

ANNUAL REPORT

2020-21

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Vice-Chancellor's Message

TERI SAS remains the pioneer and leader in sustainability education and research, not only in India, but also in the globe.

Our aim is to educate generations to enable and equip them to cope with the challenges the world is facing.

Since our inception in 1998, we are committed to higher education, research, innovation and social impact in sustainability studies.

A total of 131 PhDs and roughly 2300 Master's degrees awarded by us is enough to highlight our commitment.

Known for the quality research, the institute has also published more than 600 research publication from 2015 onwards.

Our interdisciplinary doctoral programmes in seven thematic areas cater to the research quest of our students. The 14 Masters programmes cover a wide range of sustainability studies.

Our alumni hold coveted positions at corporates think tanks, government organisations, research institutes, NGOs and international organizations.

The regular alumni meets help us strengthen our bond with our alumnus. We have recently started a Mumbai chapter in February.

We are also coming up with a campus in Hyderabad. We are sure that we will be able to take the new campus to greater heights much like our New Delhi campus.

We are committed to the cause! There's no doubt TERISAS flag would fly higher and higher in the days to come!



Message from the Dean (Academic)

The year 2021 is important for TERI School of Advanced Studies as it has completed twenty years of commencement of formal degree programmes which started with a PhD programme. 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 reach in education and research. Today, the School offers twelve Master's degree programmes and six Doctoral degree programmes. The efforts of its faculty, students and alumni have been recognised globally for the quality and contribution to research. TERI SAS has received recognition from Scientific & Industrial Research Organization (SIRO), has participated as an observer to the United Nations Convention to Combat Desertification (UNCCD) Conference of Parties (COP) and its Subsidiary Bodies.

It has won The UN GCNI (Global Compact Network India) Award at the 3rd Innovative Practices Awards on SDGs. Students of TERI SAS are being recruited by leading recruiters like TCS, PWC, Suzlon, Infosys, Wipro, HPCL, IOCL, KPMG, E&Y, Ambuja Cement, ACC, and many others. All these recruiters have expressed satisfaction with the employability skills of the students. The School is committed to enhancing further the competency of its graduates in acquiring adaptive expertise in the area of their specialisation. The placement cell of the university is working in this direction.

The School 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. We have re-organised our departments and programmes to give fillip to the transformation in education and adoption of New Education Policy.



Message from the Dean (Research and Partnerships)

TERI School of Advanced Studies has been examining the complex dimensions of sustainable development through research since its inception. Our research excellence is demonstrated through an extensive record of high-impact, multidisciplinary research in overarching and interrelated themes such as natural resources, energy and environment, water studies, biotechnology, business and sustainability, and policy studies.

The unique credentials of the School are defined through an interdisciplinary approach that provides an open and dynamic ecosystem for advanced research.

With a vision of knowledge creation and capacity enhancement of people and institutions through advance research and engagement, TERI School lays greater emphasis on the faculty-led research in these thematic areas to complement the learning outcomes of postgraduate programmes with emphasis on the impact of research measurable as 'Research into Use'. Our students and faculty members actively engage in new discourses relating to sustainability challenges and solutions. Our distinct departments have specialized teams of faculty members and researchers who work towards knowledge advancement for examining and addressing sustainability challenges.

Our interdisciplinary faculty and scholars get regularly published in leading international high impact journals, policy briefs, result oriented research reports and popular publications which eventually add to the intellectual rigour and values in our students.

To contribute to the administrative and overall reforms, our specialized departments also assist in strengthening the capacity of local, state and national governments, other higher education and research institutions, industry and business organisations in India and other developing countries through specialised training, management development programmes, summer schools and certificate programmes.

In pursuit of advancing frontiers of research and higher education, TERI School engages in meaningful partnerships with industry, policy and decision-makers, funding organisations, community and leading research and higher education institutions globally. As the Dean (Research and Partnerships) of the TERI School of Advanced Studies, I'm extremely proud of and highly value such partnerships and strive to strengthen them to design and implement long-term solutions that make the world a better and a more sustainable place to live.

ABOUT TERI SAS

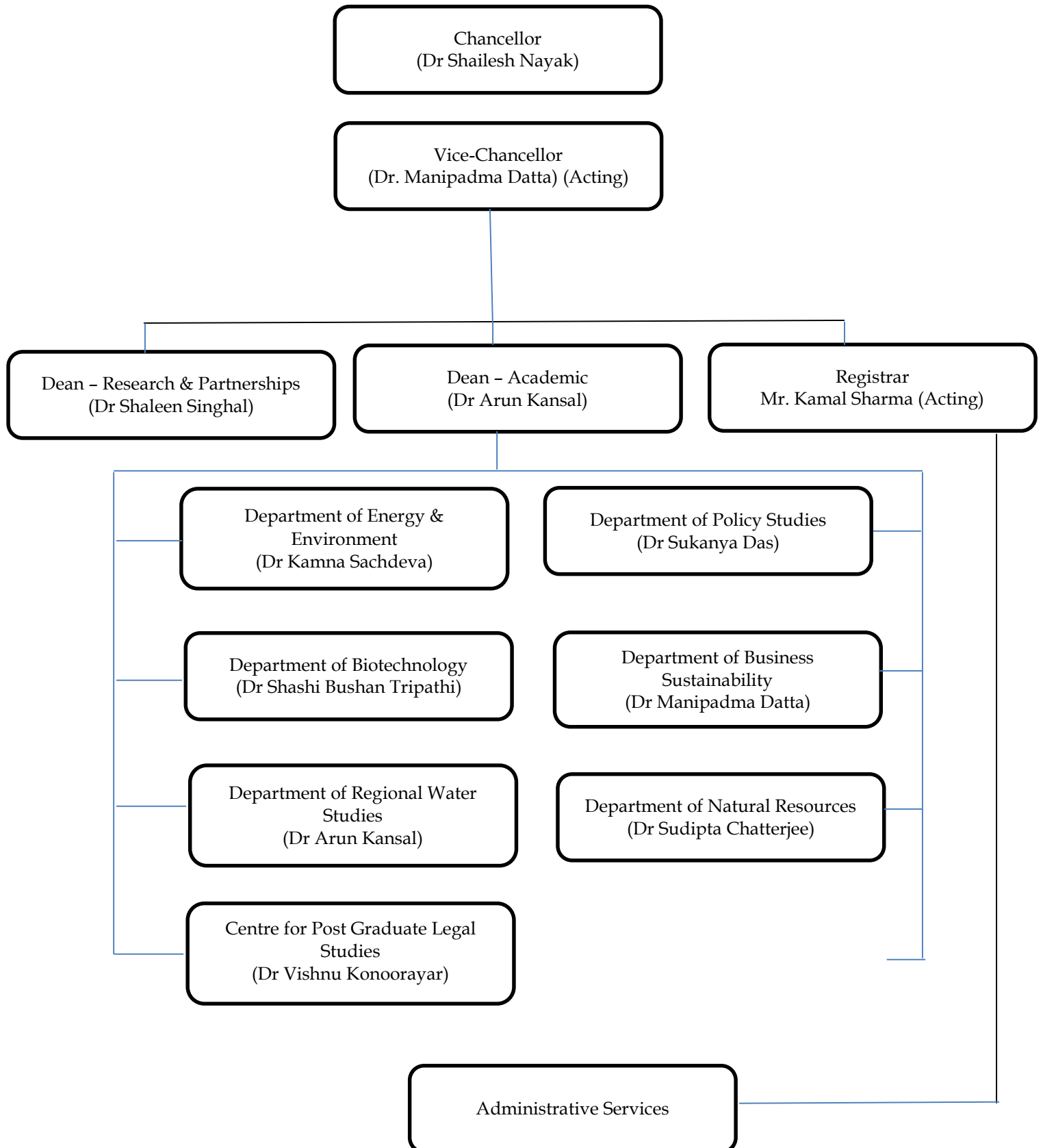
TERI SAS (earlier TERI University) was established to disseminate the vast reservoir of knowledge devised by The Energy and Resources Institute (TERI), a not-for-profit, independent research institute recognized globally for its contribution to scientific and policy research in the realms of energy,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

In 1999, the Institute 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 Institute 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 institute 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.

TERI SAS Structure



Board of Management

Chairman

Prof. Manipadma Datta

Professor & Vice Chancellor, TERI SAS

Deans

Prof. Arun Kansal

Professor & Dean (Academic), TERI SAS

Prof. Shaleen Singhal

Professor & Dean (Research & Relationships), TERI SAS

Three eminent Academicians nominated by Chancellor

Dr. Eswaran Somanathan

Professor, Indian Statistical Institute

Dr. George John

Former Vice Chancellor, Birsa Agricultural University, Ranchi and Former Sr. Advisor, DBT, Govt. of India

Dr. Sachin Chaturvedi

Professor & Director General, Research and Information System for Developing Countries (RIS)

Nominee of Sponsoring Society

Mr. R R Rashmi

Distinguished Fellow & Programme Director, TERI

Dr. Nimmi Singh

Former DGM (Chem.) – PM, Oil and Natural Gas Corporation Limited

Dr. Bhim Singh

Chair Professor, Department of Electrical Engineering, Indian Institute of Technology, Delhi

Dr. V.P. Singh,

Professor, Regional Rep for South Asia International Centre for Tropical Agriculture

Two teachers (from Prof and Associate Prof)

Prof. Ramakrishnan Sitaraman

Professor, TERI SAS

Prof. Manipadma Datta

Professor, TERI SAS

Secretary

Mr. Kamal Sharma

Registrar (Officiating), TERI SAS

THE ACADEMIC COUNCIL

Chairperson

Prof. Manipadma Datta

Professor & Vice Chancellor, TERI SAS

Deans

Prof. Arun Kansal

Professor & Dean (Academic), TERI SAS

Prof. Shaleen Singhal

Professor & Dean (Research & Relationship)

Heads of the Departments

Prof. Manipadma Datta

Professor, Department of Business and Sustainability

Prof Arun Kansal

Professor, Department of Regional Water Studies

Dr Vinay Shankar Prasad Sinha

Associate Professor, Department of Natural Resources

Dr Shashi Bhushan Tripathi

Associate Professor, Department of Biotechnology

Dr Sukanya Das

Associate Professor, Department of Policy Studies

Dr Kamna Sachdeva

Associate Professor, Department of Energy & Environment

Professors

Prof. Prateek Sharma

Prof. Ramakrishnan Sitaraman

Prof. Anandita Singh

Two Associate Professors from Departments

Dr Nandan Nawn

Dr Naqui Anwer

Two Assistant Professors from the department by rotation of seniority

Dr Montu Bose

Dr Anu Rani Sharma

Nominee of Vice Chancellor

Dr. Vivek Suneja

Professor of Strategy, Faculty of Management Studies (FMS), University of Delhi

Dr. T C Kandpal

Professor, Centre for Energy Studies, Indian Institute of Technology Delhi

Prof. Arun S. Kharat

School of Life Sciences, & Director, Internal Quality Assurance Cell (IQAC), Jawaharlal Nehru University, New Delhi

Co-opted Members

Ms. Ranu Kayastha Bhogal

Director, Policy Research and Campaigns at Oxfam India

Mr Manoj Chugh

President – Group Public Affairs & Member of the Group Executive Board Mahindra & Mahindra Ltd

Mr Rajesh Ayapilla

Director-CSR and Sustainability for India and South-West Asia, The Coca Cola Company

Secretary

Mr. Kamal Sharma

Registrar (Officiating)

Controller of Exams

Dr Seema Sangita

Student and Faculty Strength

From July 1,2020-June 30,2021	
Program name	No. of students
PhD	33
M.Sc.	133
MBA	19
MA	34
M.Tech.	38
LL.M.	57
PGD	
Certificate	

from July 1, 2020- June 30, 2021	
Particular	No. of Faculty
Core Faculty	48
Adjunct Faculty	8
Visiting Faculty	53

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 (Sustainability Management)
- M.Tech. (Renewable Energy Engineering and Management)
- M.Tech. (Urban Development Management)
- M.Tech. (Water Resources Engineering and Management)
- LL.M. (Specialization in Environment and Natural Resources Law; and Infrastructure and Business Law)
- 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. (Sustainability Management)

The Doctoral Programme 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 (Sustainability Management)

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.

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 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 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 (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 2020

TERI SAS organized its thirteenth convocation on 8 December 2020. The ceremony was held with much pomp and show. During the thirteenth Convocation ceremony, a total of 18 Doctoral degrees and 216 Master's degrees were conferred.

Medals for Standing First (2020 passouts)	
Name of student	Stream
Vanika Bajaj Sayal	MA (Sustainable Development Practice)
Mansi Bachani	Master of Laws (Environment and Natural Resources Law)
Ditipriya Bose	M.Tech (Renewable Energy Engineering and Management)
Amishi Tewari	M.Sc. (Environmental Studies and Resource Management)
Aishani Nitingiri Goswami	M Tech (Water Resources Engineering and Management)
Rajat R Khajane	MBA (Business Sustainability)
Shivansh Ghildiyal	M.Sc. (Geoinformatics)
Harshita Saxena	M.Sc. (Plant Biotechnology)
Anushkriti	M Tech (Urban Development Management)
Yashi Puri	M.Sc. (Economics)
Anita Karn	MA (Public Policy and Sustainable Development)
Rohan Sharma	MBA (Infrastructure)
Dikshita Arora	M.Sc. (Water Science and Governance)
Soham Banerjee	M.Sc. (Climate Science and Policy)

Guest Lectures at the Institute

Speakers	Title	Date
Mr. Pankaj Chandra, Senior Vice President & Head Special Projects-Sales, NDTV	Brands and Corporate Social Responsibility	12-09-2020
Mr. Pranshu Singhal, CEO, Karo Sambhav	Circular Business Models & EPR Scenario in India	07-10-2020
Ms. Shilpa Naryal, Head Sustainability, South East Asia, Intertek	Corporate Sustainability (Industry Agnostic)	09-10-2020
Lavanya Garg, Sr. Strategy & Development Manager & Chief of staff, Good Business Lab (GBL	Enabling social impact in business on the ground	04-11-2020
Richa Pant, Head - CSR & Sustainability, L & T Financial Services	Integrating CSR with business objectives & creation of shared values	07-11-2020
Mr. Selvakumar R, AGM, Corporate Sustainability at Hindalco.	Experience across Consulting, Conglomerate and Corporate	08-04-2021
Dr. Sunita Purushottam Head of Sustainability at Mahindra Life space Developers	Climate Responsive design- Base for Net Zero Buildings	15-04-2021
Dr Hishmi Jamil Husain Head Biodiversity, Corporate Sustainability at Tata Steel Ltd	Business and Biodiversity to Restore Our Earth.	22-04-2021
Mr. Sandeep Chandra Chief Sustainability Officer at Tech Mahindra	Life stages of a Sustainability policy advocacy Initiative	18-06-2021
Mr. Akhil Vinaik Regional Manager at Steelcase Asia Pacific Holdings India Pvt. Ltd	Carbon Neutral Now Carbon Negative Next, Business as a force for good.	04-06-2021
Mr. Shusil Kumar Sharma Former General Manager Sustainable Development at NTPC Ltd	Ecosystem Restoration	17-06-2021
Dr. Santanu Satapathy , CLP India Pvt Ltd.	ESG Goals; post pandemic world "- A Way Forward.	20/02/2021
Dr .Lopamudra Priyadarshni , Hindalco Industries Ltd.	ESG Goals; post pandemic world "- A Way Forward.	20/02/2021
· Prof. Vivek Suneja . Head & Dean	ESG Goals; post pandemic world "- A Way Forward.	20/02/2021

(FMS) ,University of Delhi.		
Ms. Richa Pant , L&T Financial services.	ESG Goals; post pandemic world "- A Way Forward.	20/02/2021
Ms .Ankita Sharma ,Reckitt & Benckiser .	ESG Goals; post pandemic world "- A Way Forward.	20/02/2021
Dr. Somendu Sarkar, Assistant Professor, Delhi School of Economics	Economics, Strategy, and Public Policy	27/08/2021
Dr. Pinaki Das Gupta, Professor of Marketing, IMI New Delhi	Marketing	27/08/2021
Dr. Irfan A. Rizvi, Professor, IMI New Delhi	Organisational Behavior and Human Resources Management	27/08/2021
Dr. Jaya Vasudevan, Professor, Hidayatullah National Law University, Raipur	CSR and Law	27/08/2021
Dr. Ritika Mahajan, Assistant Professor, Department of Management Studies, MNIT Jaipur	Sustainability	27/08/2021
Dr. Irfan A. Rizvi, Professor, IMI New Delhi	Organisational Behavior and Human Resources Management	28/08/2021
Dr. Sayantan Bandhu Majumder; Assistant Professor, St. Xavier's University, Kolkata	Contemporary Issues in Management Research	28/08/2021
Prof Shri Prakash, Mentor and Director, Public Policy and Sustainable Development, TERI SAS	The topic of Prof. Shri Prakash: Public Policy and Sustainable Development	24/04/2021
Mr Deepak Virmani, IAS (AGMUT), presently working as Secretary, (Tourism/Revenue) in A&NI Administration to Indian Cyber Crime Coordination Centre, CIS Division, Ministry of Home Affairs	The topic of Mr. Deepak Virmani: Electric Vehicles, Construction and Demolition Waste	
Dr Vishnu Konoorayar, HoD and Associate Professor, Centre for Postgraduate Legal Studies, TERI SAS	The topic of Dr Vishnu: Global Governance and Justice Administration in India	1/5/2021
Ms Rashmi Ranjan, Public policy professional & student, MA (PP&SD), TERI SAS	The topic of Ms Rashmi: Urban Governance and Sustainability issues	

Dr Jaya Vasudevan, Associate Professor & Program Coordinator, MA (PP&SD), Department of Business & Sustainability, TERI SAS	The topic of Dr Jaya: Conflict resolution in sustainable infrastructure management	
Ms Morsal Jamal, Public Policy Professional & Student, MA (PP&SD), TERI SAS	The topic of Ms Morsal: Marginalization in Education	8/5/2021
Dr L N Venkataraman, Assistant Professor, Department of Policy Studies, TERI SAS	Pandemic Pedagogy and Public Policy	15/05/2021
Mr Souvik Bhattacharjya, Associate Director, Integrated Policy Analysis Division, The Energy and Resources Institute (TERI)	The topic of Mr Souvik: Circular Economy Governance: Challenges and Opportunities	
Dr Sanjeeb Kumar Patjoshi (IPS), Joint Secretary to Government of India, Ministry of Panchayati Raj, New Delhi & Student, MA (PP&SD), TERI SAS	The topic of Dr Sanjeeb: Indian Covid Vaccination Divide Policy, Economic and Health Aspects	22/05/2021
Mr Souvik Bhattacharjya, Assistant Professor, Department of Energy and Environment, TERI SAS	The topic of Dr Manish: The 'Public' in the Policy Discourse on Climate Change	
Dr Shyam Sundar Kandpal, Joint Director, Wildlife Crime Control Bureau, Ministry of Environment, Forest and Climate Change & Student, MA (PP&SD), TERI SAS	The topic of Mr Shyam: Is Contract Farming New to India vis-à-vis Farm Laws 2020	29/05/2021
Dr Ritu Mathur, Director, Integrated Assessments & Modelling, The Energy and Resources Institute (TERI)	The topic of Dr Ritu: India's Energy sector choices in a net-zero emissions scenario	
Mr Viraj Desai, Press and Information Officer, Delegations of the European Union to India	The topic of Mr Viraj: Indian companies swift transition to sustainable energy alternatives in the new global order and India's EV Scenario	5/6/2021
Prof Shaleen Singhal, Dean (Research and Relationships) & Professor, Department of Energy and Environment, TERI SAS	The topic of Prof Shaleen: Green Growth and Planning for Resilient Cities	
Shri Abdul Kayum, Director, Ministry of Communication, Government of India	The topic of Mr Abdul: Universal Service Delivery Challenges	12/6/2021
Emani Kumar On Behalf of Organizing Partners Executive Director, ICLEI South Asia	KASpaces India Webinar, 12th July 2021	12/07/2021

& Deputy Secretary-General, ICLEI		
Dr Debolina Kundu, Professor, National Institute of Urban Affairs (NIUA)	Strengthening Sustainability in Urban India" - Talk #3	21/05/2021
Dr. D. Dhanuraj, Chairman, Centre for Public Policy Research	Strengthening Sustainability in Urban India" - Talk #2	07/05/2021
NIDM - TERI SAS DEE Joint Webinar	Comprehensive Disaster Management (Covid-19, Institutional Mechanism and Disaster Management Act)	31/03/2021

Dr Rajashree V Bothale, Mr. Sharukh Wasay, Dr. Neeti,	Higher Education in Geoinformatics: Opportunities and Challenge	07/04/2021
Shri. P.L. N. Raju	Geospatial applications of Unmanned Aerial Vehicles	15/04/2021
Mr. Rakesh Verma and Mr. Rakesh Mathur	Technological Developments and Career Opportunities in Geospatial Industry	28/04/2021
Dr Neeti and Mr. Raj Bhagat Palanichamy	Machine Learning for Spatial Data Analysis	05/05/2021
Dr Rakesh Paliwal and Dr Gautam Talukdar	Geospatial technology for LULC and biodiversity studies	21/05/2021

Ms Aparajita Tyagi and Ms. Shreya Khurana (Alumni)	Careers in the corporate sector after M.Sc. Economics from TERI-SAS	23/03/2021
Dr. Ishita Chatterjee, Senior Lecturer, UWA Business School (Economics), University of Western	Intergenerational Transmission of Educational Attainment in China	06/04/2021
Dr. Deepak Singhania, Senior Fellow, EPoD India at LEAD at Krea University	Does Revolution Work? Evidence from the Birth of Nepal's Federal Democracy	20/04/2021
Ms. Anmol Sehgal and Ms.Swati Asnani (Alumni)	Careers in Research after M.Sc. Economics	24/04/2021
Dr Devinder Sharma	"Agrarian Crisis, Sustainable Development and Contemporary Farm Policies in India"	16/04/2021
Ms Carina Lindberg	"Policy Coherence and Governance for Sustainable Development	07/05/2021

Hon'ble Mr. Justice A.K Sikri, Former Judge, Supreme Court of India, International Judge Singapore International Commercial Court. 2. Hon'ble Mr. Justice Sanjeev Sachdeva, Judge High Court of Delhi. 3. Mr. Amarjit Singh Chandhiok, Sr. Advocate Former Additional Solicitor General of India, President Maadhyam 4. Mr. Shri Prakash, Distinguished Fellow, TERI	Panel Discussion on Emerging trends in Mediation: Challenges and Opportunities in collaboration with Maadhyam	18/07/2020
Mr Hitesh Sablok, Lead Legal at Eden Renewables India	'Role of an In-house Counsel in the Renewable Energy Sector	21/10/2020
Mr Abhayraj Naik	Lecture on Opportunities and Challenges for an Environment Law Practitioner	30/09/2020
Justice Ms. Prathiba M Singh, Judge High Court of Delhi	72nd Constitution Day Lecture	26/11/2020

Research Projects at TERI SAS

Statement of Ongoing projects for the financial year 2020-2021				
S.No	Sponsor's Name	Title of the projects	Project Status	Project Investigator
1	Ministry of Human Resourse & Development (MHRD)	Energy Storage - Centre of Excellence	Ongoing	Dr. Som Mondal, Dr. Atul Kumar, Dr. Basudeb Prasad
2	Indian Council of Social Science Research (ICSSR)	Impact Analysis pf the Arunachal Pradesh Panchayati Raj Act 1997 on Traditional Institution in the State	Ongoing	Dr. M P Ram Mohan
3	Government of Arrunachal Pradesh	Preparation of the State Specific Action Plan for Water Sector	Ongoing	Dr. Vinay Shankar Prasad Sinha
4	Science and Engineering Research Board (SERB)	Understanding the role of MIR160 and AUXIN RESPONSE FACTORS in establishment of root system archietcture for improvement of crop Brassicas.	Ongoing	Dr. Anandita Singh
5	Department of Biotechnology (DBT)	Department of CMS /RF System in Bhut Jolokia using marker assisted selection	Ongoing	Dr. Shashi Bhushan Tripathi

6	Indian Council of Social Science Research (ICSSR)	Urban Transition beyond Municipal Boundaries : A Comparative Spatial Analysis of the PERI-Urban Areas of Gurugram and Noida	Ongoing	Dr. Bhawna Bali
7	Department of Atomic Energy (BRNS)	Spatial Distribution of Uranium and associated water quality parameters in five districts of UP	Ongoing	Dr. Chander Kumar Singh
8	Department of Biotechnology (DBT)	Collection, evaluation, documentation and conservation of banana genetic resources from north eastern region	Ongoing	Dr. Shashi Bhushan Tripathi
9	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	Ongoing	Dr. Anandita Singh
10	Science and Engineering Research Board (SERB)	Gene regulation by DNA methylation in Bacillus anthracis (Sterne)	Ongoing	Dr. Ramakrishnan Sitaraman

11	Indian Council of Medical Research (ICMR)	Structural characterization of a non-specific acid phosphatase HppA from <i>Helicobacter pylori</i>	Ongoing	Dr. Chaitanya Madhurantakam
12	The Indira Gandhi National Centre for the Arts, (IGNCA) New Delhi	Paddy Growing Culture of the Ao-Naga Tribe and Climate Change	Ongoing	Dr. Chubamenla Jamir
13	Central Pollution Control Board (CPCB)	Air Quality Impact on Transport Choices (A-QUIT)	Ongoing	Dr. Deepty Jain
14	National Mission on Himalayan Studies (NMHS)	Water Resources Management through Spring and Catchment Rejuvenation in Uttarakhand for Improving Water Security	Ongoing	Dr. Vinay Shankar Prasad Sinha
15	Department of Science and Technology (DST)	Scalable synthesis of starch nanoparticles based adhesive/consolidants for conservation of cellulose based heritage objects	Ongoing	Dr. Udit Soni
16	Space Application Centre, ISRO	Space Technology Utilisation for Food Security, Agricultural Assessment and Monitoring (SUFALAM)	Ongoing	Dr. Neeti Sinha

17	Indian Council Of Medical Research	Prevalence, Procreation, Persecution and Prevention regarding Caesarean-Section Deliveries/Birth in South Asia : A Systematic Review and Meta Analysis	Ongoing	Dr. Chandan Kumar
18	TERI	Solar dryer based self- employment model for rural tribal communities, women and differently-abled persons	Ongoing	Dr. Som Mondal
19	Department of Science and Technology (NGP) Division, Government of India	Solutions for Indoor Tracking and Navigation for Urban Governance	Ongoing	Dr. Abhijit Datey
20	Department of Science and Technology & IIT, Kharagpur	Demonstration of sustainable mitigation of groundwater arsenic in arsenic- polluted Gangetic River aquifers of Bihar, Uttar Pradesh and West Bengal, India-Tribute Ganga	Ongoing	Dr. Chander Kumar Singh
21	KPS India Pvt. Ltd.	Scoping Assessment in Madhya Pradesh	Ongoing	Dr. Chumamenla Jamir

22	Dhupar Brothers Trading Pvt. Ltd.	Vetting of Illuminance Design Simulation for a Football Field	Ongoing	Dr. Aviruch Bhatia and Dr. Shaleen Singhal
23	Chulalongkorn University	Development of a framework for the local implementation of the SDG's - Phase II	Ongoing	Dr. Smriti Das
24	Department of Science and Technology	SARASWATI 2.0 - Identifying best available technologies for decentralized wastewater treatment and resource recovery for India	Ongoing	Dr. Sukanya Das
25	Societe Generale Securities India (P) Limited	Societe Generale - TERI SAS - Research Sponsorship Program	Ongoing	Dr. Gopal Sarangi and Dr. Sapan Thapar
26	Department of Science and Technology & Uttrakhand State Council for Science and Technology	Water Energy Food Nexus (WEFN) Through Solar-Green House Based Hydroponic Solutions with Android Mobile Application of Vegetable Market for Rural farmers and Urban Users	Ongoing	Dr. Shashi Bhushan Tripathi, Dr. Vinay Sinha and Dr. Som Mondal

27	CICERO Senter for Klimaforskning (Center for International Climate Research)	India's ambitions and possibilities of becoming a global green leader (INDGREEN)	Ongoing	Dr. Atul Kumar, Dr. Sapan Thapar and Dr. Manish Kumar Srivastava
28	TERI	Climate Risk Assessment of the Proposed Petrochemical Complex in Mundra, Gujarat	Ongoing	Dr. Vinay Shankar Prasad Sinha
29	Centre For Ecology & Hydrology, United Kingdom	Forest Impacts on Nitrogen Pollution	Ongoing	Dr. Sudipta Chatterjee
30	Centre For Ecology & Hydrology, United Kingdom	Forest Impacts on Nitrogen Pollution	Ongoing	Dr. Smriti Das
Statement of Completed projects for the financial year 2020-2021				
S.No	Sponsor's Name	Title of the projects	Project Status	Project Investigator
1	Department of Biotechnology (DBT)	Structural studies on proteins involved in synthesis and processing of mycolic acids in Mycobacterium tuberculosis	Completed	Dr. Chaithanya Madhurantakam

2	Ministry Of Housing and Urban Affairs	Impact of Urban Infrastructure Schemes on Mitigation of Greenhouse Gas Emissions	Completed	Dr. Atul Kumar
3	I Am Gurgaon, Gurugram	Blue Green Interventions for addressing flooding between Sectors 56 and 26 in Gurugram	Completed	Ms. Ranjana Ray Chaudhuri, Dr. Fawzia Tarannum and Dr. Sherly MA
4	The DHAN Academy	Engaging DoWRS for content development and training on 'Land based water pollution'	Completed	Dr. Fawzia Tarannum
5	AUBURN University	Rejuvenating the Ganga: Investigating the Potential for Decentralized Institutions, Technologies and Governance to Meet the Wastewater Challenge	Completed	Dr. Sukanya Das
6	University of Leeds	Success stories in urban climate action : Building the economic evidence base (the "Project") World Resources Institute-funded research project	Completed	Dr. Abhijit Datey

Recruiters at TERI SAS

ANCF
Applied Environmental Research Foundation (AERF)
APRAAVA Energy
APTE & DHARAP ASSOCIATES
CABE Foundation
CEEW
Centre for Social Research
Chaayos
Chola MS Risk Services Limited
Chubb
CRISIL Limited
CSC Academy
Cushman & Wakefield
Dakshin Foundation
Earthwatch India
EGROW Foundation
Enviro Legal Defence Firm
Exigent Group Limited
EY
Free Lancer
Galytix Analytics pvt ltd
Galytix Analytics Pvt. Ltd
GICIA Pvt.Ltd
GIZ
Grail Insights
Grant Thornton
HCL Foundation
Heights Inc.
ICLEI South Asia
IDAM Infrastructure advisory Pvt. Ltd.
IDinsight
IHS Markit
India Infrastructure Publishing
Indian Express
Indian School of Business
Instituitonal Shareholder Services (ISS-ESG)
Intellectap
IQVIA

J.M. EnviroNet Pvt. Ltd.
JITF ecopolis
jolt india electric
Kantar
KPMG Assurance and Consulting Services LLP
KPMG Global Services
KPMG India
Manikaran Analytics Limited
Microenergy Credits
MTX
Namdhari Eco Energies Pvt Ltd
NCCI
ODISHA BRIDGE & CONSTRUCTION CORPORATION LIMITED
pManifold business consulting Pvt Ltd
PPAP automotive
Prism Johnson Limited
Punjab Remote Sensing Centre
Research and Information System for Developing Countries
Royal HaskoningDHV- India
Rural development department Ladakh
SG Analytics
Shahi Exports Pvt Ltd
SMEC INDIA PVT LTD
Sociometrik
STENUM Asia
TATA power
TERI School of Advanced Studies
THE ENERGY AND RESOURCES INSTITUTE
The Nature Conservancy
Think through Consulting
TRIFED, Ministry of Tribal Affairs
Veolia India Private Limited
WSP India
Xceedance
Xeam Ventures

List of Publications

Author	Year	Title_of_work	Journal name	digital_object_identifier_doi	Current Status
Deepty Jain and Shikha Singh	2021	Adaptation of trips by metro rail users at two stations in extreme weather conditions: Delhi	Urban Climate	https://doi.org/10.1016/j.uclim.2020.100766	Published
Rohit Sharma, Kamna Sachdeva, and Anu R Sharma	2021	Variations of Surface Ozone levels in Urban area of India: a focus on night-time residual concentrations	EQA - International Journal of Environmental Quality	https://doi.org/10.6092/issn.2281-4485/10809	Published
Lokesh Chandra Dube, J.V.Sharma and Sudipta Chatterjee	2021	Carbon Finance for Community Forestry: National or Reality ?	Indian Forester	DOI: 10.36808/if/2021/v147i1/154879	Published
Shantanu De Roy and C. Saratchand	2021	Covid-19 and some contours of India's ongoing agrarian crisis	Human Geography	https://doi.org/10.1177%2F1942778620985194	Published
L. N. Venkataraman	2021	The Social Construction of Capabilities in a Tamil Village			Published
Deepty Jain, Smriti Bhatnagar, Vanshika Rath, Divyansh Sharma, Kamna Sachdeva	2021	Mainstreaming Built Environment for Air Pollution Management Plan in Delhi	Economic & Political weekly		Published
Seema Sangita	2021	Higher Education, Vocational Training and Performance of Firms	Margin—The Journal of Applied Economic Research		Published
Ranjana Ray Chaudhuri & Prateek Sharma	2021	An integrated stochastic approach for extreme rainfall analysis in the National Capital Region of India	Journal of Earth System Science		Published
Aaina Dutta & Sukanya Das	2021	Transition Of Solar Power In Jammu And Kashmir			Published
Rainer Quitzow, German Bersalli, Laima Eicke, Joschka Jahn, Johan Lilliestam, Flavio Lira, Adela	2021	The COVID-19 crisis deepens the gulf between leaders and laggards in the global energy transition	Energy Research & Social Science	https://doi.org/10.1016/j.erss.2021.101981	Published

Marian, Diana Susser, Sapan Thapar, Silvia Weko, Stephen Williams and Bing Xue					
Sanchi Singh and Sudipto Chatterjee	2021	Provisioning Ecosystem Services of Rhododendron- Rich Forests in the Western Himalayas†	Environmenta l Sciences Proceedings	https://doi.org/10.3390/IECF2020-08070	Published
Naveen Agarwal and Naqui Anwer	2021	Exploring the impact of cross subsidy on growth of renewable energy generation capacity in India	Interdisciplina ry Environmenta l Review	https://doi.org/10.1504/IER.2020.112592	Published
P.Tandale, Neeraj Choudhary, Joga Singh, Akanksha Sharma, Ananya Shukla, Pavani Sriram Udit Soni, Neha Singla, Ravi P.Barnwal, Gurpal Singh, Indu Pal Kaur and Ashish Suttee	2021	Fluorescent quantum dots: An insight on synthesis and potential biological application as drug carrier in cancer	Biochemistry and Biophysics Reports	https://doi.org/10.1016/j.bbrep.2021.100962	Published
Kavita Sardana, John C. Bergstrom and J. M. Bowker	2021	Effects of Ad-hoc Data Truncation and Homogeneous Preferences on Recreational Demand and Values: An Application to the George Washington and Jefferson National Forests	Journal of Agricultural and Applied Economics	https://doi.org/10.1017/aae.2020.30	Published
Abhijit Datey, Bhawna Bali, Neha Bhatia, Leishipe m Khamrang, Sohee Minsun Kim	2021	A gendered lens for building climate resilience: Narratives from women in informal work in Leh, Ladakh	Gender, Work and Organization	https://doi.org/10.1111/gwao.12667	Published
Kavita Sardana	2021	Double truncation in choice-based sample: An application of on- site survey sample	Economics Bulletin		Published
Prashant Kumar	2021	Mapping the triple	Health &	https://doi.org/10.1016/j.healthplace.2021.	Published

Singh, Nishikant Singh Pankhuri Jain Pallavi Sinha Chandan Kumar, cLucky Singh Ankur Singh,Amit Yadav,Yatan Pal Singh Balhara Shekhar Kashyap Shalini Singhi S.V.Subramanian		burden of smoking, smokeless tobacco and alcohol consumption among adults in 28,521 communities across 640 districts of India: A sex- stratified multilevel cross-sectional study	Place	102565	
Vinay Kumar Tyagi, Aparna Kapoor, Pratham Arora, J. Rajesh Banu, Sukanya Das, Shubham Pipesh,A.A.Kazmi a	2021	Mechanical- biological treatment of municipal solid waste: Case study of 100 TPD Goa plant, India	Journal of Environmenta l Management	https://doi.org/10.1016/j.jenvman.2021.112741	Published
Sunakshi Budhiraja, Sukanya Das and Badri Narayanan Gopala Krishnan	2021	Water Footprint and Virtual Water Trade of Cash Crops		DOI: 10.4018/978-1-7998-4990-2	Published
Diya Dasgupta,Gopal K.Sarangi	2021	Meeting India's Electricity Demand in 2030	Energy and Climate Change	https://doi.org/10.1016/j.egycc.2021.100038	Published
Manipadma Datta and Shinu Vig	2021	The impact of corporate governance on sustainable value creation: A case of selected Indian firms	Journal of Sustainable Finance & Investment	https://doi.org/10.1080/20430795.2021.1923337	Published
Amit Pandey, Kavita Sardana, Sandeep Kumar Gupta	2021	Developing a framework for sacred grove management using stakeholder analysis: evidence from sacred groves in Gujarat, India	Benchmarking : An International Journal	https://doi.org/10.1108/BIJ-11-2020-0599	Published
Swati Kwatra, Archana Kumar, Sumit Sharma, Prateek Sharma	2021	Stakeholder participation in prioritizing sustainability issues at regional level using analytic hierarchy process (AHP) technique: A case study of Goa,	Environmenta l and Sustainability Indicators	https://doi.org/10.1016/j.indic.2021.100116	Published

		India			
Birinchi Bora, Som Mondal, B.Prasad,O.S.Sast ry, M.Bangar, A.K.Tripathi, Chandan Banerjee	2021	Accelerated stress testing of potential induced degradation susceptibility of PV modules under different climatic conditions	Solar Energy	https://doi.org/10.1016/j.solener.2021.05.020	Published
Souryadeep Basak & Aviruch Bhatia	2021	Application of Global Sensitivity Analysis to Building Performance Simulations for Screening Influential Input Parameters in a Humid Coastal Climate		https://doi.org/10.1007/978-981-16-0235-1_78	Published
Shashi Bhushan Tripathi, Gayaprasad Jatav, Anoop Anand Malik, Shrikant Joshi, Vivek Kumar Singh, Madan Singh Negi, Laxmi Chauhan, Shyam Sundar Sharma	2021	AFLP markers based genetic diversity and population structure analysis of Kadaknath: an indigenous black meat poultry breed of India	Animal Biotechnology	https://doi.org/10.1080/10495398.2020.1865390	Published
Sachin Kumar & Prateek Sharma	2021	Adoption of cleaner production innovations by micro, small and medium enterprises: lessons from the clay-fired brick manufacturing sector in India	International Journal of Management and Enterprise Development	https://doi.org/10.1504/IJMED.2021.113645	Published
Divya Jain.,Gopal Sarangi.,Sukanya Das	2021	Effects of Climate change on electricity demand in India- Case of three different climate zones			Published
Divya Jain.,Gopal Sarangi.,Sukanya Das	2021	Effects of Climate change on electricity demand in India- Case of three different climate zones			Published
Shivanshu Sharma and Naqui Anwer	2021	Electric Vehicles Adoption In India: A Comparative Data			Published

		Analysis of Different States			
Swati Singh & Shresth Tayal	2021	Managing food at urban level through water–energy–food nexus in India: A way towards holistic sustainable development	Environment, Development and Sustainability	https://doi.org/10.1007/s10668-021-01580-0	Published
Andrew Sudmant, Vincent Viguie, Quentin Lepetit, Lucy Oates, Abhijit Datey, Andy Gouldson and David Watling	2021	Fair weather forecasting? The shortcomings of big data for sustainable development, a case study from Hubballi-Dharward, India	Sustainable Development	https://doi.org/10.1002/sd.2221	Published
Nandan Nawn	2021	Can an Indian university occupy a top spot in global rankings?			Published
Snigdha Goel, Arun Kansal and Stephan Pfister	2021	Sourcing phosphorus for agriculture: Life cycle assessment of three options for India	Resources, Conservation and Recycling	https://doi.org/10.1016/j.resconrec.2021.105750	Published
	2021			https://doi.org/10.1177/09722661211020232	Published
Gopal K. Sarangi, Abhilas Kumar Pradhan and Farhad Taghizadeh-Hesary	2021	Performance assessment of state-owned electricity distribution utilities in India	Economic Analysis and Policy	https://doi.org/10.1016/j.eap.2021.06.005	Published
Megha Gupta, Dr Fawzia Tarannum, Dr Mansee Bal Bhargava	2021	WednesdaysForWater#: Pollution, climate change 'impacting' oceanic life, livelihood			Published
Asif Nazar, Naqui Anwer	2021	Performance Analysis of Analytical Tools in the Techno-Economic Assessment of Electrical Energy Storage and Grid Balancing	International Journal of Engineering Trends and Technology		Published
Qazi Syed Wamiq Ali, Shashank Pandey, Ranjana	2021	Development of rainfall-infiltration measurement	Modeling Earth Systems and	https://doi.org/10.1007/s40808-020-01050-y	Published

Ray Chaudhuri, Suman Behera and Lordwin Jeyakumar		system and recharge strategies for urban flooding areas: a case study of Delhi, India	Environment		
Madhuri Nanda and Arun Kansal	2021	Pathways for sustainable phosphorus loop in Germany: Key lessons from stakeholders' perspectives	Current Research in Environmenta l Sustainability	https://doi.org/10.1016/j.crsust.2021.100062	Published
Asif Nazar and Naqui Anwer	2021	Electrical Energy Storage Influencing Shift in Grid Balancing Approach		https://doi.org/10.1007/978-981-16-1186-5_7	Published
Neeti Neeti, Arun Murali C.M.,V.M.Chowda ry, N.H.Rao, Mohit Kesarwani	2021	Integrated meteorological drought monitoring framework using multi-sensor and multi-temporal earth observation datasets and machine learning algorithms: A case study of central India	Journal of Hydrology	https://doi.org/10.1016/j.jhydrol.2021.126638	Published
Naveen Agarwal, Naqui Anwer and Gopal K. Sarangi	2021	Impact Assessment of Cross-Subsidy Surcharge on Electricity Demand in Short-Term Power Market in India		https://doi.org/10.1007/978-981-16-1186-5_4	Published
Dharmesh Kumar Singh and Shresth Tayal	2021	Assessment of regional water demand for coal- based power plants in India: exploring its regional impact on other cross- sectoral water stress	Environmenta l Monitoring and Assessment	https://doi.org/10.1007/s10661-021-09298-2	Published
Sukanya Das, M.N. Murty and Kavita Sardana	2021	Using Economic Instruments to Fix the Liability of Polluters in India: Assessment of the Information Required and Identification of Gaps	Ecology, Economy and Society-the INSEE Journal	https://doi.org/10.37773/ees.v4i2.363	Published

	2021			https://doi.org/10.37773/ees.v4i2.523	Published
Adriano Vinca, Simon Parkinson, Keywan Riahi, Edward Byers, Afreen Siddiqi, Abubakr Muhammad, Ansir Ilyas, Nithiyandam Yogeswaran, Barbara Willaarts, Piotr Magnuszewski, Muhammad Awais, Andrew Rowe & Ned Djilali	2021	Transboundary cooperation a potential route to sustainable development in the Indus basin	Nature Sustainability	https://www.nature.com/articles/s41893-020-00654-7	Published
Saif Khan, Pallavi Somvanshi, Aditi Singh, Mahvish Khan, Raju K. Mandal, Sajad A. Dar, Mohd Wahid, Arshad Jawed, Bhartendu Nath Mishra & Shafiul Haque	2021	Potency of inhibitors depends upon the accessibility of their aromatic rings within the hydrophobic specificity pocket: a novel avenue for future aldose reductase inhibitor design	Journal of Biomolecular Structure and Dynamics	https://doi.org/10.1080/07391102.2020.1733090	Published
Prakashan Chellattan Veettil, Prabhakaran T. Raghu and Arathy Ashok	2021	Information quality, adoption of climate-smart varieties and their economic impact in flood-risk areas	Environment and Development Economics	https://doi.org/10.1017/S1355770X20000212	Published
Ahmed M.Z., Muteeb G., Khan S., Alqahtani A.S., Somvanshi P., Alqahtani M.S., Ameta K.L., Haque S.	2021	Identifying novel inhibitor of quorum sensing transcriptional regulator (SdiA) of Klebsiella pneumoniae through modelling, docking and molecular dynamics simulation	Journal of Biomolecular Structure and Dynamics	doi: 10.1080/07391102.2020.1767209	Published
Ram Kumar Singh, Vinay Shankar Prasad Sinha, Pawan Kumar Joshi &	2021	A multinomial logistic model-based land use and land cover classification for the South Asian	Environment, Development and Sustainability	https://doi.org/10.1007/s10668-020-00864-1	Published

Manoj Kumar		Association for Regional Cooperation nations using Moderate Resolution Imaging Spectroradiometer product			
Prabhat Upadhyaya, Manish Kumar Shrivastava, Ganesh Gorti, Saliem Fakir	2021	Capacity building for proportionate climate policy: Lessons from India and South Africa	International Political Science Review	https://doi.org/10.1177/0192512120963883	Published
Surindra Suthar Sukanya Das, Ajay Nagpure, Chaithany Madhurantakam, Satya Brat Tiwari, Pallavi Gahlot, Vinay Kumar Tyagi	2021	Epidemiology and diagnosis, environmental resources quality and socio-economic perspectives for COVID-19 pandemic	Journal of Environmental Management	https://doi.org/10.1016/j.jenvman.2020.111700	Published
Kamaljit S.Bawa, Asmita Sengupta, Vishwas Chavan, Ravi Chellam, R.Ganesan, Jagdish Krishnaswamy, Vinod B.Mathur, Nandan Nawn, Shannon B.Olsson, Nitin Pandit, Suhel Quader, Prabhakar Rajagopal, Uma Ramakrishnan, G.Ravikanth, Mahesh Sankaran, Darshan Shankar, Reinmar Seidler, R. Uma Shaanker, Abi Tamim Vanak	2021	Securing biodiversity, securing our future: A national Mission on biodiversity and human well-being for India	Biological Conservation	https://doi.org/10.1016/j.biocon.2020.108867	Published
Deepty Jain and Geetam Tiwari	2021	Travel Patterns in India: Association with Development and Development Pattern	Journal of Urban Planning and Development	https://doi.org/10.1061/(ASCE)UP.1943-5444.0000652	Published
Debanjali	2021	Sustainability	Clean	https://doi.org/10.1007/s10098-020-	Published

Dasgupta & Sukanya Das		performance of the Indian cement industry	Technologies and Environmental Policy	01998-6	
Chan, Sander and Boran, Idil and van Asselt, Harro and Ellinger, Paula and Garcia, Miriam and Hale, Thomas and Hermwille, Lukas and Mbeva, Kennedy and Mert, Aysem and Roger, Charles and Weinfurter, Amy and Widerberg, Oscar and Bynoe, Paulette and Chengo, Victoria and Cherkaoui, Ayman and Edwards, Todd and Gütschow, Malin and Hsu, Angel and Hultman, Nathan E. and Levai, David and Mihnar, Saffran and Posa, Sara and Roelfsema, Mark and Rudyk, Bryce and Scobie, Michelle and Shrivastava, Manish,	2021	Climate Ambition and Sustainable Development for a New Decade: A Catalytic Framework	Global Policy	https://doi.org/10.1111/1758-5899.12932	Published
Sonia Grover, Tayal S., Beldring S., Li H.	2021	Modeling Hydrological Processes in Ungauged Snow-Fed Catchment of Western Himalaya	Water Resources	https://doi.org/10.1134/S0097807820060147	Published
Sumedha Tayal and Sukanya Das	2021	Economic viability of marketing bio-methane: a case study in India to promote circular economy	Clean Technologies and Environmental Policy	https://doi.org/10.1007/s10098-021-02172-2	Published
Bhaskar Sharma,	2021	Genome-wide	Scientific	https://doi.org/10.1038/s41598-021-	Published

Harshita Saxena & Harshita Negi		analysis of HECT E3 ubiquitin ligase gene family in Solanum lycopersicum	Reports	95436-2	
Payam Sajadi, Yan-Fang Sang, Mehdi Gholamnia, Stefania Bonafoni, Luca Brocca, Biswajeet Pradhan and Amit Singh	2021	Performance Evaluation of Long NDVI Timeseries from AVHRR, MODIS and Landsat Sensors over Landslide-Prone Locations in Qinghai-Tibetan Plateau	Remote Sensing	https://doi.org/10.3390/rs13163172	Published
Ritu Rao	2021	With climate change, the need to conserve India's urban water bodies has become even more urgent			Published
Kumar P., Singh S.S., Pandey A.K., Singh R.K., Srivastava P.K., Kumar M., Dubey S.K., Sah U., Nandan R., Singh S.K., Agrawal P., Kushwaha A., Rani M., Biswas J.K., Drews M.	2021	Multi-level impacts of the COVID-19 lockdown on agricultural systems in India: The case of Uttar Pradesh	Agricultural Systems	https://doi.org/10.1016/j.agry.2020.103027	Published
Ahmad R., Nutan G.V., Singh D., Gupta G., Soni U., Sapra S., Srivastava R.	2021	Colloidal lead-free Cs ₂ AgBiBr ₆ double perovskite nanocrystals: Synthesis, uniform thin-film fabrication, and application in solution-processed solar cells	Nano Research	https://doi.org/10.1007/s12274-020-3161-6	Published
Mallick J., Kumar A., Almesfer M.K., Alsubih M., Singh C.K., Ahmed M., Khan R.A.	2021	An index-based approach to assess groundwater quality for drinking and irrigation in Asir region of Saudi Arabia	Arabian Journal of Geosciences	https://doi.org/10.1007/s12517-021-06506-8	Published
Chaudhary R., Nain P., Kumar A.	2021	Temporal variation of leachate pollution index of Indian landfill sites and associated human health risk	Environmental Science and Pollution Research	https://doi.org/10.1007/s11356-021-12383-1	Published

AlSubih M., Kumari M., Mallick J., Ramakrishnan R., Islam S., Singh C.K.	2021	Time series trend analysis of rainfall in last five decades and its quantification in Aseer Region of Saudi Arabia	Arabian Journal of Geosciences	https://doi.org/10.1007/s12517-021-06935-5	Published
Priya A., Dureja P., Rath R., Lal B.	2021	Comparative assessment of separation techniques for downstream processing of 2,3- Butanediol	Fuel	https://doi.org/10.1016/j.fuel.2021.120351	Published
Mallick J., Almesfer M.K., Singh V.P., Falqi I.I., Singh C.K., Alsubih M., Kahla N.B.	2021	Evaluating the ndvi– rainfall relationship in bisha watershed, saudi arabia using non-stationary modeling technique	Atmosphere	https://doi.org/10.3390/atmos12050593	Published
Patel S., Kannan D.C.	2021	A method of wet algal lipid recovery for biofuel production	Algal Research	https://doi.org/10.1016/j.algal.2021.102237	Published
Anwer R., AlQumaizi K.I., Haque S., Somvanshi P., Ahmad N., AlOsaimi S.M., Fatma T.	2021	Unravelling the interaction of glipizide with human serum albumin using various spectroscopic techniques and molecular dynamics studies	Journal of Biomolecular Structure and Dynamics	10.1080/07391102.2019.1711195.	Published
Singh R.K., Drews M., De la Sen M., Srivastava P.K., Trisasongko B.H., Kumar M., Pandey M.K., Anand A., Singh S.S., Pandey A.K., Dobriyal M., Rani M., Kumar P.	2021	Highlighting the compound risk of COVID-19 and environmental pollutants using geospatial technology	Scientific Reports	https://doi.org/10.1038/s41598-021-87877-6	Published
Mallick J., Singh C.K., Almesfer M.K., Singh V.P., Alsubih M.	2021	Groundwater quality studies in the kingdom of saudi arabia: Prevalent research and management dimensions	Water (Switzerland)	https://doi.org/10.3390/w13091266	Published
Bora B., Sastry O.S., Kumar R.,	2021	Failure Mode Analysis of PV	IEEE Journal of	10.1109/JPHOTOV.2020.3043847	Published

Dubey R., Chattopadhyay S., Vasi J., Mondal S. and Prasad B.		Modules in Different Climatic Conditions	Photovoltaics		
Svensson J., Ström J., Honkanen H., Asmi E., B. Dkhar N., Tayal S., P. Sharma V., Hooda R., Leppäranta M., Jacobi H.-W., Lihavainen H. and Hyvärinen A.	2021	Deposition of light-Absorbing particles in glacier snow of the sunderdhunga valley, the southern forefront of the central Himalayas	Atmospheric Chemistry and Physics	https://doi.org/10.5194/acp-21-2931-2021	Published
Prasad S., Saluja R., Joshi V. and Garg J.K.	2021	Riverine landscape dynamics of the Upper Ganga River (Haridwar-Narora), India	Environmental Monitoring and Assessment	https://doi.org/10.1007/s10661-021-08868-8	Published
Dangi N. and Narula S.A.	2021	Sharing economy approach for the development of the organic food market in India	Management of Environmental Quality: An International Journal	https://doi.org/10.1108/MEQ-03-2020-0060	Published
Ewim D.R.E., Oyewobi S.S., Dioha M.O., Daraojimba C.E., Oyakhire S.O. and Huan Z.	2021	Exploring the perception of Nigerians towards nuclear power generation	African Journal of Science, Technology, Innovation and Development	https://doi.org/10.1080/20421338.2021.1930848	Published
Dalal R., Bansal K. and Thapar S.	2021	Bridging the energy gap of India's residential buildings by using rooftop solar PV systems for higher energy stars	Clean Energy	https://doi.org/10.1093/ce/zkab017	Published
Alqadhi S., Mallick J., Balha A., Bindajam A., Singh C.K. and Hoa P.V.	2021	Spatial and decadal prediction of land use/land cover using multi-layer perceptron-neural network (MLP-NN) algorithm for a semi-arid region of Asir, Saudi Arabia	Earth Science Informatics	https://doi.org/10.1007/s12145-021-00633-2	Published
Naudiyal N. and Schmerbeck J.	2021	Potential distribution of oak forests in the central Himalayas and implications for	Ecosystem Services	https://doi.org/10.1016/j.ecoser.2021.101310	Published

		future ecosystem services supply to rural communities			
Pande G., Selvakumar S., Ciotonea C., Giraudon J.-M., Lamonier J.-F. and Batra V.S.	2021	Modified red mud catalyst for volatile organic compounds oxidation	Catalysts	https://doi.org/10.3390/catal11070838	Published
Singh S. and Singh A.	2021	A prescient evolutionary model for genesis, duplication and differentiation of MIR160 homologs in Brassicaceae	Molecular Genetics and Genomics	https://doi.org/10.1007/s00438-021-01797-8	Published
Kumar M., Kalra N., Singh H., Sharma S., Singh Rawat P., Kumar Singh R., Kumar Gupta A., Kumar P. and Ravindranath N.H.	2021	Indicator-based vulnerability assessment of forest ecosystem in the Indian Western Himalayas: An analytical hierarchy process integrated approach	Ecological Indicators	https://doi.org/10.1016/j.ecolind.2021.107568	Published
Pusapati C., Manoharakrishna n M., Phillott A.D. and Shanker K.	2021	Effect of Hatchery Nest Environment on Olive Ridley (Lepidochelys olivacea) Hatchling Performance	Chelonian Conservation and Biology	https://doi.org/10.2744/CCB-1450.1	Published
Singh C.K., Kumar A., Shashtri S., Kumar A., Mallick J., Singh A., Avtar R., Singh R.P., Kumar P. and Ranjan S.	2021	Geochemical modeling to infer genetic origin of groundwater and associated health risks in desertic aquifers	Groundwater for Sustainable Development	https://doi.org/10.1016/j.gsd.2021.100569	Published
Sirohi P.R., Kumari A., Admane N., Somvanshi P. and Grover A.	2021	The polyphenolic phytoalexin polydatin inhibits amyloid aggregation of recombinant human prion protein	RSC Advances	10.1039/d1ra01891d	Published
Bhatt A.G., Kumar A. and Trivedi P.R.	2021	Integration of multivariate statistics and water quality indices to evaluate groundwater quality and its suitability in	SN Applied Sciences	https://doi.org/10.1007/s42452-021-04394-x	Published

		middle Gangetic floodplain, Bihar			
Kumari A., Shrivastava N., Mishra M., Somvanshi P. and Grover A.	2021	Inhibitory mechanism of an antifungal drug, caspofungin against amyloid β peptide aggregation: Repurposing via neuroinformatics and an experimental approach	Molecular and Cellular Neuroscience	10.1016/j.mcn.2021.103612	Published
Cordell D., Dominish E., Esham M., Jacobs B. and Nanda M.	2021	Adapting food systems to the twin challenges of phosphorus and climate vulnerability: the case of Sri Lanka	Food Security	https://doi.org/10.1007/s12571-020-01118-8	Published
Bhatnagar P., Sreekanth G.P., Murali-Krishna K., Chandele A. and Sitaraman R.	2021	Dengue Virus Non-Structural Protein 5 as a Versatile, Multi-Functional Effector in Host–Pathogen Interactions	Frontiers in Cellular and Infection Microbiology	10.3389/fcimb.2021.574067	Published
Balha A., Mallick J., Pandey S., Gupta S. and Singh C.K.	2021	A comparative analysis of different pixel and object-based classification algorithms using multi-source high spatial resolution satellite data for LULC mapping	Earth Science Informatics	https://doi.org/10.1007/s12145-021-00685-4	Published
Kamboj S. and Rana S.	2021	Big data-driven supply chain and performance: a resource-based view	TQM Journal	https://doi.org/10.1108/TQM-02-2021-0036	Published
Shivhare V., Gupta C., Mallick J. and Singh C.K.	2021	Geospatial modelling for sub-watershed prioritization in Western Himalayan Basin using morphometric parameters	Natural Hazards	https://doi.org/10.1007/s11069-021-04957-6	Published
Pramanick N., Acharyya R., Mukherjee S., Mukherjee S., Pal I., Mitra D. and Mukhopadhyay A.	2021	SAR based flood risk analysis: A case study Kerala flood 2018	Advances in Space Research	https://doi.org/10.1016/j.asr.2021.07.003	Published

Ashraf M., Arshad A., Patel P.M., Khan A., Qamar H., Siti-Sundari R., Ghani M.U., Amin A. and Babar J.R.	2021	Quantifying climate-induced drought risk to livelihood and mitigation actions in Balochistan	Natural Hazards	10.1007/s11069-021-04913-4	Published
Rajput V.S., Sharma R., Kumari A., Vyas N., Prajapati V. and Grover A.	2021	Engineering a multi epitope vaccine against SARS-CoV-2 by exploiting its non structural and structural proteins	Journal of Biomolecular Structure and Dynamics	10.1080/07391102.2021.1924265.	Published
Alemu Z.A., Dioha E.C. and Dioha M.O.	2021	Hydro-meteorological drought in addis ababa: A characterization study	AIMS Environmental Science	10.3934/environsci.2021011	Published
Alhobeira H.A., Al Mogbel M., Khan S., Khan M., Haque S., Somvanshi P., Wahid M. and Mandal R.K.	2021	Prioritization and characterization of validated biofilm blockers targeting glucosyltransferase C of Streptococcus mutans	Artificial Cells, Nanomedicine and Biotechnology	10.1080/21691401.2021.1903021	Published
Sharma R., Sachdeva K. and Sharma A.R.	2021	Assessment of Synergistic Impact of Ambient Surface Ozone and Fine Particulate Matter on Experimentally Grown Wheat Crop	Asian Journal of Atmospheric Environment	https://doi.org/10.5572/ajae.2020.080	Published
Sarkar S.	2021	Auctions, negotiation and winner's curse in coal mining in India	International Journal of Management Practice	10.1504/IJMP.2021.10033340	Published
Sharma D., Khandekar N. and Sachdeva K.	2021	Exploratory agent-based model to understand migration scenarios: a study from the Indian Himalayan Region, Uttarakhand	Development in Practice	https://doi.org/10.1080/09614524.2020.1801583	Published
Shagun, Lloyd H.C.Chua and Arun Kansal	2021	Modeling washoff in temperate and tropical urban catchments	Journal of Hydrology	https://doi.org/10.1016/j.jhydrol.2021.126951	Published
Sharma A., Kumari G., Singh H.P., Viral R.K., Sinha S.K. and Anwer N.	2021	Design of Energy Management System for Hybrid Power Sources		https://doi.org/10.1007/978-981-15-8815-0_18	Published

Sasidharan C. and Mondal S.	2021	Modelling and Optimization of Novel Solar Cells for Efficiency Improvement		https://doi.org/10.1007/978-981-15-9953-8_32	Published
Chadda V.M.	2021	Taxation and mandatory CSR in India: The perplexity persists		https://doi.org/10.1007/978-981-33-4076-3	Published
Sharma A., Singh H.P., Viral R.K. and Anwer N.	2021	An Overview of the Intelligent Control-Based Optimization Methods for Integrated Renewable Energy Sources		https://doi.org/10.1007/978-981-15-9938-5_39	Published
Rijhwani V., Sharma D., Khandekar N., Rathod R. and Govindan M.	2021	Gender dynamics and climate variability: Mapping the linkages in the Upper Ganga Basin in Uttarakhand, India			Published
Arijita Dutta and Montu Bose	2021	Policy Failure before COVID Pandemic and Options for the Government in Near Future			Published
Gopal K. Sarangi and Farhad Taghizadeh-Hesary	2021	Market-Led Energy Efficiency Transformation in India: A Deep Dive into the Perform, Achieve, Trade (PAT) Scheme		https://doi.org/10.1007/978-981-16-3599-1	Published
Ranjana Ray Chaudhuri, Prateek Sharma and Arun Kansal	2021	Reducing the water footprint of megacities in Asia: Addressing water reuse and groundwater recharge (case study of Delhi, India)		https://doi.org/10.4324/9781003093282	Published
Khanal, Ashish Sondhi, Akash and Giri, S.	2021	Use of personal protective equipment among waste workers of Sisdol landfill site of Nepal	International Journal of Occupational Safety and Health	https://doi.org/10.3126/ijosh.v11i3.39768	Published
Ritu Rao	2021	Bringing Traditional Wisdom, Modern Knowledge Together			Published

		to Ensure Water Security			
Rajender Singh Malik, Udit Soni, Sampat Singh Chauhan, Devendra Kumar and Veena Choudhary	2021	Semi-interpenetrating polymer networks of poly (vinyl alcohol)-functionalized nanocrystals/sulfonated poly (ether ether ketone) (PVA-FNCs/SPEEK) as fuel cell membrane	Materials Today Communications	https://doi.org/10.1016/j.mtcomm.2021.102897	Published
Ayushi Vijhanti, Vinay Shankar Prasad Sinha and Mini Govindan	2021	Assessing resource vulnerability quadrants under changing precipitation trends in Uttarakhand, Central Himalayan region	Journal of Mountain Science	https://doi.org/10.1007/s11629-021-6856-6	Published
Ritu Rao	2021	Najafgarh Jheel Has More To Offer Delhi and Haryana, if They Will Allow It			Published
Anoop Raj Singh and Neha Oli(Student)	2021	Development of vulnerability framework for assessing the air pollution-related health impacts in four districts of Delhi, India	Current Science	10.18520/cs/v120/i6/1092-1098	Published
Ahmed Ali Bindajam, Javed Mallick, Akanksha Balha, Saeed Al Qadhi, Ahmed Ali A. Sohan, Chander Kumar Singh and Atiqur Rahman	2021	Characterizing the Urban Decadal Expansion and Its Morphology Using Integrated Spatial Approaches in Semi-Arid Mountainous Environment, Saudi Arabia	Polish Journal of Environmental Studies	10.15244/pjoes/133033	Published
Lavkush Kumar Patel, Anwasha Sharma, Parmanand Sharma, Anushree Singh and Meloth Thamban	2021	Glacier area changes and its relation to climatological trends over Western Himalaya between 1971 and 2018	Journal of Earth System Science	https://doi.org/10.1007/s12040-021-01720-0	Published

Memorandum of Understanding (from July 2020-June 2021)

S.No	Name of Institution	From	to	Details of MoU	Facilitated by
1	Canvest Infracapital Inc., Canada	30-09-2020	29-09-2025	short-term education programs, joint projects, data analytics and technology entrepreneurship incubation centre etc.	Dr Arun Kansal
2	DHAN Academy, Tamil Nadu	16-10-2020	15-10-2023	research activities, joint experimentation, field studies, documentation, capacity building, etc.	Dr Arun Kansal
3	Centre for Public Policy Research, Kerala	20-01-2021		Collaborate on internship opportunities, student placement support, research projects and organising workshops and short term courses relevant to research projects	Dr Deepty Jain and Ms Ranjana Chaudhuri
4	Emerson Electric Co (I) Pvt. Ltd, Pune, Maharashtra	25-01-2021	24-01-2026	Collaboration on R&D activities, conduct of joint workshops, internship opportunity, conduct of expert lectures, etc.	Dr Kamna Sachdeva
5	National Bureau of Plant Genetic Resources	17-02-2021	16-02-2024	Promotion of students training and quality post-graduate research	Dr Shashi Bhushan Tripathi

Honorary Doctoral Degrees Awarded

Name	Designation
Dr Raghunath Anant Mashelkar	Chancellor of ICT, Mumbai, National Research Professor at the National Chemical Laboratory, President of Global Research Alliance, and Chairperson of the National Innovation Foundation of India.

Doctoral Degrees Awarded

Doctoral Degrees Awarded (July 1, 2020-June 30, 2021)		
Name	Supervisor	Thesis Title
Snehlata Tigala	Dr Kamna Sachdeva	Health impacts due to exposure to biomass combustion: A study over Karauli, Rajasthan
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
Saad Nazif Ahamad Faruqui	Dr Naqui Anwer	Performance evaluation of a novel transformerless Z-source solar photovoltaic multilevel inverter
Michael Obiora Dioha	Dr Atul Kumar	Modelling low carbon transition scenarios for Nigeria
Priyanka	Dr J V Sharma	Total economic valuation of ecosystem services provided by Sariska Tiger Reserve in Rajasthan
Anchala Kumari	Dr Pallavi Somvanshi	Studying the role of osmolytes and the repurposed drugs in amyloidogenesis
Roopam Shukla	Dr Kamna Sachdeva	Differentiated vulnerability and adaptation of Western Himalayan agriculture communities to climate change
Rohit Sharma	Dr Kamna Sachdeva	A study of Tropospheric Ozone and Aerosols over Delhi
Tanu Sri	Dr Anandita Singh	Study of Promotor Evolution in SOC1 homologs from Polyploid Brassica genomes
Varsha Bisht	Dr Banwari Lal	Developing bacterial and plant-based biofloculants for wastewater treatment

Ongoing Doctoral Research ¹

Ongoing Doctoral Research (July 1, 2020-June 30, 2021)			
S.No.	Name	Supervisor	Topic of Research
1	Nidhi Gautam	Dr Montu Bose	Emerging Perspectives In Indian Micro, Small And Medium Enterprises (Msmes) Sector With Special Reference To Textile Sector
2	Pradeep Vashisht	Dr Shresth Tayal	Assessing energy balance of high altitude glaciated basin in the North - Western Himalayas
3	Varsha Srivastava	Dr Malini Balakrishnan	Recovery of Bioactive Compounds (Phytochemicals) from Food Processing Waste
4	Md Ziauddin	Dr Shaleen Singhal	Evaluation of challenges and prospects of urban development:an exploratory research with special reforms to redevelopment in Delhi
5	Sahaj Kaur	Dr Sudipta Chatterjee	Lichen Conservation Areas (LCAs) for in situ conservation of lichen species preferred in trade in Uttarakhan, Western Himalayas
6	Sangeeta Agasty	Dr Fawzia Tarannum	Diffusion of cleaner production innovation in MSME sector in India: a study of Drivers and inhibitors in select sectors
7	Dharmesh Kumar Singh	Dr Shresth Tayal	Optimizing Resource use and Reducing Water Footprint of Electricity Generation in India
8	Lokesh Chandra Dube	Dr Sudipta Chatterjee	Assessing carbon and livelihood impacts of selected carbon forestry projects in India
9	N K Ram	Dr Atul Kumar	Experimental study of Hydrogen enrichment in producer gas through steam, air gasification route
10	Gp Capt A Shajahan	Dr Soumendu Sarkar Dr Sukanya Das (Internal Officiating Supervisor)	Employment of Aerospace Power in Disaster Response: An Analysis of Existing Framework in India
11	Vivek Kumar Singh	Dr Shashi Bhushan Tripathi	Development of cytoplasmic genic male sterile (CGMS) lines in Bhut Jolokia (Capsicum chinense x C. frutescens)
12	Anjulata Singh	Dr P M Reddy	Engineering the modulation signaling pathway in the Rice plant to promote rhizobial infection and nitrogen fixing

¹ The list is only of those students who have completed their comprehensive.

			symbiosis
13	Meenakshi Kumar	Dr Shaleen Singhal	Multifunctionality of urban green infrastructure for the competitive advantage of cities in India
14	I V Rao	Dr Prateek Sharma	Strategy for business sustainability of MSMEs in the Indian auto industry: Status and way forward
15	Sulaksha Shetty	Dr Manipadma Datta	A study on organisation and its leadership for sustainable development with particular reference to the Indian situation
16	Akanksha Balha	Dr C. K Singh	Runoff Modeling for present & future scenario: a case study of Delhi watershed
17	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
18	Tanya Sharma	Dr Prateek Sharma	Assessment of the nexus between built environment, travel behaviour, air quality, and human health to re-inform the transport system
19	Kamlesh Yadav	Dr Atul Kumar	Optimum Energy Utilization in Decentralized PV System
20	Renu	Dr Atul Kumar	Performance Modelling and Systematic Optimization of SPVWPS for different climatic zones for irrigation purpose in India
21	Lalit Sharma	Dr Suneel Pandey	Exploring Secondary resource Material (SRM) utilization potential in Indian Automotive Sector, originating from End-of-life Vehicles (ELV's) in National Capital - Delhi
22	Madhurima Waghmare	Dr Shaleen Singhal	Inclusive cities and creative habitats - Exploring the dynamics in context of the diverse Indian cities
23	Mary Abraham	Dr Gopal Sarangi	Impact of Mining Induced Landuse Landcover changes on livelihood
24	Rishika Singh	Prof Manipadma Datta	Public Participation in Decision Making; A case study of nuclear energy sector in India
25	Yogesh Tyagi	Dr Shaleen Singhal	An assessment of relationship between MRTS and real estate values: Case study of Delhi

26	Gurdeep Kaur	Dr P M Reddy	Development of transgenic rice lines resistant to sheath blight through modulation of lignin biosynthesis pathway genes
27	Swati Patel	Dr Dheeban Chakravarthi Kannan	Studies on commercial viability on microalgae Biofuel production
28	Himanshu Arora	Dr Naqui Anwer	A study on sustainability reporting process & practices of energy sector
29	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
30	Ayushi Vijhani	Dr Vinay S P Sinha	Assessing influence of climate change on water availability and distribution on vulnerable communities in Central Himalaya
31	Satyam Kushwaha	Dr Nithiyanandam Yogeswaran	Developing a spatial mitigation strategy to reduce urban heat island impact on urban habitat - A case study on Gurugram
32	Amit Jain	Dr Smriti Das	Locating Forest Community in Forest Governance: Cases of Two Villages from Jharkhand, India
33	Ashmeet Kaur	Dr Venkataraman L N	Education for Peace: Intersectional analysis of Curricular Debates in India
34	Pratibha Bisht	Dr Suneel Pandey	Evaluation of Traditional Knowledge and Biocultural Diversity of Nyishi Tribal Community for Sustainable Development in Arunachal Pradesh, India
35	Kirti Rawat	Dr Shashi Bhushan Tripathi	Characterization of Fusarium fujikuroi isolates causing Bakanae disease of basmati rice and its management through biocontrol agents
36	Paromita Das	Dr Vibha Dhawan	Ecosafety Studies of Bare and Modified Titania Nanomaterials used as Adsorbents and Photocatalysts for Efficient Waste Water Treatment
37	Preeti Rana	Dr Shashi Bhushan Tripathi (Officiating)	Conformational ensembles guided inhibition of prion aggregation
38	Neha	Dr Arun Kansal	Developing framework model for use of reclaimed water in urban areas to address increasing water demand

39	Soumendu Shekhar Roy	Dr Chander Kumar Singh	Defining the nature of metamorphism of the litho-units of Lesser Himalayas (Kumaon) using sensor
40	Himani Singh	Dr Vinay S P Sinha	Water Accounting framework for Eastern Himalaya in context of Climate Change
41	Nandita Singh	Dr Neeti	Characterization of spatio-temporal dynamics of coastal hazard vulnerability of West Bengal
42	Pratyaya Jagannath	Dr Chubamenla Jamir	Assessment of the Sustainability of shifting cultivation in Nagaland
43	Sanjukta Mudgal	Dr J V Sharma	Assessment of Implementation of Forest Rights Act in Madhya Pradesh
44	Snigdha Goel	Dr Arun Kansal	Thermochemical conversion of scrap tyre to high value products: Selected Aspects
45	Priya Bhatnagar	Dr Vidhi M Chadda	Analysing Legal and Regulatory Framework Governing Interaction between Competition Law and Indian Coal Sector
46	Sanjay Prakash Bhagat	Dr Nandan Nawn	Policy and Regulatory Interventions for Integration of Variable Renewable Energy Sources
47	Gurbir Kaur Sidhu	Dr P M Reddy	Bioengineering of cyanobacterial CO ₂ -Concentrating Mechanism (CCM) in Rice (<i>Oryza Sativa</i>)
48	Karanjot Kaur	Dr P M Reddy	Integration of Nodulation signalling pathway and assessment of its performance in promoting rhizobial symbiosis in rice
49	Tushar Saxena	Dr Manish Kumar Shrivastava	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
50	Aaina Dutta	Dr Sukanya Das	Investigating households preferences for grid connected solar rooftop systems: A case study of Jammu and Kashmir
51	Gaurang Meher Diljun	Dr Vinay S P Sinha	Water-Energy-Food Nexus in the context of Groundwater Irrigation in semi-arid agriculture zone in India
52	Prasoon Singh	Dr Vinay S P Sinha	Spatiotemporal assessment for disaster risk reduction and climate change adaptation to enhance urban flood disaster resilience

53	Asif Nazar	Dr Naqui Anwer	Technical and Economic aspects of Electrical Energy Storage in GridBalancing
54	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
55	Priya Bhatnagar	Dr Ramakrishnan Sitaraman	Interaction of Dengue virus non.structural protein 5 with host proteins
56	Bhawna Chaudhary	Dr Chaithanya Madhurantakam	Structural and functional characterization of a mycolic acid methyl transferase enzyme of Mycobacterium tuberculosis
57	Rinki Sisodia	Dr Chaithanya Madhurantakam	Structural studies on phosphatases of Helicobacter pylori
58	Manjusha Jain	Dr Manipadma Datta	Changing paradigm of public transport infrastructure financing with specific reference to Indian Railways: An exploratory study
59	Chhabishwar Prasad Patel	Dr Som Mondal	Study of Latent Heat Thermal Energy Storage System for Medium - Temperature Solar Thermal Application
60	Colonel Gaurav Singh Karki	Dr Bhawna Bali	Transformation of Military Stations into Smart Liveable Military Stations in India: A Study on Necessity, Challenges and Framework
61	Jeevan Kumar Jethani	Dr Atul Kumar	Solar Energy for Agriculture: Challenges and Oppurtunities
62	Jagriti Dabas	Dr Som Mondal	Estimation of Agricultural Residue Potential for Renewable Energy Applications Using Integrated Geospatial Technology
63	Rajshree Mathur	Dr Shaleen Singhal	What are the linkages/synergy between weekly markets and their associated catchment in a city?
64	Jayalakshmi Paonam	Dr Sudipta Chatterjee	Ecosystem services and intitutional mechanism for conservation of loktak lake: A ramsar site in Manipur
65	Sanchi Singh	Dr Sudipta Chatterjee	Provisioning ecosystem services and forest health of Rhododendron rich forests in western himalayas: study of Rhododendron arboreum harvest in Chamoli District for its sustainable use
66	Amit Pandey	Dr Kavita Sardana	Ecological and Economic Significance of sacred forests of Kachchh, Gujarat, India: An arid biographic province

67	Badsha Sarkar	Dr Swarup Dutta	Migration in rural areas of Madhya Pradesh and Rajasthan: A study from drought - affected districts of Shahdol and Dungarpur
68	Divya Jain	Dr Gopal Sarangi	An assessment of climate change effects on household electricity consumption and consequent adaptation choices in India
69	Karthick R	Dr Sukanya Das	Estimation of economic value of a coastal wetland ecosystem: A case study of Kaliveli wetland
70	Prabhakaran T R	Dr Sukanya Das	Analysis of climate impact on the rice productivity and its adaptation strategies
71	Shweta Prajapati	Dr Smriti Das	Mainstreaming Climate Change in Development Planning: Analysing local climate governance in Bundelkhand, Madhya Pradesh
72	Chandni Bedi	Dr Arun Kansal	Assessment of water management for urban liveability and sustainable cities
73	Nipun Bhargava	Dr Arun Kansal	Advanced Oxidation Process based Technological Intervention for treatment of Wastewater Streams
74	Simran Kaur	Dr Anandita Singh	Biochemical characterization and comparative functional analysis of the SOC1 promoter homeologs in Brassica juncea
75	Tanvi Khurana	Dr Seema Sangita	Impact of Electricity Access on Rural Non-Farm Enterprises
76	Shivanshu Sharma	Dr Naqui Anwer	A study of necessity, challenges and framework of electric vehicles in India
77	Aishwary Gupta	Dr Seema Sangita	Impact of International food standards on Indian Marine Export
78	Keilash Chirom	Dr Shashi Bhushan Tripathi (Officiating)	Analysis of complex hidden patterns in cancer: A systems biology approach
79	Md Farhad	Dr Shashi Bhushan Tripathi	QTL mapping for agronomic and phenological traits under early planting in advanced breeding lines of hexaploid wheat
80	Shakti Khera	Dr Shashi Bhushan Tripathi	NIRS prediction modelling and association mapping for biochemical traits related to malting in Barley
81	Manisha Badoni	Dr Vidhi M Chadda	Evaluating India's National Green Tribunal on UNEP's Best Practices for an ECT (Working Title)

82	Charvi Kapoor	Dr Chubamenla Jamir	Neglected and Underutilized Crop Species (NUCS) in India: A study on Contribution, Challenges and Prospects
83	Ameer Faisal	Dr Naqui Anwer	Optimization and Techno-Economic Feasibility Analysis of Solar PV, Wind and Bio-energy Hybrid Standalone Renewable Energy
84	Piyush Dubey	Dr Vinay S P Sinha	Time series forecasting of River Flow using Artificial Intelligence & Machine Learning techniques
85	Sujeet Kumar Thakur	Dr Chaithanya Madhurantakam	Synthesis and characterization of functionalized carbon nanomaterials and their application in biological systems
86	Amrita Nambiar	Dr Vidhi M Chadda	BALANCING INNOVATION AND COMPETITION: CRITICAL ANALYSIS OF THE INTERFACE BETWEEN PATENT AND COMPETITION LAW IN THE INDIAN HEALTHCARE SECTOR
87	Reeya Susan John	Dr Vidhi M Chadda	REGULATION & MANAGEMENT OF ELECTRONIC WASTE IN INDIA: NEED FOR A COMPREHENSIVE LEGISLATION
88	Shivangi Goswami	Dr Swarup Dutta	Agrarian Crisis and Women Farmers in the District Yavatmal, Maharashtra
89	Sakshi Gupta	Dr Kavita Sardana	A Feasible Ecosystem Service Model: An Analysis of Catchment Ala in Himachal Pradesh
90	Maya Chaturvedi	Dr C. K.Singh	Transcriptome profiling of gastric spheroid to determine heterogeneity of gastric cancer cells
91	Minsu Jang	Dr Montu Bose	Corporate Social Responsibility and its effect of Korean electronics companies in India
92	Vivek Kumar Rai	Dr Swarup Dutta	Identity, Livelihood and Politics of Development: A Case of the Musahar Community in Bihar
93	Nidhi Rao	Dr Swarup Dutta	Marine Capture Fisheries, Small-Scale Fishers and Resource Conflict: A Study on Marine Fishery Resource Conflict in Palk Bay, Tamil Nadu
94	Mudita Deepak Upadhyay	Dr Sherly M A	Assessment of socioeconomic drought and linkages among various types of droughts

95	Anita Yadav	Dr Manish Kumar Shrivastava	Federalism, Polycentricism, and Climate change governance: A study of the States of Gujarat and Madhya Pradesh
96	Aniket Walia	Dr Chaithanya Madhurantakam	Structural and functional characterization of Baeyer-Villiger monooxygenases (BVMOs) from Mycobacterium tuberculosis
97	Bindu Aggarwal	Dr Kamna Sachdeva	Heat vulnerability assessment with reference to climatic and development change: Study of Delhi NCT towards Adaptive Planning
98	Divyansh Sharma	Dr Kamna Sachdeva	Exploring the nexus between built environment, socio-economic status and air quality in Delhi, India
99	Swetannita Chattopadhyay	Dr Anandita Singh	Role of MIR160 and ARFs in establishment of root architecture in Nitrogen-limiting conditions in Brassica species
100	Sunita Tevatiya	Dr Chubamenla Jamir	Assessing the impact of collectivization of Farmer through Farmer Producer Organization (FPO) in Rajasthan
101	Sanchi Jain	Dr Venkataraman L N	Structure-Agency Dualism: Domestic Workers in Delhi
102	Padmaza Talukdar	Dr Manish Kumar Shrivastava	EXPLORING POLYCENTRICISM AND FRUGALITY IN BIODIVERSITY CONSERVATION GOVERNANCE IN NORTH-EAST INDIA
103	Pankaj Kumar Satija	Dr Fawzia Tarannum	Unified methodological framework to estimate India's virtual water trade for cold rolled coil and other steel products
104	Prasanta Kumar Swain	Dr Chubamenla Jamir	A STUDY ON IMPACT OF DIGITALIZATION OF AGRICULTURAL MARKETS THROUGH NATIONAL AGRICULTURE MARKET SCHEME (E-NAM)
105	Anuradha Mitra	Dr Gopal Sarangi	5G Technology and Regulation of Spectrum, Access and Net Neutrality in India-An Investigative Analysis
106	Srishti Minocha	Dr Sukanya Das	Analysing the effects of energy transition in Indian coal mining sector

107	Manu Vashistha	Dr Chaithanya Madhurantakam	Characterization and Identification of Plasmodial Microtubules (MT) and MT associated Proteins (MAP) for the development of Novel anti-malarials
108	Ritu Rao	Dr Arun Kansal	Urban Water Bodies Sustainability Assessment Framework and Tool
109	Mohammed Ajmal Behmanish	Dr L N Venkataraman	Social Sciences and the capabilities formations in Afghanistan
110	Khaibar Tagge	Dr L N Venkataraman	Navigating Labyrinth: Complexities of Governance in Afghanistan

Patent

Name of the Patent published/awarded	Patent Number	Year filed for patent/ Award
A NOVEL Z-SOURCE MODIFIED CASCADED H-BRIDGE SOLAR PHOTOVOLTAIC MULTILEVEL INVERTER	Application no. 202011037155 A	Date of filling of application: 28/08/2020, Publication date : 25/09/2020

Honours and Awards

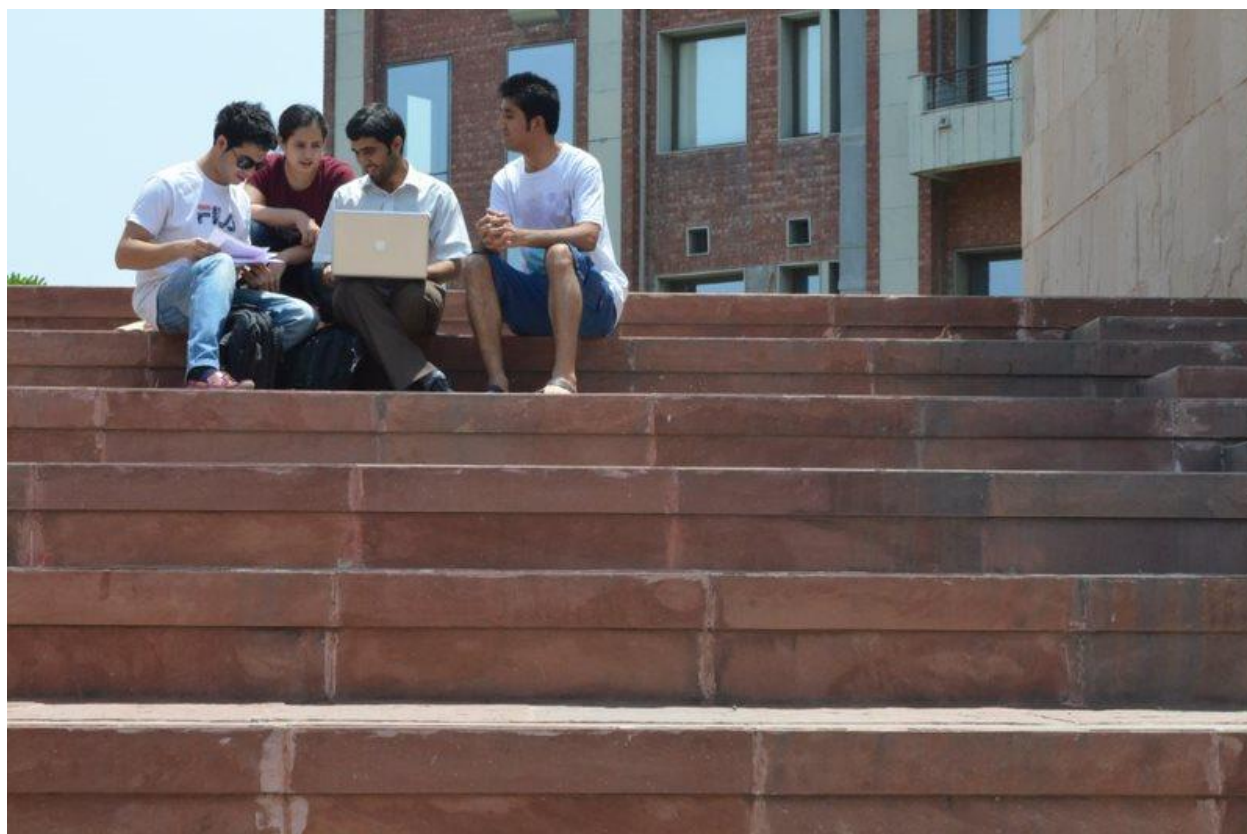
Honours and Awards (July 1, 2020-June 30, 2021)		
Faculty		
Name of Faculty	Details	Year/Date
Prof Manipadma Datta	Best author award by ICSI for the paper published in the Chartered Secretary : 'Principles of Responsible Investments and Environmental, Social and Governance issues: The Emerging Horizon of Sustainability-based Decision-making in Finance'	2020-2021
Prof Prateek Sharma	Fellow of Institution of Engineers	2020-2021
Students		
Name of Student	Details	Year/Date
Ms. Mehak Saxena	First Position in Policy Presentation on Municipal Finance at Prajatantra: Celebrating Democracy-2021	2020-2021
Ms. Akshaya Paul and Mr. Piyush Saxena	secured Second Position in a Quiz Competition related to Urban Governance	2020-2021
Ms Sarada Kapilavai	winners of UNLEASH-ORF Hackathon 2021.	2020-2021
Souryadeep Basak and Lavkesh Balchandani	Bronze medal at Global Competition	2020-2021
Ms. Anuja Narendra Chavan	International essay competition 2021 Organized by Coalition of Disaster Resilient Infrastructure (CDRI), New Delhi	2020-2021

Student Clubs at TERI SAS

TERI SAS 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-Institute Sports Meet is an annual sports extravaganza organized by the TERI SAS 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 Institute 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.

Entrepreneurship Development Cell (EDC): This cell emerged from the 'Ideation Club' of the Institute. 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.

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 Institute 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 Institute'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 TERI SAS 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

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, Institute Portal, and Digital Library are made available on all workstations across the Institute.



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 Institute 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 Institute. It helps keep students and the faculty informed of happenings across the campus.

The Institute 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 TERI SAS 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 Institute 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

Social Presence

Our social presence is on the following sites:

Facebook

<https://www.facebook.com/terischool/>

Twitter

<https://twitter.com/terischool>

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 Institute 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 aluminium 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 Institute 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 Institute.

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 Institute 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 Institute 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-TERI SAS NETWORK

TERI SAS in its endeavour to promote networking with all potential stakeholders including the school children has initiated the School – TERI SAS Network.

This endeavour is built on the understanding that existing school curriculums inadequately cover sustainability related issues in tune with complexities of development. The proposed 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 institute 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 institute 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' Masters Students act as trainers/instructors for the programme. However, the broad guidance is provided by TERI SAS Faculty Members/ Programme Coordinator.