

ANNUAL REPORT

2018-19

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Vice-Chancellor's Message

With the world grappling to transform itself towards sustainable development – resolving “to free the human race from the tyranny of poverty and want and to heal and secure our planet”– every stakeholder in this process would need to align with the broad goals of sustainable development and mobilise as many as possible to do the same. We have set ourselves a path by which we hope to contribute towards creating a movement towards sustainable development in all its dimensions and across all walks of life. We have, therefore, identified new programmes and experiential learning tools that will be implemented in the short term to plug the gaps towards a more systemic handling of sustainability.

In this effort, the TERI SAS will be seeking to aggressively strengthen its partnerships, both nationally and internationally. The upcoming new campuses in Hyderabad and Gauhati will not only increase the supply of sustainability professionals in the country but also provide a strong platform for continuous learning.

The University is also stepping up its research programme to contribute more effectively to the data and knowledge gaps on sustainability that exist in the country. Engaging the Masters students as well in this effort prepare them better for the work place challenges and would also help meet a national need.



Message from the Dean (Academics)

The University since its inception has been striving to live up to its motto of 'knowledge for sustainable development' and has been offering academic programmes that are unique and have societal relevance in sync with its motto. The nature of the programmes is such that it's imperative that the curricula be updated and reviewed at regular period programmes based on the inputs received from academic, industry, alumni and other stakeholders. In continuation of this philosophy, a major programme review exercise was undertaken by the Department of Energy and Environment for the MTech (Renewable Energy Engineering and Management) and MSc (Climate Science and Policy); and Department of Regional Water Studies for the MTech (Water Science and Governance) and MSc (Water Science and Governance). Inputs were taken from industry, research institutions, academia, and alumni.

A reshuffle in terms of relocation of few programmes was carried out in order to improve their mapping under the relevant Department. In this regard, MSc (Environmental Studies and Resource Management) and MSc (Climate Science and Policy) were relocated to the Department of Energy and Environment. The Department of Natural Resources continues to run the MSc (Geoinformatics) Programme. There are plans to develop Masters programme relevant to Department of Natural Resources in the near future.

All the departments are committed to carry out teaching and research ensuring a multi- and interdisciplinary approach that is required to address complex sustainability issues that cut across disciplinary boundaries. The pedagogy integrates information and knowledge from different disciplines.



Message from the Dean (Research and Relationships)

Since its inception, the University has paid attention to facilitate research, innovation and impact; and has put policies and mechanisms to raise its profile and range of research. Research projects are an integral feature of academic programmes at TERI SAS and student-led research opportunities exist at all stages of study. The university has played a leadership role in demonstrating the extension of research in the curriculum of Master's degree programmes, leapfrogging from the conventional research-informed syllabi to research-led pedagogy and strives to be the first university in India to have research active curriculum. Such transition will enhance learning experience of both students and teachers.

To facilitate this transition, we have been proactive in increasing our partnership with industries on one hand and research institutes on the other. Our collaboration with Environment Protection Training and Research Institute (EPTRI), Hyderabad is of immense importance for us. The objective of this collaboration is to advance the collaborative ideas related to academics and research on various dimensions of Sustainability Science. The University has also kept aside research grants for faculty members and students to enable them to do background work required to increase the quality of research and to disseminate research outputs in conferences and other events. Relevant policies that underpin good scientific research practices will soon be in place and research staff will be organized in High Performance Research Units in the areas of strategic interests of the University.

ABOUT TERI SAS

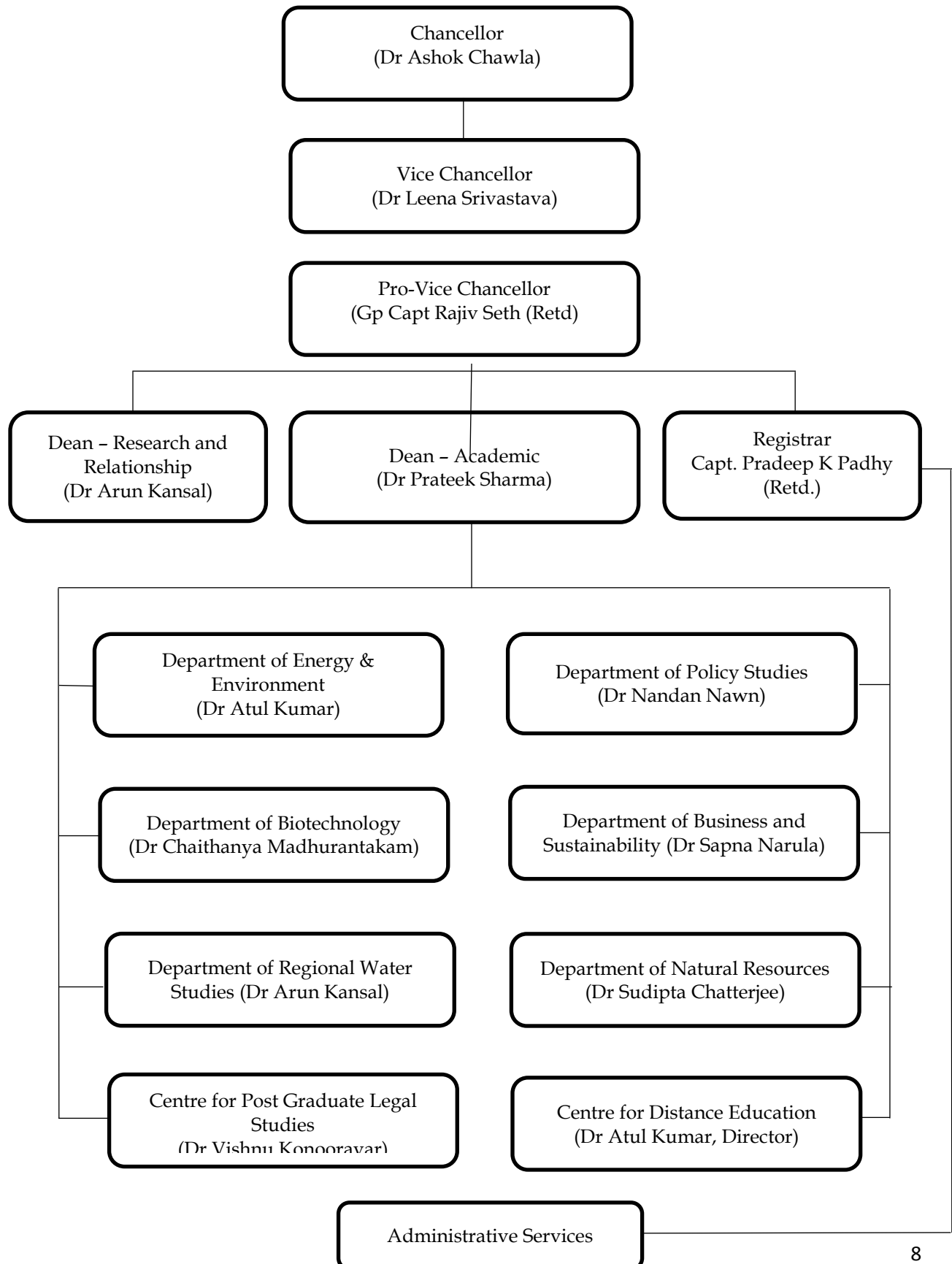
TERI SAS was established to disseminate the vast reservoir of knowledge devised by The Energy and Resources Institute (TERI), a not-for-profit, independent research institute recognized globally for its contribution to scientific and policy research in the realms of energy, environment, and sustainable development. The University's academic offering is rooted in the comprehensive research, consultancy and outreach activities of TERI.

In 1999, the University was granted the 'Deemed to be University' status by the University Grants Commission (UGC) and notified vide the Ministry of Human Resources Development, Department of Education, Government of India, notification no. F.9/19/95-U-3, dated October 5, 1999.

Since its inception, the University has offered not just world-class education, but also an environment that enables its students to develop fresh perspective in their subject areas. Before moving to Vasant Kunj, the University was housed in the Darbari Seth Block of India Habitat Centre from 1998 to 2008. In 2008, TERI SAS started functioning from its new 'Green Campus', located in Vasant Kunj, New Delhi.

TERI SAS aspires to be an institution of advanced learning which meets the needs of a rapidly growing nation. The academic programmes are envisioned to provide the students with a holistic and inter-disciplinary perspective of the subjects offered.

University Structure



Board of Management

Chairperson

Dr. Leena Srivastava Vice-Chancellor

Members

Dr. Rajiv Seth

Pro Vice-Chancellor

Deans

Dr. Prateek Sharma

Dr. Arun Kansal

Academicians nominated by Chancellor

Dr. Dipankar Gupta

Former Professor in the Centre for the study of social systems, JNU

Dr. Ashok Khosla

Chairman, Development Alternatives Nominee of Sponsoring Society

Prof Sachin Chaturvedi, Director General, Research and Information System for Developing Countries (RIS)

Nominee of sponsoring society

Mr. Inder Walia

Former Group Director (HR), Bharti Enterprises

Ms. Anita Arjandas

MD & CEO, Mahindra Lifespace Developers Ltd.

Mr. Ishteyaque Amjad

Vice President (Corporate Affairs), Coca Cola India Pvt. Ltd.

Dr. Alok Adholeya

Honorary Advisor, Sustainable Agriculture Division, TERI (Co. Opted)

Two Teacher (from Professor and Associate Professor)

Dr. Smriti Das

Associate Professor, Department of Policy Studies, TERI SAS

Dr. Anandita Singh

Professor, Department of Biotechnology, TERI SAS

One Teacher of the Rank of Assistant Professor

Dr. Soumendu Sarkar

Assistant Professor, Department of Policy Studies, TERI SAS

Controller of Examination

Dr. Seema Sangita

Assistant Professor, Department of Policy Studies, TERI SAS

Registrar

Capt. Pradeep Kumar Padhy (Retd.) Registrar, TERI SAS

Academic Council

Chairperson

Dr. Leena Srivastava - Chairperson

Vice Chancellor

Dr. Rajiv Seth (till 31 Dec 2018)

Pro Vice-Chancellor

Deans

Dr. Prateek Sharma

Dr. Arun Kansal

Heads of the Departments

Dr. Sapna A. Narula

Department of Business and Sustainability

Dr. Atul Kumar

Department of Energy & Environment

Dr. Sudipta Chatterjee

Department of Natural Resources

Dr. Chaithanya Madhurantakam

Department of Biotechnology

Dr. Nandan Nawn

Department of Policy Studies

Dr. Vishnu Konoorayar

Centre for Post Graduate Legal Studies

Professors

Dr. Manipadma Datta

Dr. Sitaraman Ramakrishnam

Dr. Anandita Singh

Dr. Shaleen Singhal

Two Associate Professors from Departments

Dr. Smriti Das

Dr. Vinay S. Prasad Sinha

Assistant Professors from the department by rotation of seniority

Dr. Sukanya Das

Dr. Akash Sondhi

Nominees by the Vice Chancellor

Dr. Malathi Lakshmikumaran

Dr. T C Kandpal

Dr. Rakesh Mehrotra

Co-opted Members

Dr. Anubha Kaushik

Dr. Vivek Suneja

Dr. J K Garg

Secretary

Capt. Pradeep Kumar Padhy (Retd.)

Registrar, TERI SAS

Student and Faculty Strength

from July 1,2018-June 30,2019	
Program name	No. of students
PhD	21 ¹
M.Sc.	97
MBA	20
MA	34
M.Tech.	55
LL.M.	15
PGD	30
Certificate	

from July 1, 2018- June 30, 2019	
Particular	No. of Faculty
Core Faculty	46
Adjunct Faculty	20
Visiting Faculty	28

¹ New admissions in Ph.D

Programmes Offered

At present, the following programmes are offered at TERI SAS:

- Ph.D. (Bioresources and Biotechnonology)
- Ph.D. (Business Sustainability)
- Ph.D. (Energy and Environment)
- Ph.D. (Natural Resources and Management)
- Ph.D. (Policy Studies)
- Ph.D. (Water Science and Governance)
- Ph.D. (Legal Studies)
- M.Sc. (Environmental Studies and Resource Management)
- M.Sc. (Geoinformatics)
- M.Sc. (Climate Science and Policy)
- M.Sc. (Plant Biotechnology)
- M.Sc. (Economics)
- M.Sc. (Water Science and Governance)
- M.A. (Public Policy and Sustainable Development)
- M.A. (Sustainable Development Practice)
- MBA (Infrastructure)
- MBA (Business Sustainability)
- M.Tech. (Renewable Energy Engineering and Management)
- M.Tech. (Urban Development and Management)
- M.Tech. (Water Resources Engineering and Management)
- LL.M. (Specialization in Environment and Natural Resources Law; and Infrastructure and Business Law)
- PG Diploma (Water Science and Governance)
- CWSG (Certificate Course in Water Science and Governance)
- PG Diploma (Public Policy and Sustainable Development)

Ph.D. (Bioresources and Biotechnology)

The Doctoral programme in Bioresources and Biotechnology provides a highly academic, knowledge-driven environment that will create scientific talent and innovative minds capable of applying knowledge to benefit society and contribute to its welfare.

The programme creates capacities for pursuing careers in industry by imparting a wide variety of skills to students. A collaborative inter-disciplinary effort between industry and academia is envisioned wherein manpower will be trained in accordance with the changing needs of industry.

Ph.D. (Business Sustainability)

The Doctoral Program is intended to encourage meaningful research on issues that have a potential fallout on the sustainability of the business. The research focus inter alia includes business management problems; sustainable business strategies; financing and management of infrastructure, business modelling for emerging markets, sustainability financing, environmental, social and governance factors in business, business ethics; corporate social responsibility and the like.

Ph.D. (Energy and Environment)

The Doctoral programme at the Department of Energy and Environment (DEE) is an interdisciplinary programme that aims to address the challenges relating to energy and environmental resource management through teaching, research and capacity building.

The programmes aim to create a cadre of trained professionals committed to bring positive change through scientific, technological and policy innovations for strengthening resilience in communities.

Ph.D. (Natural Resources and Management)

The Doctoral programme is offered by the Department of Natural Resources. The department aspires to advance and impart knowledge about the environment and natural resources, including their characteristics and dynamics, their economic and societal values and their management in an ecologically, socially, technically, and economically sound and sustainable manner.

The Doctoral programme prepares students to meet the changing needs of society for effective and integrated environmental management. The courses equip them with cutting edge tools and techniques through teaching and research. The Department's areas of research include remote sensing, GIS, GPS, forestry, applied ecology, landscape ecology, biodiversity assessment, conservation and characterization and related fields.

Ph.D. (Policy Studies)

The Department of Policy Studies embraces the philosophy that policy level recommendations for sustainable development can follow only from rigorous research that engages with alternative strands/schools of thought across disciplines. The doctoral research agenda at the Department is advanced by its multi-disciplinary team of faculty members with specializations in anthropology, economics, management, development studies, sociology and demography. Their research interests, under the core theme of public policy, cuts across various aspects of ecology-economy-society interface.

Ph.D. (Water Science and Governance)

Coca-Cola Department of Regional Water Studies at TERI SAS offers both full time and part time Ph.D. programmes in Water Science and Governance. Over the years, there has been growing pressure on the water systems leading to precarious balance between various competing uses of water. Rapid population growth and climate change has further added to water woes and conflicts at all levels. There is a growing consensus among the stakeholders to adopt an interdisciplinary approach to sustainable water management. The change management however requires an in-depth understanding of complex water-related issues through basic as well as applied research to influence the decision maker and planners.

Ph.D. (Legal Studies)

The Centre for Post Graduate Legal Studies at the TERI School of Advanced Studies offers PhD programmes in Legal Studies in areas related to sustainable development. The preferred areas of research interests are: Law and Sustainable Development, Infrastructure, Law & Sustainable Development, Corporations, Law and Sustainable Development, Natural Resources, Dispute Resolution and Law, International Trade Law and Sustainable Development, International Investment Law and Sustainable Development and Mining, Law & Sustainable Development. The doctoral programme aims at creating a cadre of professional who can ensure sustainable development with the help of effective implementation of existing laws apart from aiding in the formation of more laws.

M.A. (Public Policy and Sustainable Development)

Policy decisions by government officials at all levels are required to be increasingly multifaceted, with careful considerations of the dynamics of economic reforms and the need to ensure that decision making contributes to sustainability of the development process. Private, not-for-profit, and for-profit business entities also have a bearing on development-related policy decisions. To respond effectively to these issues, civil servants and those engaged in the non-governmental sectors need to be trained in politics and economics of public policy and in sophisticated methods and tools of analysis; and refresh their knowledge of the substantive development issues at hand.

The M.A. (Public Policy and Sustainable Development) programme, offered by TERI SAS, encompasses a comprehensive and well-structured two-year curriculum on public policy formulation, analysis, evaluation, management, and links with development concerns.

With a judicious mix of courses covering basic concepts, a practical orientation, and new methodologies and tools, the programme intends to allow future leaders in the government and other agencies to enhance their awareness about the overall public policy environment, in which they have to take decisions. The programme is also intended to sharpen the understanding of effects that policy decisions have on political, economic, social, and environmental aspects in domestic as well as in international domain.

M.A. (Sustainable Development Practice)

The M.A. programme in Sustainable Development Practice seeks to address a critical gap in sustainable development education in South Asia. It aims to develop an international cadre of development professionals, well equipped to tackle interwoven challenges of poverty, diseases, climate change, and ecosystem vulnerability specific to the region. This programme is part of the Global Association of Masters of Development Practices (MDP) programmes, which consists of 26 programmes offered in 19 universities across the world. TERI SAS was one of the few universities selected worldwide by the John D and Catherine T MacArthur Foundation to receive seed funding to create the new Masters degree programme in development practice. The programme provides an interface between the students of 26 MDP programmes and is reviewed by a team of experts from academia and national and international development organizations.

MBA (Business Sustainability)

Businesses across the globe are realizing the importance of integrating sustainability into business practices. Much of the pressure is coming in through various stakeholders, such as customers, shareholders, and the government. This has created a need for managers in different sectors — public, private and not-for-profit, to maintain a balance between three pillars of sustainability, i.e., people, planet, and profits. Having management professionals trained in sustainability within the organization not only optimizes business operations but also generates positive returns to the company.

MBA in Business Sustainability at the TERI SAS equips students with acumen to lead in a resource-sensitive world amid increasing competition and concern for sustainable development. This is not just an MBA programme, it is an MBA plus programme, which combines conventional MBA curriculum with new sustainability challenges that have direct impact on a firm's future performance financial and/or otherwise.

MBA (Infrastructure)

Infrastructure is the backbone of a nation's economy, and tackling infrastructure problems is a key requirement for leveraging growth, especially in developing economies like India. Investments in infrastructure have become crucial in order to sustain the pace of economic growth. This has created a need for managers to lead and sustain organizations involved in infrastructure business.

TERI SAS is the first University in the country to offer an MBA programme in Infrastructure. The programme not only imparts managerial skills in core subjects like any other conventional MBA course but also equips the students with acumen in infrastructure management by offering sectoral electives in water, energy, and urban infrastructure. The aim is to achieve a critical mass of expertise for effective management of infrastructure challenges across the country. The MBA (Infrastructure) programme at the TERI SAS encompasses a comprehensive and well-structured curriculum. It provides specialized training in infrastructure service delivery, regulatory processes, and competition policy, as well as in understanding infrastructure management from technical, economic, social, legal, and political perspectives. The programme is open to both mid-career professionals and fresh graduates.

M.Sc. (Climate Science and Policy)

There is a need to understand climate science, impact of climate change on various regions, resources, societies, and to study ways of mitigating as well as adapting to climate change. Role of policies and measures are also equally important.

TERI SAS offers an intensive four-semester M.Sc. programme in Climate Science and Policy intended to imbue present and future professionals with practical and theoretical knowledge in the area of scientific and policy issues relevant to climate change. The programme is indeed a need of the hour, an area that requires incentivization, projections, possible ways of mitigating emissions, and assessment of possible impacts on humans, habitats, resources, and exploring adaptation options.

The programme provides explicit inter-disciplinary knowledge and training in adaptation and mitigation issues, and understanding of tools and techniques relevant to the subject. Moreover, it enhances the understanding of national and international policies, and laws and regulations applicable to climate science and policy.

M.Sc. (Economics)

Climate change and sustainable use of energy resources for future have been globally recognized among the most serious concerns facing mankind today. Economics as a discipline has

responded to these challenges by incorporating these issues in standard theory and analysis. In various national and international forums where such issues are discussed, the opinions of economists are much sought after; in other decision-making or policy-making bodies, economists trained in environment and resource economics are expected to contribute by offering specialized insights.

The M.Sc. programme in Economics with specialization in Environmental and Resource Economics examines the application of economic theory to ecological, environmental, and natural resource issues within an interdisciplinary setting. This sub-discipline attempts to understand, analyze, and evaluate the exchanges between nature and human society. It aims to design and implement policy instruments that assist in sustaining and enhancing quality of life on Earth. The core elements of the programme not only include advanced graduate level exposure to microeconomics, macroeconomics, mathematics, statistics, and econometrics, but our students also receive an in-depth knowledge of concepts, theories, techniques, policies, and other applications in ecological, environmental, and natural resource economics. This domain knowledge makes this programme an MSc (Economics) Plus.

M.Sc. (Environmental Studies and Resource Management)

This programme is intended to create a cadre of trained professionals who are equipped to deal with scientific, technological, legal, socio-economic, and policy aspects related to environment and resource management. The curriculum has been designed seamlessly by integrating the concept of sustainable development in an inter-disciplinary framework with emphasis on research and application. It addresses the growing need for professionals in society who can apply best management practices drawn from various disciplines to create innovative solutions for a sustainable future.

The Environmental Studies and Resource Management programme is a mix of theory and practical components offered in an interdisciplinary approach with emphasis on research and application. The pedagogy of the programme includes face-to-face interactions, live case studies, field visits, theatre, conferences, seminars, and active use of information and communication technology. It trains students in sustainability and empowers them to become responsible global citizens.

M.Sc. (Geoinformatics)

Geoinformatics is rapidly evolving as a study area that can bring in additional and meaningful insights using multi-disciplinary approach to problem solving in areas such as resource

estimation and assessments, impact assessments, etc. It equips students with technologies that can support estimation, mapping, and analysis. The M.Sc. programme in Geoinformatics at the TERI SAS is a two-year programme where students specialize in the areas of geoinformation and earth sciences.

The core strength of the programme lies in its innovative e-curriculum that imbues present and future professionals with practical and theoretical knowledge in the domain of geoinformatics. Students are exposed to a wide range of cutting-edge applications of geospatial techniques to emulate real-life problems. The programme is extensively lab oriented.

Students are exposed to a wide range of practical exercises covering different applications of remote sensing, GIS, photogrammetry to real-life problems, law and policy for remote sensing and mapping. It enables students to understand various rules and regulations regarding data collection and dissemination and learn about various laws and policies related to environment.

M.Sc. (Plant Biotechnology)

The Department of Biotechnology at TERI SAS was established to facilitate capacity building in the field of biotechnology and to address prevailing lacunae in education policies that are critical for its balanced promotion. The Department focuses on inculcating scientific temper, analytical reasoning, original creative thinking, and logical thought process critical for research. It promotes sensitization to issues concerning ethics, regulations, and management vital to biotechnology.

The M.Sc. programme in Plant Biotechnology seeks to provide education and training, empower students with technical skill-set, create capacities and build career opportunities in three key domains of biotechnology – research and development; Science education; and policy, regulations, and management.

This is achieved through a combination of interdisciplinary curricula as well as intensive laboratory work. Students are expected to have both specialized knowledge and practical experience for addressing contemporary problems in both academic and industrial setting.

M.Sc. (Water Science and Governance)/ M.Tech. (Water Resources Engineering and Management)

Water governance and management goes beyond traditional field of engineering because of multi-level (local, regional, and sub-national) and multi-dimensional (economic, social, and environmental) factors. The Department aspires to provide a platform for various actors to come together for innovative ideas, capacity building, and consensus building for joint action on water challenges of tomorrow. The Department has attained leadership position in offering programmes relevant for development professionals (fresh as well as mid-career) well equipped

to tackle, beyond cultural boundaries and across sectoral divisions, the interwoven challenges of water sustainability. The format of the entire programme is flexible and caters to fresh graduates as well as working professionals who desire to upscale their skills/qualifications. It is a multi-track course offering M.Sc/M.Tech/PG Diploma/PG Certificate in Water Science and Governance. While M.Tech. and M.Sc. courses are for four semester duration; PG Diploma is a course for two semesters, and PG Certificate is a one-semester programme. The programme facilitates a systematic amalgamation of widespread knowledge on a common platform. The course structure addresses cross-sectoral perspectives on both engineering as well as social needs of water, while understanding that sustainability will not be compromised. Students get an opportunity to work on innovative solutions during the major project tenure.

M.Tech. (Renewable Energy Engineering and Management)

The TERI SAS offers multidisciplinary, postgraduate programme in Renewable Energy Engineering and Management to fulfill the increasing demand for trained professionals in the field of renewable energy and energy management. In 2009, the Department ventured into offering various online (distance learning) programmes as well. These online programmes were developed in collaboration with the Open University, UK.

The Department collaborates with International universities such as Brandeis University, USA; Deakin University, Australia; Queensland University of Technology, Australia; Freie University, Germany; and Simon Fraser University, Canada to provide state-of-the-art knowledge on new and emerging developments in energy technologies, methodologies and tools for evaluation, assessment, and decision making. Postgraduate programmes of the Department are AICTE and DEC approved.

M.Tech. (REEM) programme prepares the students in theoretical as well as practical aspects of renewable energy technologies, energy conservation, and management. This multi-disciplinary integrated programme trains the students not only in renewable energy technologies and its implementation but also in equally important areas of energy infrastructure, rational use of energy, energy policies and regulations, energy–environment interface, etc. The programme exhibits its uniqueness fostering the much sought-after leadership skills through the management energy courses. Thus, the programme enables students to tackle practical problems of design, development, deployment in the industry, and to pursue academics as well as frontiers of research.

Overarching emphasis is given towards practical learning thus exposing students to industrial projects through field visits and internships. Hands-on experience in industrial, consulting, and

research projects is imparted while working in various organizations during minor and major internships/projects.

M.Tech. (Urban Development and Management)

Rapid urbanization across the world and particularly in developing countries like India has multifarious ramifications on the settlement systems. Pressures on land, water, material needs, and environmental resources would undoubtedly increase and call for integrated and sustainable solutions that cut across disciplinary domains of science, technology, and social sciences.

The M.Tech. programme in Urban Development and Management (UDM) at the TERI SAS equips students with cutting edge technical skills; managerial capabilities; and understanding of social, economic, environmental, and legal issues associated with urban development; infrastructure and the real estate sector.

The uniqueness of this programme is in promoting learning through research-based teaching, engagement of practitioners, and a diverse pedagogy ranging from classroom teaching, tutorials, case study discussions, and field work. The programme builds capacity for understanding real-world urban development and management problems and plausible sustainable solutions through engagement of students with institutions concerned with urban development. The programme prepares students for a successful career in the urban development sector such as:

- Urban local bodies, state governments, and other public sector institutions involved in delivery of urban infrastructure and services
- Institutions conducting research, training, and capacity-building activities
- Private sector organizations engaged in real estate and urban infrastructure development
- Consultancy firms, NGOs, and CBOs participating in urban development activities.

LL.M.

Environmental Laws and Infrastructure laws are two emerging fields in legal practice. There is a dearth of qualified legal professionals in both these fields.

It is in this context that TERI SAS introduced a one year LL.M. programme with specialization in Environment and Natural Resources Law; and Infrastructure and Business Law.

Environment and Natural Resources Law

The environmental concerns need to be integrated into all economic policies and implementation decisions. A specialization in Environment and Natural Resources Law therefore assumes great significance. The primary focus of this specialization stream is to understand how the legal framework can reorient economic activity toward sustainability. This reorientation can happen in different ways like prohibiting or regulating environmentally damaging activities, assigning liability for environmental harms and providing adequate incentives for benign environmental activities. The course will also address the principles of allocation of natural resources according to the concepts of due process of law and equity.

Infrastructure and Business Law

India's infrastructure development is inadequate and there is a need for massive investment in different infrastructure sectors to meet the demands of economic growth. However, given the fiscal constraints, the investment needs of infrastructure cannot be met by the public sector alone and would require private investment, both foreign and domestic. Attracting private investment will be feasible only if there is a conducive and predictable legal regime.

This programme addresses the policies and laws relating to major sectors viz., transport, energy, telecommunications, urban infrastructure and water. The purpose of this programme is to provide an insight into the fundamental legal concepts relating to business in general and various infrastructure sectors in particular including the issues involved in the development, financing and management of projects. It also addresses the issues of public-private participation in detail.

PG Diploma (Water Science and Governance)

TERI SAS offers PG Diploma programme in Water Science and Governance to fresh graduates as well as working professionals. The students need to complete 1st and 2nd Semester to be awarded a P.G. Diploma. It is a well-integrated and holistic programme offered by trained professionals. The programme framework is interdisciplinary in nature and in consonance with the UN International Year of Water cooperation promulgated by the United Nations General Assembly in 2013 and priorities defined in India's National Water Mission that advocates water cooperation by bringing in cultural, educational, scientific as well as religious, ethical, social, political, legal, institutional and economic dimensions.

CWSG (Certificate Course in Water Science and Governance)

TERI SAS offers Certificate programme in Water Science and Governance to fresh graduates as well as working professionals. Over the years, there has been growing pressure on the water systems leading to precarious balance between various competing uses of water. Rapid population growth and climate change has further added to water woes and conflicts at all

levels. There is a growing consensus among the stakeholders to adopt an interdisciplinary approach to sustainable water management.

PG Diploma (Public Policy and Sustainable Development)

The PG Diploma (Public Policy and Sustainable Development) - programme, offered by the TERI SAS encompasses a comprehensive and well-structured one-year curriculum on public policy formulation, analysis, evaluation, management, and links with development concerns.

Policy decisions by government officials at all levels are required to be increasingly multifaceted especially in the light of economic reforms and the need to ensure that decision-making contributes to sustainability in the development process. Private not-for-profit and for-profit business entities also have a bearing on development-related policy decisions.

To respond effectively to these issues, civil servants and those engaged in the non-governmental sectors, need to be trained in the politics and economics of public policy and this gives them a better understanding of substantive development issues at hand.

Convocation 2018

TERI SAS organized its eleventh convocation on 15 November 2018. The ceremony was held with much pomp and show. During the Ninth Convocation ceremony, a total of 11 Doctoral degrees and 249 Master's degrees were conferred.

Medals for Standing First

Mayuri Phukan	M.Sc. (Water Science and Governance)	2018
Chandana Sasidharan	M.Tech (Renewable Energy Engineering and Management)	2018
Drishti Modi	M.Sc. (Environmental Studies and Resource Management)	2018
Apoorva Gupta	M.Sc. (Plant Biotechnology)	2018
Jagriti Bisht	MBA (Infrastructure)	2018
Coleman Charles Sabbithi	MBA (Business Sustainability)	2018
Vijay Laxmi	M.Sc. (Geoinformatics)	2018
Manan Parashar	M.Sc. (Climate Science and Policy)	2018
Nagina Chawla	M Tech (Urban Development and Management)	2018
Harsh Ganapathi	M Tech (Water Science and Governance)	2018
Manisha Badoni	Master of Laws (Environment and Natural Resources Law)	2018

Guest Lectures at the University

Title	Presenter	Date
Lecture on "Ecological Distribution Conflicts as Forces for Sustainability"	Dr Joan Martinez- Alier	4/4/2018
Talk on 'Edupreneur and a Start Up Mentor'	Dr Virender Khanna	16/04/2018
Talk for MA SDP students	Prof VK Nangia	18/04/2018
Talk on 'Minimum Support Price in Indian Agriculture - Trends, Issues and Challenges'	Dr Shailja Sharma, Member Secretary, CACP	24/04/2018
University lecture series on “Successful sustainability interventions in India: Case studies from SDC’s activities”.	Dr Shirish Sinha	25.04.2018
“Indian Statistical System”	Dr Pronab Sen	03.08.2018
A lecture on ‘Why have Judges?’	Dr. Gabrielle Appleby	07.08.2018
Development Corporation partnership between Britain and India	Dr Gavin McGillivray	08.08.2018
Lecture on "This River is a Person! A revolutionary development in environmental planning?"	Dr Hamish Rennie	21.08.2018
Lecture on "Multi-scalar Trans boundary Water issues in South Asia: Teaching, Research and Stakeholder Dialogues	Dr Douglas Hill	21.08.2018

Research Projects at TERI SAS

SNO	SPONSOR'S NAME	PROJECT TITLE	PROJECT INVESTIGATOR
STATEMENT OF ONGOING PROJECTS FOR THE FINANCIAL YEAR 2018-19			
1	Science & Engineering Research Board (SERB)	Reconstruction of Genome - Scale Metabolic Networks of Pichia Pastoris CBS 7435 Strain Using System Biology	Dr. Pallavi Somvanshi
2	Ministry of Human Resource Development (MHRD)	Establishment of Centre of Excellence for Training and Research in Forentier Areas of Science and Technology (FAST)	Dr. Som Mondal
3	Central Pollution Control Board (CPCB)	Impact of Ozone and Other Pollutants on Crops	Dr. Kamna Sachdeva
4	The Indian Council of Social Science Research (ICSSR)	Impact Analysis pf the Arunachal Pradesh Panchayati Raj Act 1997 on Traditional Institution in the State	Dr. Vishnu Konoorayar
5	Department of Science and Technology (DST)	Sopporing, Conolidation, replication and upscaling of sustainable waste water treatment and reuse technologies for India	Dr. Sukanya Das
6	Department of Biotechnology (DBT)	Structural studies on proteins involved in synthesis and processing of mycolic acids in Mycobacterium tuberculosis	Dr. Chaithanya Madhurantakam
7	National Security Council Secretariat (NSCS)	Advance Model for Climate Research	Dr. Nithiyanandam Yogeswaran
8	Ministry of Petroleum and Natural Gas	Design, development and testing of a down draft gasifier system completed by hydrogen enrichment through air steam gasification	Dr. Piyanka Kaushal / Dr. Atul Kumar
9	Government of Arunachal Pradesh	Preparation of the State Specific Action Plan for Water Sector	Dr. Vinay Shankar Prasad Sinha
10	Science & Engineering Research Board (SERB)	Understanding the role of MIR160 and AUXIN RESPONSE FACTORS in establishment of root system architcture for improvement of crop Brassicas.	Dr. Anandita Singh
11	Department of Biotechnology (DBT)	Department of CMS /RF System in Bhut Jolokia using marker assisted selection	Dr. Shashi Bhusan Tripathi

12	Indian Council of Social Science Research	Urban Transition beyond Municipal Boundaries : A Comparative Spatial Analysis of the PERI-Urban Areas of Gurugram and Noida	Dr. Bhawna Bali
13	Department of Atomic Energy (BRNS)	Spatial Distribution of Uranium and associated water quality parameters in five districts of UP	Dr. Chander Kumar Singh
14	Central Pollution Control Board	Air Quality Management - Plans using decision support system UrbAir India	Dr. Kamna Sachdeva
15	Uttarakhand State Council for Science and Technology	Modelling for Enhancing Water Quality in Uttarakhand using Geospatial Technology	Dr. Vinay Shankar Prasad Sinha
16	Coca Cola India (P) Ltd.	Climate Jamboree - A journey from climate apathy to empathy.	Dr. Leena Srivastava / Ms. Ranjana Saikia
17	WaterEd Australia Pty Ltd.	Service Agreement - Delivery of short course on Gender, Equity and Water Management	Dr. Arun Kansal
18	Department of Biotechnology (DBT)	Collection, evaluation, documentation and conservation of banana genetic resources from north eastern region	Dr. Shashi Bhushan Tripathi
19	Forest Research Institute, Uttarakhand	Genotyping by sequencing of 72 samples/genotypes of Polygonatum with Bioinformatics Analysis	Dr. Shashi Bhushan Tripathi
20	Department of Biotechnology (DBT)	Isolation and comparative analysis of promoter homeologs of flowering time gene SOC 1 : Discovering novel promoters involved in floral transition in Indian Brassicas	Dr. Anandita Singh
21	Science & Engineering Research Board (SERB)	Gene regulation by DNA methylation in Bacillus anthracis (Sterne)	Dr. Ramakrishnan Sitaraman
22	Indian Council of Social Science Research (ICMR)	Structural characterization of a non-specific acid phosphatase HppA from Helicobacter pylori	Dr. Chaitanya Madhurantakam
23	Indian Institute of Technology (IIT), New Delhi	Towards an Integrated Global Transport and Health Assessment Tool (TIGTHAT)	Dr. Deepty Jain
24	International Centre for Integrated Mountain Development (ICIMOD)	Cities on Women : Uncovering the relationship between Gender, Land-use and Livelihoods for Embedding Climate Change Resilience in Himalayan Cities	Dr. Abhijit Datey
25	The Indira Gandhi National Centre for the Arts (IGNCA), New	Paddy Growing Culture of the Ao-Naga Tribe and Climate Change	Dr. Chubamenla Jamir

	Delhi		
26	Central Pollution Control Board (CPCB)	Air Quality Impact on Transport Choices (A-QUIT)	Dr. Deepty Jain
27	TERI	Developing Country Participation in addressing Climate Change : Research on policy instruments for achievement of India's NDC's and Strengthening Non-state Climate Action in the Global South	Dr. Manish Kumar Srivastava
28	Columbia University	Students Research Grant : Ms. Ishita Sinha and Ms. Prakriti Sharma	Dr. Smriti Das
29	RMIT University	Recycling Plastics in Asian City Environments (RePLACE)	Dr. Arun Kansal
30	TERI	Mahindra TERI Centre of Excellence	Dr. Arun Kansal
31	TERI	Energy Audit and Pre-Feasibility Study for Namangan City Suvokova (1256781), Uzbekistan	Dr. Arun Kansal
32	Tribhuvan University	Transboundary water governance and role of institution to enhance the capacities of marginalized community in Mahakali River Basin	Dr. Arun Kansal
33	TERI	Development of Flood Warning System for Guwahati and Jorhat Town	Dr. Vinay Shankar Prasad Sinha
34	National Mission on Himalayan Studies (NMHS)	Water Resources Management through Spring and Catchment Rejuvenation in Uttarakhand for Improving Water Security	Dr. Vinay Shankar Prasad Sinha
35	Department of Science and Technology (DST)	Scalable synthesis of starch nanoparticles based adhesive/consolidants for conservation of cellulose based heritage objects	Dr. Udit Soni
36	Technische Universiteit	Developing and Implementing Smart Grids in India	Dr. Amit Kumar
37	AUBURN University	Investigating the Potential for Decentralized Institutions, Technologies, and Governance to Meet the Wastewater Challenge	Dr. Sukanya Das
38	University Of Leeds	Success stories in urban climate action : Building the economic evidence base (the "Project") World Resources Institute-funded research project	Dr. Abhijit Datey

39	The Trustee's of Coloumbia University	Global Summit 2019	Dr. Smriti Das
40	Centre For Ecology & Hydrology, United Kingdom	Forest Impacts on Nitrogen Pollution	Dr. Sudipta Chaterjee / Dr. Smriti Das
STATEMENT OF COMPLETED PROJECTS FOR THE FINANCIAL YEAR 2018-19			
1	The Housing and Urban Development Corporation Limited (HUDCO)	To strengthen researcha and capacity building activites in the Habitat Sector with regard to specialized areas	Dr. Shaleen Singhal
2	The Indian Council of Social Science Research (ICSSR)	Indian European Multi Level Climate Goverance Resresearch Networking	Dr. Arabinda Mishra
3	TERI	Hi-Aware sub project for TERI SAS	Dr. Kamna Sachdeva
4	National Security Council Secretariat (NSCS)	Model Building and Developing Customized Algorithm for Climate Studies	Dr. Nithiyanandam Yogeswaran
5	Small Industries Development Bank of India (SIDBI)	Implementation of Possible Improvement Measures Covering Energy Varanasi Cluster	Dr. Girish Sethi
6	Science & Engineering Research Board (SERB)	National Post Doctoral Fellowship to Dr Anil Kumar Verma, under the mentorship of Dr. Ramakrishnan Sitaraman	Dr. Ramakrishnan Sitaraman
7	Science & Engineering Research Board (SERB)	Financial Sanction under National Post Doctoral Fellowship to Ms. Aditi Jain vide dairy no. SERB/F/3627/2017-2018	Dr. Anandita Singh
8	Nirmal Seeds Private Limited	Geotyping of the Four SNP's based on Either Agarose Gel Electro Phorisis or real time PCR	Dr. Shashi Bhushan Tripathi
9	The United Nations Environment Programme (UNEP)	Internationally recognized information tools to enable individual and institutional consumers to make informed choices	Dr. Chubamenla Jamir

10	The National Institute of Urban Affairs (NIUA)	Conducting Third Party Evaluation of the States/Union Territories regarding Implementation of Reforms under AMRUT	Dr. Abhijit Datey / Dr. Bhawna Bali
11	Ministry of Urban Development (MoUD)	Capacity Building for Urban Development	Dr. Bhawna Bali / Dr. Abhijit Datey
12	Dalmia Cement Bharat Ltd. & Others	Climate Jamboree - A journey from climate apathy to empathy	Dr. Leena Srivastava / Ms. Ranjana Saikia / Dr. Rajiv Seth
13	International Centre for Integrated Mountain Development (ICIMOD)	Preparation of an Assessment report of Water Study Higher Education Institutions in India	Dr. Arun Kansal
14	Toyota Kirloskar Motor Pvt. Ltd.	Evaluation of CO2 Emission Reduction by Mobility Electrification & Alternative Fuels (Biofuels/CNG) Introduction in India	Dr. Atul Kumar
15	Keio University, United Nations University	Development of a framework for local implementation of the SDGs - Prosper.NET	Dr. Smriti Das
16	Karvy Management Pvt. Ltd.	Scoring of Innovations and Best Practices Under Swachh Survekshan 2019	Dr. Arun Kansal
17	Chulalongkorn University and United Nations Environment Programme	Key Person of Module 4 'Business Models' in Asian Circular Economy Leadership Academy	Dr. Ritika Mahajan
18	National Academy of Science (NAS), US	Targeting Low-Arsenic and Low - Fluoride Groundwater to Reduce Exposure in Rural Punjab, India	Dr. Chander Kumar Singh
19	Columbia University	Household Response in 26 District in Bihar Villages	Dr. Chander Kumar Singh
20	International Centre for Integrated Mountain Development (ICIMOD)	MSc Scholarships for Five Fulltime Students to Work in Upper Ganga River Basin, India	Dr. Kamna Sachdeva

21	United Nations University (UNU)	Local Coordinator for the UNU-IAS case study in Lucknow on "Low Carbon Urban Water Environment Project"	Dr. Chander Kumar Singh
22	Solidaridad Network Asia Limited	Landscape Approach for Land-Water-Community Security	Dr. Fawzia Tarannum
23	International Centre for Integrated Mountain Development (ICIMOD)	Nutritional and Livelihood security of subsistence farmer in the hilly and mountain areas of the Hindu Kush Himalayan region	Dr. Chubamenla Jamir
24	The United States Agency for International Development (USAID)	Services of a Local Forestry Specialist (LFS)	Dr. Sudipta Chatterjee
25	Shakti Foundation	Addressing land issues for utility scale renewable energy development	Dr. Sapan Thapar
26	NERC-CEH Edinburg, United Kingdom	Studentship Stipend for Ms. Charu Bhanot, CEH NEC06802	Dr. Sudipto Chatterjee

Recruiters at TERI SAS

Recruiters At TERI SAS (July 1, 2018-June 30, 2019)	
3R Waste Foundation	
Adani Group	
AEEE	
AIIL	
Athena Infonomics	
ATREE	
BKC Weather Sys	
Cactus Communications	
Ccinfo	
CCMB Hyderabad	
Centre for Social Research	
CES	
CHEORS	
Childline, MWCD	
CII	
CKinetics	
Climate Change Research Institute	
ConveGenius (ETSI Fellowship),	
Creative Agri solutions Pvt Ltd	
CSH	
CSTEP	
Dakshin Foundation	
Development Alternatives	
Dhwani RIS	
E & Y	
Earthood Services	
ESRI R & D centre	
Genesis Ray Energy	
GEOSat	
GICIA India	
GIZ	
Global coordinates	
Gram Oorja	
GSES India	

Guruyal	
IARI, Pusa	
ICF Consulting	
ICMR	
ICRIER	
ICUC	
IDAM Infra	
IISWBM (central university)	
IIT Delhi	
IIT, Tirupati	
IMRB Kantar	
India Infrstructure Publishing Pvt Ltd	
Indian Institute of Tropical Meteorology	
Insight Alpha	
International Water Management Institute	
Invest India	
IRADe	
ISB	
ISDM	
ISGF	
ISRO	
IUCN	
Jaipuria University	
Jawaharlal Nehru University	
JM EnviroNet Pvt Ltd	
JNU	
Kantar	
Karo Sambhav Pvt Ltd	
Karuna Mission Social Solidarity (KMSS), National Office, Yangon, Myanmar	
KBS Certification Serviced Pvt Ltd	
KPMG	
Lady Bamford Foundation	
Lakshmikumaran & Sridhapan	
Lenskart	
Manav Rachna University	
Max Healthcare	

Ministry of commerce & Industry	
Mission Samriddhi	
Mixoram University	
MV Kini	
National Institute of Disaster Management	
Navjyoti Foundation	
NEERI	
Niiti Consulting	
NIPFP	
Niti Consulting	
Oorja energy	
Oriflame	
Ossus Biorenewable Pvt Ltd	
Phonix Global	
Powertree Engineers Pvt Ltd	
Praja Foundation	
Preparing for Civil Services	
Preparing forUPSC Examination	
PWC	
QCI	
Quality Council of India	
RBI	
Recykal	
Renew Power	
Room to read	
Roots EHS Advisory	
S & P global	
S.M Sehgal Foundation	
Schneider Electric	
Shakti Foundation	
Smart Joules	
Sociometrik	
Steamex	
Stenum Asia	

Sustain Plus	
Sustainable Square	
Swayam Shikshan	
Tata Power	
Tata Power – DDL	
Tata Trust/ Social Alpha	
TATA Trusts	
TCD UChicago	
TERI	
TERI – SAS	
The Attorneys	
The YP Foundation	
Think Through Consultant	
TISS	
Titlis Engineering and Projects	
TPCI	
Tripota	
TTDI	
Ultratech Cement Ltd	
UNDP	
UNGCNI	
Vedanta	
Veterinarians without borders/Vétérinaires Sans Frontières Canada	
Vivekanand Institute of Professional Studies	
Wellversed Health	
Wildlife Trust of India	
WRMS India	
WSP	
WWC	
WWF India	
YP foundation	

List of Publications

Staff_name	Dept.	Publication_type	Author	Year	Title_of_work	Published In/Conference
Anandajit Goswami		Journal Article	Deepa N., P.K. Bhattacharya, Shantanu Ganguly, Anandajit Goswami	2019	Qualitative and quantitative efficacy measurement of TERI library and information centre resources: A case study	Library Management
Atul Kumar	DEE	Journal Article	Kamlesh Yadav, Atul Kumar, O.S.Sastry, Rupesh Wandhare	2019	Solar photovoltaics pumps operating head selection for the optimum efficiency	Renewable Energy
Deepty Jain	DEE	Journal Article	Deepty Jain and Geetam Tiwari	2019	Explaining travel behaviour with limited socio-economic data: Case study of Vishakhapatnam, India	Travel Behaviour and Society
Sudeshna Maya Sen (Student)		Journal Article	Sudeshna Maya Sen, Aprajita Singh, Navarun Varma, Divya Sharma, Arun Kansal	2019	Analyzing Social Networks to Examine the Changing Governance Structure of Springsheds: A Case Study of Sikkim in the Indian Himalayas	Environmental Management
Kavita Sardana	DPS	Journal Article	Kavita Sardana	2019	Tourists' Willingness to Pay for Restoration of Traditional Agro-forest Ecosystems Providing Biodiversity: Evidence from India	Ecological Economics

Atul Kumar	DEE	Journal Article	Kamlesh Yadav, Atul Kumar, O.S.Sastry, and Rupesh Wandhare	2019	An assessment for the selection of weather profiles for performance testing of SPV pumps in Indian climate	Solar Energy
Gopal K Sarangi	DPS	Journal Article	Subhes C.Bhattacharyya, Debajit Palit, Gopal K.Sarangi, Vivek Srivastava and Prerna Sharma	2019	Solar PV mini- grids versus large- scale embedded PV generation: A case study of Uttar Pradesh (India)	Energy Policy
Chubamenla Jamir	DEE	Journal Article	Diwakar K.C, Tek Maraseni, Chubamenla Jamir, Ritendra Thapa Magar, Florencia Tuladhar	2019	Effectiveness of Gravity Goods Ropeways in market participation of smallholder farmers in uplands	Transportation
Sukanya Das	DPS	Journal Article	Shivani Gupta, Sukanya Das and M.N. Murty	2019	Quantifying Air Pollution Vulnerability and its Distributional Consequences: some perspectives from Delhi	Ecology, Economy and Society—the INSEE Journal
Pallavi Somvansh	DBT	Journal Article	Aditi Singh, Pallavi Somvanshi and Abhinav Grover	2019	Drug repurposing against arabinosyl transferase (EmbC) of Mycobacterium tuberculosis: Essential dynamics and free energy minima based binding mechanics analysis	Gene

Sapna A Narula	DBS	Journal Article	Anushree Poddar, Sapna A. Narula and Ambika Zutshi	2019	A study of corporate social responsibility practices of the top Bombay Stock Exchange 500 companies in India and their alignment with the Sustainable Development Goals	Corporate Social Responsibility and Environmental Management
Gopal K Sarangi	DPS	Journal Article	Abid Hussain, Gopal K.Sarangi ,Anju Pandit, Sultan Ishaq, Nabir Mamnun, Bashir Ahmad and Muhammad Khalid Jamil	2019	Hydropower development in the Hindu Kush Himalayan region: Issues, policies and opportunities	Renewable and Sustainable Energy Reviews
Arun Kansal	DRWS	Journal Article	Ruchira Ghosh, Arun Kansal and G Venkatesh	2019	Urban Water Security Assessment Using an Integrated Metabolism Approach—Case Study of the National Capital Territory of Delhi in India	Resources
Arun Kansal	DRWS	Journal Article	Madhuri Nanda, Dana Cordell, Arun Kansal	2019	Assessing national vulnerability to phosphorus scarcity to build food system resilience: The case of India	Journal of Environmental Management
Sukanya Das	DPS	Journal Article	Karthick Radhakrishnan, Sukanya Das	2019	Application of Stochastic Frontier Production Function in Sugarcane Industry-treated Wastewater Reuse in Agriculture: Case Study of a Coastal	Arthaniti: Journal of Economic Theory and Practice

					District in Tamil Nadu, India	
Pallavi Somvansh	DBT	Journal Article	Vineeta Singh, Shafiul Haque, Vibha Kumari, Hesham A. El-Enshasy, B. N. Mishra, Pallavi Somvanshi & C. K. M. Tripathi	2019	Isolation, Purification, and Characterization of Heparinase from <i>Streptomyces variabilis</i> MTCC 12266	Scientific Reports
C K Singh	DEE	Journal Article	Sonal Bindal and Chander Kumar Singh	2019	Predicting groundwater arsenic contamination: Regions at risk in highest populated state of India	Water Research
Arun Kansal	DRWS	Journal Article	Sudeshna Maya Sen and Arun Kansal	2019	Achieving water security in rural Indian Himalayas: A participatory account of challenges and potential solutions	Journal of Environmental Management
Arun Kansal	DRWS	Journal Article	Ruchira Ghosh and Arun Kansal	2019	Anthropology of changing paradigms of urban water systems	Water History
Sapna A Narula	DBS	Journal Article	Sapna A. Narula. Muneer Ahmad Magry and Ashima Mathur	2019	Business-community engagement: A case of mining company in India	Business Strategy and Development
Sukanya Das	DPS	Journal Article	Vasudha Chopra and Sukanya Das	2019	Estimating Willingness to Pay for Wastewater Treatment in New Delhi: Contingent Valuation Approach	Ecology, Economy and Society–the INSEE Journal

Anandajit Goswami		Journal Article	Anandajit Goswami, Sampurna Goswami and Ashutosh Senger	2019	Gender Neutrality: For Sustainability in Power Relations	International Journal of Sustainable Entrepreneurship and Corporate Social Responsibility (IJSECSR)
Gopal K Sarangi	DPS	Journal Article	Gopal K. Sarangi, D. Pugazenthi, Arabinda Mishra, Debajit Palit, Subhes C. Bhattacharyya	2019	Marginalisation of off-grid energy sector in Sri Lanka: What lessons could be learnt?	Environment, Development and Sustainability
Anjal Prakash		Journal Article	Lisa Dilling, Anjal Prakash, Zinta Zommers, Farid Ahmad, Nuvodita Singh, Sara de Wit, Johanna Nalau, Meaghan Daly & Kerry Bowman	2019	Is adaptation success a flawed concept?	Nature Climate Change
Fawzia Tarannum	DRWS	Journal Article	Fawzia Tarannum, Arun Kansal, Prateek Sharma	2019	ICT for Public Participation in River Water Quality Management: An Assessment of Knowledge, Readiness and Willingness	The Journal of Development Communication
Deepty Jain	DEE	Journal Article	Deepty Jain and Geetam Tiwari	2019	Measuring density and diversity to model travel behavior in Indian context	Land Use Policy
Sukanya Das	DPS	Journal Article	Sukanya Das, Karthick Radhakrishnan	2019	Multicriteria decision making model of wastewater reuse: a stakeholders' perspective in the context of India	Desalination and water treatment

Ramakrishnan Sitaraman	DPT	Journal Article	Ramakrishnan Sitaraman, Gangotri Rao	2019	A Pediatric Case of Accidental Eucalyptus Oil Poisoning from New Delhi, India: Emergency Measures, Historical Context, and Implications for Practice	Cureus
Gopal K Sarangi	DPS	Journal Article	Gopal K.Sarangi Arabinda Mishra Youngho Chang Farhad Taghizadeh-Hesary	2019	Indian electricity sector, energy security and sustainability: An empirical assessment	Energy Policy
Sudeshna Maya Sen (Student)		Journal Article	Sudeshna Maya Sen and Arun Kansal	2019	Integrating value-chain approach with participatory multicriteria analysis for sustainable planning of a niche crop in Indian Himalayas	Journal of Mountain Science
Smriti Das	DPS	Journal Article	Das, S.; Tyagi, N.	2019	Pathways to institution and resource sustainability: lessons from the Forest Rights Act implementation in India	International Forestry Review
Manish Kumar Shrivastava		Journal Article	Kavya Michael, Manish Kumar Shrivastava, Arunima Hakhu & Kavya Bajaj	2019	A two-step approach to integrating gender justice into mitigation policy: examples from India	Climate Policy
Nithiyanandam Yogeswaran	DNR	Journal Article	Yoshihide Wada... and Nithiyanandam Yogeswara	2019	Co-designing Indus Water-Energy-Land Futures	One Earth

Kamna sachdeva	DEE	Journal Article	Divya Sharma ; Neha Khandekar ; Kamna Sachdeva	2019	Addressing water-related shocks and coping decision through enhanced community participation: case studies from Ganga basin, Uttarakhand, India	Water Policy
Atul Kumar	DEE	Journal Article	Michael O.Dioha and Atul Kumar	2019	Exploring sustainable energy transitions in sub-Saharan Africa residential sector: The case of Nigeria	Renewable and Sustainable Energy Reviews
Anjal Prakash		Journal Article	Purnamita Dasgupta, Samraj Sahay, Anjal Prakash & Arthur Lutz	2019	Cost effective adaptation to flood: sanitation interventions in the Gandak river basin, India	Journal Climate and Development
Atul Kumar	DEE	Journal Article	Michael O. Dioha and Atul Kumar	2019	Exploring greenhouse gas mitigation strategies for agriculture in Africa: The case of Nigeria	Ambio
Gopal K Sarangi	DPS	Journal Article	Shashikant Yadav, Gopal K Sarangi, & MP Ram Mohan	2019	Hydraulic fracturing and groundwater contamination in India: evaluating the need for precautionary action	Journal of Energy & Natural Resources Law
Montu Bose	DBS	Journal Article	Montu Bose & Somdutta Banerjee	2019	Equity in distribution of public subsidy for noncommunicable diseases among the elderly in India: an application of benefit incidence	BMC Public Health

					analysis	
Anoop Anand Malik (Student)		Journal Article	Anoop Anand Malik, Vivek Kumar Singh, Shyam Sundar Sharma, Madan Singh Negi & Shashi Bhushan Tripathi	2019	Prevalence of apomixis in Jatropha: Is it significant?	Biofuels
Roopam Shukla (Student)		Journal Article	Roopam Shukla, Ankit Agarwal, Christoph Gornott, Kamna Sachdeva & P. K. Joshi	2019	Farmer typology to understand differentiated climate change adaptation in Himalaya	Scientific Reports
Pallavi Somvansh	DBT	Journal Article	Razique Anwer, Khalid I. AlQumaizi, Shafiul Haque, Pallavi Somvanshi , Nazia Ahmad, Saleh M. AlOsaimi & Tasneem Fatma	2019	Unravelling the interaction of glipizide with human serum albumin using various spectroscopic techniques and molecular dynamics studies	Journal of Biomolecular Structure and Dynamics
Jaya Vasudevan Suseela		Book/Monograph	Jaya Vasudevan Suseela	2019	Indirect Taxes: GST & other Indirect Taxes	Eastern Book Company
Tulika Bhardwaj (Student)		Chapter in Books/Handbooks	Tulika Bhardwaj and Pallavi Somvanshi	2019	Machine Learning Toward Infectious Disease Treatment	Machine Intelligence and Signal Analysis
Deepty Jain	DEE	Chapter in Books/Handbooks	Deepty Jain	2019	Application of Indicators in Transport Planning: Insight from India	Development and Quantification of Sustainability Indicators. Environmental Footprints and Eco-design of Products and Processes
Naqui Anwer	DEE	Chapter in Books/Handbooks	Harish V.S.K.V., Anwer N., Kumar A.	2019	Optimal Energy Sharing Within a Solar-Based DC Microgrid	Soft Computing for Problem Solving. Advances in Intelligent Systems and Computing, vol 817

Anandajit Goswami		Chapter in Books/Handbooks	Shobhakar Dhakal, Leena Srivastava, Bikash Sharma, Debajit Palit, Brijesh Mainali, Rabindra Nepal, Pallav Purohit, Anandajit Goswami, Ghulam Mohd Malikyar, Kul Bahadur Wakhley	2019	Meeting Future Energy Needs in the Hindu Kush Himalaya	The Hindu Kush Himalaya Assessment
Gopal K Sarangi	DPS	Chapter in Books/Handbooks	Sarangi G.K.	2019	Green Finance in India: Barriers and Solutions	Handbook of Green Finance: Energy Security and Sustainable Development
Shashi Bhushan Tripathi	DPT	Chapter in Books/Handbooks	Anoop Anand Malik and Shashi Bhushan Tripathi	2019	Application of Molecular Markers in Genetic Improvement of <i>Jatropha</i>	Jatropha, Challenges for a New Energy Crop - Volume 3: A Sustainable Multipurpose Crop
Manipadma Datta	DBS	Chapter in Books/Handbooks	Ria Sinha, Manipadma Datta, Magdalena Ziolo	2019	Inclusion of ESG Factors in Investments and Value Addition: A Meta-Analysis of the Relationship	Effective Investments on Capital Markets:10th Capital Market Effective Investments Conference (CMEI 2018)

Sapna A Narula	DBS	Chapter in Books/Handbooks	Anushree Poddar and Sapna A. Narula	2019	A study of Corporate Social Responsibility (CSR) and Sustainable Development Goal (SDG) practices of the states in India	Mandated Corporate Social Responsibility Evidence from India
Gopal K Sarangi	DPS	Chapter in Books/Handbooks	Gopal K. Sarangi, Arabinda Mishra, Farhad Taghizadeh-Hesary, Youngho Chang and Juswanto Wawan	2019	India's Electricity Sector: diversification, energy security, and sustainability	Achieving Energy Security in Asia :Diversification, Integration and Policy Implications
Anandajit Goswami		Magazines	Anandajit Goswami	2019	Future is green job Market, explains TERI School of Advanced Studies faculty :Honing your skills, here's how we can built a green job market in India.	India Today Online
Manish Kumar Shrivastava		Magazines	Saurabh Bhardwaj and Manish Kumar Shrivastava	2019	Potential Climate Risks to Oil and Gas Infra and Operations	InfralinePlus Magazine
Leena Srivastava		Magazines	Leena Srivastava	2019	India's loyalty to sustainability: What the evidence says	DNA (Mumbai)
Anandajit Goswami		Magazines	Anandajit Goswami and Saswata Chaudhury	2019	Skilling India in the Green building and renewable energy sector	Brainfeed Higher Education Plus Online Magazine
Sapan Thapar	DEE	Newspaper	Sapan Thapar and Seema Sharma	2019	Energy Coupons' way forward	Deccan Herald,Online

Anandajit Goswami		Chapter in Books/Handbooks	Anandajit Goswami	2019	Interdisciplinarity in Sustainability Studies	Higher Education: A guide to opportunities in India and abroad 2019
Sapan Thapar	DEE	Magazines	Sapan Thapar	2019	Rising hunger for power	DNA (Online)
Anjal Prakash		Working/Discussion papers/Policy Brief/Technical Report	Anjal Prakash [et al...]	2019	Climate Change Adaptation Research for Impact	
Sapna A Narula	DBS	Magazines	Sapna A. Narula	2019	Demand for sustainability managers on the rise	India Today (Online)
Leena Srivastava		Magazines	Leena Srivastava	2019	Going beyond Cyclone Fani	DNA (Online)
Swarup Dutta	DPS	Magazines	Swarup Datta	2019	Viewpoint: Corporate firms and their responsibility towards sustainable livelihood	CSR Mandate
Manish Kumar Shrivastava		Magazines	Manish Kumar Shrivastava	2019	Cleaning Delhi's Air An Ethical and Economic Dilemma	The Pioneer (Online)
Pallavi Somvansh	DBT	Journal Article	Aditi Singh Pallavi Somvanshi Abhinav Grover	2019	Pyrazinamide drug resistance in RpsA mutant ($\Delta 438A$) of Mycobacterium tuberculosis: Dynamics of essential motions and free-energy landscape analysis	Journal of Cellular Biochemistry

Prateek Sharma	DEE	Journal Article	Shikha Tyagi, Tanu Sri, Anupama Singh, Pratiksha Mayee, S. M. Shivaraj, Prateek Sharma & Anandita Singh	2019	SUPPRESSOR OF OVEREXPRESSION OF CONSTANS1 influences flowering time, lateral branching, oil quality, and seed yield in Brassica juncea cv. Varuna	Functional & Integrative Genomics
Ritika Mahajan		Journal Article	Ritika Mahajan	2019	Do business schools in India know the real business world? Exploring some perspectives on academia-industry collaboration	International Journal of Management in Education
C K Singh	DEE	Journal Article	van Geen A., Farooqi A., Kumar A., Khattak J.A., Mushtaq N., Hussain I., Ellis T., Singh C.K.	2019	Field testing of over 30,000 wells for arsenic across 400 villages of the Punjab plains of Pakistan and India: Implications for prioritizing mitigation	Science of The Total Environment
Smriti Das	DPS	Chapter in Books/Handbooks	Smriti Das	2019	Forest Governance in India: Achieving Balance within a Complex Policy Subsystem	Environmental Policy in India (Routledge Studies in Environmental Policy)
Anu Rani Sharma	DNR	Journal Article	Tigala, S., Sharma, A.R. and Sachdeva, K.	2019	A System Dynamics Approach to Understand Respiratory Health Risk in Rural Population.	Indian Journal of Public Health Research & Development
Kamna Sachdeva	DEE	Journal Article	R Shukla, A Agarwal, Kamna Sachdeva, J Kurths and PK Joshi	2019	Climate change perception: an analysis of climate change and risk perceptions	Climatic Change

					among farmer types of Indian Western Himalayas	
Saad Nazif Ahamad Faruqui (Student)		Journal Article	Saad Nazif Ahamad Faruqui & Naqui Anwer	2019	Performance evaluation of Z-source inverter and voltage source inverter for renewable energy applications	International Journal of Energy and Water Resources
Pallavi Somvansh	DBT	Journal Article	Bhardwaj T, Haque S and Somvanshi P	2019	Comparative Assessment of the Therapeutic Drug Targets of C. botulinum ATCC 3502 and C. difficile str. 630 using in-silico subtractive proteomics approach	Journal of Cellular Biochemistry
Shaleen Singhal	DEE	Chapter in Books/Handbooks	Singhal, S. and Jain, Sourabh	2019	Smart Sustainable Cities	Environmental Policy in India (Routledge Studies in Environmental Policy)
Vinay S P Sinha	DNR	Chapter in Books/Handbooks	Sinha, V. S., Machineni, N., Singh, P., & Singh, H.	2019	Mitigating extreme weather events through wetland conservation.	Harnessing Wetlands for Sustainable Livelihood
Udit Soni	DPT	Chapter in Books/Handbooks	Indu Pal Kaur, Joga Singh, Jatinder V. Yakhmi, Gurpal Singh, Corinne Dejous, Alka Bhatia, Ashish Sattee, Udit Soni	2019	Bioconjugated Quantum Dots in Rapid Detection of Water Microbial Load: An Emerging Technology	Advanced Research in Nanosciences for Water Technology, Nanotechnology in the Life Sciences Book Series

L N Venkataraman	DPS	Chapter in Books/Handbooks	L.N. Venkataraman	2019	Publication or Public Action?:Discursive spaces of disengagements in India	Education and the Public Sphere: Exploring the Structures of Mediation in Post-Colonial India,
Sapna A Narula	DBS	Conference Papers	Sapna Narula	2019	Aligning SDG goals with CSR in india Panel Discussion on Reimagining a Sustainable Future-The SDG Framework	6th International PRME Conference, Thu, 31st January, 2019
Smriti Das	DPS	Conference Papers	Smriti Das	2019	Local Implementation of the SDGs: Case Study of Delhi, India	6th Asia-Pacific Forum on Sustainable Development
Som Mondal	DEE	Conference Papers	Birinchi Bora, B. Prasad, O.S. Sastry, Som Mondal	2019	Effect of system voltage on potential induced degradation of PV module	International Conference on Efficient Solar Power Generation and Energy Harvesting, 12th - 14th February, 2019
Soumendu Sarkar	DPS	Conference Papers	Soumendu Sarkar	2019	Strategy proof and Fair Allocations with Negative Externality	2019 Conference on Economic Design, 12-14 June 2019
Soumendu Sarkar	DPS	Conference Papers	Soumendu Sarkar	2019	strategy proof and Fair Allocations with Negative Externality	Conference on Economic Theory and Policy, 29–31 March, 2019 at AMBEDKAR UNIVERSITY DELHI
Vinay S P Sinha	DNR	Journal Article	Nehru Machineni, Vinay S.P.Sinha, Prasoon Singh, N.T.Reddyc	2020	The impact of distributed landuse information in hydrodynamic model application	Estuarine, Coastal and Shelf Science

					in storm surge inundation	
Sapan Thapar	DEE	Journal Article	Sapan Thapar and Seema Sharma	2020	Factors impacting wind and solar power sectors in India: A survey-based analysis	Sustainable Production and Consumption
Manipadma Datta	DBS	Chapter in Books/Handbooks	Shinu Vig and Manipadma Datta	2020	Corporate Governance Role of the Board Committees in India.	Corporate Governance Models and Applications in Developing Economies
Prateek Sharma	DEE	Journal Article	Swati Kwatra Archana Kumar Prateek Sharma	2020	A critical review of studies related to construction and computation of Sustainable Development Indices	Ecological Indicators
Atul Kumar	DEE	Journal Article	Michael O.Dioha and Atul Kumar	2020	Sustainable energy pathways for land transport in Nigeria	Utilities Policy
Sukanya Das	DPS	Journal Article	Aaina Dutta and Sukanya Das	2020	Adoption of grid-connected solar rooftop systems in the state of Jammu and Kashmir: A stakeholder analysis	Energy Policy
Tanu Sri (Student)		Journal Article	Tanu Sri, Bharat Gupta, Shikha Tyagi, Anandita Singh	2020	Homeologs of <i>Brassica SOC1</i> , a central regulator of flowering time, are differentially regulated due to partitioning of evolutionarily conserved transcription factor binding sites in promoters	Molecular Phylogenetics and Evolution

Sapna A Narula	DBS	Journal Article	Anupriya Sharma and Sapna A. Narula	2020	What motivates and inhibits Indian textile firms to embrace sustainability?	Journal of Sustainability and Social Responsibility
Ram Kumar Singh (Student)		Journal Article	Ram Kumar Singh, Vinay Shankar Prasad Sinha, Pawan Kumar Joshi & Manoj Kumar	2020	Environmental Monitoring and Assessment	
Nandan Nawn	DPS	Book Review			Downscaling of Economic System	
L N Venkataraman	DPS	Book Review			Entrepreneurial Academics And Ailing Humanities	
Nandan Nawn	DPS	Book Review			Natural Resources And Institutions	

List of Memorandums of Understanding (2018-19)

List of MoUs		
S.No.	Name	Description
1	Future Himalaya Institute (FHI), Kathmandu, Nepal	Student and faculty exchange, collaborative research activities
2	The University of Victoria, B.C., Canada	Student and faculty exchange, collaborative research activities, lectures, symposia etc.
3	National Institute of Disaster Management (NIDM), India	Capacity building activities, research projects, publication of articles, journals, fellowship/ master/PhD programme jointly with NIDM faculty as co-guides
4	Purbanchal University, Nepal	Student and faculty exchange, collaborative research activities
5	Deakin University, Australia	Collaborative research activities and projects, activities in the areas of water science and governance, renewable energy engineering, sustainable agriculture, nano-biotechnology etc., Jt. PhD supervision, joint publications

Honorary Doctoral Degrees Awarded

Name	Designation
Shri Adi Godrej	Chairman, Godrej Group

Doctoral Degrees Awarded

1	Binod Kumar Mahto	Dr P M Reddy	Development of transgenic lines of Tomato and Chilli plants against Anthracnose disease
2	Achla Behl Khanna	Dr Sapna Narula	A study on the utilization of healthcare services of Mobile Health Vans (MHVs) in the state of Uttarakhand
3	Shivani Wadehra	Dr Prateek Sharma	Institutionalizing waste segregation at source: Insights from a field experiment in Delhi
4	Aditi Singh	Dr Pallavi Somvanshi	Understanding the resistance mechanisms against first line anti-tubercular drugs and finding resistance-defiant novel leads
5	Madhuben Sharma	Dr Prateek Sharma	Surface water quality assessment of major water bodies in the Himalayan region
6	Swati Kwatra	Dr Prateek Sharma	Development and assessment of national and regional sustainability: A multi-pronged approach in the Indian context
7	Tulika Bhardwaj	Dr Pallavi Somvanshi	Genome wide computational identification of potential therapeutic targets of <i>Clostridium botulinum</i> ATCC 3502 using comparative genomics
8	Shikha Tyagi	Dr Anandita Singh	Study of transcriptional regulators involved in flowering in Brassica species
9	Nehru Machineni	Dr Vinay S P Sinha	Importance of air-sea coupling in determining tropical cyclone using WRF and it's impacts using storm surge models
10	V Rangarajan	Dr Atul Kumar	The earth-air heat exchanger: Prediction of performance in constrained sites
11	Anand Kumar	Dr Chander Kumar Singh	Arsenic release mechanism in Indus river basin, Punjab, India
12	Swarnalakshmi Umamaheswaran	Dr Rajiv Seth	Barriers to renewable energy investment - A study of risk perceptions of investors in India
13	Parvathi Jayasankar	Dr Sridhar Babu	Environmental carrying capacity of Bengaluru - A case study
14	Deepti Sharma	Dr Suresh Jain	Indoor air quality and exposure assessment from biomass fuel burning in traditional and advanced cookstoves
15	Madhuri Nanda	Dr Arun Kansal	Analyzing vulnerability to global phosphorus scarcity
16	Debajit Palit	Dr Atul Kumar	Towards convergence of grid and decentralised electricity solutions for effective rural electrification
17	Sudeshna Maya Sen	Dr Arun Kansal	Sustainable planning of a niche crop system in Indian Himalayas using value chain approach – A study of large cardamom spice from Sikkim Himalayas
18	Vivek Tyagi	Dr Manipadma Datta	A study on business failures: Modeling an

			integrated bankruptcy risk assessment framework with sustainability variables
19	Snehlata Tigala	Dr Kamna Sachdeva	Health impacts due to exposure to biomass combustion: A study over Karauli, Rajasthan
20	Anoop Anand Malik	Dr Shashi Bhushan Tripathi	QTL mapping in <i>Jatropha</i> using an advanced interspecific population
21	Aparna Tyagi	Dr J V Sharma	Assessment of implementation of “The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006” in Sonbhadra District of Uttar Pradesh
22	Roopam Shukla	Dr Kamna Sachdeva	Differentiated vulnerability and adaptation of Western Himalayan agriculture communities to climate change
23	Himanshu Chaturvedi	Dr Arun Kansal	Enhanced biological tertiary treatment of Municipal Solid Waste (MSW) leachate: A comparative study of conventional technologies with innovative PVA gel technology and its large scale process optimization
24	Nidhi Gupta	Dr Vidya S Batra	Utilization of red mud as a catalyst for the processing of hydrocarbons to produce hydrogen and nano carbons

Ongoing Doctoral Research ²

Ongoing Doctoral Research (July 1, 2018-June 30, 2019)			
S.No.	Name	Supervisor	Topic of Research
1	Madhuben Sharma	Dr Prateek Sharma	Water quality modelling for different water bodies in the foothills of Himalayas
2	Nidhi Gupta	Dr Vidya S Batra	Utilisation of red mud as a catalyst for the processing of hydrocarbons to enhance the production of hydrogen
3	Deepti Sharma	Dr Suresh Jain	Evaluating health effects and risk characterisation due to emissions from biomass energy based traditional and advanced cookstoves in rural communities
4	Fawzia Tarannum	Dr Arun Kansal	Analysis of public perception of water quality and role of Information Communication Technology (ICT) in supporting participative management - A study along River Yamuna in Northern India
5	Achla Behl	Dr Sapna Narula	A study on the Evaluation of the Mobile Medical Units (MMUs) in Uttarakhand
6	Vipan Kumar	Dr Sapna Narula	Mapping Climate Technologies for Energy Sector in India: A Comparative Study vis-à-vis China and US
7	Nehru Machineni	Dr Vinay S P Sinha	Importance of air-sea coupling in understanding the tropical climate variability using a high resolution regional coupled ocean atmosphere mode (WRF+ROMS)
8	Shikha Tyagi	Dr Anandita Singh	Study of Transcriptional Regulators Involved in flowering in Brassica spp
9	Sneha Singh	Dr Banwari Lal	Screening and selection of efficient microbial strains for biohydrogen production under thermophilic condition
10	Swarnalakshmi	Dr Rajiv Seth	Barriers to investment in renewable energy: A Risk Perception Approach
11	Neeraj Dangi	Dr Sapna Narula	Consumer Buying Behavior in organic food and the role of eco-labels
12	Jyoti Kashyap	Dr Sudipta Chatterjee	Impact of anthropogenic disturbance on prey populations in Kumbhalgarh Wildlife Sanctuary, Rajasthan.
13	Tanu Sri	Dr Anandita Singh	Study of functional aspects of regulatory evolution in Brassica SOC1
14	Debajit Palit	Dr Atul Kumar	Towards Convergence of Grid and Off-grid Supply for effective Rural Electrification
15	Swati Kwatra	Dr Prateek Sharma	Development of regional scale composite sustainable development index using

² The list is only of those students who have completed their comprehensive.

			participatory approach
16	Garima Vats	Dr Ritu Mathur	Water-Carbon-Energy nexus in the Indian Power Sector: A focus on conventional fuels based thermal power generation
17	V Rangarajan	Dr Priyanka Kaushal	The Earth Air Heat Exchange: Prediction of Performance in constrained urban sites
18	Anupama Singh	Dr Anandita Singh	Molecular and functional characterization of MIR160 and its targets from Brassica species
19	Binod Kumar Mahto	Dr P M Reddy	Development of transgenic liners of tomato and chilli plants against anthracnose disease
20	Aparna Tyagi	Dr J V Sharma	Assessment of implementation of the scheduled tribes and other traditional forest dwellers((recognition of Forest Rights) Act 2006 Sonbhadra district of Uttar Pradesh
21	Sachin Kumar	Dr Prateek Sharma	Diffusion of cleaner production innovation among MSMEs - case study of brick sector in India
22	Sonia Grover	Dr Shresth Tayal	Assessing climate change impacts on water availability patterns in a mountain catchment
23	Sunil Dahiya	Dr Suresh Jain	Environmental Impact of electricity generation from coal using life cycle approach
24	Himanshu Chaturvedi	Dr Priyanka Kaushal	Biological treatment of MSW leachate with PVA Gel technology and scale up Methodology
25	Anupriya Sharma	Dr Sapna Narula	A Study of Environmental and Social Practices in Indian Textile Industry
26	Nidhi Gautam	Dr Manipadma Datta	Searching for Financial Sustainability of Micro, small and Medium Enterprises (MSMEs) in India: An analysis in retrospect and prospect
27	Anand Kumar	Dr Chander Kumar Singh	Arsenic geochemistry in Indus Basin, Punjab, India
28	Meenakshi Choudhary	Dr Chubamenla Jamir	Sustainability of Organic Agriculture (case study of Middle Gujarat Agroclimatic region)
29	Pradeep Vashisht	Dr Shresth Tayal	Assessing energy balance of high altitude glaciated basin in the North -Western Himalayas
30	Ranjana Ray Chaudhuri	Dr Prateek Sharma	A framework for updating intensity duration frequency curves for storm events
31	Shailly Jaiswal	Dr Shresth Tayal	An assessment of vulnerability to local livelihood due to melt water variations in a mountain catchment
32	Sonal Bindal	Dr Chander Kumar Singh	Arsenic vulnerability in the Upper Gangetic Plains

33	Swati Singh	Dr Shresth Tayal	Assessment of Water-Energy-Food inter linkage in urban areas and developing a framework for adaptation
34	Anoop Anand Malik	Dr Shashi Bhushan Tripathi	QTL mapping in Jatropha using an advanced interspecific population
35	Tulika Bhardwaj	Dr Pallavi Somvanshi	Genome wide identification of virulence factors of Clostridium botulinum ATCC 3502 using next generation sequencing
36	Amit Kumar Thakur	Dr Manipadma Datta	Corporate Social Responsibility and Business Sustainability in India - In Retrospect and Prospect
37	Shinu Vig	Dr Manipadma Datta	Corporate governance and sustainable value creation in Business: A study of select Indian firms
38	Rohit Sharma	Dr Kamna Sachdeva	Tropospheric Ozone and Aerosols as short lived climate stressors and their Agricultural Vulnerability
39	Roopam Shukla	Dr Kamna Sachdeva	Assesing vulnerability of mountainous communities to climate change
40	Sonal Garg	Dr Piyali Das	Hi Grade Carbon from Biomass and Waste Sources through Pyrolysis Route , Its Charaterization and Application
41	Varsha Srivastava	Dr Malini Balakrishnan	Recovery of Bioactive Compounds (Phytochemicals) from Food Processing Waste
42	Md Ziauddin	Dr Shaleen Singhal	Evaluation of challenges and prospects of urban development:an exploratory research with special reforms to redevelopment in Delhi
43	Niharika Tyagi	Dr Smriti Das	Gender and Community Forestry Institutions: Analyzing Gender Roles, Identities and Social Capital in Local Forest Governance
44	Shivani Wadehra	Dr Prateek Sharma	Public Choice and Solid Waste Management:A case study of Delhi Households
45	Naveen Agarwal	Dr Naqui Anwer	Power market in India: Exploring the Grey Areas
46	Vivek Tyagi	Dr Manipadma Datta	Studying cases of business failures: A critical analysis aiming enhanced business sustainability
47	Parvathi Jayasankar	Dr Sridhar Babu	Assessment of few environmental factors in carrying capacity of Bangalore city
48	Gilmore FrederickG Momin	Dr Chubamenla Jamir	Climate Change and Food Security in Garo Hills, Meghalaya
49	Ram Kumar Singh	Dr Vinay S P Sinha	Agricultural land dynamics in SAARC nations: elewant to food security in climate change scenarios
50	Priyanka	Dr J V Sharma	Total Economic Valuation of Ecosystem Services provided by Sariska Tiger Reserve

51	Sahaj Kaur	Dr Sudipta Chatterjee	Lichen Conservation Areas (LCAs) for in situ conservation of lichen species preferred in trade in Uttarakhan, Western Himalayas
52	Snehlata Tigala	Dr Kamna Sachdeva	Health Impacts due to Exposure to Biomass Combustion: A study over Karauli, Rajasthan
53	Sudeshna Maya Sen	Dr Arun Kansal	Variations in effectiveness and outcomes of adaptation interventions in Uttarakhand region
54	Sangeeta Agasty	Dr Sapna Narula	Diffusion of cleaner production innovation in MSME sector in India: a study of Drivers and inhibitors in select sectors
55	Dibyendu Samanta -	Dr Seema Sangita	The Dynamics of Spatial Development of India: Agglomeration, Coagglomeration, and Marshall's scale economies
56	Sourabh Jain	Dr Shaleen Singhal	An evaluation of carrying capacity based system dynamics approach towards emerging cities: Case studies for Surat and Chandigarh
57	Dharmesh Kumar Singh	Dr Shresth Tayal	Optimizing Resource use and Reducing Water Footprint of Electricity Generation in India
58	Lokesh Chandra Dube	Dr Sudipta Chatterjee	Assessing carbon and livelihood impacts of selected carbon forestry projects in India
59	N K Ram	Dr Priyanka Kaushal	Experimental study of Hydrogen enrichment in producer gas through steam, air gasification route
60	Gp Capt A Shajahan	Dr Rajiv Seth	Employment of Aerospace Power in Disaster Response: An Analysis of Existing Framework in India
61	Anil Kumar Jain	Dr Ritu Mathur	Exploring the Role of Gas in India's Energy Mix
62	Vivek Kumar Singh	Dr Shashi Bhushan Tripathi	Development of cytoplasmic genic male sterile (CGMS) lines in Bhut Jolokia (Capsicum chinense x C. frutescens)
63	Aditi Singh	Dr Pallavi Somvanshi	Understanding the resistance mechanisms against first line anti-tubercular drugs & finding resistance-defiant novel leads
64	Madhuri Nanda	Dr Arun Kansal	Sustainable Phosphorus Management: Addressing the Resource Challenge for India
65	Amruta Pattnaik	Dr Som Mondal	To explore the metal nano particles of plasmonic enhanced upconversion materials in C-Si Solar cell
66	Nimisha Singh	Dr Malini Balakrishnan	Recovery of antioxidants from distillery wastewater using Forward Osmosis (FO)
67	Sujata	Dr Priyanka Kaushal	Life cycle cost analysis of existing and suggested infrastructure to meet Ethanol blending mandate in India

68	Anjulata Singh	Dr P M Reddy	Engineering the modulation signaling pathway in the Rice plant to promote rhizobial infection and nitrogen fixing symbiosis
69	Meenakshi Kumar	Dr Shaleen Singhal	Multifunctionality of urban green infrastructure for the competitive advantage of cities in India
70	I V Rao	Dr Rajiv Seth	Strategy for business sustainability of MSMES in the Indian auto industry: Status and way forward
71	Sulaksha Shetty	Dr Manipadma Datta	A study on organisation and its leadership for sustainable development with particular reference to the Indian situation
72	Akanksha Balha	Dr Suneel Pandey	Runoff Modeling for present & future scebario: a case study of Delhi watershed
73	Ashutosh Kumar Pathak	Dr J V Sharma	Total Economic valuation of Ecosystem provided by Soorsarovar bird century
74	Charu Bhanot	Dr Sudipta Chatterjee	Conservation significance of Najafgarh Lake: An urban wetland of Delhi and assessment of its habitat as a refugia of resident and migratory birds
75	Divya Sharma	Dr Kamna Sachdeva	Gendered Vulnerabilities of Climate Change Shocks and adaptive decision making: A study of lower and middle Utrakhand region
76	Tanya Sharma	Dr Suresh Jain	Assessment of the nexus between built environment, travel behaviour, air quality, and human health to re-inform the transport system
77	Birinchy Bora	Dr Som Mondal	Energy rating and reliability of PV modules
78	Kamlesh Yadav	Dr Atul Kumar	Optimum Energy Utilization in Decentralized PV System
79	Rakesh Kumar Choudhary	Dr Malini Balakrishnan	Embedding RECP in Indian MSMEs
80	Renu	Dr Atul Kumar	Performance Modelling and Systematic Optimization of SPVWPS for different climatic zones for irrigation purpose in India
81	Saad Nazif Ahamad Faruqui	Dr Naqui Anwer	Performance evaluation of a novel transformerless Z-source multilevel solar photovoltaic inverter
82	Lalit Sharma	Dr Suneel Pandey	Exploring Secondary resource Material (SRM) utilization potential in Indian Automotive Sector, orighinating from End-of-life Vehicles (ELV's) in National Capital – Delhi
83	Madhurima Waghmare	Dr Shaleen Singhal	Inclusive cities and creative habitats - Exploring the dynamics in context of the diverse Indian cities
84	Mary Abraham	Dr Gopal Sarangi	Impact of Mining Induced Landuse Landcover changes on livelihood

85	Rishika Singh	Dr Vishnu Konoorayar	Public Participation in Decision Making; A case study of nuclear energy sector in India
86	Yogesh Tyagi	Dr Shaleen Singhal	An assessment of relationship between MRTS and real estate values: Case study of Delhi
87	Gurdeep Kaur	<u>Dr P M Reddy</u>	Development of transgenic rice lines resistant to sheath blight through modulation of lignin biosynthesis pathway genes
88	Nanditha Krishnan Vimalakumari	Dr P M Reddy	Bioengineering of rice for improved phosphorus use efficiency
89	Swati Patel	Dr Dheeban Chakravarthi Kannan	Studies on commercial viability on microalgae Biofuel production
90	Anushree Poddar	Dr Sapna Narula	CSR Orientation, Implementation and its relation with Firm Performance - A study of selected firms in India
91	Himanshu Arora	Dr Sapna Narula	A study on sustainability reporting process & practices of energy sector
92	Arun Pratap Golaya	Dr Nithiyanandam Yogeswaran	Overcoming fundamental challenges in Marine Vessel Tracking through suitable use of emerging information and communication technology (ICT) in the maritime domain: Safety and Security Perspective
93	Ayushi Vijhani	Dr Vinay S P Sinha	Assessing influence of climate change on water availability and distribution on vulnerable communities in Central Himalaya
94	Satyam Kushwaha	Dr Nithiyanandam Yogeswaran	Developing a spatial mitigation strategy to reduce urban heat island impact on urban habitat - A case study on Gurugram
95	Amit Jain	Dr Smriti Das	Locating Forest Community in Forest Governance: Cases of Two Villages from Jharkhand, India
96	Ashmeet Kaur	Dr Venkataraman L N	Education for Peace: Intersectional analysis of Curricular Debates in India
97	Pratibha Bisht	Dr Suneel Pandey	Evaluation of Traditional Knowledge and Biocultural Diversity of Nyishi Tribal Community for Sustainable Development in Arunachal Pradesh, India
98	Anchala Kumari	Dr Pallavi Somvanshi	Studying role of osmolytes and repurposed drugs in amyloidogenesis
99	Kirti Rawat	Dr Shashi Bhushan Tripathi	Characterization of Fusarium fujikuroi isolates causing Bakanae disease of basmati rice and its management through biocontrol agents
100	Paromita Das	Dr Vibha Dhawan	Ecosafety Studies of Bare and Modified Titania Nanomaterials used as Adsorbents and Photocatalysts for Efficient Waste Water Treatment

101	Preeti Rana	Dr Pallavi Somvanshi	Conformational ensembles guided inhibition of prion aggregation
102	Varsha Bisht	Dr Banwari Lal	Developing bacterial and plant-based bioflocants for wastewater treatment
103	Neha	Dr Arun Kansal	Developing framework model for use of reclaimed water in urban areas to address increasing water demand
104	Soumendu Shekhar Roy	Dr Chander Kumar Singh	Defining the nature of metamorphism of the litho-units of Lesser Himalayas (Kumaon) using sensor
105	Himani Singh	Dr Vinay S P Sinha	Water Accounting framework for Eastern Himalaya in context of Climate Change
106	Michael Hembrom	Dr Shresth Tayal	An assessment of vulnerability flood potential of Glacial lakes in Sikkim, India
107	Nandita Singh	Dr Neeti	Characterization of spatio-temporal dynamics of coastal hazard vulnerability of West Bengal
108	Pratyaya Jagannath	Dr Chubamenla Jamir	Assessment of the Sustainability of shifting cultivation in Nagaland
109	Sanjukta Mudgal	Dr J V Sharma	Assessment of Implementation of Forest Rights Act in Madhya Pradesh
110	Babu Gurucharan S H	Dr Som Mondal	Valorisation of Municipal Solid Waste - a Research study on Indian Solid Waste
111	Snigdha Goel	Dr Arun Kansal	Thermochemical conversion of scrap tyre to high value products: Selected Aspects
112	Priya Bhatnagar	Dr Vishnu Konoorayar	Analysing Legal and Regulatory Framework Governing Interaction between Competition Law and Indian Coal Sector
113	Sanjay Prakash Bhagat	Dr Nandan Nawn	Policy and Regulatory Interventions for Integration of Variable Renewable Energy Sources
114	Shashi Kant Yadav	Dr Gopal Sarangi	Hydraulic Fracturing vis-a-vis Natural Resources in India: Is Indian Legal Framework Ready for Fracking
115	Gurbir Kaur Sidhu	Dr P M Reddy	Bioengineering of cyanobacterial CO ₂ -Concentrating Mechanism (CCM) in Rice (<i>Oryza Sativa</i>)
116	Karanjot Kaur	Dr P M Reddy	Integration of Nodulation signalling pathway and assessment of its performance in promoting rhizobial symbiosis in rice
117	Tushar Saxena	Dr Priyanka Kaushal	Determination of the carbon price to internalize the external cost of climate change in the economic decision making of companies to guide new investment in low carbon technologies

118	Aaina Dutta	Dr Sukanya Das	Investigating households preferences for grid connected solar rooftop systems: A case study of Jammu and Kashmir
119	Asif Nazar	Dr Naqui Anwer	Technical and Economic aspects of Electrical Energy Storage in GridBalancing
120	Malar Kodi	Dr Naqui Anwer	Analysis of temperature and wind conditions effects on transmission line: Power flow and line failure in Indian condition and Standard
121	Priya Bhatnagar	Dr Ramakrishnan Sitaraman	Interaction of Dengue virus non.structural protein 5 with host proteins
122	Dioha Michael Obiora	Dr Atul Kumar	Modelling Low Carbon Transition Scenarios for Nigeria
123	Aditi Dhawan	Dr Ramakrishnan Sitaraman	The response of Mycobacterium tuberculosis to physiologically relevant temperature changes

Honours and Awards

Students

In 2018, four students from the TERI School of Advanced Studies, pursuing the MA Sustainable Development Practice, chose to undertake their in-the field practice in Ethiopia under the IFAD-Universities Win-Win Partnership.

Alumni

Mr Sanjay Kumar

On May 9th, 2019, the Sustainable Purchasing Leadership Council (SPLC), based at Washington, DC, recognized ten organizations and one individual for their leadership in the sustainable purchasing movement, a growing trend in which organizations are using their purchasing power to advance the long term health and vitality of society, economies, and the planet.

The individual award was presented to Mr Sanjay Kumar (TERI SAS alumnus – M.A. (PP&SD) Class of 2008), who currently serves as the Additional General Manager, Dedicated Freight Corridors Corporation of India limited (DFCCIL), Ministry of Railways, Government of India.

TERI SAS

TERI SAS has been awarded with UN GCNI (Global Compact Network India) Award at the 3rd Innovative Practices Awards 2019 on SDGs of Global Compact Network India's 14th National Convention held in Mumbai on 31st May 2019. TERI SAS showcased its initiatives on forest landscape restoration and studying the impacts of Nitrogen Pollution on Forest Ecosystems which addresses Sustainable Development Goal 15. During the one hour competition, top winning organisations contested to share their innovative insights aligning SDGs with their practices out of which TERI SAS won the contest.

Student Clubs at TERI SAS

The University has eight active clubs (a) Dramatics Club, (b) Elocution Club, (c) Eco-Club, (d) Sports Club, (e) Music and Dance Club, (f) Media and Photography Club, (g) Social Cause Club and (h) Entrepreneurship Development Cell.

Dramatics Club: Students engage in activities like street plays, drama to spread awareness on sustainability and development issues.



Elocution Club: This Club primarily focus on strengthening skills of students in public speaking, confidence building, and overall personality development. Debates, quizzes, JAM sessions, poetry recitation, writing, etc. are some of the activities, which students undertake.

Eco-Club: Organizes and celebrates environment-related events and activities, such as 'No Plastic Day,' 'Earth Day,' 'International Youth Day', tree plantation drive, etc. In 2016, Eco-Club introduced 'No Paper Cups' campaign on campus, which was successfully implemented in early 2017. Now every Wednesday has been declared as 'no paper cup day' in TERI SAS.

Sports Club: The Intra-University Sports Meet is an annual sports extravaganza organized by the TERI SAS's Sports Club. It's a two week long event, which includes sports like badminton, table tennis, cricket, athletics, volleyball, football, basketball, and carom. All the sports events

take place in the University premises except cricket and athletics, which are held at TERI Gram, Gurgaon. This helps foster healthy sportsman spirit amongst students.



Music and Dance Club: This club encourages artistic pursuits and promotes talent of the students. It regularly organizes musical performances by students and artists from outside. It helps develop and hone students' interest in music and traditional/contemporary dance forms.

Media and Photography Club: This club helps in creating awareness about the TERI SAS activities and its philosophy to the world outside through the mode of writing and photography.

Social Cause Club: This club was set up with the initiative of students of TERI SAS to promote community participation and work towards social cause. In 2016, students organized clothes donation camp where not only students but all staff members of TU donated clothes for the underprivileged children. The proceeds were given to an NGO. In April 2017, students organized blood donation camp in association with the Rotary Club. Many students and staff members of TERI SAS came forward and donated blood.

Entrepreneurship Development Cell (EDC): This cell emerged from the 'Ideation Club' of the University. EDC has been established to promote the spirit of innovation and entrepreneurship among the students of the TERI SAS. Skill building, experience sharing and networking programmes are a regular feature of this cell.

Events at TERI SAS

REtopia

REtopia was started by students from M. Tech Renewable Energy Engineering and Management (REEM) of the Department of Energy and Environment at TERI SAS in the year 2011.

REtopia is the annual technical symposium of the Department of Energy and Environment, TERI SAS and is aimed at bringing together academicians, students, industrialists and experts from diverse backgrounds on one platform to share their knowledge and to discuss the best possible solutions to the present bottlenecks in the implementation of renewable energy programmes.

CLIMATES

CLIMATES is the youth-driven Climate Change Conclave organised by TERI SAS. It was first organised in 2018.

Organized by the students of MSc (Climate Science and Policy), the conclave seeks to provide an insight into the catastrophic impacts of Climate Change on different aspects of Ocean and understand the challenges about mitigation of impacts and developing climate resilience.

The conclave features experts from Climate Science to discuss and link SDG 13 (Climate Action) and SDG 14 (Life below Water) and put into perspective the immediate need to mitigate and adapt to climate change.

SWASH

To generate awareness on the water security issues and suggest strategies to enable communities to become water champions in their sphere of influence and beyond, the Coca-Cola Department of Regional Water Studies organizes a yearly event SWASH.

The grim realities such as the increase in global water demand with approximately 1.9 billion people who accounts for a quarter of the world's population living in acute water scarcity make awareness programs such as SWASH relevant and crucial.

BIOTIKOS

The Greek word "Biotikos" means "matters pertaining to life". Biotikos is an annual biotechnology seminar organized by TERI SAS Biotechnology Society (TUBS).

This comprises of masters and doctoral level students sharing a commitment of generating awareness about latest breakthroughs and current issues in the field of Biotechnology.

Biotikos was initiated in the year 2011 and then it was inaugurated by Dr. M.S. Swaminathan. Since then this program is organized each year to encourage students to pursue education and research in Biotechnology and contribute to research and development in this fascinating area.

TERI SAS Library

The Library and its collections and services continue to grow and evolve. It delivered a number of electronic services and an ever-wider range of resources in order to support teaching, learning, and research. The Library continually seeks to identify key areas to add value and develop services that facilitate seamless access to e-resources. It engages in partnership initiatives with academic colleagues and national and international universities. The Library has demonstrated that it is a crucial component of the academic-cum-research environment. It exemplifies modern methods for creating, applying, and utilizing digital resources and services. The services are offered electronically through a web-enabled integrated digital information system. Electronic resources and services are centrally organized and available via a single-window access.

The Library embarks on university wide information literacy efforts, targeting everyone from students to faculty. It proactively engages in scholarly interactions with users and makes digital library resources and services more visible, more used, and better attuned to user needs. The digital library literacy classes are integrated into curricula and these are conducted in partnership with faculty in the online learning environment. On-campus dissemination of collections, audio, and video, archive, and recorded media provide access to digital collections. The digital library system works across locations to create connections among individuals and departments.

The Library customizes digital services for various users, based on their needs, to support expanding modes of research, teaching, and scholarly communication. The tools have web interfaces that allow integrated access to all intellectual content, in-house e-collection, and external digital resources available to the users regardless of format, source, or location. The digital services support specialized teaching needs as well as global and local reach.

Digital library services' development is prioritized according to user needs. The University's specific in-house special collections are integrated in online networked services. To facilitate sharing of resources, TERI SAS library familiarizes users with the information available at other university libraries within region, nation, and worldwide. It helps students become more information literate, by conducting subject-specific user-education sessions.

The Library is embedded in departments as well as in instruction and works closely with the students, faculty, PhD scholars, and researchers to meet their needs. It improves their experience of using scholarly resources thus providing innovative, responsive, and effective services to meet the changing needs of the academic community. In addition to scholarly electronic journals and books, it provide for access to data (economic, corporate, social), news, reports, and analysis to its users. The library is moving towards transition to open access for both

journal and monographic materials in ways that result in a more cost-effective system that provides high-quality scholarly content when and where it is needed.

The Library actively engages and connects with the user communities. Helps students to get their work published; supports them to get scholarships, internships, projects, and jobs, thus creates efficiencies for students of each department. Provides help in course readings for all departments and offers convenient access to their assigned readings. It connects into existing course and teaching workflows through the TERI SAS Portal, Digital library e-resources and e-services, and involves in new learning initiatives, like online courses as well as distance learning. To explore some of these newer models, the library continues to build partnerships with diverse cross-section of publishers, from academic to trade, higher education to university presses. The library facilitates learning and education either through direct instruction or online interactions; and train users to use a variety of resources.

While the University Library in the campus supports students and faculty through its core services, it also focuses on the student opportunities to help students grow and succeed through national and international events and enables the users to connect and transform their lives.

IT Infrastructure at TERI SAS

The TERI SAS has state-of-the-art IT infrastructure and is equipped with the latest tools and technology. The LAN setup with secure from all internal and external threats. The faculty, staff, and students can access IT infrastructure after successful authentication and authorization. The file services are maintained for storing institute data on a central repository. The smart printing service is enabled for faculty and staff members. Access to multiple resources such as the Internet, Students Information System, Learning Management System, University Portal, and Digital Library are made available on all workstations across the University.

The campus is fully Wi-Fi enabled, internet link with a capacity of 45 mbps bandwidth. Separate dedicated links are available that connect the campus to access resources such as the University Portal, Digital Library, etc. Cloud technology is introduced for mailing through O365, which allows faculties, staff, and students to communicate using mail, audio/video/text chat, group discussion, calendar sharing, and data storing.



The campus has a dedicated computer lab with 20 computers, having various specialized scientific software installed, such as MATLAB, PVSyst, WAsP, etc. The Geoinformatics Lab which comprise of another 20 computers with ARC GIS and ERDAS software is also available for

students. Video conferencing facility for distance learning and a media lab is available for recording and streaming of lectures. Centralized IT Helpdesk staff is present round the clock for addressing IT-related issues in the least possible time. The TERI SAS Portal is an online gateway to information and resources at the University. It helps keep students and the faculty informed of happenings across the campus. The University has created and maintained e-learning portals in Moodle platform for online programmes to offer distance education for student across the globe. These course modules are rich in audio and video and have interactive web-based contents.



Highlights

- All Faculty and Staff systems are using i3 / i5 • Classroom are upgraded on i3 / i5
- Upgraded Projectors in all classroom and lecture hall • Secure Colour printing service
- Video Conferencing facility for online lecture and meetings
- Cloud technology is introduced for mailing, which allows faculties, staff, and students to communicate using mail, audio/video/text chat, group discussion, calendar sharing, and data storing

- Lease Line upgraded from 20 Mbps to 45 Mbps
- 24X7, NOC support for Wi-Fi
- Archiving usage history logs as per the DOT norms
- Smart Hub for collecting Payment
- Point to point links are available that connect the campus to access resources such as the University Portal, Digital Library, etc.
- Cyberoam network security service enabled for Anti-Virus, Anti-Spyware & Anti-Spam, Intrusion Prevention System (IPS), Content & Application Filtering, Web Application Firewall, Application Visibility & Control, Bandwidth Management, Multiple Link Management for Load Balancing
- Centralized IT Helpdesk staff is present round the clock for addressing IT-related issues at the earliest possible
- Centralized Symantec endpoint protection for users

Media Lab

A media lab with latest audio and video mixer, high-definition robotic camera, and web-streaming server facility and a video conferencing system is set up at the TERI SAS for providing distance learning and e-learning. The lab allows developing e-content for university education at various levels in environmental science courses such as environmental pollution and control, water and wastewater treatment, air quality management, integrated impact assessment, and environmental economics. The media lab is equipped with a digital glass notebook for live interaction, two high-definition plasma screens for clear picture view, Digital Video Recorder, and 1 Terabyte of storage server for archiving the course material as well as Cisco Telepresence video conferencing system for distance learning. The audio/video editing is done using the Sony VegasPro software.

Student Portal

The Student Portal of the TERI SAS provides a single point of access to online university services and information of current staff and students.



The portal can be accessed globally. Students can use the following features and services:

Time table

Attendance

Course outline and feedback

Exam result

Placement,

Latest news,

events,

and announcements

Open and Distance Learning

The Centre will plan, implement, coordinate and monitor operationalization and quality assurance of the programmes in open and distance learning mode, including monitoring of the

conduct and programme delivery by the learner support centres and shall adhere to the regulation and guidelines of UGC and other regulatory authorities.

Social Presence

Our social presence is on the following sites:

Facebook

www.facebook.com/teriuniversity

Twitter

<https://twitter.com/teriuniv>

Youtube

<https://www.youtube.com/user/teriuniversity>

Green Campus

TERI SAS has a 'green' campus. It puts into practice the very principles taught in its classrooms. An architectural delight, the campus has been planned to provide a setting that enhances learning, while simultaneously showcasing the concept of modern green buildings. Spread over two acres, the University campus comprises an administrative block, an office block, a convergence and hostel block.

The green building has 10 classrooms, each having a capacity for seating 32 students, three lecture halls with a capacity for 60, and an auditorium with a capacity for 100 to 150 persons. The building also has 10 well-equipped laboratories to complement cutting-edge research at the TERI SAS. The campus is aesthetically designed with several features of passive energy-saving design, energy-efficiency, and water and waste management systems.

Green Features

- Insulation of external walls
- Insulation on terrace done with vermiculite and puff insulation topped with China mosaic for efficient heat reflection
- Double insulation synergy azure glass is used in external façade with aluminum glazing
- Earth Air Tunnel (EAT), Thermal Mass Storage, and Variable Refrigerant Volume (VRV) systems are used for cooling the building
- Hunter Douglas louvers are used in the building for controlling the intensity of incoming sun rays
- Solar water heating system
- Waste water recycling with STP
- Rainwater harvesting
- Solar Rooftop System
- LED lights across the campus
- Wind mill

TERI SAS Laboratories (Resources)

TERI SAS harnesses the best of modern technologies to support and encourage the intellectual curiosity of its students and faculty. It also has laboratories with advanced equipment and facilities to aid and stimulate research.

Solar Lighting Laboratory

TERI SAS has established a Solar Lighting Laboratory (SLL) which is a first-of-its-kind laboratory in India and achieved the NABL's accreditation (National Accreditation Board for Laboratories) as per IEC 62257-9-5 ed. 2.0. The laboratory adheres to International Electrotechnical Commission (IEC), an international body that sets standards for all electrical, electronic and related technologies throughout the world standards for the testing of Solar Lighting Systems (SLS) and also recognized under the Lighting Global programme of International Finance Corporation (IFC). The laboratory is also supported by the Ministry of New and Renewable Energy (MNRE) and has sophisticated equipment and test setup that is used for testing lighting products.



The laboratory's facility is available for testing as per IEC and MNRE specifications for various lighting systems (both solar-based lighting and general lighting). The laboratory has also carried

out various training programmes for different target groups. So far, the laboratory has tested more than 200 models of solar lighting systems including solar lanterns, solar home lighting systems, solar task lights, and multi-purpose solar lights.

The ability of the laboratory to cater to the testing needs of both rural as well as urban lighting infrastructure makes it stand out from other laboratories. The laboratory is working towards strong quality assurance and testing programmes which will help in building consumer confidence towards the solar lighting products.



The IFC's Lighting Asia–India programme is working with the University to achieve these goals. As a way forward for the development and expansion of this laboratory, it is further planned to be linked with several other groups or programmes that require General Lighting System (GLS) testing. The supreme testing equipment and authority for high quality assurance can lead to the transformation of the laboratory into a nodal agency for General (solar) Lighting System testing not only for India, but entire Southeast Asia.

Environmental Monitoring Laboratory

The Environmental Monitoring laboratory (EML) is capable of providing practical training to the students through structured laboratory curriculum, including all kinds of relevant soil, water, and air monitoring experiments required at the postgraduate level. It caters to the interdisciplinary application in research to all the students of the University.

The EML is state of art laboratory equipped with instruments such as UV-Visible Spectrophotometer, GRIMM Aerosol Spectrophotometer, Respirable Dust Sampler, High Volume Sampler, Gaseous Monitoring Kit, Handy Low Volume Air Samplers, Stack Monitoring Kit, PH Meter, Muffle Furnace Ion Selective Electrode, Turbidity Meter, Conductivity Meter, Jar Test Assembly, COD Digester (Reflux), BOD Testing Apparatus, Sensitive Balance, Bomb Calorimeter, Kjeldahl Unit, Microscope (Primostar Halogen), Muffle , TSI Optical Sizer, Potable As Analyzer, Q Track–Indoor Air Quality Monitors And Q Track– Velocicalc.

Combustion Laboratory

The Combustion laboratory has been established to test the performance of cookstoves based on energy efficiency as well as emissions using nationally and internationally accepted protocols such as Water Boiling Test (WBT), Controlled Cooking Test (CCT), and the Indian Standard on Solid Biomass Chulha Specification (BIS India).

The hood method is used to capture and quantify the various products of incomplete combustion. The instruments and support facilities that are available in the lab are Moisture Meter, Bomb Calorimeter, Equipment to maintain isokinetic conditions, Aerosol Spectrometer And Dust Monitor, Low Flow Air Samplers (attached with SKC pump) for collection of bulk aerosols for characterization, Potable Gas Analyzer, Digital Infrared Thermometer

Geoinformatics Laboratory

The Geoinformatics Laboratory at the TERI SAS is well equipped with state-of-the-art equipment such as high-end computers (workstations), scanner, digitizer, printer, navigation devices, Infra-red thermometers and others. It has licensed version of high-end latest commercial software like ERDAS Imagine, LPS, ArcGIS, GMS, and WEAP along with other advanced support system's mechanism. The laboratory is also equipped with web publishing tools like ArcGIS Advance and ArcIMS Servers. The laboratory is also equipped with various open source geospatial software, to expose our students to the powerful open source environment.

The laboratory also holds a good repository of geospatial information in both digital and hard formats.

The Geoinformatics laboratory of the Natural Resources Department of TERI SAS also operates through a network with several research institutions working in the arena of Geoinformatics and other associated fields both within and outside the country.

Biotechnology Laboratory

Biotechnology laboratory is fortified with fundamental and advance facilities required for radical teaching and research applications in plant biotechnology. The laboratory is furnished with autoclave for sterilization, Biosafety Cabinet, Centrifuges, Conductivity Meter, Deep Freezers, Digital pH Meter, Gas Chromatography, Gel Documentation System, Ice Flaking Machine, Magnetic Stirrer, Microscopy Facilities, Nano-Drop Spectrophotometer, Refrigerated Shaking Incubator, Plant Growth Room, Vortex Shaker with Touch Plate, Water Bath for Incubations, Laminar Air Flow, Master Cycler among other basic infrastructure.



Additionally, the Bioinformatics laboratory with work station dedicated computer systems facilitated with advanced software, such as MATLAB, GCK, PAUP, and MacVector exists for 'in-silico' applications.

Further, the plant biotechnology course is augmented by the support from research laboratories involved in research activities led by the faculty members in the areas of Genomics and Plant Development Biology, Nanobiotechnology, Bioinformatics, Microbial genetics and pathogenesis, Stress Physiology and Structural Biology.

Power System Laboratory

The Power System Laboratory gives a comprehensive idea about the practical aspects of power system infrastructure. The generated electrical power is transmitted through transmission lines and used mostly in rotating machines. The state-of-the-art laboratory infrastructure is equipped with the experimental facilities for providing training on transmission lines, DC machines, induction motors, synchronous machines, and transformers. The laboratory gives the opportunity for experimental verification of performance characteristics of the power system equipments along with exposure of modern day technologies for solving modern day power system problems. The experiments are designed keeping in mind the multidisciplinary approach of the students coming from different engineering and science backgrounds.

Heat Transfer Laboratory

The Heat Transfer Laboratory is designed to incorporate the practical concepts of heat and mass transfer applied to renewable energy systems and energy conservation techniques. The experiments are designed to give comprehensive knowledge of heat transfer through conduction, natural convection, forced convection and radiation. The laboratory is fully equipped with experiments on heat exchanger. It also provides knowledge of boiling and condensation processes. The lab explores the basics of mechanical engineering and is designed such that the students are able to acquire interdisciplinary knowledge in an easy way.

Energy Simulation Laboratory

Energy Simulation Laboratory enhances the soft computing skills of the students and enables them for modelling and simulation of energy systems. The laboratory experiments are designed to experimentally verify what they have learnt in the previous laboratories through software applications. The experiments are carried out using renewable energy simulation softwares viz. PVsyst for Solar PV, WAsP for wind, RET Screen for renewable energy project management, HOMER for microgrid applications. MATLAB is also discussed to be used for power flow solutions especially in renewable energy sector.

SCHOOL-UNIVERSITY NETWORK

TERI SAS, in its endeavour to promote networking with all potential stakeholders including the school children has initiated the School - University Network (SUN). This endeavour is built on the understanding that existing school curriculums inadequately cover sustainability related issues in tune with complexities of development. The proposed SUN initiative is aimed at bridging this gap.



The key objectives of this initiative are:

- To provide comprehensive understanding on key sustainability issues
- Offer ways and means to adopt sustainable lifestyles
- Offer different ways to see the world in terms of the goals of sustainable development.
- Be the champions of sustainability-centric development ideas and practices

As part of this network, students from secondary and senior secondary level from schools based in Delhi-NCR are invited to be a part of experiential learning visit to the University campus. The sessions are focussed on five broad areas – climate change; energy efficiency; waste

management; water management; and urban sustainability. This initiative is driven entirely by the students of the University and the participating schools.

The participating school selects a batch of 40-50 students to visit TERI SAS for the interactive session on one specific theme as mentioned above. Multiple pedagogical tools (interactions with the trainers, discussion centric deliberations; documentaries, various experiential and visual methods of learning); are used to educate them on the chosen theme.

TERI SAS's Masters Students act as trainers/instructors for the programme. However, the broad guidance is provided by TERI SAS Faculty Members/ Programme Coordinator.