097/XCE.00000000000003 23
16.	Enhancing the functionality of extruded snack (namkeen) using indigenous ingredients of Uttarakhand, India: A predictive modelling approach for shelf-life optimization	<u>10.1007/s44187-025-00333-6</u>
17.	Evaluation of infant feeding knowledge and practices of mothers in rural communities of Uttarakhand India: A cross-sectional study	<u>10.1016/j.jnn.2025.101694</u>
18.	Green chemistry revolutionizing sustainability in the food industry: A comprehensive review and call to action	<u>10.1016/j.scp.2024.101774</u>



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19.	Harnessing probiotic foods: managing cancer through gut health	<u>10.1007/s10068-024-01638-5</u>
20.	Slaughterhouse blood: A state-of- the-art review on transforming by- products into valuable nutritional resources and the role of circular economy	<u>10.1016/j.fbio.2024.104644</u>
21.	Encapsulation of debittered pomelo juice using novel Moringa oleifera exudate for enrichment of yoghurt:  A techno-functional approach	<u>10.1016/j.foodchem.2024.139</u> <u>937</u>
22.	Comprehensive review of sustainable utilization of Arenga obtusifolia Griff. as a food	<u>10.1016/j.jafr.2023.100945</u>
23.	Nanoparticles as a Tool for Alleviating Plant Stress: Mechanisms, Implications, and Challenges	<u>10.3390/plants13111528</u>
24.	Micro-algae: Revolutionizing food production for a healthy and sustainable future	<u>10.1016/j.jafr.2023.100939</u>
25.	Structural and functional insights into Dioscorea esculenta (Suthni) flour: a comparative analysis with	<u>10.1007/s11694-024-02880-5</u>



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	potato flour for potential application in bakery product	
26.	Fishers 4.0: Revolutionizing  Contemporary Fisheries  Management through Industry 4.0  Integration	<u>10.1109/HISET61796.2024.000</u> <u>54</u>
	Biofortification as a solution for addressing nutrient deficiencies and malnutrition	10.1016/j.heliyon.2024.e30595
27.	Himalayan fruit and circular economy: nutraceutical potential, traditional uses, challenges and opportunities	<u>10.1186/s43014-023-00220-6</u>
28.	Nutritional, techno-functional properties, and metabolite profiling of Arenga obtusifolia griff. (Tassey) flour in the formulation of functional food	<u>10.1016/j.fbio.2024.105502</u>
29.	Sustainable solutions for food security: Evaluating pre-treatment technologies in the growing fruits and vegetables industry of India	<u>10.1016/j.scp.2024.101580</u>



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30.	Optimization of pretreatments to enhance quality characteristics and storage period of kinnow (Citrus reticulata Blanco) using response surface methodology	<u>10.1038/s41598-024-80555-3</u>
31	State-of-the-art non-destructive approaches for maturity index determination in fruits and vegetables: principles, applications, and future directions	<u>10.1186/s43014-023-00205-5</u>
32.	Exploring pharmacological properties and food applications of Asparagus racemosus (Shatavari)	<u>10.1016/j.focha.2024.100689</u>
33.	Editorial: Potential of the plant rhizomicrobiome for bioremediation of contaminants in agroecosystems	10.3389/fpls.2024.1397360
34.	Rhizomicrobiome as a potential source of microbial inoculants for use in in vitro biotization mediated acclimatization of micropropagated plants	<u>10.1016/B978-0-443-23691-</u> <u>4.00015-4</u>
35.	Revolution of Agriculture: State-of- art and Research in IoT	10.1109/ICAC2N63387.2024.1 0895719
36.	Agricultural Innovations using IOT - A	10.1109/ICAC2N63387.2024.1



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	Comprehensive Poview	0005646
	Comprehensive Review	<u>0895646</u>
37.	Edible Flowers: Health Benefits, Nutrition, Processing, and Applications	<u>10.1016/C2022-0-02601-5</u>
38.	Traditional and Underutilized Fruits and Vegetables for Attaining Zero Hunger	<u>10.1007/978-3-031-51647-4 8</u>
39.	Smartphone addiction and its correlation with academic performance in high school adolescents: An observational study	<u>10.4103/amh.amh 97 24</u>
40.	Microbial Technology for Agro- Ecosystems: Crop Productivity, Sustainability, and Biofortification	<u>10.1016/C2021-0-03424-6</u>
41.	Effect of Engineered Nanoparticles on Rhizospheric Microbes	<u>10.1007/978-981-97-2355-3 3</u>
42.	SSR In Genome Sequences Of Tartary Buckwheat	<u>10.1109/HISET61796.2024.000</u> <u>46</u>
43.	Nutraceutical Potential of Staple Food Crops	<u>10.1002/9781394241576.ch16</u>
44.	Nutrition related practice of mother's under-five children	<u>10.47203/IJCH.2024.v36i01.01</u> <u>2</u>



## NAAC A+

45.	Role of Citrus Juice Sacs	<u>10.1007/978-981-99-8699-</u> <u>6 11</u>
46.	Probiotics in Aquaculture	<u>10.1201/9781003408543-7</u>
47.	Evaluation of polysaccharides, proteins, total phenolic content and antioxidant property of Hypsizygus ulmarius cultivated on varying substrate	<u>10.1109/HISET61796.2024.000</u> <u>62</u>