

17 PARTNERSHIPS FOR THE GOALS



Annual Report 2021

Shoolini University of Biotechnology and Management
Sciences



Report on SDG 17: Partnership for the Goals

Universities have a unique and critical role in helping the world to achieve the SDGs through their research, teaching, operations, and community leadership. Shoolini University aims to contribute to the SDGs and highlight their importance at both national and sub-national levels. By framing research around the SDGs, we aim to create a global future that is fair and equitable, and provides prosperity within environmental constraints. A lot of research is going on at Shoolini University pertaining to SDGs like water, sanitation and hygiene, affordable and clean energy, industry innovation and infrastructure, life below water, life on land, climate action, responsible consumption and production, etc. The faculty members have secured competitive research grants from regional, national, and international funding agencies to work on some of the most important research areas.

Shoolini University aims to provide:

1. The necessary knowledge, solutions, technologies, and innovations needed to support the implementation of the SDGs by the global community.
2. Capacity building for developing nations in conducting research; cooperating with and assisting innovative companies in implementing SDG solutions.
3. Improving diversity in research and training students for sustainable development research.

Relationships with regional NGOs and government for SDG policy

Shoolini University is actively engaged with a number of government agencies and non-governmental organizations (NGOs) at both national and sub-national levels to formulate policies and strategies related to SDGs and accelerate their adoption and implementation. Some of the highlighted interventions where the university is involved are mentioned below.

1. International Centre for Integrated Mountain Development (ICIMOD): Shoolini University is an active member of the **International Centre for Integrated Mountain Development (ICIMOD) and the Himalayan University consortium (HUC)** and is actively engaged in organising and participating in various policy-making initiatives. HUC partners also develop and adopt programmes aimed at training students on mountain issues and promoting research on Himalayan sustainability and climate change. Shoolini University regularly participates in the activities of HUC and has also organized an International Dialogue on Himalayan Ecology and a Sustainable Mountain Development Summit VII with a focus on the wellbeing of the next generation of farmers in the Himalayan Region. Hon'ble Chancellor of Shoolini University is an active member of the Himalayan University Consortium for Research and Development, which is an active body promoting research on Himalayan sustainability, climate change, and so on.
2. Hon'ble Chancellor of Shoolini University is a very active member of the **Association of Indian Universities**, which is also a vital body giving directions to Indian universities regarding academic and

research. Shoolini University also organized a North Zone Vice Chancellors' Meet on the theme "Realizing SDGs through HEIs for ensuring Equality and Sustainable Society" on November 26-27, 2021. The meeting was primarily focused on the role of HEIs from the perspective of their contribution to achieving the SDGs. The discussion covered the global progress in achieving these goals; sharing knowledge, success stories, and good practices; and identifying particular areas of concern and main challenges related to SDGs adoption.

3. Shoolini University is a member of the **Confederation of Indian Industries (CII)**, Northern Regional Committee on Lifesciences and Biotech and the Northern Regional Committee on Education, which are working at the interface of industry and academia, providing directions on research, innovation, and infrastructure development.
4. At the regional level, Hon'ble Chancellor of Shoolini University is a member of the **Department of Environment Science & Technology**, Govt. of Himachal Pradesh, which works towards defining a direction for research and development in the area of environmental sciences and climate action.
5. The Hon'ble Vice Chancellor of Shoolini University is a regional co-chair of **ASSOCHAM** National Education, which is a prime body giving directions to the education sector.
6. MOU with **FICCI Ladies Organisation**: Shoolini University has also signed MOUs with FICCI Ladies Organisation, a non-government, non-profit organisation whose mission is to engage with policymakers and civil society in order to express the views and concerns of the business community and transform the participation of women in India's growth.
7. MOU with **IHub DivySampark**: Shoolini University and IHub DivySampark, a non-profit organisation, have signed a memorandum of understanding to create an innovative ecosystem in India by supporting translational research, providing training, building capacity, and developing policies to provide solutions for national strategic sectors.
8. MOU with **YouWeCan**: Shoolini University has signed a MOU with YouWeCan to take initiatives towards cancer research, awareness, patient support, and policy-making for better implementation and driving change. YouWeCan is a non-profit organisation which was set up in 2009 by cricket icon Yuvraj Singh, who is a cancer survivor and who has made a remarkable return to the Indian national cricket team after fighting cancer.
9. MOU with the **Government of Himachal Pradesh**: The Department of AYUSH, Government of Himachal Pradesh and Shoolini University have signed a MOU for the establishment of "Shoolini Yogananda AYUSH Medicity". The idea behind setting up the AYUSH Medicity is to revive the principles of ancient knowledge and healthcare policy making.
10. MOU with **International Coaching Federation (ICF)**: Shoolini University has partnered with the International Coaching Federation for a social impact project with a goal of creating empowered professionals from a group of less privileged students. Shoolini University actively takes part in policy making, initiatives, assessment and evaluation of the project.



MoU Signing Ceremony with YouWeCan



Shoolini University sign MoU with iHuB Divyasamapark to find solutions for issues concerning HP

Sr. No.	Name of NGOs/ government organization	Relationship of University/faculty with NGOs /government organization	SDG	Evidence
1	Himalayan University Consortium (HUC) and International Centre for Integrated Mountain Development (ICIMOD)	Membership	Climate Action, Quality Education, Responsible consumption and production	Link Link SDG Conference
2	Confederation of Indian	Membership	Industry, Innovation and	Link

	Industry (CII)		Infrastructure	
3	Association of Indian Universities (AIU)	Membership	Quality Education, Gender Equality, Reduced Inequalities	Link
4	Association of Indian Universities (AIU) research committee	Membership	Quality Education	Link
5	Department of Environment Science & Technology, Govt. of Himachal Pradesh	Membership: PK Khosla (Chancellor)	Climate Action	Link
6	ASSOCHAM	National Education - Regional Vice Co-Chair: Atul Khosla (Vice Chancellor)	Quality Education	Link
7	FICCI Ladies Organisation	Memorandum of Understanding (MOU)	Industry, Innovation and Infrastructure; Gender Equality	Link
8	IHub DivySampark, Technology Innovation Hub	Memorandum of Understanding (MOU)	Quality Education	Link
9	YouWeCan	Memorandum of Understanding (MOU)	Good Health and Wellbeing	Link
10	Department of Ayush, Government of Himachal Pradesh	Memorandum of Understanding (MOU)	Good Health and Wellbeing	Link
11	International Coaching Federation (ICF)	Memorandum of Understanding (MOU)	Quality Education	Link

Initiation and participation in cross-sectoral dialogue about the SDGs, e.g., conferences involving government/NGOs

Shoolini University is actively engaged in initiating and participating in cross-sectoral dialogue on the SDGs. Shoolini University aims to contribute to achieving the SDGs and emphasise the importance of SDGs in local, national, and global implementation. Six international seminars/conferences on sustainable development goals were held at Shoolini University in 2021.

1. Shoolini University organised a two-day North Zone Vice Chancellors Conference in collaboration with the Association of Indian Universities on the theme "**Realizing SDGs through HEIs for Ensuring Equality and Sustainable Society**" from November 26 to November 27, 2021, covering interrelated

SDGs-5, 10, 11, and 12. The discussions were primarily focused on the role of HEIs in achieving the SDGs. The discussions also included the global progress in achieving these sustainable development goals; sharing knowledge, success stories, and good practices; and identifying particular areas of concern and main challenges. The meeting also focused on identifying next steps and follow-up actions to be taken by HEIs, governments, and other stakeholders to achieve these goals.



North Zone Vice Chancellors Conference in collaboration with the Association of Indian Universities on the theme "Realizing SDGs through HEIs for Ensuring Equality and Sustainable Society"

2. Shoolini University hosted the 21st International Melow Conference on "**Illness, Healing, and Literary Imagination**" from November 12–14, 2021. The conference brought the issues and challenges of pandemics, disease, isolation, loneliness, vulnerability, regeneration, and hope to the fore. Scholars from India and other regions talked about the history and origins of diseases that have been plaguing people for thousands of years and are almost as old as humans.



21st International Melow Conference on "Illness, Healing, and Literary Imagination"

3. Shoolini University also organised two "**Yogananda International Conferences on Contemporary Issues in Social Sciences**" during the year 2021. The primary objective of these conferences was to provide opportunities for academicians, industry, practitioners, professionals, researchers, and policy makers from various fields of social sciences to engage in discussions on issues related to the dynamic and challenging economic environment.
4. To emphasise the importance of yoga for good health and wellbeing, the School of Ancient Indian Wisdom and Yogic Studies, Shoolini University, organised a Webinar Series of 21 Days from June 1–21, 2021 on the theme "**Health and Happiness**". The webinar series focused on highlighting the importance of ancient Indian philosophy and spirituality and disseminating yoga and its applications as solutions to major social challenges in the world. The webinar series also focused on promoting yoga and meditation as a natural way to treat different health problems and on how yoga can be used to improve mental health.



Webinar Series on the theme "Health and Happiness"

5. Shoolini University organised an "**International Conference on Media and Law: The Quest for Equilibrium**" from 20–21 May 2021 with the aim of discerning the legislative and institutional framework which guarantees freedom of expression, enhances the quality of journalism, and establishes pluralistic means of media reporting internationally. The conference also focused on finding solutions to problems and challenges that countries all over the world face. Various legal luminaires across the country participated and delivered expert talks.

Sr. No.	Name of the Event	Date of Event	SDG	Collaborating Organization	Evidence	Report
1	Realizing SDGs through HEIs for ensuring Equality and Sustainable Society	26 November to 27 November 2021	Gender Equality, Reduced Inequalities, Sustainable Cities and Communities, Responsible	Association of Indian Universities (AIU)	Link Link Link	Link

			Consumption and Production			
2	21st International Melow conference on "Illness, Healing and Literary Imagination"	12 November to 14 November 2021	Good Health and Wellbeing	MELOW - The Society for the Study of the Multi-Ethnic Literatures	Link	Link
3	2nd Yogananda International Conference on Contemporary Issues in Social Sciences	20 August to 21 August 2021	Decent Work and Economic Growth	Govt. of Himachal Pradesh	Link	Link
4	Health and Happiness series of webinar	1 June to 21 June 2021	Good Health and Wellbeing	Health & Family Welfare Department, Government of Himachal Pradesh	Link	Link
5	International Conference Media and Law: The Quest for Equilibrium	20 May to 21 May 2021	Peace, Justice and Strong Institutions	Law Commission of India	Link	Link
6	Yogananda International Conference on Contemporary Issues in Social Sciences	20 February 2021	Decent Work and Economic Growth	Govt. of Himachal Pradesh	Link	Link

Participation in international collaboration on gathering or measuring data for the SDGs

Shoolini University has an international partnership with several global universities to gather or measure data related to SDGs. These partnerships are built through joint research projects, Memorandum of Understanding (MOUs), and working with the community. By focusing research on the SDGs, we aim to create a global future that is inclusive, fair, and provides prosperity within environmental limits. Shoolini University has received a grant from National Geographic to study the scope and impacts of plastic waste and raise awareness among communities. Researchers are also working in collaboration with Lancaster University to understand the current status of the origin and dissipation of pharmaceutical and personal care product pollutants in the Himalayan Region. Shoolini University has published several internationally collaborative papers to gather data related to SDGs, and these partnerships substantially contribute to achieving the United Nations SDGs. Some of the projects in which the university has partnered with international institutions on gathering or measuring data for the SDGs are mentioned below.

S. No.	Title	Collaborating institution/organization	SDG	Evidence	Remarks
1	What goes up must come down: Himalayan Upstream plastic waste solutions that minimize downstream marine inputs	National Geographic, Health Care Foundation Nepal, Zero waste Himalaya	Climate Action	Link	The team documented social and structural environmental behavioural shifts, analysed the scope and impacts of plastic waste reduction projects, and raised awareness of community-led solutions and environmental behavioural change factors.
2	Tackling Pharmaceutical and Personal Care Product Pollutants in the North-Western Himalayan Region of India	Lancaster University	Climate Action, Good Health and Wellbeing	Link	This project aims to understand the current status of origin and dissipation of pharmaceutical and personal care product (PPCP) pollutants and people's perception of the issue in the Baddi-Barotiwala-Nalagarh (BBN) region, which is considered a major pharmaceutical hub in the Himachal Pradesh State of India.
3	Assessment of phytochemicals present in Indian indigenous plants through in silico methods for Covid19 targeting and treatment	The COVID-19 High Performance Computing Consortium	Good Health and Wellbeing	Link	In this project, researchers screened phytochemicals for anti-CoVID19 activity through interaction with CoVID19 specific targets using in silico methods such as molecular modeling.
4	Placed-based interpretation of the sustainable development goals for the land-river interface	Cranfield University, Université de Liège, Ministry of Education China, Peking University, Join For Water (Protos)	Climate action, Life on Land, Life Below Water	Link	This study proposes a place-based approach to interpret the SDG framework to support sustainable land/water management, by (i) identifying key priorities for sustainable development through a normative content analysis of the SDG targets, and (ii) illustrating these priorities and associated challenges within the LRI, based on a literature review and case-studies on human–environment interactions.

5	Evaluation of glacial lakes and catastrophic floods on the northern slopes of the Kyrgyz range	Chinese Academy of Sciences, Central-Asian Institute for Applied Geosciences (CAIAG), Khallikote University, American University of Central Asia, Tribhuvan University	Climate action	Link	This study aims to evaluate the spatial distribution and growth of glacial lakes on the northern slopes of the Kyrgyz range using semiautomated remote sensing and field techniques. The researchers recorded 273 glacial lakes and examined the characteristics of 5 small GLOFs that occurred between 2000 and 2012 due to moraine collapse. Further, the findings highlight alarmingly rapid changes and a high probability that these lakes will burst soon.
6	Mega festivals like MahaKumbh, a largest mass congregation, facilitated the transmission of SARS-CoV-2 to humans and endangered animals via contaminated water	Nanyang Technological University, Singapore	Good Health and Wellbeing	Link	The collaborative work discusses the consequences of MahaKumbh festivals, the largest religious mass gathering on earth, which was held during the COVID-19 pandemic in India, and its impact on both the spread of SARS-CoV-2 among participants and their families and its influence on the quality of the river Ganga.
7	Impacts of environmental regulations on green economic growth in China	Anhui University of Finance and Economics, Fujian Normal University, Hefei University of Technology, Shanghai University of Finance and Economics	Decent Work and Economic Growth	Link	This study investigates the impact of environmental regulations on green economic growth and renewable energy development in China
8	Responses of soil greenhouse gas emissions to land use conversion and reversion—A global meta-analysis	Chinese Academy of Sciences	Climate action	Link	A global meta-analysis was conducted to analyze the responses of carbon dioxide (CO ₂), methane (CH ₄), and nitrous oxide (N ₂ O) emissions to land use conversion or reversion, and determine their temporal evolution, driving factors,

					and potential mechanisms.
9	Global challenges in microplastics: From fundamental understanding to advanced degradations toward sustainable strategies	Vietnam National University Hanoi, National Taiwan University Duy Tan University	Climate Action	Link	The study discusses the global challenges in microplastics, including the current production and use status of plastics and their impact on the environment.
10	Determination of the Physicochemical Quality of Groundwater and its Potential Health Risk for Drinking in Oromia, Ethiopia	Addis Ababa Medical and Business College, Jimma University	Clean Water and Sanitation	Link	This study aimed to determine the physicochemical quality of groundwater and its potential health risk for drinking in Ethiopia.
11	The role of renewable energy and natural resources for sustainable agriculture in ASEAN countries: Do carbon emissions and deforestation affect agriculture productivity?	Roma Tre University, University of Alberta, Anhui University of Finance and Economics	Affordable and Clean Energy, Responsible Consumption and Production	Link	This study provides policy recommendations for the governments of ASEAN economies on improving the environmental performance of agriculture and achieving the SDGs by 2030.
12	Contamination, exposure, and health risk assessment of Hg in Pakistan	Beijing Normal University, University of Swat, King Saud University, Universiti Kebangsaan	Good Health and Wellbeing	Link	This study aimed to assess the environmental and health risks related to Hg. Seventy studies related to Hg in environmental media, aquatic biota, and food stuffs across Pakistan were reviewed, and their concentrations were used for ecological and human health risk assessments.
13	Solar Energy in Nigeria - Status, Utility and Procurement	Hassan Usman Katsina Polytechnic	Affordable and Clean Energy	Link	This aim of the study was to study of six zones of Nigeria and its potential to generate green energy in the country.

14	A survey on ethnoveterinary medicines used by the tribal migratory shepherds of Northwestern Himalaya	Parque Tecnológico de Galicia, Universidad de Vigo, Albrecht's University	Life on Land	Link	This survey was conducted to document the contemporary ethnoveterinary knowledge of Gaddi shepherds living in Northwestern Himalayan region.
15	Era connecting nanotechnology with agricultural sustainability: issues and challenges	Assiut University	Responsible Consumption and Production	Link	This study explore the potential for advancement in agri-nanotechnology with new-age nanomaterials, while discussing the advantages and disadvantages of the same.
16	Accumulation pattern and risk assessment of potentially toxic elements in selected wastewater-irrigated soils and plants in Vehari, Pakistan	King Abdulaziz University, University of Wuppertal, Taif University, King Saud University, COMSATS University Islamabad	Clean Water and Sanitation	Link	This study aims to assess the pollution levels and potential ecological risks of PTEs (As, Cr, Cd, Cu, Ni, Mn, Pb and Zn) in wastewater-irrigated arable soils and different edible-grown plants in selected areas of Vehari, Pakistan.
17	Changing Dynamics of SARS-CoV-2: A Global Challenge	The University of Manchester, The University of Suwon, Kwangwoon University, The University of Suwon	Good Health and Wellbeing	Link	The study examine the effect of the transmissibility and infectious potential of the virus due to various mutations of SARS-CoV-2, especially in the receptor-binding domain (RBD). The study discusses the role of genome sequencing in tracing all the mutations and the importance of the R value (reproductive number) to understand the virus spread.
18	Prospects of sustainable photovoltaic powered thermoelectric cooling in zero energy buildings	University of New South Wales, Sydney	Affordable and Clean Energy	Link	The main objective of the study is to explore the potential of PV-powered thermoelectric technology as a distributed air-conditioning system in buildings.
19	Biohydrogen production and its bioeconomic impact	Adekunle Ajasin University, Ladoké Akintola University of Technolog, University of Ibadan,	Decent Work and Economic Growth	Link	This study aims to examine the significance and impact of biohydrogen on the bioeconomy.

		University of Ilorin			
20	Sustainable chemical preventive models in COVID-19: Understanding, innovation, adaptations, and impact	Ben-Gurion University of the Negev, New Jersey Institute of Technology, Pusan National University, Royal Institute of Technology	Good Health and Wellbeing	Link	The study highlighted the sustainable chemical preventive models for COVID-19.
21	World eutrophic pollution of lake and river: Biotreatment potential and future perspectives	Najran University, Lanzhou University, Indiana University	Climate Action	Link	This study provides a complete eutrophication-based characterization of lakes and rivers all over the world is provided. Different cost-effective and efficient bio-remediations to control point and non-point pollution are discussed.
22	Environmental impact of COVID-19 Vaccine waste	King Saud University, King Abdulaziz University, New Jersey Institute of Technology	Climate Action	Link	This study highlights the necessity of opting sustainable solutions of disinfecting and substituting vaccination tools for an environment friendly ongoing vaccination campaign.
23	Revisiting conventional and green finance spillover in post-COVID world	Griffith University	Decent Work and Economic Growth	Link	The study examine the causality and spillover effects between NASDAQ clean energy indexes and their corresponding alternatives.

Collaboration for SDG best practice through international collaboration and research, review comparative approaches and develop international best practice on tackling the SDGs

International collaboration has become an important aspect of sustainable development research to achieve the SDGs. The increasing differences, particularly those evident between rich and developing countries, can greatly affect the implementation of SDGs. In order to achieve the SDGs, it is essential to recognise the significance of stronger cooperation between global organisations for the implementation of SDGs, especially in developing nations. In an effort to support progress towards the SDGs, Shoolini University has signed memorandums of understanding (MOUs) with several institutions across the world. Shoolini University has also published several internationally collaborative papers with some of the leading institutions in attaining Sustainable Development Goals. As per the data retrieved from Scopus and SciVal (using query strings for SDGs), Shoolini University

has published 239 papers on SDGs in the year 2021. These papers have received citations per publication of 13.6 with a field weighted citation impact of 2.47. Sixty-six percent of these papers have been published in collaboration with some of the leading universities in 61 different countries. The collaborations in most cases have benefited both the partners with the research getting published in higher impact journals and receiving more citations. Shoolini university has also established several centres of excellence and research centers in areas relevant to the SDGs. The purpose of setting up the research centers is to promote interdisciplinary collaborative research within the university as well as with researchers from other institutions in India and abroad.

Year : 2021				
Data source: Scopus, Scival				
Date last updated: 19 October 2022				
Date exported: 27 October 2022				
Query string used: https://data.mendeley.com/datasets/87txkw7khs/1				
Entity	SDG	International Collaborative Papers	Top collaborating countries by publication output	Top collaborating institutions by publication output
SDG 3	Good Health and Well-being	80	Australia: 22 Malaysia: 21 United Kingdom: 17 United States: 16 Saudi Arabia: 15 South Korea: 14 China: 11 Iran: 11 Germany: 9 Czech Republic: 8	University of Technology Sydney: 19 Lovely Professional University: 17 International Medical University: 16 University of Newcastle: 14 Hunter Medical Research Institute: 12 Ulster University: 8 University of Hradec Kralove: 7 Pontificia Universidad Católica de Chile: 6 Charles University: 5 Clemson University: 5
SDG 6	Clean Water and Sanitation	55	Saudi Arabia: 22 China: 17 Viet Nam: 17 Iran: 15 South Korea: 15 Malaysia: 13 United Kingdom: 11 South Africa: 5 United Arab Emirates: 5 United States: 5	King Saud University: 15 Duy Tan University: 11 Scotland's Rural College: 10 Shenzhen University: 10 Universiti Kebangsaan Malaysia: 9 Yonsei University: 7 King Abdulaziz University: 6 Binh Duong University: 4 Islamic Azad University: 4 Korea University: 4
SDG 7	Affordable and Clean Energy	35	Viet Nam: 16 China: 14 Saudi Arabia: 12 South Korea: 8 United Kingdom: 7 Iran: 5 South Africa: 4 Germany: 3 Italy: 2 Malaysia: 2 Russian Federation: 2	Duy Tan University: 12 King Abdulaziz University: 8 Scotland's Rural College: 7 Ton Duc Thang University: 7 Binh Duong University: 6 Institute for Computational Science and Technology: 4 Lanzhou University: 4 King Saud University: 3 Korea University: 3 Nguyen Tat Thanh University: 3

SDG 13	Climate Action	15	Viet Nam: 12 Saudi Arabia: 7 China: 6 United Kingdom: 6 South Korea: 4 Malaysia: 2 United Arab Emirates: 2 France: 1 Germany: 1 Iran: 1 United States: 1	Duy Tan University: 11 King Abdulaziz University: 6 Scotland's Rural College: 6 Ton Duc Thang University: 6 Institute for Computational Science and Technology: 4 Binh Duong University: 3 Korea University: 3 Nanjing Forestry University: 2 Nguyen Tat Thanh University: 2 University of Da Nang: 2 Vietnamese Academy of Science and Technology: 2 Aix-Marseille Université: 1
SDG 12	Responsible Consumption and Production	11	China: 5 Saudi Arabia: 4 Portugal: 3 South Korea: 3 Viet Nam: 3 Czech Republic: 2 Egypt: 2 Iran: 2 United Kingdom: 2 Denmark: 1	King Saud University: 3 Shenzhen University: 3 Charles University: 2 Lovely Professional University: 2 Nguyen Tat Thanh University: 2 Scotland's Rural College: 2 University of Hradec Kralove: 2 University of Porto: 2 Aarhus University: 1 Agricultural Research Center, Giza: 1
SDG 15	Life on Land	9	Germany: 3 South Korea: 3 Egypt: 2 Ethiopia: 2 Russian Federation: 2 Saudi Arabia: 2 South Africa: 2 United States: 2 Bangladesh: 1 China: 1	Kafrelsheikh University: 2 King Abdulaziz University: 2 People's Friendship University of Russia: 2 RAS - Joint Institute for High Temperatures Research: 2 Sejong University: 2 University of Wuppertal: 2 Ben-Gurion University of the Negev: 1 Cairo University: 1 Clemson University: 1 Damascus University: 1
SDG 11	Sustainable Cities and Communities	5	Saudi Arabia: 3 Greece: 2 Malaysia: 2 South Korea: 2 Australia: 1 China: 1 Egypt: 1 Finland: 1 Germany: 1 Russian Federation: 1	King Saud University: 2 Universiti Kebangsaan Malaysia: 2 University of Thessaly: 2 Aristotle University of Thessaloniki: 1 Kafrelsheikh University: 1 King Abdulaziz University: 1 Lappeenranta University of Technology: 1 People's Friendship University of Russia: 1 RAS - Joint Institute for High Temperatures Research: 1
SDG 2	Zero Hunger	4	Egypt: 2 Saudi Arabia: 2 Argentina: 1 Bangladesh: 1 Belgium: 1 China: 1	Agricultural Research Center, Giza: 1 Cairo University: 1 Charles University: 1 Consejo Nacional de Investigaciones Científicas y Técnicas: 1 Institute of Animal Reproduction and

			Czech Republic: 1 Germany: 1 Pakistan: 1 Poland: 1	Food Research of the Polish Academy of Sciences: 1 Kafrelsheikh University: 1 Karpagam Academy of Higher Education: 1 King Abdulaziz University: 1 Nanjing Agricultural University: 1 Northwest Agriculture and Forestry University: 1 Polish Academy of Sciences: 1
SDG 14	Life Below Water	1	Sri Lanka: 1	University of Sri Jayewardenepura: 1
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Memorandum of understanding (MoU) signed with global universities during the year 2021

Sr. No	Name of the University	Country	Date of signing of MOU	Link
1	Info Link College	Ethiopia	19/04/2021	Link
2	Pharma College Ethiopia	Ethiopia	08/09/2021	Link
3	Mizan - Tepi University	Ethiopia	13/09/2021	Link
4	University of Nigeria	Nigeria	11/09/2021	Link
5	American International University	Bangladesh	12/09/2021	Link
6	Soka University	Japan	30/11/2021	Link
7	Institute of Advanced Materials, Sweden	Sweden	25/10/2021	Link



MoU Signing Ceremony with Mizan - Tepi University

Student Exchange Program Year-2021

S.No	Name of Students	Program	Name of University	Country	Date of Leaving	Link
1	Kumari Garima Singh	M.Sc. Microbiology	University of Naples	Italy	01-Feb-21	Link
2	Karan Negi	M.Sc. Microbiology	University of Naples	Italy	01-Feb-21	Link
3	Himani Chandel	M.Sc. Microbiology	University of Naples	Italy	02-Feb-21	Link
4	Raj Akshat	M. Tech biotechnology	University of Naples	Italy	01-Feb-21	Link

Research centers and centres of excellence established in areas relevant to the SDGs

- **Centres of Excellence:**

1. Centre for Excellence in Visionary Learning Community of India (VLCI)
2. Centre of Excellence in Informatics, Artificial Intelligence and Data Analytics
3. Centre of Excellence Himalayan Sustainability, Cancer Research, Yoga
4. Centre of Excellence in Energy Science and Technology

- **Research centers:**

1. Research Centre on Nanotechnology
2. Research Centre in OMICS and Biodiversity Research
3. Research Centre in Automobile Engineering
4. Research Centre in Yoga
5. Research Centre in Disaster Management
6. Research Centre in Data Analytics
7. International Research Centre of Nanotechnology for Himalayan Sustainability (IRCNHS)
8. Centre of Post Graduate Legal Studies

Collaboration with NGOs for SDGs

Collaboration between NGOs and universities is an important approach to operationalizing the integrated and universal nature of sustainable development goals. NGOs can also play an important role in contributing directly via the implementation of their projects. Shoolini University has collaborated with several NGOs to support their awareness-raising campaigns and has achieved outstanding results in

achieving many goals relevant to the SDGs. Factors like environmental protection, health and hygiene, and education for the masses are some of the factors that count for nation-building. The University regularly conducts activities with YouweCan, Care n Share, Healing Himalayas, Mahadevi Charitable Trust, Indian Association of Muscular Dystrophy, Foundation for a Drug-Free World, and the Red Cross Society. Awareness and detection camps mainly for breast, cervical and oral cancer have been organised in various towns in collaboration with cricketer Yuvraj Singh's Cancer Foundation "**YouWeCan**". The university bears immense enthusiasm in serving the environment and has been participating and inculcating a habit of responsible waste-management among its students through active participation in the cleaning drives conducted by "**Healing Himalayas**". Regular cleanliness drives, including cleaning and maintenance of local water bodies, are also organised in the neighbouring village. Plantation drives are organised in and around the campus, and more than 15,000 saplings of different species of trees like Deodar, Oak, and other ornamental varieties have been planted and nurtured with the support of various NGOs. Shoolini's trained volunteers, in collaboration with the "**Foundation for a Drug-Free World**," organise campaigns on drug abuse and tobacco use and make an effort to combat the spreading menace of drugs and tobacco through street plays, counselling sessions, and student interactions. Shoolini University is engaged and committed towards the cause of muscular dystrophy and supports various camps organised by the "**Indian Association of Muscular Dystrophy**" at Manav Mandir. Shoolini University also organises online sessions for poor children and book donation drives in collaboration with "**Mahadevi Charitable Trust**" to establish libraries for poor children. Shoolini University also contributed significantly towards COVID relief by donating items, medical equipment, and supporting healthcare workers to fight the COVID-19 pandemic jointly.



Shoolini University Volunteers at camps organised by the "Indian Association of Muscular Dystrophy" at Manav Mandir.



Cleaning drive with “Healing Himalayas”



Awareness campaign on cancer in collaboration with “YouWecan”

S.No	Name of the activity	Name of the collaborating NGO/ government recognised bodies	SDG	Link
1	Campaigns to restore the environment.	Healing Himalayas	Climate Action	Link
				Link
2	Cancer awareness	YouWeCan	Good Health and Wellbeing	Link
				Link

3	Awareness campaign on Drug Abuse and Drug Addiction	Foundation for a Drug-Free World	Good Health and Wellbeing	Link
4	Book donation drive	Mahadevi Charitable Trust	Quality Education	Link
5	Contribution towards Covid-19 relief	Department of health and family welfare, H.P.	Good Health and Wellbeing	Link
				Link
6	Contribution towards Covid-19 relief	Dr Yashwant Singh Parmar Hospital, Nahan	Good Health and Wellbeing	Link
7	Patient support camps at "Manav Mandir"	Indian Association of Muscular Dystrophy	Good Health and Wellbeing	Link
				Link

Education for SDGs commitment to meaningful education

The role of universities is vital to achieving the SDGs because of their focus and impact. Shoolini University is committed to meaningful education around various SDGs and is actively engaged in education, research, and community participation, which are all crucial to the transformation of individuals and society toward a more sustainable future. The University collaborates with local and global organizations on sustainability initiatives to raise awareness of the SDGs. By engaging directly with social entrepreneurs, employers, and industry, Shoolini University aims to provide practical solutions for sustainable development. Shoolini University aspires to be a role model for other universities in the adoption of sustainable development pedagogies and curricula. We are amongst the first few universities in India to implement a choice-based credit system and have made open electives mandatory for all the UG students across the university (**list of open-electives attached**). These open elective courses are generic in nature and are basically designed around one or more of the SDGs. In addition, many programmes being offered at Shoolini University (UG, PG, and Doctoral) have a very strong research component in them, and the research policy of the university also focuses on the sustainable development of the Himalayan Region (**research Policy Attached**). When assigning research projects to students, we emphasise that the research problem must be in line with our research policy in order to work on the sustainable development of the Himalayan Region. Shoolini University encourages its students to engage in a variety of SDG-related activities and motivates its students to become future leaders in the quest to achieve sustainable development goals (**social projects report attached**). In order to sensitise the students, Shoolini university have included social projects as part of curriculum of Faculty of Management Sciences and Liberal Arts. As part of social projects, the social problems pertaining to SDGs are assigned to the students. In addition, we also have a university wide credit programme called SPRINT where we sensitise students on various issues including SDGs (**SRRINT booklet attached**). "Parivartan" is an educational initiative run by the students of Shoolini University through which our students teach the children of daily wage employees.

Education for SDGs: specific courses on sustainability

Shoolini University offers various courses in Biotechnology and Pharmaceutical Sciences, Energy, Food Technology, Agriculture, Sciences, Engineering, Liberal Arts, Law, Yoga, and Management that address

sustainability and the SDGs. We are amongst the first few universities in India to implement a choice-based credit system and have made open electives mandatory for all the UG students across the university (**List of courses and open-electives attached**). The courses offered as part of open electives were designed keeping in mind The SDGs like like Decent work and Economic Growth, Good Health and Wellbeing, Peace, Justice and Strong Institutions, Reduced Inequalities, Zero Hunger, Responsible Consumption and Production, Industry, Innovation, and Infrastructure, Climate Action, Affordable and Clean Energy, Reduced Inequalities etc. The list of courses and open electives and how they relate to the different SDGs is mentioned below.

List of open electives:

Sr. No.	Elective Code	Open Elective Name	SDG
1	OE013	Values and Ethics	Decent work and Economic Growth
2	OE011	Digital Marketing	Decent work and Economic Growth
3	OE054	Network Marketing	Decent work and Economic Growth
4	OE014	Introduction to Psychology	Good Health and Wellbeing
5	OE044	Law in Daily Life	Peace, Justice and Strong Institutions
6	OE010	Sex Education	Good Health and Wellbeing
7	OE019	Food & Nutrition	Good Health and Wellbeing
8	OE020	Drug Abuse	Good Health and Wellbeing
9	OE070	Winning Hackathons	Industry, Innovation, and Infrastructure
10	OE075	Cyber Crime & Defense	Peace, Justice and Strong Institutions
11	OE049	Robotics & Automation	Industry, Innovation, and Infrastructure
12	OE005	Himalayan Biodiversity	Climate Action
13	OE009	Biology of Human Body	Good Health and Wellbeing
14	OE017	Spirituality and Meditation	Good Health and Wellbeing
15	OE052	Yoga in Daily Life	Good Health and Wellbeing
16	OE068	Yoga for Wellness	Good Health and Wellbeing
17	OE003	History and Introduction to Automobiles	Industry, Innovation, and Infrastructure
18	OE038	Grooming & Hospitality Skills	Decent work and Economic Growth
19	OE059	Developing Patents	Industry, Innovation, and Infrastructure
20	OE071	Practical Farming	Responsible Consumption and Production
21	OE078	Direct Selling Entrepreneurship	Decent Work and Economic Growth
22	OE080	Microorganisms for Human Welfare	Good Health and Wellbeing
23	OE079	Introduction to Indian Constitution	Peace, Justice and Strong Institutions
24	OE027	Total Quality Management	Decent work and Economic Growth
25	OE002	Non-conventional Energy Sources	Affordable and Clean Energy
26	OE006	Nanotechnology and Nanoscience	Industry, Innovation, and Infrastructure
27	OE063	Social Challenges & Their Resolutions	Reduced Inequalities
28	OE081	Ecology and Environment	Climate Action

List of courses:

S. No.	Course	SDG
1	PhD Alternative Dispute Resolution	Peace and Justice Strong Institutions
2	PhD Agriculture (Agronomy, Agricultural Extension Education, Entomology, Plant Pathology, Soil Science, Plant Breeding and Genetics)	Responsible Consumption and Production, Zero Hunger
3	PhD Applied Economics	Decent Work and Economic Growth
4	PhD Cancer Biology	Good Health and Well-being
5	PhD Civil Engineering	Sustainable Cities and Communities
6	PhD Disaster Management	Climate Action
7	PhD Economics	Decent Work and Economic Growth
8	PhD Energy	Affordable and Clean Energy
9	PhD Environmental Sciences	Climate Action
10	PhD Food Technology	Responsible Consumption and Production, Zero Hunger
11	PhD Human Rights	Peace and Justice Strong Institutions
12	PhD IPR	Industry, Innovation and Infrastructure
13	PhD Legal Sciences	Peace and Justice Strong Institutions
14	PhD Pharmaceutical Sciences (Pharmaceutics, Pharmacology, Medicinal Chemistry, Pharmacognosy, Pharmaceutical Chemistry)	Good Health and Well-being
15	PhD Psychology	Good Health and Well-being
16	PhD Public Relations	Peace and Justice Strong Institutions
17	PhD Water Management	Clean Water and Sanitation
18	PhD Yoga	Good Health and Well-being
19	PhD Biotechnology	Good Health and Well-being
20	PhD Microbiology	Good Health and Well-being
21	LLM	Peace and Justice Strong Institutions
22	M Pharma Pharmaceutics	Good Health and Well-being
23	M Pharma Pharmacognosy	Good Health and Well-being
24	M Pharma Pharmacology	Good Health and Well-being
25	M Pharmacy Pharmaceutical Chemistry	Good Health and Well-being
26	M Tech Civil	Sustainable Cities and Communities
27	M Tech Climate Science and Sustainable Development	Climate Action
28	M Tech Energy Technology	Affordable and Clean Energy
29	M Tech Food Technology	Responsible Consumption and Production, Zero Hunger
30	MA/ MSc Psychology	Good Health and Well-being
31	MBA Food Technology	Responsible Consumption and Production, Zero Hunger
32	MBA International Relations	Partnerships for the Goals
33	MBA Pharma and Healthcare Management	Good Health and Well-being
34	MSc Agriculture (Agricultural Economics)	Decent Work and Economic Growth
35	MSc Agriculture (Agricultural Extension Education, Agronomy, Entomology, Plant Breeding & Genetics, Plant Pathology, Soil Science)	Responsible Consumption and Production, Zero Hunger
36	MSc Environmental Sciences	Climate Action

37	MSc Food Technology Research	Responsible Consumption and Production, Zero Hunger
38	MSc Nutrition and Dietetics	Good Health and Well-being
39	MSc Yoga	Good Health and Well-being
40	M Tech Biotechnology	Good Health and Well-being
41	MBA Biotechnology	Good Health and Well-being
42	MSc Biotechnology Research	Good Health and Well-being
43	MSc Microbiology Research	Good Health and Well-being
44	MBA Digital Marketing	Decent Work and Economic Growth
45	MBA Marketing	Decent Work and Economic Growth
46	B Tech Food Technology Research	Responsible Consumption and Production, Zero Hunger
47	B Tech Renewable Energy	Affordable and Clean Energy
48	BA (Hons) Liberal Arts Economics and Finance	Decent Work and Economic Growth
49	BA (Hons) Liberal Arts Psychology and Counseling	Good Health and Well-being
50	BA/ BSc Behavioural & Neuro Psychology	Good Health and Well-being
51	BSc (Hons) Agriculture	Responsible Consumption and Production, Zero Hunger
52	BSc (Hons) Food Technology Research	Responsible Consumption and Production, Zero Hunger
53	BSc Nutrition and Dietetics	Good Health and Well-being
54	BSc/ BA Yoga	Good Health and Well-being
55	B Pharmacy	Good Health and Well-being
56	B Tech Civil	Sustainable Cities and Communities
57	BA LLB	Peace and Justice Strong Institutions
58	BBA (Rural Management)	No Poverty, Zero Hunger
59	B Tech Biotechnology Research	Good Health and Well-being
60	BSc (Hons) Biotechnology Research	Good Health and Well-being
61	BSc (Hons) Industrial Microbiology	Good Health and Well-being
62	BSc (Hons) Microbiology Research	Good Health and Well-being
63	BBA Digital marketing	Decent Work and Economic Growth

Education for SDGs in the wider community

Under the banner of Program “**Jagriti**” we offer dedicated outreach educational activities for wider community including our alumni, local residents and displaced people. As part of our association with YuWeCan we regularly organise various activities related to cancer awareness for local residents and displaced people. We also organise various activities in and outside campus for gender sensitization and equality. During the covid times in 2021 we have also organised various educational and outreach activities on issues related to physical and mental health. We have also adopted primary health centres nearby and helped them to be fully equipped with oxygen cylinders and oxygen concentrators to fight the Covid-19 outbreak in the community. We also contribute to the wellbeing of senior citizens and under privileged section of the society by programmes like celebrating grandparent’s day, Dhan Utsav and fund raiser for various societal activities. Some of the dedicated outreach educational activities for the wider community organised during 2021 under the banner of Program "Jagriti" are mentioned below. **Ideas That Matter** is a

collaborative platform by Shoolini University that connects forward-thinking schools, academia, students, scientists, industry leaders, public figures, cultural icons, and all with the spirit of innovation. To enable out-of-the-box thinking, we organize programs, webinars, masterclasses, and other creative adventures to stimulate their minds. We want to light the way to a better future! We want to create an environment where ideas travel and creativity blossoms. Through our initiatives, we want to equip and energize the education fraternity.

Social Activities (JAN-DEC 2021)		
Sr. No.	Title of the activity	Date
1	Cultural Activity at Manav Mandir	January 09, 2021
2	Social Activity at Manav Mandir	January 22 to 24, 2021
3	A Guru Talk with Sarabjeet Singh on World Cancer Day	February 04, 2021
4	Cricket tournament on World cancer day	February 04 to 05, 2021
5	Food Stalls for Fund raising- World Cancer Week	February 05, 2021
6	Zumba for a Cause- World Cancer Week	February 06, 2021
7	A-z of being cancer smart	February 07, 2021
8	Musical Evening "Rock for a Cause"	February 07, 2021
9	A cleanathon with Healing Himalayas	March 07, 2021
10	A talk on overall health and hygiene on Women's Day	March 08, 2021
11	"Can Survive – A Ray of Hope" A play on breast cancer on Women's Day	March 08 and 09, 2021
12	Visit to Manav Mandir on international Happiness Day	March 20, 2021
13	NIC Camp in Rajasthan	March 20 to 26, 2021
14	Book Reading Event	April 01, 2021
15	Event at Mahadevi Library and Fund-Raising	April 02, 2021
16	Talk on gender equality by Mx. Dhananjay Chauhan	June 25, 2021
17	YouWeCan bikers visit for "Mission 1000 Beds"	July 09, 2021
18	Gender Equality Talk by Devika Mangal Mukhi	July 13, 2021
19	Finding inclusivity in Society- Talk by Minal	July 31, 2021
20	Discussion on Climate Change	August 05, 2021
21	"On Top of the World" with Amit Negi	August 06, 2021
22	A Visit to IAMD Centre	August 08, 2021
23	Youth's Spiritual Awakening	August 12, 2021
24	Cleaning Drive at Shimla	August 14, 2021
25	Mission Freedom from Hunger Day 1	August 14, 2021
26	Mission Freedom from Hunger Day 2	August 15, 2021
27	Guru Talk- Solving Women related Issues	August 17, 2021
28	Gun Ki Ser- Clean-up	August 29, 2021

29	Doctors Meeting with Girls at Girls' Hostel	August 30, 2021
30	Meeting with Deep Bajaj	August 31, 2021
31	Book Release at Manav Mandir	September 02, 2021
32	World Literacy Day- Event at Shoolini	September 08, 2021
33	World Literacy Day- Event at Mahadevi Library	September 08, 2021
34	Social Activity at Manav Mandir	September 09, 2021
35	Session by YCT on Ganesh Chaturthi	September 10, 2021
36	First NSS Meeting for the term	September 15, 2021
37	Online education for underprivileged students at Mahadevi Library	September 20 to December 04, 2021
38	Social Project with Mudita Foundation	September 27 to December 11, 2021
39	Tree plantation and Cleaning Drive	October 02, 2021
40	Gandhi Jayanti Poster Making	October 02, 2021
41	Daan Utsav at Solan	October 02 to October 08, 2021
42	Animal Welfare Day	October 04, 2021
43	World Mental Health Day	October 10, 2021
44	Talk on Menstrual Hygiene	October 13, 2021
45	Peddals- A Ride for Breast Cancer Awareness	October 16, 2021
46	Cleaning of Natural Water Resource	October 16, 2021
47	Animal Lovers Club Meeting	October 18 & 19, 2021
48	Breast Cancer Awareness	October 20, 2021
49	Fashion Show on Cancer Awareness	October 23, 2021
50	Standup against Street Harassment	October 28, 2021
51	Ekta Diwas	November 13, 2021
52	Mattress Making Event by Animal Lovers Club	November 08, 2021
53	Children's Day Donation Drive	November 13 & 14, 2021
54	Painting of Primary School on Children's Day	November 14 & 15
55	Workshop on HIV AIDS with Red Ribbon Club	November 18, 2021
56	A bicycle ride on International Men's Day	November 19, 2021
57	Talk On Prostate Cancer	November 22, 2021
58	Ashwani Khadd Cleaning with Cleaning Himalayas	November 21, 2021
59	Selfie challenge for Prostate Cancer Awareness	November 24, 2021
60	Ladies visit to Manav Mandir	November 24, 2021
61	International Day of People with Disability	December 03, 2021
62	International Day of Volunteers	December 05, 2021
63	Paying Homage to Gen Rawat	December 09, 2021
64	Thanksgiving	December 09, 2021
65	Odha Do Zindagi	December 09 & 10, 2021
66	Fundraising for our paws	December 10, 2021
67	Cupcake activity for Cancer awareness	December 12 & 13
68	Christmas celebration in School	December 23, 2021
69	Christmas celebration in Shoolini	December 24, 2021

Ideas That Matter – Shoolini University

Social Activities (JAN-DEC 2021)			
Sr. No.	Title of the activity	Year	Link
1	Ideas That Matter Artificial Intelligence	2021	https://www.youtube.com/watch?v=-jdPywxkNx0
2	CV Raman Young Researchers Program	2021	https://www.youtube.com/watch?v=bKuE3KL5b6I
3	Ideas That Matter Finding Success Within	2021	https://www.youtube.com/watch?v=Wa61sx2m6zk&list=PL427Ao6J-cXMmQJSwamm4ezAe3Vrg-7v8&index=4