ANNUAL REPORT
2017-18

CONTENTS

Vice-Chancellor's Message

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

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

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

Message from the Dean (Academics)

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

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

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

Message from the Dean (Research and Relationships)

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

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

ABOUT TERI SAS

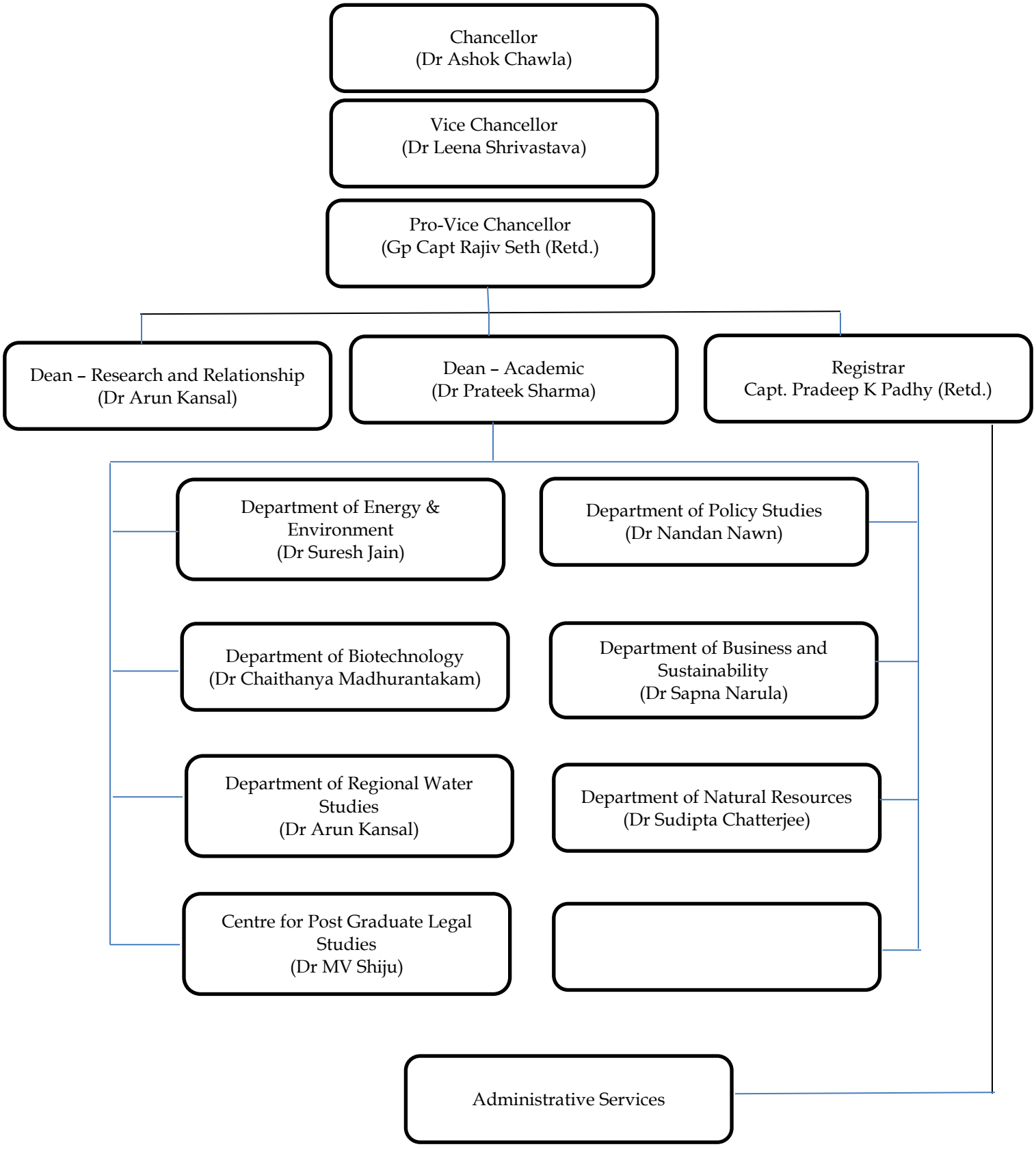
TERI SAS was established to disseminate the vast reservoir of knowledge devised by The Energy and Resources Institute (TERI), a not-for-profit, independent research institute recognized globally for its contribution to scientific and policy research in the realms of energy, environment, and sustainable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

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

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

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

University Structure



BOARD OF MANAGEMENT

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Dr Leena Srivastava

Vice-Chancellor, TERI SAS

Members

Dr Rajiv Seth

Pro Vice-Chancellor, TERI SAS

Deans

Dr Prateek Sharma

Dean (Academic), TERI SAS

Dr Arun Kansal Dean (Research and Relationships), TERI SAS

Three Eminent Academicians Nominated by the Chancellor

Dr Dipankar Gupta

Former Professor in the Centre for the Study of Social Systems, JNU

Dr Ashok Gulati

Infosys Chair Professor for Agriculture, ICRIER

Dr Ashok Khosla

Chairman, Development Alternatives Nominee of the Government of India

UGC nominee

Air Marshal K K Nohwar (Retd)

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Ms Anita Arjandas MD and CEO, Mahindra Lifespace Developers Ltd.

Mr Ishteyaque Amjad

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

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

Two Teachers (from Professor and Associate Professor)

Dr Smriti Das

Associate Professor, Department of Policy Studies, TERI SAS

Dr Anandita Singh Professor

Department of Biotechnology, TERI SAS

One Teacher of the Rank of Assistant Professor

Dr Soumendu Sarkar

Assistant Professor, Department of Policy Studies, TERI SAS

Controller of Examination

Dr Seema Sangita

Assistant Professor, Department of Policy Studies, TERI SAS

Registrar

Capt Pradeep Kumar Padhy (Retd)

TERI SAS

ACADEMIC COUNCIL

Chairperson of the Council

Dr Leena Srivastava

Vice-Chancellor, TERI SAS

Dr Rajiv Seth

Pro Vice-Chancellor, TERI SAS

Deans

Dr Prateek Sharma

Dean (Academic), TERI SAS

Dr Arun Kansal

Dean (Research and Relationships), TERI SAS

Heads of the Departments

Dr Sapna Narula

Department of Business and Sustainability, TERI SAS

Dr Suresh Jain

Department of Energy and Environment, TERI SAS

Dr Sudipta Chatterjee

Department of Natural Resources, TERI SAS

Dr Chaithanya Madhurantakam

Department of Biotechnology, TERI SAS

Dr Nandan Nawn

Department of Policy Studies, TERI SAS

Dr M V Shiju

Centre for Post Graduate Legal Studies, TERI SAS

Professors

Mr S Sundar

Emeritus Professor, Department of Policy Studies, TERI SAS

Dr Anandita Singh

Professor, Department of Biotechnology, TERI SAS

Prof Manipadma Datta

Dr S Ramakrishnan

Associate Professors from Departments

Dr Naqui Anwer

Associate Professor, Department of Energy and Environment, TERI SAS

Assistant Professors from the Department by Rotation of Seniority

Dr Anu Rani Sharma

Assistant Professor, Department of Natural Resources, TERI SAS

Ms Fawzia Tarannum

Lecturer, Department of Regional Water Studies, TERI SAS

Nominees of the Vice Chancellor

Dr Kanchan Chopra

Professor and Former Director, IEG

Dr Malathi Lakshmikumaran

Director, Lakshmikumaran & Sridharan

Dr T C Kandpal

Professor, Centre for Energy Studies, IIT Delhi

Co-opted Members

Dr Anubha Kaushik

Professor and Dean, School of Environment Management, GGSIU

Dr Vivek Suneja

Dean(Planning), FMS, Delhi University

Dr Rakesh Khosa

Professor, Department of Civil Engineering, IIT Delhi

Secretary

Capt Pradeep Kumar Padhy Registrar

TERI SAS

Student and Faculty Strength

from July 1,2017-June 30,2018	
Program name	No. of students
PhD	43[1]
M.Sc.	110
MBA	23
MA	31
M.Tech.	62
LL.M.	22
PGD	17
Certificate	

from July 1, 2017- June 30, 2018	
Particular	No. of Faculty
Core Faculty	52
Adjunct Faculty	20
Visiting Faculty	28

[1] New admissions in Ph.D

Programmes Offered

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

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

Ph.D. (Bioresources and Biotechnology)

The Doctoral programme in Bioresources and Biotechnology provides a highly academic, knowledge-driven environment that will create scientific talent and innovative minds capable of applying knowledge to benefit society and contribute to its welfare. The programme creates capacities for pursuing careers in industry by imparting a wide variety of skills to students. A collaborative inter-disciplinary effort between industry and academia is envisioned wherein manpower will be trained in accordance with the changing needs of industry.

Ph.D. (Business Sustainability)

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

Ph.D. (Energy and Environment)

The Doctoral programme at the Department of Energy and Environment (DEE) is an interdisciplinary programme that aims to address the challenges relating to energy and environmental resource management through teaching, research and capacity building.
The programmes aim to create a cadre of trained professionals committed to bring positive change through scientific, technological and policy innovations for strengthening resilience in communities.

Ph.D. (Natural Resources and Management)

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

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

Ph.D. (Policy Studies)

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

Ph.D. (Water Science and Governance)

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

Ph.D. (Legal Studies)

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

M.A. (Public Policy and Sustainable Development)

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

sectors need to be trained in politics and economics of public policy and in sophisticated methods and tools of analysis; and refresh their knowledge of the substantive development issues at hand.

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

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

M.A. (Sustainable Development Practice)

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

MBA (Business Sustainability)

Businesses across the globe are realizing the importance of integrating sustainability into business practices. Much of the pressure is coming in through various stakeholders, such as customers, shareholders, and the government. This has created a need for managers in different sectors — public, private and not-for-profit, to maintain a balance between three pillars of sustainability, i.e., people, planet, and profits. Having management professionals trained in sustainability within the organization not only optimizes business operations but also generates positive returns to the company. MBA in Business Sustainability at the TERI SAS equips students with acumen to lead in a resource-sensitive world amid increasing competition and concern for sustainable development. This is not just an MBA programme, it is an MBA plus programme,

which combines conventional MBA curriculum with new sustainability challenges that have direct impact on a firm's future performance financial and/or otherwise.

MBA (Infrastructure)

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

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

M.Sc. (Climate Science and Policy)

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

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

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

M.Sc. (Economics)

Climate change and sustainable use of energy resources for future have been globally recognized among the most serious concerns facing mankind today. Economics as a discipline has responded to these challenges by incorporating these issues in standard theory and analysis. In various national and international forums where such issues are discussed, the opinions of economists are much sought after; in other decision-making or policy-making bodies, economists trained in environment and resource economics are expected to contribute by offering specialized insights.

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

M.Sc. (Environmental Studies and Resource Management)

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

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

M.Sc. (Geoinformatics)

Geoinformatics is rapidly evolving as a study area that can bring in additional and meaningful insights using multi-disciplinary approach to problem solving in areas such as resource estimation and assessments, impact assessments, etc. It equips students with technologies that can support estimation, mapping, and analysis. The M.Sc. programme in Geoinformatics at the TERI SAS is a two-year programme where students specialize in the areas of geoinformation and earth sciences.

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

Students are exposed to a wide range of practical exercises covering different applications of remote sensing, GIS, photogrammetry to real-life problems, law and policy for remote sensing and mapping.

It enables students to understand various rules and regulations regarding data collection and dissemination and learn about various laws and policies related to environment.

M.Sc. (Plant Biotechnology)

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

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

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

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

Water governance and management goes beyond traditional field of engineering because of multi-level (local, regional, and sub-national) and multi-dimensional (economic, social, and environmental) factors. The Department aspires to provide a platform for various actors to come together for innovative ideas, capacity building, and consensus building for joint action on water challenges of tomorrow. The Department has attained leadership position in offering programmes relevant for development professionals (fresh as well as mid-career) well equipped to tackle, beyond cultural boundaries and across sectoral divisions, the interwoven challenges of water sustainability. The format of the entire programme is flexible and caters to fresh graduates as well as working professionals who desire to upscale their skills/qualifications. It is a multi-track course offering M.Sc/M.Tech/PG Diploma/PG Certificate in Water Science and Governance. While M.Tech. and M.Sc. courses are for four semester duration; PG Diploma is a course for two semesters, and PG Certificate is a one-semester programme. The programme facilitates a systematic amalgamation of widespread knowledge on a common platform. The course structure addresses cross-sectoral perspectives on both engineering as well as social needs of water, while understanding that sustainability will not be compromised. Students get an opportunity to work on innovative solutions during the major project tenure.

M.Tech. (Renewable Energy Engineering and Management)

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

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

M.Tech. (REEM) programme prepares the students in theoretical as well as practical aspects of renewable energy technologies, energy conservation, and management. This multi-disciplinary integrated programme trains the students not only in renewable energy technologies and its

implementation but also in equally important areas of energy infrastructure, rational use of energy, energy policies and regulations, energy–environment interface, etc. The programme exhibits its uniqueness fostering the much sought-after leadership skills through the management energy courses. Thus, the programme enables students to tackle practical problems of design, development, deployment in the industry, and to pursue academics as well as frontiers of research.

Overarching emphasis is given towards practical learning thus exposing students to industrial projects through field visits and internships. Hands-on experience in industrial, consulting, and research projects is imparted while working in various organizations during minor and major internships/projects.

M.Tech. (Urban Development and Management)

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

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

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

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

LL.M.

Environmental Laws and Infrastructure laws are two emerging fields in legal practice. There is a dearth of qualified legal professionals in both these fields. It is in this context that TERI SAS introduced a one year LL.M. programme with specialization in Environment and Natural Resources Law; and Infrastructure and Business Law.

Environment and Natural Resources Law

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

Infrastructure and Business Law

India's infrastructure development is inadequate and there is a need for massive investment in different infrastructure sectors to meet the demands of economic growth.

However, given the fiscal constraints, the investment needs of infrastructure cannot be met by the public sector alone and would require private investment, both foreign and domestic. Attracting private investment will be feasible only if there is a conducive and predictable legal regime.

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

PG Diploma (Water Science and Governance)

TERI SAS offers PG Diploma programme in Water Science and Governance to fresh graduates as well as working professionals. The students need to complete 1st and 2nd Semester to be awarded a P.G. Diploma. It is a well-integrated and holistic programme offered by trained professionals. The programme framework is interdisciplinary in nature and in consonance with the UN International Year of Water cooperation promulgated by the United Nations General

Assembly in 2013 and priorities defined in India's National Water Mission that advocates water cooperation by bringing in cultural, educational, scientific as well as religious, ethical, social, political, legal, institutional and economic dimensions.

CWSG (Certificate Course in Water Science and Governance)

TERI SAS offers Certificate programme in Water Science and Governance to fresh graduates as well as working professionals. Over the years, there has been growing pressure on the water systems leading to precarious balance between various competing uses of water. Rapid population growth and climate change has further added to water woes and conflicts at all levels. There is a growing consensus among the stakeholders to adopt an interdisciplinary approach to sustainable water management.

PG Diploma (Public Policy and Sustainable Development)

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

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

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

Convocation 2017

TERI SAS organized its tenth convocation on 10 November 2017. The ceremony was held with much pomp and show. During the Ninth Convocation ceremony, a total of 18 Doctoral degrees and 196 Master's degrees were conferred.

Medals for Standing First

Name of student	Stream	YEAR
Kala Sunil Bada	MA (Sustainable Development Practice)	2017
Sharada Ramadass	MSc (Environmental Studies and Resource Management)	2017
Shahnaz Khatun	MSc (Geoinformatics)	2017
Sanchi Bhimrajka	MSc (Plant Biotechnology)	2017
Trinayana Kaushik	MSc (Climate Science and Policy)	2017
Payal Mitra	MSc (Economics)	2017
Bhavya Chawla	MSc (Water Science and Governance)	2017
Supreet Kaur	MBA (Business Sustainability)	2017
Dhriti Pande	M Tech (Renewable Energy Engineering and Management)	2017
Nandini Shandilya	M Tech (Urban Development and Management)	2017
Swekritha B S	M Tech (Water Science and Governance)	2017
Akshay Shandilya	Master of Laws	2017

Guest Lectures at the University

	University Lecture Series 2017	
Speakers	Title	Date
Satya Gautam ,JNU, New Delhi	Ethics in / and Public Policy in India	02/11/2017
V K Srivastava,DU, New Delhi	Methodological Reflections in Data Collection	04/11/2017
Yogesh Gokhale,TERI	Natural Resource Management and Local Communities in India	16/11/2017
Radhika Mittal, LBS National Academy	Strategic Communication for Public Policy	20/11/2017
Ipshita Sengupta, UNHCR, New Delhi	UNHCR's Role in Refugee Protection in India	30/11/2017
	Other Seminars in the University 2017	
Speakers	Title	Date
Robert James Wasson, National University of Singapore	Water, Complexity and Public Policy	09/02/2017
Prabir Basu, Professor and Director Energy Conversion Lab, Dalhousie University, Canada	Revival of Nuclear Energy Option – through a safer and more affordable means	13/02/2017
Swati Maliwal, Chairperson, Delhi Commission for Women	Gender perspectives in Indian Society - why are women unsafe?	13/02/2017
Sara Ahmed	Addressing inequities in water - A policy perspective.	29/03/2017
Prof Lung, Department of Civil and Env. Engineering. University of Virginia	Estuarine modeling of eutrophication and toxic substances	03/04/2017
Rukmini Sen, School of Liberal Studies, Ambedkar University	Gender and Equality	12/4/2017
Manoj Mishra,Yamuna Jiye Abhiyaan	Conservation of Yamuna Flood Plains	28/04/2017
Mr Elkind , U.S. Embassy's guest expert on Clean Energy	Global Energy Trends and the Clean Energy Transition & Future of Clean Energy Collaborations post-Paris	25/07/2017
Badrinarayan Gopalakrishnan	Potential global economic and environmental impact of the OPEC Oil Production Freeze	27/07/2017
Keith Newton, International Secretary General of The Chartered Institute of Logistics and Transport, London	Emerging Trends in Logistics and Supply Chain	06/11/2017
Arne Walther	Evolving Geopolitics and Sustainable Development	08/11/2017
Thomas Tanner, Head pf Adaptation and Climate Resilience, Overseas	Climate change and development	15/11/2017

Development Institute		
Lars Ronnals		1/12/2017
	Economics Seminar Series 2017	
Shouvik Chakraborty ,PERI-UMass Amherst	An Egalitarian Green Growth Programme for India	18/01/2017
Priya Bhagowalia, JNU	The Impact of Public Distribution System on Food Security	01/02/2017
Dipa Sinha, Ambedkar University Delhi	Women Status in a Changing Village and a Changing India	15/02/2017
Sangeeta Bansal , JNU	Corporate Social Responsibility Act in India: An Early Assessment	22/03/2017
Ananya Ghosh Dastidar, University of Delhi South Campus	Policy Challenges in the Emerging Market Economies (EMEs) in the Wake of Global Financial Crisis	12/4/2017
Murali Kallummal, Indian Institute of Foreign Trade	Three Decades of Multilateralism: Rise of Domestic Regulation as a Major Determinant of International Trade	17/08/2017
Surajit Das , JNU	Impact of the GST on Indian Economy	31/08/2017
Arup Mitra, Institute of Economic Growth, New Delhi and Director General, NILERD	Informal Sector: The Inter-Sectoral Linkages	14/09/2017
Amit Thorat , JNU	Mind-sets, Beliefs and Outcomes	9/11/2017

Student Exchange

TERI SAS students visiting other Universities (July 1, 2017- June 30, 2018)				
Student Name	Programme Name	Department Name	Name of University visited	Duration
Tarishi Kaushik	M.Tech (UDM)	DEE	University of Reims Champagne – Ardenne, France	**Oct. 2017 – Jan. 2018**
Rohit Sharma	Doctorial	DEE	Freie University of Berlin, Germany	**Oct. 2017 – July 2018**
Roopam Shukla	Doctorial	DEE	Freie University of Berlin, Germany	**Oct. 2017 – Mar 2018**
Madhuri Nanda	Doctorial	DRWS	Freie University of Berlin, Germany	**May – July 2018**
Tanya Sharma	Doctorial	DEE	Freie University of Berlin, Germany	**Feb. – July 2018**

External students visiting TERI SAS		
Student Name	University Name	Duration
Keegan Charles McChesney	University of Graz, Austria	July – Dec. 2017
Rafaela Reznik Rocha	University of Graz, Austria	July – Dec. 2017
Yasmine Zaki Abdelaziz	University of Graz, Austria	July – Dec. 2017
Jasmeet Singh Khosla	University of Graz, Austria	July – Dec. 2017
Maxmilian Vorast	University of Graz, Austria	July – Dec. 2017
Dr. Sabine Boomers	Freie University	February 2018

Research Projects at TERI SAS

SNO	SPONSOR'S NAME	PROJECT TITLE	PROJECT INVESTIGATOR
STATEMENT OF ONGOING PROJECTS FOR THE FINANCIAL YEAR 2017-18			
1	The Housing and Urban Development Corporation Limited (HUDCO)	To strengthen researcha and capacity building activites in the Habitat Sector with regard to specialized areas	Dr. Shaleen Singhal
2	The Indian Council of Social Science Research (ICSSR)	Indian European Multi Level Cliamate Goverance Resrearch Networking	Dr. Arabinda Mishra
3	Science & Engineering Research Board (SERB)	Reconstruction of Genome - Scale Metabolic Networks of Pichia Pastoris CBS 7435 Strain Using System Biology	Dr. Pallavi Somvanshi
4	Ministry of Human Resource Development (MHRD)	Establishment of Centre of Excellence for Training and Research in Forentier Areas of Science and Technology (FAST)	Dr. Basudeb Prasad / Dr. Som Mondal
5	TERI	Hi-Aware sub project for TERI SAS	Dr. Kamna Sachdeva
6	Central Pollution Control Board (CPCB)	Impact of Ozone and Other Pollutants on Crops	Dr. Kamna Sachdeva
7	The Indian Council of Social Science Research (ICSSR)	Impact Analysis pf the Arunachal Pradesh Panchayati Raj Act 1997 on Traditional Institution in the State	Dr. M P Ram Mohan
8	Department of Science and Technology (DST)	Sopporting, Conolidation, replication and upscaling of sustainable waste water treatment and reuse technologies for India	Dr. Sukanya Das

9	National Security Council Secretariat (NSCS)	Model Building and Developing Customized Algorithm for Climate Studies	Dr. Nithiyanandam Yogeswaran
10	Small Industries Development Bank of India (SIDBI)	Implementation of Possible Improvement Measures Covering Energy Varanasi Cluster	Dr. Girish Sethi
11	Department of Biotechnology (DBT)	Structural studies on proteins involved in synthesis and processing of mycolic acids in Mycobacterium tuberculosis	Dr. Chaithanya Madhurantakam
12	Science & Engineering Research Board (SERB)	National Post Doctoral Fellowship to Dr Anil Kumar Verma, under the mentorship of Dr. Ramakrishnan Sitaraman	Dr. Ramakrishnan Sitaraman
13	National Security Council Secretariat (NSCS)	Advance Model for Climate Research	Dr. Nithiyanandam Yogeswaran
14	Ministry of Petroleum and Natural Gas	Design, development and testing of a down draft gasifier system completed by hydrogen enrichment through air steam gasification	Dr. Piyanka Kaushal
15	Government of Arunachal Pradesh	Preparation of the State Specific Action Plan for Water Sector	Dr. Vinay Shankar Prasad Sinha
16	Science & Engineering Research Board (SERB)	Financial Sanction under National Post Doctoral Fellowship to Ms. Aditi Jain vide dairy no. SERB/F/3627/2017-2018	Dr. Anandita Singh

17	Nirmal Seeds Private Limited	Geotyping of the Four SNP's based on Either Agarose Gel Electro Phorisis or real time PCR	Dr. Shashi Bhushan Tripathi
18	Science & Engineering Research Board (SERB)	Understanding the role of MIR160 and AUXIN RESPONSE FACTORS in establishment of root system archietcture for improvement of crop Brassicas.	Dr. Anandita Singh
19	Department of Biotechnology (DBT)	Department of CMS /RF System in Bhut Jolokia using marker assisted selection	Dr. Shashi Bhusan Tripathi
20	The United Nations Environment Programme (UNEP)	Internationally recognized information tools to enable individual and institutional consumers to make informed choices	Dr. Chubamenla Jamir
21	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	Dr. Bhawna Bali
22	Department of Atomic Energy (BRNS)	Spatial Distribution of Uranium and associated water quality parameters in five districts of UP	Dr. Chander Kumar Singh
23	The National Institute of Urban Affairs (NIUA)	Condcuting Third Party Evaluation of the States/Union Teritories regarding Implementation of Reforms under AMRUT	Dr. Abhijit Datey / Dr. Bhawna Bali

24	Ministry of Urban Development (MoUD)	Capacity Building for Urban Development	Dr. Bhawna Bali / Dr. Abhijit Datey
25	Central Pollution Control Board (CPCB)	Air Quality Management - Plans using decision support system UrbAir India	Dr. Kamna Sachdeva
26	Uttarakhand State Council for Science and Technology	Modelling for Enchancing Water Quality in Uttarakhand using Geospatial Technology	Dr. Vinay Shankar Prasad Sinha
27	Dalmia Cement Bharat Ltd. & Others	Climate Jamboree - A journey from climate apathy to empathy	Dr. Leena Srivastava / Ms. Ranjana Saikia / Dr. Rajiv Seth
28	WaterEd Australia Pty Ltd.	Service Agreement - Delivery of short course on Gender, Equity and Water Management	Dr. Arun Kansal
29	International Centre for Integrated Mountain Development (ICIMOD)	Preparation of an Assessment report of Water Study Higher Education Institutions in India	Dr. Arun Kansal
30	Department of Biotechnology (DBT)	Collection, evaluation, documentation and conservation of banana genetic resources from north eastern region	Dr. Shashi Bhushan Tripathi

31	National Academy of Science (NAS), US	Targeting Low-Arsenic and Low - Fluoride Groundwater to Reduce Exposure in Rural Punjab, India	Dr. Chander Kumar Singh
32	Columbia University	Household Response in 26 District in Bihar Villages	Dr. Chander Kumar Singh
33	Technische Universsiteit	Developing and Implementing Smart Grids in India	Dr. Amit Kumar
34	International Centre for Integrated Mountain Development (ICIMOD)	MSc Scholarships for Five Fulltime Students to Work in Upper Ganga River Basin, India	Dr. Kamna Sachdeva
35	United Nations University (UNU)	Local Coordinator for the UNU-IAS case study in Lucknow on "Low Carbon Urban Water Environment Project"	Dr. Chander Kumar Singh
36	Solidaridad Network Asia Limited	Landscape Approach for Land-Water-Community Security	Dr. Fawzia Tarannum
37	AUBURN University	Investigating the Potential for Decentralized Institutions, Technologies, and Governance to Meet the Wastewater Challenge	Dr. Sukanya Das

38	International Centre for Integrated Mountain Development (ICIMOD)	Nutritional and Livelihood security of subsistence farmer in the hilly and mountain areas of the Hindu Kush Himalayan region	Dr. Chubamenla Jamir
39	The United States Agency for International Development (USAID)	Services of a Local Forestry Specialist (LFS)	Dr. Sudipta Chatterrjee
40	Shakti Foundation	Addressing land issues for utility scale renewable energy development	Dr. Sapan Thapar
STATEMENT OF COMPLETED PROJECTS FOR THE FINANCIAL YEAR 2017-18			
1	The South Asian Network for Development and Environmental Economics (SANDEE)	Economic Value of Biodiversity Conservation Provided by Forest and Agro Forest Ecosystem in Kodagu Distt.	Dr. Kavita Sardana
2	United Nations University (UNU)	Understanding Decentralised Energy Interventions and their Success Conditions in Select Countries in Asia	Dr. Gopal Sarangi
3	The United States Agency for International Development (USAID)	Strengthening Water and Sanitation in Urban Settings	Dr. Arun Kansal

4	The South Asian Network for Development and Environmental Economics (SANDEE)	The Distribution Implications of Solar Water Pumping Program for Ground Water Irrigation in Rajasthan	Dr. Eshita Gupta
5	One Climate Club	Feasibility Study for Climate Protection by Financial Instruments in India in Collaboration with One Climate Club	Dr. Leena Srivastava
6	National Security Council Secretariat (NSCS)	Develop a proof of concept for relating pollutant emissions to mass heavy duty vehicular movement	Dr. Leena Srivastava
7	The Trustee's of Coloumbia University	Students Field Placement	Dr. Prasant Kumar Singh
8	Indian Council of Social Science Research (ICSSR)	Analyzing the Implementation of Forest Right Act (2006) - Community Right in Southern Rajasthan	Dr. Smriti Das
9	Ministry of Coal	Sustainable livelihood activities on reclaimed open cast coal mines: a technology enabled integrated approach in Indian Coal sector	Dr. Sudipto Chatterjee
10	Toyota Kirloskar Motors Private Limited	Research on Indian Future Energy Policy in line with the technical assistance agreement executed between TKM and TMC for production and sales of Toyota Vehicles in India	Dr. Atul Kumar

11	United Nations Enviroment Programme (UNEP)	Support the Implementation of Lao PDR's Sustainable Consumption and Production Policy mainstreaming programme	Dr. Shaleen Singhal
12	Ministry of Climate and Enviroment, Norwegian	Share Experiences between India and Norway on GHG Emission Inventory	Dr. Atul Kumar
13	UNDESA (DSD)	Preparation of Two technical Papers on Linkages between Energy and SDG's for discussion during "2018 High Level Political Forum"	Dr. Leena Srivastava
14	Embassy of Sweden	7 days Challenge Programme	Dr. Leena Srivastava

Recruiters at TERI SAS

Recruiters At TERI SAS (July 1, 2017-June 30, 2018)	
3R Waste Foundation	
ALTUM Law	
Amarjit Singh Bedi & Associates	
Anahat for change foundation	
APL Vascor	
Arora Engineers and Associates	
ASAR Social Impact Advisors Pvt Ltd	
Ashoka University	
Asian Consulting Engineers	
ATREE	
Azim Premji University	
Azure Power India Pvt. Ltd.	
Canadian Solar	
CEEW	
Centre for Regional Trade	
CHEORS India	
CRB	
CRT- Centre for Regional Trade	
CSIR	
Narain Associates	
Disha India Foundation	
DPMB, Delhi University	
Dynapix	
Earthhood Services Pvt. Ltd.	
Ecociate Consultants Pvt. Ltd	
Edunguru	
Emergent Ventures India	
Eptisa Private Ltd.	
ERM India Pvt. Ltd.	
Ernst & Young	
ESRI India	
Evidence for Policy Design	
Face Past for Future Foundation	
FICCI	
Fraunhofer IEE	

Geo Climate Risk Solutions Pvt. Ltd.	
Geocycle-Ambuja	
GIZ	
Global Network for Sustainable Development	
Gokhale Institute of Politics & Economics	
Gopal Jain & Associates	
Green building	
Green Initative Certification & Inspection Agency (GICIA)	
Haryana Space Applications Centre	
Helum Tour Solar	
Hitachi Systems Micro Clinic	
HSBC Bank	
ICF International	
(Innovation and Comprehensive soultions for Urban Climate	
Idam Infrastructure Advisory	
IIIT	
IILM College of Engg & Technology	
IIT Bombay	
India Infrastructure Publishing	

Indian Renewable Development Agency Ltd.

Indian School of Business	
Innovators In Health	
Inox Wind	
Institute for Sustainable Communities	
Institute of Economic Growth	
Integrated Research and Action for Development	
International AIDS Vaccine Initiative (IAVI)	
IREDA	
Istead Outdoor	
IT Power	
JM Environet	
J-Pal	
Kantar IMRB	
karo Sambhav	
Karvy Insights Ltd.	
KEN Research	

KPMG Global Services	
KURVE Wustrow	
MAG Consultancy	

Mahindra Finance

Manikaran Power Ltd.	
Mobius Foundation	
National Academy of Agricultural Research Management	
National Health Agency	
National Innovation Foundation	
National Institute of Urban Affairs	
National Institute of Wind Energy	
Nielsen India Pvt Ltd	
NIITI Consultant	
NJS Engineers India Pvt. Ltd.	
Pluss Advanced Technologies Pvt. Ltd.	
PPAP Automative Ltd	
Pragya	
Prayas (Energy Group)	
Primate Research Inst., Kyoto University	
Prodah Solution Pvt. Ltd.	
Project Guru	
Public Affairs Centre	
QCP	
Quash Products India Pvt. Ltd.	
R&D Associates	
Research Assistant at Salal Urja	
Reserve Bank Of India	
Risk Management Solutions	
RSM-GC Advisory	
Sahai & Associates	
SANGATH	
Save the Environment	
School of Planning and Architecture	
Sehgal Foundation	

Shakti Sustainable Energy Foundation	
St. Mark's Girls School, Meera Bagh, Paschim Vihar	
Steamax	
Sterling and Wilson Pvt. Ltd.	

Sthaapak Foundation

Sustainable Indian Finance Facility	
Tata Centre for Development	
Tata Consultancy	
Telangana Lagruthi	
The Energy and Resources Institute	
The Madras Crocodile Bank Trust	
Tracteble Engie	
TRIPP-IIT Delhi	
Think Through Consulting	
Ultratech Cement	
United Way of Delhi	
Vasudha Foundation	
Vedanta Ltd.	
World Resource Institute	
WWF India	

List of Publications

Staff_name	Dept.	Publication_Type	Author	Year	Title_of_work	Published In/Conference/Publisher
Aditi Singh (Student)		Journal Article	Pandey B., Grover S., Tyagi C., Goyal S., Jamal S., Singh A., Kaur J., Grover A.	2018	Dynamics of fluoroquinolones induced resistance in DNA gyrase of Mycobacterium tuberculosis	Journal of Biomolecular Structure and Dynamics
Arun Kansal	DRWS	Journal Article	Singh P., Kansal A.	2018	Energy and GHG accounting for wastewater infrastructure	Resources, Conservation and Recycling
Suresh Jain		Journal Article	Rajesh, S., Jain, S., Sharma, P.	2018	Inherent vulnerability assessment of rural households based on socio-economic indicators using categorical principal component analysis: A case study of Kimsar region, Uttarakhand	Ecological Indicators
Kamna Sachdeva	DEE	Journal Article	Chakraborty, A, Shukla, R, Kamna Sachdeva and Joshi, P. K.	2018	Perception-based evidences for climate change policies.	Economic and Political Weekly
Vinay S P Sinha	DNR	Journal Article	Matthieu Pommier, Hilde Fagerli, Michael Gauss, David Simpson, Sumit Sharma, Vinay Sinha, Sachin D. Ghude, Oskar Landgren, Agnes Nyiri, and Peter Wind	2018	Impact of regional climate change and future emission scenarios on surface O3 and PM2.5 over India	Atmospheric Chemistry and Physics

Pallavi Somvansh	DBT	Journal Article	Saif Khan,Pallavi Somvanshi,Tulika Bhardwaj,Raju K. Mandal,Sajad A. Dar,Mohd Wahid,Arshad Jawed, Mohtashim Lohani,Mahvish Khan,Mohammed Y. Areeshi,Shafiul Haque	2018	Aspartate-β-semialdeyhyde dehydrogenase as a potential therapeutic target of Mycobacterium tuberculosis H37Rv: Evidence from in silico elementary mode analysis of biological network model	Journal of Cellular Biochemistry
Atul Kumar	DEE	Journal Article	Sourabh Manuja, Atul Kumar, Suneel Pandey	2018	Greenhouse Gas Emissions and Reduction Stratagems from Waste Sector in India	International Journal of Latest Engineering Research and Applications
C K Singh	DEE	Journal Article	Chander Kumar Singh, Anand Kumar & Soumendu Shekhar Roy	2018	Quantitative analysis of the methane gas emissions from municipal solid waste in India	Scientific Reports
Madhuri Kumari (Student)		Journal Article	Madhuri Kumari, Chander Kumar Singh	2018	GaRiRO: Gradient and residual integrated rank ordering of stations in rainfall monitoring network	Earth Science Informatics
Mamta Mehra (Student)		Journal Article	Mamta Mehra and Chander Kumar Singh	2018	Identification of resource management domain-specific best practices in the agriculture sector for the Mewat region of Haryana, India	Environment, Development and Sustainability
Shashi Bhushan Tripathi	DPT	Journal Article	Malik A.A., Sharma R., Ahlawat S., Deb R., Negi M.S. Tripathi S.B.	2018	Analysis of genetic relatedness among Indian cattle (Bos indicus) using genotyping-by-sequencing markers.	Animal Genetics
M V Shiju	DPS	Chapter in Books/Handbooks	Shiju Mazhuvanchery	2018	India and International Environmental Law	Locating India in the Contemporary International Legal Order

Sukanya Das	DPS	Chapter in Books/Handbooks	Zareena Begum., Sukanya Das	2018	Global and Indian Supply Chain of Textiles	A Study of India's Textile Exports and Environmental Regulations
Sukanya Das	DPS	Chapter in Books/Handbooks	K. S. Kavi Kumar. ,Zareena Begum., Sukanya Das	2018	Non-tariff Barriers in Textiles: Incidence and Perceptions	A Study of India's Textile Exports and Environmental Regulations
Shantanu De Roy	DPS	Chapter in Books/Handbooks	Shantanu De Roy	2018	Economic Reforms and Agricultural Growth in India	Quarter Century of Liberalisation in India:Essays from Economic & Political Weekly
Leena Srivastava		Magazines	Leena Srivastava	2018	Go local on clean air	
Vinay S P Sinha	DNR	Journal Article	Prasoon Singh, Vinay Shankar Prasad Sinha, Ayushi Vijhani, Neha Pahuja	2018	Vulnerability assessment of urban road network from urban flood	International Journal of Disaster Risk Reduction
Pallavi Somvansh	DBT	Journal Article	Anchala Kumari, Rinky Rajput, Nidhi Shrivastava, Pallavi Somvanshi, Abhinav Grover	2018	Synergistic approaches unraveling regulation and aggregation of intrinsically disordered β-amyloids implicated in Alzheimer’s disease	The International Journal of Biochemistry & Cell Biology
Pallavi Somvansh	DBT	Journal Article	Mohd Wahid, Arshad Jawed, Raju K. Mandal, Sajad A. Dar, Naseem Akhter, Pallavi Somvanshi, Farah Khan, Mohtashim Lohani, Mohammed Y. Areeshi, Shafiul	2018	Recent developments and obstacles in the treatment of melanoma with BRAF and MEK inhibitors	Critical Reviews in Oncology Hematology

Prashant Kumar Singh		Journal Article	Devika Gupta Prashant Kumar Singh	2018	The hidden cost of development—a review of mental health issues of displaced tribal populations in India	Journal of Public Health
Pallavi Somvansh	DBT	Journal Article	Khan S, Bhardwaj T, Somvanshi P, Mandal RK, Dar SA, Jawed A, Wahid M, Akhter N, Lohani M, Alouffi S, Haque S.	2018	Inhibition of C298S mutant of human aldose reductase for antidiabetic applications: Evidence from in silico elementary mode analysis of biological network model.	Journal of Cellular Biochemistry
Smriti Das	DPS	Journal Article	Niharika Tyagi, Smriti Das	2018	Assessing gender responsiveness of forest policies in India	Forest Policy and Economics
Sukanya Das	DPS	Journal Article	Markus Starkl, Josephine Anthony, Enrique Aymerich, Norbert Brunner, Caroline Chubilleau, Sukanya Das, Makarand M. Ghangrekar, Absar Ahmad Kazmih, Ligy Philip, Anju Singh	2018	Interpreting best available technologies more flexibly: A policy perspective for municipal wastewater management in India and other developing countries	Environmental Impact Assessment Review
Snehlata Tigala (student)		Journal Article	Snehlata Tigala, Anu Rani Sharma, Kamna Sachdeva	2018	Health risk assessment due to biomass smoke exposure in Indian indoor environment: An empirical approach using lung deposition model	Science of The Total Environment
Tulika Bhardwaj (Student)		Journal Article	Tulika Bhardwaj, Shafiul Haque, Pallavi Somvanshi	2018	In silico identification of molecular mimics involved in the pathogenesis of Clostridium botulinum ATCC 3502 strain	Microbial Pathogenesis
Sukanya Das	DPS	Journal Article	Bouzit, M., Das, S., & Cary, L	2018	Valuing Treated Wastewater and Reuse: Preliminary	Water Economics and Policy

					Implications From a Meta-Analysis	
Ritika Mahajan		Journal Article	Ritika Mahajan and Montu Bose	2018	Business sustainability : exploring the meaning and significance	IMI Konnect: An IMI Kolkata Publication
C K Singh	DEE	Journal Article	Chander Kumar Singh, Anand Kumar, Sonal Bindal	2018	Arsenic contamination in Rapti River Basin, Terai region of India	Journal of Geochemical Exploration
Prashant Kumar Singh		Journal Article	Prashant Kumar Singh Domantas Jasilionis Anna Oksuzyan	2018	Gender Difference in Cognitive Health among Older Indian Adults: A Cross-Sectional Multilevel Analysis	SSM - Population Health
PRashant Kumar Singh		Journal Article	Prashant Kumar Singh, Rajesh Kumar Rai, Shalini Singh and Lucky Singh	2018	Rising Caesarean Births: A Growing Concern	Economic & Political Weekly
Tulika Bhardwaj (Student)		Journal Article	Tulika Bhardwaj, Pallavi Somvanshi	2018	A computational approach using mathematical modeling to assess the peptidoglycan biosynthesis of Clostridium botulinum ATCC 3502 for potential drug targets	Gene Reports
Manipadma Datta	DBS	Journal Article	Shinu Vig and Manipadma Datta	2018	Corporate governance and value creation: a study of selected Indian companies	International Journal Indian Culture and Business Management
Binod K. Mahto (Student)		Journal Article	Binod K. Mahto, Poonam Sharma, M. V. Rajam, Pallavolu M. Reddy,Swatismita Dhar-Ray	2018	An efficient method for Agrobacterium-mediated genetic transformation of chilli pepper (Capsicum annuum L.)	Indian Journal of Plant Physiology
A Pattnaik (Student)		Journal Article	A pattnaik, S Jha, M Tomar, V Gupta, B Prasad and S	2018	Improving the quantum efficiency of the monocrystalline	Materials Research Express

			Mondal		silicon solar cell using erbium-doped zinc sulphide nanophosphor in downshift layer.	
L N Venkataraman	DPS	Journal Article	L. N. Venkataraman	2018	Can Lateral Entry in the IAS Ensure Good Governance?	Economic & Political Weekly
Ramakrishnan Sitaraman	DPT	Journal Article	Ramakrishnan Sitaraman	2018	Prokaryotic horizontal gene transfer within the human holobiont: ecological-evolutionary inferences, implications and possibilities	Microbiome
Som Mondal	DEE	Journal Article	Brinchi Bora, Rajesh Kumar, O.S.Sastry, Basudev Prasad, Som Mondal, A.K.Tripathi	2018	Energy rating estimation of PV module technologies for different climatic conditions	Solar Energy
Udit Soni	DPT	Journal Article	Ashna Rawat, Udit Soni, Rajender Singh Malik Satish C.Pandeya	2018	Facile synthesis of UV blocking nano-sized Zinc Oxide and Polymethyl-methacrylate polymer nanocomposite coating material	Nano-Structures & Nano-Objects
Sukanya Das	DPS	Journal Article	Kelly D. Alley, Nutan Maurya, and Sukanya Das	2018	Parameters of Successful Wastewater Reuse in Urban India	Indian Politics & Policy
Gopal K Sarangi	DPS	Journal Article	Shashikant Yadav, Gopal K Sarangi, M P Ram Mohan	2018	Challenges in Shale Gas Production Cannot Be Resolved by Generic Environment Clearance Processes	Economic &Political Weekly
Montu Bose	DBS	Journal Article	Montu Bose and Arijita Dutta	2018	Health financing strategies to reduce out-of-pocket burden in India: a comparative study of three states	BMC Health Services Research
Arun Kansal	DRWS	Journal Article	G. Venkatesh and Arun Kansal	2018	Industrial Ecology Tools as decision- making aids for Sustainable Phosphorus Recovery- a Methodology Paper	VATTEN-Journal of Water Management and Research

Nithiyanandam Yogeswaran	DNR	Journal Article	N. Demir and N. Yogeswaran	2018	Semi-Automated Cemetery Mapping using Smartphones	The International Archives of the Photogrammetry, Remote Sensing and Spatial Information Sciences
Atul Kumar	DEE	Journal Article	Michael O. Dioha and Atul Kumar	2018	Rooftop solar PV for urban residential buildings of Nigeria: A preliminary attempt towards potential estimation	AIMS Energy
Sapna A Narula	DBS	Journal Article	Anushree Poddar and Sapna A. Narula	2018	Sustainability reporting practices in India: A study of selected conglomerates	Strategic Change :Briefings in Entrepreneurial Finance
Swarup Dutta	DPS	Journal Article	Swarup Datta, Adam Runacres and Ishita Singh	2018	Development-Induced Displacement, Indigenous Knowledge, and the RFCTLARR Act: A Critical Analysis	Journal of Resources, Energy and Development
Nithiyanandam Yogeswaran	DNR	Journal Article	Arun Pratap Golaya and Nithiyanandam Yogeswaran	2018	“AIS 2.0”: Technological changes, implications and policy recommendations	Maritime Affairs: Journal of the National Maritime Foundation of India
L N Venkataraman	DPS	Journal Article	Laksh N. Venkataraman	2018	The privatisation of public welfare in India	Social Work and Society International Online Journal
Smriti Das	DPS	Journal Article	Amit Jain and Smriti Das	2018	Crisis of the forest community in postcolonial Indian forest policies and laws	Environmental Sociology
Atul Kumar	DEE	Journal Article	Narasimhan Kodanda Ram, Nameirakpam Rajesh Singh, Perumal Raman, Atul Kumar, Priyanka Kaushal	2018	A detailed experimental analysis of air–steam gasification in a dual fired downdraft biomass gasifier enabling hydrogen enrichment in the producer gas	Energy

C K Singh	DEE	Book/Monograph	Chander Kumar Singh (Ed.)	2018	Geospatial Applications for Natural Resources Management	
Gaurav Varshney	DNR	Book/Monograph	Gaurav Varshney	2018	Islamic Insurance	
L N Venkataraman	DPS	Chapter in Books/Handbooks	Venkataraman, L N	2018	Capitals and Capabilities: Social reproduction of inequalities in Sripuram	Youth, Gender and the Capabilities Approach to Development: Rethinking Opportunities and Agency from a Human Development Perspective
Sapna A Narula	DBS	Newspaper	Sapna A. Narula	2018	Creating better facilities: Smart cities and infra reforms have increased the demand for management graduates infrastructure	The Tribune (Jobs&Careers)
Leena Srivastava		Magazines	Leena Srivastava and Nithiyanandam Yogeswaran	2018	Disaster preparedness in an increasingly uncertain World: Aligning science & policy	Geography and You
Neeti	DNR	Magazines	Neeti	2018	Geospatial technology for monitoring natural resources	Geography and You
Anandajit Goswami		Web Content	Anandajit Goswami and Saswata Chaudhury	2018	Green growth intervention and job creation	TERI
Meghna Bandelwar (Student)		Magazines	Meghna Bandelwar	2018	Gentrification in Mumbai	Shashwat Magazine (GRIHA)

Abhijit Datey	DEE	Working/Discussion papers/Policy Brief/Technical Report	Gillard, R., Datey, A., Sudmant, A., Oates. L., Gouldson, A.	2018	Resilient and affordable housing for all: Lessons on house building from Kochi and Trivandrum, India. Coalition for Urban Transitions	
Tulika Bhardwaj (Student)		Journal Article	Tulika Bhardwaj Pallavi Somvanshi	2018	Pan-genome analysis of Clostridium botulinum reveals unique targets for drug development	Gene
Priyanka Kaushal		Journal Article	Himanshu Chaturvedi Priyanka Kaushal	2018	Comparative study of different Biological Processes for non-segregated Municipal Solid Waste (MSW) leachate treatment	Environmental Technology & Innovation
Arun Kansal	DRWS	Journal Article	Chandrashekhar Deshmukh., Arun Kansa et al…	2018	Carbon dioxide emissions from the flat bottom and shallow Nam Theun 2 Reservoir: drawdown area as a neglected pathway to the atmosphere	Biogeosciences
Soumendu Sarkar	DPS	Journal Article	Soumendu Sarkar	2018	Convergence of VCG mechanism to ex-post budget balance in a model of land acquisition	Mathematical Social Sciences
Montu Bose	DBS	Journal Article	Montu Bose	2018	Development, Globalization and Its Impact on Health Status: A Study from Developing Countries Perspective	International Journal of Healthcare Sciences

C K Singh	DEE	Journal Article	Javed Mallick, Ram Karan Singh, Roohul Abad Khan, Chander Kumar Singh, Nabil Ben Kahla, Essam Ibrahim Warrag, Saiful Islam & Atiqur Rahman	2018	Examining the rainfall–topography relationship using non-stationary modelling technique in semi-arid Aseer region, Saudi Arabia	Arabian Journal of Geosciences
Anandita Singh	DPT	Journal Article	S. M. Shivaraj, Aditi Jain, Anandita Singh	2018	Highly preserved roles of Brassica MIR172 in polyploid Brassicas: ectopic expression of variants of Brassica MIR172 accelerates floral transition	Molecular Genetics and Genomics
Pallavi Somvansh	DBT	Journal Article	Rohit Satyam Essam Mohammed Janahi Tulika Bhardwaj Pallavi Somvanshi Shafiul Haqued andMohammad Zeeshan Najma	2018	In silico identification of immunodominant B-cell and T-cell epitopes of non-structural proteins of Usutu Virus	Microbial Pathogenesis
Montu Bose	DBS	Journal Article	Montu Bose	2018	Inequity in Utilization of Health Care Facilities in Urban India: An Application of Marginal Benefit Incidence Analysis	International Journal of Health Sciences and Research
Priyanka Kaushal		Journal Article	V. Rangarajan, R. Singh & Priyanka Kaushal	2018	Model development and performance evaluation of an earth air heat exchanger under a constrained urban environment	Modeling Earth Systems and Environment

Anandita Singh	DPT	Journal Article	Shikha Tyagi, Pooja Anjali Mazumdar, Pratiksha Mayee, Shivraj SM, Saurabh Anand, Anupama Singh, Chaithanya Madhurantakam, Prateek Sharma, Sandip Das, Arun Kumar, Anandita Singh	2018	Natural variation in Brassica FT homeologs influences multiple agronomic traits including flowering time, silique shape, oil profile, stomatal morphology and plant height in B. juncea	Plant Science
Priyanka Kaushal		Journal Article	Misra, G. P.; Kaushal, P.; Bhaskarwar, A. K.; Grover, P. D.	2018	Requirement of Pre-processing in a Waste to Energy (WTE) Plant Based on Indian Municipal Solid Waste (MSW)	The Journal of Solid Waste Technology and Management
Pallavi Somvansh	DBT	Journal Article	Siddharth Sinha Sharad Verma Aditi Singh Pallavi Somvanshi Abhinav Grover	2018	Simulation Based Investigation of Deleterious nsSNPs in ATXN2 Gene and Its Structural Consequence Toward Spinocerebellar Ataxia	Journal of Cellular Biochemistry
Fawzia Tarannum	DRWS	Journal Article	Fawzia Tarannum ; Arun Kansal ; Prateek Sharma	2018	Understanding public perception, knowledge and behaviour for water quality management of the river Yamuna in India	Water Policy
Roopam Shukla (Student)		Journal Article	Roopam Shukla,Anusheema Chakraborty,Kamna Sachdeva & P.K. Joshi	2018	Agriculture in the western Himalayas – an asset turning into a liability	Journal Development in Practice
Naqui Anwer	DEE	Journal Article	V.S.K.V. Harish, Naqui Anwer, Amit Kumar	2018	Modelling of Peer to Peer Sharing of Power within Solar Based DC Microgrids	Trends in Mechanical Engineering & Technology
Roopam Shukla (Student)		Journal Article	Roopam Shukla, Kamna Sachdeva & P. K. Joshi	2018	Demystifying vulnerability assessment of agriculture communities in the Himalayas: a systematic review	Natural Hazards

Manipadma Datta	DBS	Journal Article	Shinu Vig & Manipadma Datta	2018	Reviewing and revisiting the use of corporate governance indices	International Journal of Corporate Governance
Anusheema Chakraborty (Student)		Journal Article	Anusheema Chakraborty, Somidh Saha, Kamna Sachdeva & Pawan Kumar Joshi	2018	Vulnerability of forests in the Himalayan region to climate change impacts and anthropogenic disturbances: a systematic review	Regional Environmental Change
Nandan Nawn	DPS	Book/Monograph	Dayal, Vikram, Duraiappah, Anantha, Nawn, Nandan (Eds.)	2018	Ecology, Economy and Society:Essays in Honour of Kanchan Chopra	
Nandan Nawn	DPS	Book/Monograph	Nandan Nawn and Joy Elamon(eds.),	2018	Sustainability, Institutions, Incentives: Voices, Policies, and Commitments: Conference Proceedings	
C K Singh	DEE	Chapter in Books/Handbooks	Shubhangi, Kumar A., Balha A., Bindal S., Singh C.K.	2018	A Comparative Analysis of Fluoride Contamination in a Part of Western India and Indus River Basin.	Groundwater of South Asia.
C K Singh	DEE	Chapter in Books/Handbooks	Soumendu Shekhar Roy and Chander Kumar Singh	2018	Evaluation of Spectral Mapping Methods of Mineral Aggregates and Rocks along the Thrust Zones of Uttarakhand Using Hyperion Data	Geospatial Applications for Natural Resources Management
C K Singh	DEE	Chapter in Books/Handbooks	Chander Kumar Singh, M. Kumari, N. Kikon, and R.K. Tomar	2018	Spatiotemporal Analysis of Urban Expansion and Its Impact on Surface Temperature and Water Bodies	Geospatial Applications for Natural Resources Management

C K Singh	DEE	Chapter in Books/Handbooks	Akanksha Balha and Chander Kumar Singh	2018	Predictive Modeling of a Metropolitan City in India Using a Land Change Modeling Approach	Geospatial Applications for Natural Resources Management
C K Singh	DEE	Chapter in Books/Handbooks	Akanksha Balha and Chander Kumar Singh	2018	Urban Growth and Management in Lucknow City, the Capital of Uttar Pradesh	Geospatial Applications for Natural Resources Management
C K Singh	DEE	Chapter in Books/Handbooks	Pankaj Kumar and Chander Kumar Singh	2018	Use of Hydrological Modeling Coupled with Geographical Information System for Plotting Sustainable Management Framework	Geospatial Applications for Natural Resources Management
Seema Sangita	DPS	Chapter in Books/Handbooks	Seema Sangita	2018	India's Exports Through the Lens of Diversification	Changing the Indian Economy :Renewal, Reform and Revival
Sanjay Kumar Srivastava (Student)		Chapter in Books/Handbooks	Sanjay Kumar Srivastava, Rohit Sharma, Kamna Sachdeva, and Anu Rani Sharma	2018	Fog—A Ground Observation-Based Climatology and Forecast over North India	Geospatial Applications for Natural Resources Management
Manipadma Datta	DBS	Chapter in Books/Handbooks	Manipadma Datta	2018	Commentary on evolution and divergence of the concept of CSR and recent developments laid by Companies Act, 2013	Disaster Management, Corporate Social Responsibility and Conservation Issues

Manipadma Datta	DBS	Chapter in Books/Handbooks	Manipadma Datta	2018	Managing disaster through Corporate Social Responsibility and sustainability-based project on apple management in Himachal Pradesh leading to sustainable development	Disaster Management, Corporate Social Responsibility and Conservation Issues
Atul Kumar	DEE	Conference Papers	Subramaniyan, S., Mathew, M., Hossain, J., & Kumar, A	2018	Capacity Value Estimation of Renewable Energy in Maharashtra Using Peak Period Method	
Saad Nazif Ahamad Faruqui (Student)		Conference Papers	Saad Nazif Ahamad Faruqui ; Naqui Anwer	2018	Single Phase-Single Stage Z-Source Solar PV Inverter	IEEE International Conference on Power Energy, Environment and Intelligent Control (PEEIC) 13-14 April 2018
Ritika Mahajan		Working/Discussion papers/Policy Brief/Technical Report	Vinay Sharma ,Ritika Mahajan, Aparna Dutt Sharma, Rajat Agrawal	2018	Social Media Magic: How to Gain a Leap of Investor Recall in 7 Days?	The Case Centre
Gopal K Sarangi	DPS	Working/Discussion papers/Policy Brief/Technical Report	Gopal K. Sarangi	2018	Green energy finance in India: Challenges and Solution	Asian Development Bank Institute, place Tokyo
Anu Rani Sharma	DNR	Journal Article	Tigala, S., Sharma, A.R. and Sachdeva, K.	2018	Assessing Public Health Vulnerability due to Poor Indoor Air Quality: A Case Study of Rural Population of Rajasthan	Journal of Advanced Research in Medical Science & Technology

C K Singh	DEE	Journal Article	Mallick J, Singh CK, AlMesfer M, Kumar A, Khan R, Islam S, Rahman A	2018	Hydro-Geochemical Assessment of Groundwater Quality in Aseer Region, Saudi Arabia	Water
Nandan Nawn	DPS	Journal Article	Nandan Nawn, Sudha Vasan, Ashish Kothari	2018	Edited Sections in Journal- Review of Environment and Development, Theme: Agrarian Ecology, Second Issue	Economic and Political Weekly
Nandan Nawn	DPS	Journal Article	Nandan Nawn, Sudha Vasan, Ashish Kothari	2018	Introduction to Review of Environment and Development	Economic and Political Weekly
Nithiyanandam Yogeswaran	DNR	Journal Article	Nithiyananda Yogeswaran and Lakshmi P	2018	Applying Geospatial Techniques for Mapping Coastal Resources of Mahatma Gandhi Marine National Park of Andaman and Nicobar Islands	The Indian Geogrpahical Journal
Ramakrishnan Sitaraman	DPT	Journal Article	Sitaraman R	2018	Reducing everything to shillings and pence: Analysis of a Marxist perspective on the Bhagavadgita	Dialogue Quarterly
Shaleen Singhal	DEE	Journal Article	Sourabh Jain, Shaleen Singhal & Nikunj Kumar Jain	2018	Construction and demolition waste (C&DW) in India: generation rate and implications of C&DW recycling	International Journal of Construction Management
Shaleen Singhal	DEE	Journal Article	Tyagi, Y. and Singhal, S.	2018	Analyzing the influence of metro rail ridership on group housing property prices in Delhi	Real Estate Finance
Shaleen Singhal	DEE	Journal Article	Shaleen Singhal	2018	Intangibles for tangible outcomes	The Nature of Cities (Non- peer reviewed online)

A Pattnaik (Student)		Journal Article	Amruta Pattnaik,Monika Tomar,Vinay Gupta,B. Prasad &Som Mondal	2018	Optical study of ZnS nano spheres with varying amount of ethylenediamine for photovoltaic application	Integrated Ferroelectrics: An International Journal : International Symposium on Integrated Functionalities (ISIF 2017), Part II
Nandan Nawn	DPS	Book/Monograph	Nandan Nawn	2018	INSEE is Twenty: Looking Back, Thinking Ahead	Indian Society for Ecological Economics
Nandan Nawn	DPS	Chapter in Books/Handbooks	Dayal, Vikram, Duraiappah, Anantha, Nawn, Nandan	2018	Introduction	Ecology, Economy and Society: essays in honour of Kanchan Chopra
Anu Rani Sharma	DNR	Conference Papers	Tigala, S., Sharma, A.R. and Sachdeva, K	2018	Assessing Public Health Vulnerability due to Poor Indoor Air Quality: A Case Study of Rural Population of Rajasthan	International Conference on Health and Air Pollution: Effects and Management (ICOHAP-EM-2018)
Atul Kumar	DEE	Conference Papers	Dioha, M. O., Kumar, A., Mathew, M., & Hossain, J.	2018	Comparative Performance Analysis of Different Silicon-based Photovoltaic Technologies in Nigeria.	In 2018 International Conference on Power Energy, Environment and Intelligent Control (PEEIC) 13-14 April 2018
Atul Kumar	DEE	Conference Papers	Negi, A., & Kumar, A.	2018	Long-term Electricity Demand Scenarios for India: Implications of Energy Efficiency	In 2018 International Conference on Power Energy, Environment and Intelligent Control (PEEIC) 13-14 April 2018
Kavita Sardana	DPS	Conference Papers	Kavita Sardana	2018	A Latent Class Approach for Modeling Arbitrariness in the Definition of Visitors for Individual Trip Behavio	6th World Congress of Environmental and Resource Economists, Gothenburg,

						Sweden 25 Jun - 29 Jun 2018
Sapna A Narula	DBS	Conference Papers	Sapna Narula	2018	Business -Community Engagement: The Case of Mining Company in India	The 8th PRME Asia Forum , SP Jain Institute for Management Resaerch 12- 14 December, 2018 in Mumbai, India.
Soumendu Sarkar	DPS	Conference Papers	Soumendu Sarkar	2018	Bargaining for Assembly	14th Annual Conference on Economic Growth and Development,December 19 – 21
Manish Kumar Shrivastava		Working/Discussion papers/Policy Brief/Technical Report	Manish Kumar Shrivastava	2018	Addressing climate change in Indian Cities: some preliminary observations	entre For Policy Research
Ramakrishnan Sitaraman	DPT	Web Content	Sitaraman R	2018	The microbial trafficking in genetic parts within us	Nature Research Microbiology
Ramakrishnan Sitaraman	DPT	Web Content	Sitaraman R	2018	The year of bacterial anti-phage defenses?	Nature Research Microbiology
Sapna A Narula	DBS	Newspaper	Sapna A. Narula	2018	With focus on Synergy	The Tribune

List of Memorandums of Understanding (2017-18)

List of MoUs		
S.No.	Name	Description
1	Gurugram Metropolitan Development Authority, Haryana	Joint research activity, sharing of technical expertise etc.
2	Institute for Future Cities, University of Strathclyde, Glasgow, United Kingdom	Joint funding bid, conference, workshop, exchange of staff
3	Faculty of Graduate Studies, University of Sri Jayewardenapura, Sri Lanka	Exchange of faculty and staff, joint research activities and publications, participation in seminars and meetings
	University of Technology, Eindhoven, The Netherlands	Student, faculty and staff exchange and other research activities
	Concordia University, Canada	Student exchange for research internships, collaborative research, Co-sponsorship of academic projects
	Kwame Nkrumah University of Science and Technology, Kumasi, Ghana	Exchange of faculty and staff, joint research activities and publications, participation in seminars and meetings

Honorary Doctoral Degrees Awarded

Name	**Designation**
Ms Monique Barbut	Executive Secretary of United Nation Convention Combat Desertification

Doctoral Degrees Awarded

Doctoral Degrees Awarded (July 1, 2017-June 30, 2018)			
S.No.	Name	Supervisor	Thesis Title
1	Priyanka Kohli	Dr J V Sharma	Impact of decentralized forest governance under "The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act 2006" on REDD-plus in India
2	Pratiksha Jain	Dr Banwari Lal	Bioelectrochemical treatment of petroleum produced water
3	Sourabh Shrivastava	Dr Anu Rani Sharma	A study of drought occurrences and forecasting of drought events in the Indian subcontinent
4	Arpita Bisht	Dr Nandan Nawn	Ecological distribution conflicts against mineral extractivism at resource peripheries in India
5	Siddharth Sinha	Dr Pallavi Somvanshi	Functional computational approach towards structural insights of Histone Deacetylase (HDAC) inhibitors as anti Spino-Cerebellar Degeneration (ataxia) therapeutic agent
6	Dinesh Chander Pant	Dr Arun Kansal	Bacterial and thermal pre-treatment of organic waste to maximize biogas yield and estimation of air emission from digestate
7	Parvesh Kumar	Dr Shaleen Singhal	Assessment of socio economic benefits of non-motorized transport (NMT) integration with public transit (PT), case study of Bike share (BS) system in Pune, India
8	Fawzia Tarannum	Dr Arun Kansal	Analysis of public perception of water quality and role of ICT in supporting participative management – A study along river Yamuna in northern India
9	Sanjay Kumar Srivastava	Dr Anu Rani Sharma	Mechanism of fog variability and prediction of fog events over the Indo-gangetic plains
10	Anandajit Goswami	Dr Atul Kumar	Determinants of choice of cooking fuel in Bihar
11	Anchal Priya	Dr Banwari Lal	Biotechnological intervention for production of 2, 3-butanediol by indigenous bacterial strains isolated from hydrocarbon contaminated sites

Ongoing Doctoral Research [2]

S.No.	Name	Supervisor	Topic of Research
1	Madhuben Sharma	Dr Prateek Sharma	Water quality modelling for different water bodies in the foothills of Himalayas
2	Nidhi Gupta	Dr Vidya S Batra	Utilisation of red mud as a catalyst for the processing of hydrocarbons to enahance the production of hydrogen
3	Deepti Sharma	Dr Suresh Jain	Evaluating health effects and risk characterisation due to emissions from biomass energy based traditional and advanced cookstoves in rural communites
4	Fawzia Tarannum	Dr Arun Kansal	Analysis of public perception of water quality and role of Information Communication Technology (ICT) in supporting participative management - A study along River Yamuna in Northern India
5	Achla Behl	Dr Sapna Narula	A study on the Evaluation of the Mobile Medical Units (MMUs) in Uttarakhand
6	Dinesh Chander Pant	Dr Arun Kansal	Development of Efficient pretreatment system to improve the viability of AD for organic solid waste
7	Vipan Kumar	Dr Sapna Narula	Mapping Climate Technologies for Energy Sector in India: A Comparitive Study vis-à-vis China and US
8	Nehru Machineni	Dr Vinay S P Sinha	Importance of air-sea coupling in understanding the tropical climate variability using a high resolution regional coupled ocean atmosphere mode (WRF+ROMS)
9	Shikha Tyagi	Dr Anandita Singh	Study of Transcriptional Regulators Involved in flowering in Brassica spp
10	Sneha Singh	Dr Banwari Lal	Screening and selection of efficient microbial strains for biohydrogen production under thermophilic condition
11	Swarnalakshmi	Dr Rajiv Seth	Barriers to investment in renewable energy: A Risk Perception Approach
12	Neeraj Dangi	Dr Sapna Narula	Consumer Buying Behavior in organic food and the role of eco-labels
13	Anandajit Goswami	Dr Atul Kumar	Essays on Energy Transition question
14	Anita Amarsingh Dahiya	Dr Chubamenla Jamir	Study of in-situ production of ozone and determination of leighton ratios to differentiate between background, stratosphere-intruded and photo-chemically produced ozone in Delhi
15	Jyoti Kashyap	Dr Sudipta Chatterjee	Impact of anthropogenic disturbance on prey populations in Kumbhalgarh Wildlife Sanctuary, Rajasthan.
16	Manshu Madan	Dr Prateek Sharma	Stochastic modelling applications for local urban air quality management
17	Tanu Sri	Dr Anandita Singh	Study of functional aspects of regulatory evolution in Brassica SOC1

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

18	Debajit Palit	Dr Atul Kumar	Towards Convergenc of Grid and Off-grid Supply for effective Rural Electrification
19	Swati Kwatra	Dr Prateek Sharma	Development of regional scale composite sustainable development index using participatory approach
20	Garima Vats	Dr Ritu Mathur	Water-Carbon-Energy nexus in the Indian Power Sector: A focus on voncentional fuels based thermal power generation
21	V Rangarajan	Dr Priyanka Kaushal	The Earth Air Heat Exchange: Prediction of Performance in constrained urban sites
22	Anjna Sehrawat	Dr Ramakrishnan Sitaraman	Identification and characterization of Helicobacter pylori phospholipases
23	Anupama Singh	Dr Anandita Singh	Molecular and functional characterization of MIR160 and its targets from Brassica species
24	Binod Kumar Mahto	Dr P M Reddy	Development of transgenic liners of tomato and chilli plants against anthracnose disease
25	Aparna Tyagi	Dr J V Sharma	Assessment of implementation of the scheduled tribes and other traditional forest dwellers((recognition of Forest Rights) Act 2006 Sonbhadra district of Uttar Pradesh
26	Sachin Kumar	Dr Prateek Sharma	Diffusion of cleaner production innovation among MSMEs - case study of brick sector in India
27	Sonia Grover	Dr Shresth Tayal	Assessing climate change impacts on water availability patterns in a mountain catchment
28	Sunil Dahiya	Dr Suresh Jain	Environmental Impact of electricity generation from coal using life cycle approach
29	Gyan Prakash Misra	Dr Priyanka Kaushal	With special reference to Ghazipur WtE project, study of process optimization of incineration based Waste-toEnergy (WtE) plant, examin financial viability of process optimized WtE Plant and identify need for any policy and regulatory support.
30	Himanshu Chaturvedi	Dr Priyanka Kaushal	Biological treatment of MSW leachate with PVA Gel technology and scale up Methodology
31	Anupriya Desore	Dr Sapna Narula	A Study of Environmental and Social Practices in Indian Texitile Industry
32	Megha Chandhiok	Dr Rajiv Seth	Openness of economy,spillovers and productivity growth:Firm level evidence from Indian services
33	Nidhi Gautam	Dr Manipadma Datta	Searching for Financial Sustainability of Micro, small and Medium Enterprises (MSMEs) in India: An analysis in retrospect and prospect
34	Chetna Chauhan	Dr Suneel Pandey	An Assessment and Management of Residues in E-waste Recycling
35	Anand Kumar	Dr Chander Kumar Singh	Arsenic geochemistry in Indus Basin, Punjab, India
36	Meenakshi Choudhary	Dr Chubamenla Jamir	Sustainability of Organic Agriculture (case study of Middle Gujarat Agroclimatic region)

37	Nathaniel Bhakupar Dkhar	Dr Shresth Tayal	A comparitive assessment of glacier response to climatic setting through mass balance measurement
38	Pradeep Vashisht	Dr Shresth Tayal	Assessing energy balance of high altitude hlacierised basin in the North -Western Himalayas
39	Ranjana Ray Chaudhuri	Dr Prateek Sharma	A framework for updating intensity duration frequency curves for storm events
40	Shailly Jaiswal	Dr Shresth Tayal	An assessment of vulnerability to local livelihood due to melt water variations in a mountain catchment
41	Sonal Bindal	Dr Chander Kumar Singh	Arsenic vulnerability in the Upper Gangetic Plains
42	Swati Singh	Dr Shresth Tayal	Assessment of Water-Energy-Food inter linkage in urban areas and developing a framework for adaptation
43	Anoop Anand Malik	Dr Shashi Bhushan Tripathi	QTL mapping in Jatropha using an advanced interspecific population
44	Tulika Bhardwaj	Dr Pallavi Somvanshi	Genome wide identification of virulence factors of Clostridium botulinum ATCC 3502 using next generation sequencing
45	Amit Kumar Thakur	Dr Manipadma Datta	Corporate Social Responsibility and Business Sustainability in India - In Retrospect and Prospect
46	Shinu Vig	Dr Manipadma Datta	Corporate governance and sustainable value creation in Business: A study of select Indian firms
47	Devpreet Singh	Dr M V Shiju	Civilian Nuclear Energy and Risk Communication in India: Evaluation and Strategies for an Improved Stakeholder Engagement
48	Parvesh Kumar	Dr Shaleen Singhal	Assessment of socio-economic benefits of non-motorised transport integration with public transit in metro cities in India
49	Rohit Sharma	Dr Kamna Sachdeva	Tropospheric Ozone and Aerosols as short lived climate stressors and their Agricultural Vulnerability
50	Roopam Shukla	Dr Kamna Sachdeva	Assesing vulnerability of mountainous communities to climate change
51	Sonal Garg	Dr Piyali Das	Hi Grade Carbon from Biomass and Waste Sources through Pyrolysis Route , Its Charaterization and Application
52	Varsha Srivastava	Dr Malini Balakrishnan	Recovery of Bioactive Compounds (Phytochemicals) from Food Processing Waste
53	Md Ziauddin	Dr Shaleen Singhal	Evaluation of challenges and prospects of urban development:an exploratory research with special reforms to redeveopment in Delhi
54	Arpita Bisht	Dr Nandan Nawn	Social movements against expending commodity frontiers and the role of conflcts in altering patterns of extractivism
55	Niharika Tyagi	Dr Smriti Das	Gender and Community Forestry Institutions: Analyzing Gender Roles, Identities and Social Capital in Local Forest Governance

56	Shivani Wadehra	Dr Prateek Sharma	Public Choice and Solid Waste Management:A case study of Delhi Households
57	Naveen Agarwal	Dr Naqui Anwer	Power market in India: Exploring the Grey Areas
58	Vivek Tyagi	Dr Manipadma Datta	Studying cases of business failures: A critical analysis aiming enhanced business sustainability
59	Parvathi Jayasankar	Dr Sridhar Babu	Assessment of few environmental factors in carrying capacity of Bangalore city
60	Gilmore FrederickG Momin	Dr Chubamenla Jamir	Climate Change and Food Security in Garo Hills, Meghalaya
61	Ram Kumar Singh	Dr Vinay Shankar Prasad Sinha	Agricultural land dynamics in SAARC nations: elevant to food security in climate change scenarios
62	Priyanka Tewari	Dr J V Sharma	Total Economic Valuation of Ecosystem Services provided by Sariska Tiger Reserve
63	Sahaj Kaur	Dr Sudipta Chatterjee	Lichen Conservation Areas (LCAs) for in situ conservation of lichen species preferred in trade in Uttarakhan, Western Himalayas
64	Snehlata Tigala	Dr Kamna Sachdeva	Health Impacts due to Exposure to Biomass Combustion: A study over Karauli, Rajasthan
65	Sudeshna Maya Sen	Dr Arun Kansal	Variations in effectiveness and outcomes of adaptation interventions in Uttarakhand region
66	Sangeeta Agasty	Dr Sapna Narula	Diffusion of cleaner production innovation in MSME sector in India: a study of Drivers and inhibiters in select sectors
67	Dibyendu Samanta -	Dr Seema Sangita	The Dynamics of Spatial Development of India: Agglomeration, Coagglomeration,and Marshall's scale economies
68	Sourabh Jain	Dr Shaleen Singhal	An evaluation of carrying capacity based system dynamics approach towards emerging cities:Case studies for Surat and Chandigarh
69	Gp Capt Sanjay Kumar Srivastava	Dr Anu Rani Sharma	Mechanism of fog variability and prediction of fog events over the Indo-gangetic plains
70	Dharmesh Kumar Singh	Dr Shresth Tayal	Optimizing Resource use and Reducing Water Footprint of Electricity Generation in India
71	Lokesh Chandra Dube	Dr Sudipta Chatterjee	Assessing cabon and livlihood impacts of selected carbon forestry projects in India
72	N K Ram	Dr Priyanka Kaushal	Experimental study of Hydrogen enrichment in producer gas through steam, air gasification route
73	Gp Capt A Shajahan	Dr Rajiv Seth	Employment of Aerospace Power in Disaster Response: An Analysis of Exisiting Framework in India
74	Anil Kumar Jain	Dr Ritu Mathur	Exploring the Role of Gas in India's Energy Mix
75	Vivek Kumar Singh	Dr Shashi Bhushan Tripathi	Development of cytoplasmic genic male sterile (CGMS) lines in Bhut Jolokia (Capsicum chinense x C. frutescens)

76	Aditi Singh	Dr Pallavi Somvanshi	Understanding the resistance mechanisms against first line anti-tubercular drugs & finding resistance-defiant novel leads
77	Anchal Priya	Dr Banwari Lal	Biotechnological intervention for production of 2, 3 Butanediol by indigenous bacterial strains isloated from hydrocarbon contaminated sites
78	Madhuri Nanda	Dr Arun Kansal	Sustainable Phosphorus Management:Addressing the Resource Challenge for India
79	Ved Prakash Sharma	Dr Suresh Jain	Assessment of air quality and related health impacts around land-fill site in an urban area
80	Suchita Awasthi	Dr Kamna Sachdeva	Urban Water allocation in a changing climate regime-A study of drought prone regions of Maharashtra
81	Amruta Pattnaik	Dr Som Mondal	To explore the metal nano particles of plasmonic enhanced upconversion materials in C-SI Solar cell
82	Nimisha Singh	Dr Malini Balakrishnan	Recovery of antioxidants from distillery wastewater using Forward Osmosis (FO)
83	Sujata	Dr Priyanka Kaushal	Life cycle cost analysis of existing and suggested infrastructure to meet Ethanolblending mandate in India
84	Anjulata Singh	Dr P M Reddy	Engineering the modulation signaling pathway in the Rice plant to promote rhizobial infection and nitrogen fixing symbiosis
85	Meenakshi Kumar	Dr Shaleen Singhal	Multifunctionality of urban green infrastructure for the competitive advantage of cities in India
86	I V Rao	Dr Rajiv Seth	Strategy for business sustainability of MSMES in the Indian auto industry: Status and way forward
87	Sulaksha Shetty	Dr Manipadma Datta	A study on organisation and its leadership for sustainable development with particular reference to the Indian situation
88	Anuradha Bhattacharya	Dr Suneel Pandey	To assess EPR to achieve the mandate to mainstream informal e-waste recycling in India
89	Akanksha Balha	Dr Suneel Pandey	Runoff Modeling for present & future scebario: a case study of Delhi watershed
90	Ashutosh Kumar Pathak	Dr J V Sharma	Total Economic valuation of Ecosystem provided by Soorsarovar bird century
91	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
92	Divya Sharma	Dr Kamna Sachdeva	Gendered Vulnerabilities of Climate Change Shocks and adaptive decision making: A study of lower and middle Uttrakhand region
93	Tanya Sharma	Dr Suresh Jain	Assessment of the nexus between built environment, travel behaviour, air quality, and human health to re-inform the transport system
94	Birinchi Bora	Dr Som Mondal	Energy rating and reliability of PV modules
95	Kamlesh Yadav	Dr Atul Kumar	Optimum Energy Utilization in Decentralized PV

			System
96	Rakesh Kumar Choudhary	Dr Malini Balakrishnan	Embedding RECP in Indian MSMEs
97	Renu	Dr Atul Kumar	Performance Modelling and Systematic Optimization of SPVWPS for different climatic zones for irrigation purpose in India
98	Saad Nazif Ahamad Faruqui	Dr Naqui Anwer	Performance evaluation of a novel transformerless Z-source multilevel solar photovoltaic inverter
99	Lalit Sharma	Dr Suneel Pandey	Exploring Secondary resource Material (SRM) utilization potential in Indian Automotive Sector, orighinating from End-of-life Vehicles (ELV's) in National Capital – Delhi
100	Madhurima Waghmare	Dr Shaleen Singhal	Inclusive cities and creative habitats - Exploring the dynamics in context of the diverse Indian cities
101	Mary Abraham	Dr Gopal Sarangi	Impact of Mining Induced Landuse Landcover changes on livelihood
102	Rishika Singh	Dr M V Shiju	Public Participation in Decision Making; A case study of nuclear energy sector in India
103	Yogesh Tyagi	Dr Shaleen Singhal	An assessment of relationship between MRTS and real estate values: Case study of Delhi
104	Gurdeep Kaur	Dr P M Reddy	Development of transgenic rice lines resistant to sheath blight through modulation of lignin biosynthesis pathway genes
105	Nanditha Krishnan Vimalakumari	Dr P M Reddy	Bioengineering of rice for improved phosphorus use efficiency
106	Swati Patel	Dr Dheeban Chakravarthi Kannan	Studies on commercial viability on microalgae Biofuel production
107	Anushree Poddar	Dr Sapna Narula	CSR Orientation, Implementation and its relation with Firm Performance - A study of selected firms in India
108	Himanshu Arora	Dr Sapna Narula	A study on sustainability reporting process & practices of energy sector
109	Arun Pratap Golaya	Dr Nithiyanandam Yogeswaran	Overcoming fundamental challenges in Marine Vessel Tracking though suitable use of emerging information and communication technology (ICT) in the maritime domain: Safety and Security Perspective
110	Ayushi Vijhani	Dr Vinay SP Sinha	Assessing influence of climate change on water availability and distribution on vulnerable communities in Central Himalaya
111	Satyam Kushwaha	Dr Nithiyanandam Yogeswaran	Developing a spatial mitigation strategy to reduce urban heat island impact on urban habitat - A case study on Gurugram
112	Amit Jain	Dr Smriti Das	Locating Forest Community in Forest Governance: Cases of Two Villages from Jharkhand, India
113	Ashmeet Kaur	Dr Venkataraman L N	Education for Peace: Intersectional analysis of Curricular Debates in India
114	Pratibha Bisht	Dr Suneel Pandey	Evaluation of Traditional Knowledge and Biocultural Diversity of Nyishi Tribal Community for Sustainable Development in Arunachal Pradesh, India

115	Anchala Kumari	Dr Pallavi Somvanshi	Studying role of osmolytes and repurposed drugs in amyloidogenesis
116	Kirti Rawat	Dr Shashi Bhushan Tripathi	Characterization of Fusarium fujikuroi isolates causing Bakanae disease of basmati rice and its management through biocontrol agents
117	Paromita Das	Dr Vibha Dhawan	Ecosafety Studies of Bare and Modified Titania Nanomaterials used as Adsorbents and Photocatalysts for Efficient Waste Water Treatment
118	Preeti Rana	Dr Pallavi Somvanshi	Conformational ensembles guided inhibition of prion aggregation
119	Varsha Bisht	Dr Banwari Lal	Developing bacterial and plant-based biofloccants for wastewater treatment
120	Soumendu Shekhar Roy	Dr Chander Kumar Singh	Defining the nature of metamorphism of the litho-units of Lesser Himalayas (Kumaon) using sensor

Honours and Awards

Alumni

Ms Florencia

Ms Florencia, a student of M.Sc. (Geoinformatics, 2013-15 batch) and former SCCF scholar, received Nepal Bidya Bhusan Medal on World Literacy Day by President of Nepal, Ms. Bidya Bhandari in recognition of achieving gold medal for topping MSc Geoinformatics program from TERI SAS.This medal is awarded annually to students who top their respective academic programs from Bachelors to PhD.

Mr Rohit Sadaphal

Mr Rohit Sadaphal, alumni of TERI SAS and CEO of Eckonirmitee Pvt. Ltd. was awarded "Leaders in Innovation Fellowship Award" by Govt. of UK and Royal Academy of Engineering, London in 2017. Eckonirmitee, a startup company, founded as an incubated project at TERI SAS in September 2013, was selected through an independent research carried out by IIM Ahmedabad on Top 10 innovative promising startups in Energy, Environment and Engineering sectors in India. The Fellowship awards are jointly selected by the Academy on the basis of excellence of startups in their research, the potential of their innovation, the social and economic benefits of their innovation and their potential as entrepreneurs.

Student Clubs at TERI SAS

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

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

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

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

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

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

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

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

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

Entrepreneurship Development Cell (EDC): This cell emerged from the 'Ideation Club' of the University. EDC has been established to promote the spirit of innovation and entrepreneurship

among the students of the TERI SAS. Skill building, experience sharing and networking programmes are a regular feature of this cell.

Events at TERI SAS

REtopia

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

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

CLIMATES

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

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

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

SWASH

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

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

BIOTIKOS

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

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

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

TERI SAS Library

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

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

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

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

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

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

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

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

IT Infrastructure at TERI SAS

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

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

The campus has a dedicated computer lab with 20 computers, having various specialized scientific software installed, such as MATLAB, PVSyst, WAsP, etc. The Geoinformatics Lab which comprise of another 20 computers with ARC GIS and ERDAS software is also available for students. Video conferencing facility for distance learning and a media lab is available for recording and streaming of lectures. Centralized IT Helpdesk staff is present round the clock for

addressing IT-related issues in the least possible time. The TERI SAS Portal is an online gateway to information and resources at the University. It helps keep students and the faculty informed of happenings across the campus. The University has created and maintained e-learning portals in Moodle platform for online programmes to offer distance education for student across the globe. These course modules are rich in audio and video and have interactive web-based contents.

Highlights

• All Faculty and Staff systems are using i3 / i5

• Classroom are upgraded on i3 / i5

• Upgraded Projectors in all classroom and lecture hall

• Secure Colour printing service

• Video Conferencing facility for online lecture and meetings

• Cloud technology is introduced for mailing, which allows faculties, staff, and students to communicate using mail, audio/video/text chat, group discussion, calendar sharing, and data storing

• Lease Line upgraded from 20 Mbps to 45 Mbps

• 24X7, NOC support for Wi-Fi

• Archiving usage history logs as per the DOT norms

• Smart Hub for collecting Payment

• Point to point links are available that connect the campus to access resources such as the University Portal, Digital Library, etc.

• Cyberoam network security service enabled for Anti-Virus, Anti-Spyware & Anti-Spam, Intrusion Prevention System (IPS), Content & Application Filtering, Web Application Firewall, Application Visibility & Control, Bandwidth Management, Multiple Link Management for Load Balancing

• Centralized IT Helpdesk staff is present round the clock for addressing IT-related issues at the earliest possible

• Centralized Symantec endpoint protection for users

Media Lab

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

Student Portal

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

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

Time table

Attendance

Course outline and feedback

Exam result

Placement,

Latest news,

events,

and announcements

Open and Distance Learning

The Centre will plan, implement, coordinate and monitor operationalization and quality assurance of the programmes in open and distance learning mode, including monitoring of the conduct and programme delivery by the learner support centres and shall adhere to the regulation and guidelines of UGC and other regulatory authorities.

Social Presence

Our social presence is on the following sites:

Facebook

www.facebook.com/teriuniversity

Twitter

https://twitter.com/teriuniv

Youtube

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

Green Campus

TERI SAS has a 'green' campus. It puts into practice the very principles taught in its classrooms. An architectural delight, the campus has been planned to provide a setting that enhances learning, while simultaneously showcasing the concept of modern green buildings. Spread over two acres, the University campus comprises an administrative block, an office block, a convergence and hostel block. The green building has 10 classrooms, each having a capacity for seating 32 students, three lecture halls with a capacity for 60, and an auditorium with a capacity for 100 to 150 persons. The building also has 10 well-equipped laboratories to complement cutting-edge research at the TERI SAS. The campus is aesthetically designed with several features of passive energy-saving design, energy-efficiency, and water and waste management systems.

Green Features

• Insulation of external walls

• Insulation on terrace done with vermiculite and puff insulation topped with China mosaic for efficient heat reflection

• Double insulation synergy azure glass is used in external façade with aluminum glazing

• Earth Air Tunnel (EAT), Thermal Mass Storage, and Variable Refrigerant Volume (VRV) systems are used for cooling the building

• Hunter Douglas louvers are used in the building for controlling the intensity of incoming sun rays

• Solar water heating system

• Waste water recycling with STP

• Rainwater harvesting

• Solar Rooftop System

• LED lights across the campus

• Wind mill

TERI SAS Laboratories (Resources)

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

Solar Lighting Laboratory

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

The laboratory's facility is available for testing as per IEC and MNRE specifications for various lighting systems (both solar-based lighting and general lighting). The laboratory has also carried out various training programmes for different target groups. So far, the laboratory has tested

more than 200 models of solar lighting systems including solar lanterns, solar home lighting systems, solar task lights, and multi-purpose solar lights. The ability of the laboratory to cater to the testing needs of both rural as well as urban lighting infrastructure makes it stand out from other laboratories. The laboratory is working towards strong quality assurance and testing programmes which will help in building consumer confidence towards the solar lighting products. The IFC's Lighting Asia–India programme is working with the University to achieve these goals.

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

Environmental Monitoring Laboratory

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

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

Combustion Laboratory

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

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

Geoinformatics Laboratory

The Geoinformatics Laboratory at the TERI SAS is well equipped with state-of-the-art equipment such as high-end computers (workstations), scanner, digitizer, printer, navigation devices, Infra-red thermometers and others. It has licensed version of high-end latest commercial software like ERDAS Imagine, LPS, ArcGIS, GMS, and WEAP along with other advanced support system's mechanism.

The laboratory is also equipped with web publishing tools like ArcGIS Advance and ArcIMS Servers. The laboratory is also equipped with various open source geospatial software, to expose our students to the powerful open source environment.

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

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

Biotechnology Laboratory

Biotechnology laboratory is fortified with fundamental and advance facilities required for radical teaching and research applications in plant biotechnology.

The laboratory is furnished with autoclave for sterilization, Biosafety Cabinet, Centrifuges, Conductivity Meter, Deep Freezers, Digital pH Meter, Gas Chromatography, Gel Documentation System, Ice Flaking Machine,

Magnetic Stirrer, Microscopy Facilities, Nano-Drop Spectrophotometer, Refrigerated Shaking Incubator, Plant Growth Room, Vortex Shaker with Touch Plate, Water Bath for Incubations, Laminar Air Flow, Master Cycler among other basic infrastructure.

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

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

Power System Laboratory

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

Heat Transfer Laboratory

The Heat Transfer Laboratory is designed to incorporate the practical concepts of heat and mass transfer applied to renewable energy systems and energy conservation techniques. The experiments are designed to give comprehensive knowledge of heat transfer through conduction, natural convection, forced convection and radiation.

The laboratory is fully equipped with experiments on heat exchanger. It also provides knowledge of boiling and condensation processes. The lab explores the basics of mechanical engineering and is designed such that the students are able to acquire interdisciplinary knowledge in an easy way.

Energy Simulation Laboratory

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

SCHOOL-UNIVERSITY NETWORK

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

The key objectives of this initiative are:

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

As part of this network, students from secondary and senior secondary level from schools based in Delhi-NCR are invited to be a part of experiential learning visit to the University campus.

The sessions are focussed on five broad areas – climate change; energy efficiency; waste management; water management; and urban sustainability. This initiative is driven entirely by the students of the University and the participating schools.

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

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