

# **TERI School of Advanced Studies**

Address: Plot No. 10, Institutional Area, Vasant Kunj, New Delhi - 110 070, India.

Department of Business & Sustainability

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### 1. About TERI School of Advanced Studies

The TERI School of Advanced Studies 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. TERI 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 TERI 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 University started functioning from its new 'green campus', located in Vasant Kunj. The University 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 perspective of the subjects offered and encourage interdisciplinary learning.

### Administration

The University's Board of Management is responsible for its overall administration and control. All aspects of academic policy are under the purview of the Academic Council, chaired by the Vice Chancellor, which approves curricula, courses, and examination results. Furthermore, it appoints committees to look into specific academic matters arising from time to time.

### Structure

TERI SAS has structured its academic programmes around the research experience and skill sets gained by TERI over the past three decades. Since its inception, the wide array of academic programmes offered by the University have been related to sustainable development and structured around four thematic areas—Biotechnology, Regulatory and Policy aspects, Energy and Environment, and Natural Resources. The University is a first-of-its-kind university in India to dedicate itself to the study of environment, energy, and natural sciences for sustainable development.

#### **Department of Natural Resources**

Aims to advance and impart knowledge about the environment and natural resources, including their characteristics and dynamics, their economic and societal value, and their management.

#### **Department of Energy and Environment**

Aims to advance and impart knowledge in aspects related to clean technologies, renewable energy management, and especially the interface between energy and the environment. Engaged in research in the broad area of clean technologies to achieve energy efficiency and minimize adverse environmental impacts.

#### **Department of Biotechnology**

Aims to advance and impart knowledge in the field of life sciences, emphasizing research and the interaction of science with society.

#### **Coca-Cola Department of Regional Water Studies**

Aims to advance knowledge and build core competencies among students, researchers, policymakers, and professionals in order to equip them to tackle the interwoven challenges of water sustainability, beyond cultural boundaries and across sectoral divisions.

## **Department of Business and Sustainability**

Aims to provide research-based education that would equip students to implement an integrated approach to business sustainability.

## **Department of Policy Studies**

Aims to achieve a critical mass of expertise and academic excellence that would provide a basis for influencing public policy and regulatory practice.

## **Centre for Post Graduate Legal Studies**

Aims to be an interdisciplinary centre of excellence dedicated to legal research and teaching on issues pertaining to society and development.

Besides a set of core faculty members, the University also draws about 17 PhD qualified research professionals of TERI as adjunct faculty for its programmes. They have rich experience of working on projects related to regulatory studies, policy research, bioresources, biotechnology, energy, and environment.

## ACADEMIC PROGRAMMES

At present, the following programmes are offered:

- PhD
- MSc (Environmental Studies and Resource Management)
- MSc (Geoinformatics)
- MSc (Climate Science and Policy)
- MSc (Plant Biotechnology)
- MSc (Economics)
- MSc (Water Science and Governance)
- MA (Public Policy and Sustainable Development)
- MA (Sustainable Development Practice)
- MBA (Infrastructure)
- MBA (Business Sustainability)

- MTech (Renewable Energy Engineering and Management)
- MTech (Urban Development and Management)
- MTech (Water Science and Governance)
- LLM (specialisation in Environment and Natural Resources Law and Infrastructure and Business Law)
- Diploma in Water Science and Governance
- Diploma in Renewable Energy (distance education mode)
- Advanced PG Diploma in Renewable Energy (distance education mode)

The academic programmes offered by the TERI SAS focus on the challenges of providing for the rising global population with a limited and degraded natural resource base. In moving towards sustainability, there is no panacea, or straight road with recognized and established methodologies, tools or specializations. The solutions, therefore, do not lie in a specific subject discipline but must be appropriate and relevant to the context or the practical problem being addressed. Developing such an understanding among the students is best achieved through exposure to a variety of subjects, tools, and methodologies in the interdisciplinary mode. This has been the guiding philosophy of TERI SAS's programmes and is practised by building a theoretical understanding of courses covering a variety of traditional disciplines such as ecology, the natural and social sciences, governance, policy, law, and engineering. Over the duration of their study, students converge upon a few areas based upon their interest, having been exposed to a new way of thinking that looks at problems not from the lens of a subject specialist, but from the perspective of one who recognizes the complex linkages between man and the environment.

The University uses modern pedagogical tools, richly supplemented by field visits, live industry projects, and hands-on applications. It provides the best equipment and instruments, which includes state-of-the art computer hardware and software, well-equipped laboratories, video-conferencing facilities, and access to South Asia's most comprehensive library on energy and environment. TERI SAS was awarded the India Today award for the most innovative curriculum.

### Collaborations

Stressing the importance of the international perspective in its programmes, TERI University has entered into Memorandums of Understanding (MoUs) with several international universities aimed at facilitating a mutually beneficial exchange of students, faculty, knowledge, resources, and ideas.

The University encourages the exchange of ideas, cultural understanding, and a wide range of knowledge that would result from international exposure. In 2007, the University launched an academic exchange programme with Yale University (School of Forestry and Environmental Studies) with support from the V K Rasmussen Foundation. In 2008, the University launched another academic exchange programme with Freie University of Berlin, Germany, with support from DAAD (the German Academic Exchange Service).

TERI University has also signed MoUs for academic collaborations with North Carolina State University, University of Eastern Finland, Tor Vergata Economic Foundation (Rome, Italy), Utrecht University (Utrecht, The Netherlands), Carletin University (Canada), Simon Fraser University (Canada), Deakin University (Australia), University of Technology (Sydney).

## INFRASTRUCTURE

### **Green Campus**

TERI University 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 University. 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

## **TERI** University Laboratories

TERI University 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 University has established a Solar Lighting Laboratory (SLL) which is a first-of-itskind laboratory in India and achieved the NABL's accreditation (National Accreditation Board for Laboratories) as per IEC 62257-9-5 ed. 2.0.

#### **Environmental Monitoring Laboratory**

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

The EML is equipped with UV-Visible Spectrophotometer, GRIMM Aerosol Spectrometer, Respirable Dust Sampler, High Volume Sampler, Stack Monitoring Kit, pH Meter, Muffle Furnace, Oven, Ion Selective Electrode, Turbidity Meter, Conductivity Meter, Jar Test Assembly, COD Digester (Reflux), BOD Incubator, Sensitive Balance, Bomb Calorimeter, Kjeldahl Unit, Microscope With Camera (Primostar Halogen), Optical Partical Sizer (TSI), Potable Gas 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).

### **Geoinformatics Laboratory**

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

#### **Biotechnology Laboratories**

The Biotechnology Laboratories are equipped for teaching and research in plant biotechnology. These laboratories harbour equipment such as autoclave, oven, water baths centrifuges, conductivity meter, pH Meter and ice flaking machine. They house molecular biology related equipment such as gel electrophoresis systems for nucleic acids and proteins, gel documentation system, Nano-Drop for DNA quantification, thermal cyclers, real-time PCR, refrigerators, deep freezers (-20 and -80 0C) and laminar air flow. Other equipment such as microscopes, gas chromatograph, plant growth room and plant culture room are also available. The Bioinformatics laboratory is equipped with a high capacity server, work stations and dedicated computers with advanced software such as MATLAB, GCK, PAUP and MacVector. Furthermore, the students also have access to TERI's research laboratories at Gual Pahari.

#### **Power System Laboratory**

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.

### **Heat Transfer laboratory**

The Heat Transfer laboratory provides a platform to study various mechanisms of heat transfer such as conductive, convective and radiative heat transfer. The experiments are designed to give students the ability to do steady-state measurement and analysis of heat transfer mechanisms along with characterization of heat exchanger.

### **Energy Simulation Lab**

Energy Simulation Lab enhances the soft computing skills of the students and enables them for modelling and simulation of energy systems. 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

### **Biofuel and Waste Utilization Laboratories:**

The Biofuel and Waste Utilization Laboratories are distributed between the TERI University and TERI Gram at Gual Pahari, Gurgaon. Combustion process and fuel properties such as proximity analysis, COD, etc., are studied at the lab in TERI University, while experimental studies on biomass conversion processes such as gasification, biomethanation, and pyrolysis are carried out on facilities at TERI Gram.

The Solar Energy Laboratory has outdoor and indoor facilities for conducting experiments on characterization of solar photovoltaics modules and performance analysis of various solar thermal devices.

Centre for Excellence in Thermal Energy Storage works on finding innovative solutions in the areas of solar energy based decentralized cold storages and air cooling application, thermal storage for solar crop drying, development of thermal storage for waste heat utilization and solar thermal power generation

### TERI SAS LIBRARY

The TERI University library supports the university's academic and research programmes by meeting the information requirements of students, researchers, and faculty members.

The Digital Library provides access to electronic books, journals, databases, PhD theses, CDs, links to resources, news, and information alerts about the library. The online bibliography database of the university library can be accessed to search any particular title using the author's name, keyword or title itself. The faculty and students can retrieve online information from the dedicated terminals situated in the library. Network resource sharing

facilities are provided through DELNET and interlibrary loan services from the libraries of other universities and institution, such as American Information Centre, Delhi University, Indian Institute of Technology (IIT), Jawaharlal Nehru University (JNU), and more.

## 2. Department of Business and Sustainability

### **About the Department**

The Department of Business & Sustainability is committed to the cause of continued research in sustainability for business. The department, naturally, is interdisciplinary in its approach. Its mission is to provide experience and research-based education that would equip the students to implement an integrated approach to business sustainability, so that the world we share thrives with a greener agenda. The department offers two masters programmes, MBA in Business Sustainability and MBA in Infrastructure. It also offers PhD programmes, both full-time and part-time, with the goal of capacity building in the area for the academic world and the industry. The department's areas of research include: economics of climate change, responsible investments, sustainability reporting, environmental accounting for sustainability, weather derivatives, infrastructure financing, business innovation, business strategy, international financial reporting standards (IFRS) and sustainability, green indices, environmental-social-governance issues and business, valuation of intangibles, eco-entrepreneurship and the like.

- **Vision:** To successfully integrate the values of sustainability in business practices and build a just, clean and green society.
- **Mission:** To create a pool of human resources through evidence and researchbased learning who are well trained to adopt an integrated approach to sustainability in management practices

## 3. Structure & Organization



### Dr. Sapna A. Narula

**Teaching Interests:** sustainable business strategy, sustainability Reporting, CSR and Business, Natural Ecosystems and Community

**Research Interests**: Business Sustainability, Corporate Social Responsibility, Sustainability Reporting and standards

## Faculty: Dr. Ritika Mahajan

**Teaching Interests:** Quality Management, Organizational Behaviour, Fundamentals of Management

**Research Interests:** The areas of management education for sustainable development, stakeholder experiences with business sustainability

### Prof. Manipadma Datta

**Teaching Interests:** Corporate Finance, Corporate Accounting and Reporting, Legal Aspects of Business

**Research Interests:** Climate Finance, Responsible Investments, Integrated Reporting, Circular Economy Finance, Weather Derivative, Circular Economy Finance to Public Management, CSR, Strategic Management, Sustainability and Creativity, Valuation of Intangibles.

### Dr. Montu Bose

**Teaching Interests:** Statistical Methods for Management, Managerial Economics, Health Economics, Health Financing, Economics of Social Sector and Public Health

**Research Interests:** Health Financing, Social Sector Management, Environmental Health, Sustainable Health Systems and Epidemiological Transition

Programme Assistant: Ms. Jyoti Mehlawat

Visiting Faculty	Designation	Organization
Dr Vinay Sharma	Consultant	Partners India
Dr. Zinaida Fadeeva	Research Fellow	United Nations University-Institute for Advanced Studies
Dr. Ambika Zutshi	Associate Professor	Deakin University, Australia
Dr Santosh Pande	Director	Nihilent Technologies Ltd
Dr Nikunj Jain	Assistant Professor	International Management Institute New Delhi
Dr. Umesh Gulla	Director	DigiGYAN Institute for Professional Training & Services
Dr Santosh Pande	Director	Nihilent Technologies Ltd
Anil Gupta	Director	GVC Ltd.
Ms Neha Suri	Associate Professor	FIIB
Dr. Sanjeeva Shivesh	Director	The Entrepreneurship School
Prof Jay Seelan	Consultant (Business Incubation)	Meghalaya Basin Development Authority (MBDA), Govt. of Meghalaya
Prof Sanjay Chandwani	CEO	Centre for Market Research & Social Development
Ms. Kanchi	Forest Governance & Environment Justice	Free Lancer
Dr. Swati Dhawan	Associate Professor	Delhi University
Dr. KK Jain	Associate Professor- Finance	Business School
Dr. Subodh Jain	Chairman	Etude services
Dr. Sanjeeva Shivesh	Director	The Entrepreneurship School
Dr. Neha Suri	Associate Professor	FIIB
Lovneesh Chanana	Vice President	SAP India Private Limited
Dr. Rudra Rameshwar	Professor / Management Faculty	Thapar School of Management, Thapar Institute of Engineering & Technology University, Patiala (Punjab) India

## Programmes

## M.B.A. (Business Sustainability)

## **Programme Overview**

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 the customers, shareholders, and the government. This has created a need for managers in different sectorspublic, private and not for profit, to maintain a balance between three pillars of sustainability i.e. people, planet and profit. The MBA (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. Different courses such as Principles and Concepts of Sustainability, Climate Change and Development, Sustainability Reporting, Corporate Social Responsibility, Strategies for sustainable business, Business, Natural Ecosystems and Community, Accounting and Finance for Sustainability taught in the programme help the students recognize the need, challenges and ways to approach long-term viability of businesses through management and optimization of resources without compromising on profitability and competitiveness.

## MBA (BS): Program Specific Outcomes

- Ability to formulate, implement and evaluate sustainable business strategies
- Competency to make business decisions ethically, with social and environmental consciousness
- · Leadership and teamwork skills for business sustainability
- Training in tools, techniques, and frameworks to think critically and communicate effectively
- Training in quantitative and qualitative methods for research

## **Programme Structure**

Year/Semester	Course Title	Туре	Credits
1 <sup>st</sup> Year			
1 <sup>st</sup> Semester	Total Credits		23
	Principles and concepts of sustainability	Core	2
	Business ethics	Core	2
	Sustainability Reporting	Core	2
	Managerial economics	Core	3
	Marketing management	Core	3
	Fundamentals of Management	Core	2
	Business communication	Core	3
	Statistical methods for management	Core	3
	Corporate accounting and reporting	Core	3
2nd Semester	Total Credits		21
	Legal aspects of business	Core	2
	Qualitative research methods in management	Core	2
	Strategies for Sustainable Business	Core	3
	Macroeconomic Environment	Core	3
	Corporate Finance	Core	3
	Management information system	Core	2

	Advanced statistical methods for management	Core	2
	Corporate Social Responsibility	Core	2
	Organisational behavior and leadership	Core	2
2 <sup>nd</sup> year			
3rd Semester	Total Credits		21 (15+6)
	Accounting and finance for sustainability	Core	3
	Minor Project	Core	6
	Entrepreneurship	Core	2
	Supply chain management	Core	2
	Business, Natural Ecosystems and Community	Core	2
	Health Finance	Elective	3
	Corporate governance	Elective	2
	Sustainable consumption and production	Elective	2
	Techniques of environmental valuation	Elective	4
	Financial intermediaries, institutions and regulations	Elective	2
	Integrated impact assessment	Elective	4
	Derivatives and risk management	Elective	2
	International financial management	Elective	2
	Business to business marketing	Elective	2

	Urban Governance	Elective	4
	Environmental management system	Elective	4
	Brand management	Elective	2
	Security analysis and portfolio management	Elective	2
	Production and Operations Management	Elective	3
	Consumer Behaviour	Elective	2
	Project design and management for sustainable development practice	Elective	4
	Social Entrepreneurship	Elective	2
	Design Thinking	Elective	2
4 <sup>th</sup> Semester	Major project	Core	14

## **MBA** (Infrastructure)

### **Programme Overview**

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. Amidst the changing global and domestic economic order, 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 organisations involved in infrastructure business.

The TERI SAS is the first University in the country to offer an MBA programme in infrastructure. The increasing emphasis on the infrastructure sector nowadays and the requirements of the industry necessitated a review of the existing programme. It was felt that a programme more focused on the sector would attract candidates, especially the mid- career professionals. However, fresh graduates who can demonstrate the ability to cope with the rigour of the programme can also apply.

The programme not only imparts the 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.



## **Eligibility:**

- Bachelor's degree in any discipline with English at 10+2 level
- The candidate will be shortlisted based on CAT/MAT/GMAT/CMAT/XAT scores. Candidates who have not appeared for the above exams can take the TERI SAS common entrance test.
- Candidates with more than 2 years of relevant work experience may be exempted from requirement (2) above depending on the discretion of the selection committee.

## **Selection Process**

The candidates will be shortlisted based on CAT/GMAT/MAT/CMAT/XAT or TERI SAS entrance exam scores (Candidates with more than 2 years of relevant work experience may be exempted from this requirement), depending on the discretion of the selection committee. Selection from shortlisted candidates will be on the basis of group discussions and interviews conducted by the University at New Delhi.

## MBA (Infrastructure)

Year/ Semester	Course Title	Туре	Credits
1 <sup>st</sup> year			
1 <sup>st</sup> Semester	Total Credits		20
	Module 1 Basics of Infrastructure		
	Business		
	Introduction to Infrastructure Business	Core	2
	Economics of Infrastructure and Pricing	Core	2
	Strategies		
	Infrastructure project finance	Core	2
	Corporate Accounting and Reporting	Core	2
	Corporate Finance	Core	2
	Statistical methods for management	Core	3
	Module 2 Law & Policy Framework for		
	Infrastructure Business		
	Legal & Regulatory aspects of	Core	2
	infrastructure		
	Business Laws and Infrastructure projects	Core	2
	Contract Laws	Core	2
	Environmental and Social Laws	Core	1
2 <sup>nd</sup> Semester	Total Credits		20
	Module 1 Strategy and Risk		
	Business Ethics	Core	1
	Strategic planning	Core	2
	Risk analysis and Implementation	Core	3
	Management		
	Project Planning and management	Core	2
	Bidding System Management	Core	1
	Module 2 Operational aspects of		
	Infrastructure		
	Quality Management	Core	2
	Management information systems	Core	2
	Infrastructure organization and HR	Core	3
	Logistics and supply chain management	Core	2
	Macroeconomic Environment	Core	3
2 <sup>nd</sup> Year			
3 <sup>rd</sup> Semester	Total Credits		23 (17+6)
	Minor Project	Core	6
	Integrated impact assessment	Core	3
	Public Private Partnership	Core	2
	Corporate governance	Core	2

	Innovation and change management for infrastructure projects	Core	2	
	Strategic communication and stakeholder engagement			
	Advanced Logistics and Supply Chain Management			
	Accounting and finance for sustainability	Elective	3	
	Financial intermediaries, institutions and markets			
Sustainable Urban Transport			2	
	Entrepreneurship			
	Urban water supply and waste management	Elective	2	
	Business to business marketing			
	Total credits			
4 <sup>th</sup> Semester	Major Project	Core	14	

## **Student Intake:**

Year	MBA (Business and Sustainabilit y	MBA (Infrastr ucture)	Total	Teacher-Student Ratio (Department Level)
2011-2013	29	18	47	1:15.6
2012-2014	27	14	41	1:13.6
2013-2015	8	-	8	1: 2.6
2014-2016	11	3	14	1:3.5
2015-2017	24	8	32	1: 8
2017-2019	23	-	23	1: 5.75
2018-2020	16	4	20	1:5

## **Student Profiles**

Student Intake in Department of Business & Sustainability						
Veen	MBA (BS)			MBA (Infra)		l)
Year	Male	Female	Total	Male	Female	Total
2017-19	10	13	23	0	0	0
2018-20	10	6	16	4	0	4

## Educational Background of the Students of Academic Year 2017-2019





Sales & marketing

Business Analyst

Quality Control

Consultancy

Operations

Fresher

quality control

Experience Domain

Application Analyst

Manufacturing

Duration of Work Experience of the 2017-19 Batch

9%

4%

4%

4%

4%

4%

52%



## Table: Programme wise Percentage of Syllabus Revised

Programme name of revised syllabus	Year of revision	Percentage of Syllabus content added or replaced
M.B.A. (Business Sustainability)	2016	90%
M.B.A. (Infrastructure)	2015	20%

Programme name	Name of the new course introduced in last 5 years	Year of introduction
M.B.A. (Business		
Sustainability)	Principles and concepts of sustainability	2013
M.B.A. (Business		
Sustainability)	Business ethics	2013
M.B.A. (Business		
Sustainability)	Sustainability Reporting and CSR	2013
M.B.A. (Business		
Sustainability)	Managerial economics - 1	2013
M.B.A. (Business		
Sustainability)	Marketing management - 1	2013
M.B.A. (Business		
Sustainability)	Management functions and organisational behaviour	2015
M.B.A. (Business		
Sustainability)	Business communications	2015
M.B.A. (Business		
Sustainability)	Statistical methods for management	2013
M.B.A. (Business		
Sustainability)	Corporate accounting and reporting	2015
M.B.A. (Business		
Sustainability)	Legal aspect of business	2013
M.B.A. (Business	Managerial economics - 2	2013

Sustainability)		
M.B.A. (Business		
Sustainability)	Corporate finance	2015
M.B.A. (Business		
Sustainability)	Infrastructure policies reforms and law	2013
M.B.A. (Business		
Sustainability)	Management information system	2015
M.B.A. (Business		
Sustainability)	Quantitative methods in management - 2	2013
M.B.A. (Business		2016
Sustainability)	Accounting and finance for sustainability	2016
M.B.A. (Business	Marketing management II	2014
Sustainability) M.B.A. (Business	Marketing management - II	2014
Sustainability)	Entrepreneurship Development and Management	2014
M.B.A. (Business	Corporate governance - challenges, evolution and	2014
Sustainability)	future direction	2014
M.B.A. (Business		2011
Sustainability)	Supply chain management	2013
M.B.A. (Business		
Sustainability)	Contemporary issues in change management	2013
M.B.A. (Business		
Sustainability)	Community relationship	2014
M.B.A. (Business		
Sustainability)	Derivatives and risk management	2013
M.B.A. (Business		
Sustainability)	International financial management	2015
M.B.A. (Business		2014
Sustainability)	Business to business marketing	2014
M.B.A. (Business	Consumer behaviour	2014
Sustainability) M.B.A.		2014
(Infrastructure)	Statistical methods for management	2016
M.B.A.	Statistical methods for management	2010
(Infrastructure)	Introduction to Infrastructure Business	2015
M.B.A.		2010
(Infrastructure)	Business Ethics	2013
M.B.A.		
(Infrastructure)	Strategic planning	2015
M.B.A.		
(Infrastructure)	Risk analysis and Implementation Management	2015
M.B.A.		
(Infrastructure)	Project planning and management	2015
M.B.A.		
(Infrastructure)	Bidding System Management	2015
M.B.A.		2015
(Infrastructure)	Legal & regulatory aspects of infrastructure	2015

Pusiness Laws and infrastructure projects	2015
	2013
	2015
	2013
	2015
Opportunities	2015
	2015
Environmental and Social Laws	2015
	2015
Macroeconomic Environment	2015
	2015
Infrastructure project finance	2015
Economics of Infrastructure and Pricing Strategies	2015
Corporate Accounting and Reporting	2015
Corporate Finance	2015
Quality Management	2015
Management information systems	2015
Infrastructure organization and HR	2015
Logistics and supply chain management	2015
Strategic communication and stakeholder engagement	2015
Corporate governance - challenges, evolution and	
future direction	2014
Innovation and change management for infrastructure	
	2015
Entrepreneurship Development and Management	2014
Business to business marketing	2014
	Logistics and supply chain management   Strategic communication and stakeholder engagement   Corporate governance - challenges, evolution and   future direction   Innovation and change management for infrastructure   projects   Entrepreneurship Development and Management

## 4. Best Practices

## **Our Strength: Pedagogy, Learning & Exposure**

The pedagogy for both the programmes is rooted in the interdisciplinary approach the University follows. The instructors follow critical thinking approach where a student is given hands on training to provide solutions to sustainability problems the businesses are facing. The interaction is allowed between students from other departments and programmes and efforts are done to ensure that the students work on problems by knowledge exchange across disciplines. A range of open electives throughout the University facilitate this exchange.Pedagogy for MBA (Programmes) includes role-plays, group discussions, case study analysis, use of games and simulations along with lecture method. Training is also provided on softwares for data management and analysis. Teaching is research based as faculty members are extensively involved in carrying out research as well as publishing in good quality journals.



Term papers Case studies Debates/ Discussions Poster presentation Role plays Simulation games

Summer Internship, and Major Research Project

Campus 2 Corporate programme Field Trips Industry Visits

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Interface with Society Community Engagement Corporate Social Responsibility

## Learning outside Classrooms

The rigorous academic curriculum is complemented with group activities and field visits. Industry interaction with sustainability experts, business heads, investors, entrepreneurs and academicians expose students to contemporary business sustainability, environmental and corporate governance issues.



Students visit Open Cast Coal Mines, Dhanbad (November 2017)



Industrial visits such as Jharkhand coal mines, Maruti and Unilever production sites instils deep interest in students. They partake ecological restoration, livelihood generation and local body and citizen interaction programs to understand industrial impacts on ecosystem services.

Students practicing CSR at the Community level



**Study Tours:** Study tour is an integral part of our curriculum. Students visit various places twice in their entire two-year tenure at the Institute. The places are chosen based on three criterion – at least an urban locality, at least a natural habitat and at least a village.

Study Tour at Alwar, Rajasthan 2018



Study Tour 2018: Village Sariska, Rajasthan



Study Tour 2018: Bharatpur Bird Sanctuary



## **Evaluation System**

The Department emphasizes on continuous evaluation and unique methods of evaluating learning outcomes. Some examples are given below.

- Open book exam for the course principles and concepts of sustainability
- Research project in the course qualitative research methods in management where students conduct a primary data-based survey. Evaluation is based on various components submitted throughout the semester like abstract, literature review, proposal, and final paper.
- Fieldwork based assignment in the course Business, Natural Ecosystems and Community. Students go for field visits to suitable locations to understand various aspects taught in the course. A concept note is prepared based on the field visit and followed Presentation and submission of Field visit report. Weightage is assigned to all the components.
- Minor and Major project reports of the MBA programmes are based on experiential learning of the candidates where they spend a minimum of 6 weeks and 10 weeks respectively in the industry to gain insights into the working of organizations and put classroom learning into perspective.

- Book Review, and industry visit to study application of concepts and principles for the OB course.
- Group activity aimed at understanding the industry, competition and strategy of a firm for the course Marketing Management. The group has to choose a company in consultation with the faculty, plot the products in the product line on the PLC, create a product mix, explain the pricing strategy and provide an innovative promotional campaign

## **Curriculum Revision**

For curriculum revision, structured feedback is collected from various stakeholders including industry experts, academicians, alumni and students through a questionnaire-based survey. In 2018, a report on structured feedback for MBA (Business Sustainability) programme was presented by the Program Coordinator to the Academic Council on behalf of the Department of Business and Sustainability. Key findings from the survey formed the basis of changes made in the MBA (BS) program from January 2018 onward including consolidation of existing courses, and introduction of new courses in demand in the job market.

## **Student Placements**

The campus recruitment activity for the MBA (Business Sustainability) and MBA (Infrastructure) programme is conducted to serve dual purposes, placement of the students for their final project which is undertaken in the fourth semester, and the formal job recruitment on completion of the programme.

Year	Total Students	Placed	% of Students Placed
2018	31	27	87
2017	8	7	88%
2016	14	13	93%
2015	31	29	94%
2014	36	30	83%
2013	46	40	87%
2012	45	42	93%

# Leading Organizations where students are placed:

Consulting						
	KPMG	Energy				
	E & Y	_	IREDA			
-	Next Gen PMS	_	IDAM Infrastructure			
	IMRB International	_	Reconnect Energy			
_	Vox Populi Research	_	Schneider Electric			
_	E Value Serve	_	Sun Alpha Energy			
_	Louis Berger	-	Infraline energy			
_	Emergent Ventures	-	ICF International			
_	Ipsos Research	-	World energy Council			
	Ernst & Young	_	Indian energy Exchange			
_	IPE Global		SN Power( Statkraft)			
_	RSM-GC		EKI Energy			
		-	Intelligrow			
		<b>T</b> ( )				
Academic In –	Ashoka University	International	l Organisations UNIDO			
	Next Gen PMS	_	WBCSD			
_	Orange education	_	TERI			
		_	Development Alternatives			
		-	Sulabh international			
		-	UN Global Compact			
Others _	Macmillan Publishers	Oil & Gas				
_	Havells India	-	HPCL			
_	Decathalon Sports India		Bharat Petroleum ONGC			
	Shakti Pumps	-	GAIL			
_	Galaxy Surfactants	-	Oil India			
	Lalavy Nurtactante					
– G	odrej Agrovet					
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- 0	YO Rooms					
	ational oundations	Innovation				
– PI	PAP Automotive					
Industry Associations			Financial Institutions			
– C	Π		- HSBC Bank			
– Fl	ICCI		<ul> <li>Mahindra Finance</li> <li>American Express</li> </ul>			
– SI	IAM					
IT Sector			Cement Industry			
	- TCS		- Ultra Tech Cement			
	<ul><li>Dell Interna</li><li>Infosys</li></ul>	tional	- Ambuja Cement			

# Our placement process consists of two phases

Major Project

Availability of Students
January–June 2019
Availability of Students
June 2019 onwards

# **Sectoral placement of Students**



## **Integrating Sustainability in Management Education**

Our uniqueness lies in differentiating ourselves with respect to integrating sustainability with business education. We are a member of PRME (UN Initiative) and the department submitted its first PRME report in 2018. The department is fully engaged with PRME secretariat and other signatories for our commitment towards spreading awareness on responsible management education and integrating sustainability in business school curriculum. The faculty and students have been part of both PRME Asia Forums held last year in Mumbai and Delhi respectively.

**TERI SAS Sustainability Paradigm** 



# **Integrating PRME into Educational System**

PRME's six principles, which each member institution is expected to abide by are also followed by TERI SAS as exhibited in the figure-2 below:

## Six Major PRME Principles



The courses offered nurture students ability to inculcate management and sustainability to create sustainable business models of tomorrow, a need of the hour.

	Corporate Accounting	Financial statements,	Role of Finance in	
	and Finance, Accounting	Leverages, Cost Accounting,	Corporate strategy,	
	for Finance and	Risk and return, Green	Sustainable Finance	
	Sustainability	Accounting, Responsible		
	-	Investment		
	Managerial Economics,	Demand and Supply,	Economic decision	
	Statistical Methods of	Production theory, effect of	making, Statistical	
	Management, Qualitative	taxes, Regression, Co-relation	Analytics, Forecasting,	
	Research Methods,	analysis, Hypothesis testing,	Market research	
General	Quantitative Methods in	Data collection, Research		
Management	Management	Methodologies		
Subjects	Productions and	Inventory management,	Planning and	
Ŭ	Operations, Supply Chain	Queuing Theory, Linear	Scheduling, Logistics	
	Management,	programming, Distribution	Network, Build and	
		Channels,	improvise supply chain	
	Marketing Management,	Marketing Mix, Motivation	Marketing Strategies,	
	Business Communication,	theories, Group vs Individual	Sales and Pricing	
	Organization Behavior	behavior	Plans, Business	
			proposals, Market	
			Research, Team	
			Building, Leadership	
	Business Ethics,	Ethics in Management,	Sustainability risk	
	Sustainability Reporting,	Reporting on economic,	assessment, GRI	
	Principles and concepts of	environmental, and social	reporting,	
	sustainability	impacts, CSR	<i>6</i> ,	
0		I may see		
Sustainability				
Related	Strategies for Sustainable	Core competency, Porter's	Strategy Formulation,	
Subjects	Business, Environmental	generic strategies Government	Policy making and	
	Economics, Business,	and fiscal policies,	Research	
	Natural Ecosystems and	Environmental benefits and	Impact assessment of	
	community	costs, Strategies	Business Projects	
		for community relationship		
		and engagement		

# **Course----Key Notes --- Key Applications**

## VALUES

We will incorporate into our academic activities and curricula the values of global social responsibility as portrayed in international initiatives such as the United Nations Global Compact

The Faculty is committed to systematically embed values of social responsibility across all its courses. However, there are few direct courses in our programmes which are directly linked to ethics and value. The courses are –

#### **BUSINESS ETHICS**

An important element of any corporate organization during its interactions with its environment is how it deals with ethical issues. What does it consider as acceptable /unacceptable and the extent to which a business accepts its responsibility are some key issues for study? From time to time corporate scandals have demonstrated that managerial decision-making invariably has ethical implications. However, these ethical implications are seldom given any serious thought and get viewed as just byproducts of mistaken action, instead of understanding that they comprise the prime ingredients of business decisions.

#### LEGAL AND REGULATORY ASPECTS OF INFRASTRUCTURE

This course provides an overview of the Constitutional and general legal context in which the infrastructure sector operates. It also covers the legislative and policy framework within which the specific infrastructure activity has to be undertaken. Special emphasis is placed on the regulatory law of different infrastructure sectors and attempts to undertake a comparative assessment of the regulatory laws and policies of different infrastructure sectors.

#### **BUSINESS LAWS**

Business works under a defined set of laws and a predictable legal regime provides a stable environment conducive for overall business development. The course covering Companies Act;

the Industries (Development and Regulation) Act 1951; Industrial Disputes Act; the Competition Act, 2002; the Arbitration and Conciliation Act, 1996; the Foreign Exchange Management Act (FEMA),1999; introduction to taxation system; Polices relating to Foreign Direct Investment, FIIs; Multilateral Guarantee System, taught through various case studies expose students to various sets of laws and regulatory regime that interact with business on a day to day basis.

#### LAND, ENVIRONMENTAL AND OTHER LAWS

Laws relating to land acquisition, environment, labour etc. have an important role to play in the various phases of an infrastructure project. This course tries to analyse these laws and their application in infrastructure projects during the development, construction, operation and demobilization phases.

#### Method

We embed the values of environment and sustainability into our courses and actively involve organisations in developing the student experience. Our courses are backed by high-quality contemporary research and developed in consultation with industry to ensure graduates are ready for their chosen career. We highlight several exemplary units below:

#### **PRINCIPLES & CONCEPTS OF SUSTAINABILITY:**

This course focuses to empower students to critically analyse different, often competing, definitions of sustainability driven by perspectives and interests of societal stakeholders. It introduces sustainability visions and practices relevant for the business community. A special emphasis is given to provide historical perspective to the concepts, and strategies employs by businesses and their stakeholders as well as various ideological interpretations of these concepts and strategies in individual contexts. Finally, students are encouraged to work with discussion of multiple solutions for sustainability challenges.

## INTRODUCTION TO SUSTAINABLE DEVELOPMENT

The course seeks to build an inter-disciplinary perspective on understanding sustainable development concerns and challenges. This course familiarizes students with current debates and perspectives in analyzing constraints and opportunities for sustainable development. It also aims to provide students with a general introduction to the basic core competencies and practical skills required of a "generalist" development practitioner.

# **CORPORATE ACCOUNTING AND REPORTING**

The course is designed in a way to make the program participants learn the basics of accounting; how the accounting information system works in a firm; how the accounting information does help managerial decision-making process; how to analyze the performance vis-à-vis financial health of the firm; and, how accounting acts as a control mechanism.

## STRATEGIES FOR SUSTAINABLE BUSINESSES

This course is a basic strategic management course covering all aspects of strategy i.e. environmental analysis, internal analysis, strategic advantage analysis, strategy formulation, implementation and control. The course has been designed keeping in view the increasing need for environmental sustainability into products, markets and functional strategies of companies as demanded by stakeholders and regulatory authorities and hence at each step, due emphasis has been given on the sustainable aspect of strategy formulation and implementation.

## **ENVIRONMENTAL ECONOMICS:**

This course familiarizes students with the theory and application of economics to environmental problems and prepare them for analyzing issues in environmental economics and policy. It focuses on the design of cost-effective environmental policies and on methods for determining the value of environmental amenities. The course relies on select mathematical methods and techniques such as differentiation, select methods in econometrics.

## **BUSINESS, NATURAL ECOSYSTEMS AND COMMUNITY**

Biodiversity and ecosystems are increasingly being recognized as critical natural resource and business issues as geographical areas selected by organizations as a source of materials or supplies

are relied upon at an operational level and impact business decision making. There may also be non- financial costs that warrant recognition and measurement, with reference to water scarcity issues and knock on impacts of industrial production on other local industries such as farming or fishing. However, there are other impacts on natural resources which need immediate attention in context of business dependencies and community development. The course explores the drivers, regulatory pressures, frameworks and, most significantly, the business case for ecosystem service measurement and management and social issues associated with it.

### **ACCOUNTING AND FINANCE FOR SUSTAINABILITY:**

The course intends to expose the learners to the emerging world of sustainability-centered accounting and finance. The field is emerging. There are many challenges to standardize the practices. Different experiments and research are on. So, it's a felt need of importance that the budding managers develop a clear perspective to actively contribute to the evolving process of newer paradigm.

#### SUSTAINABLE CONSUMPTION AND PRODUCTION:

Countries in South Asian region are witnessing rapid transformation. It is evident that future prosperity and transition to sustainability in this region will be highly influenced by changes in development of the countries and businesses as well as in consumption patterns and lifestyles. There are noticeable awareness generation and capacity building initiatives aiming to promote a shift towards sustainable consumption and production (SCP) patterns and resource efficiency for green growth and poverty reduction in South Asian region. The enabling policy environment needs to be strengthened through enhanced capacity of future decision makers in order to ensure balance between demand and supply side towards SCP. Advanced knowledge, skills and commitment of policy makers and graduates today are critical constituents necessary to structure and successfully implement sustainable development policies in future. India in particular, with its young population is likely to rise from twelfth-largest consumer market today, to become world's fifth-largest consumer market by 2025. While the significance of SCP and resource efficiency is well accepted in India, imparting knowledge to policy and decision makers shall facilitate an enabling environment for comprehensive integration of SCP into policy making. This is being aimed through the first-of-its-kind post graduate course in India for young policy and decision makers

# 4. PhD Programme

The Doctoral Program is intended to encourage meaningful research on issues that have a potential fallout on the sustainability of business. Most of our students are exploring issues related to business sustainability, CSR, Environmental management etc. The thought process behind TERI SAS - in addition to building capacity around various themes of sustainable development - was to develop an infrastructure aligned with the different teaching programmes, so students could study real and practical aspects of sustainable development. To move further in this direction, the courses were developed against the backdrop of sustainable development.

## Preferred areas of research

- Corporate Social responsibility
- Socially Responsible Businesses
- Sustainability Reporting and Standards
- Strategies for Sustainable Businesses
- Responsible Management Education
- Organizational Behavior, Change Management, leadership
- Sustainable Health Systems
- Building inclusive and Sustainable Supply Chains
- Sustainable Finance

# Admissions

Admission are made based on written tests and interview. A weightage of 70% to the written tests and 30% to the performance in interviews shall be given. Written test will have two papers of equal weightage. Paper I will be on 'Research Methodology' which will be a common paper for admission in all departments of the University. Paper II will be department/subject specific.

# Time Limit for PhD Work:

(a) Candidates having a B.Tech./M.A./M.Sc. or equivalent degree are required to be registered for a period of not less than three years from the commencement of course work (date of registration). In exceptional cases the minimum period of registration may be reduced to two years with the approval of the Academic Council. The minimum period of registration for candidates having an M.Tech. or M.Phil equivalent degree is two years. The minimum period of registration for part-time students will be five years

(b)\* A candidate is normally expected to submit his/her thesis within five years from the date of registration. This period may be extended by the Academic Council as a special case to a maximum of seven years after which the registration will stand cancelled.

(c) A full-time candidate may be allowed by the Chairperson, Academic Council, to convert his/her registration into part-time registration only after completion of three years from initial registration or after submission of a synopsis, whichever is earlier.

(d) Full-time Ph.D. scholars with M.Tech. qualification can be permitted to convert their registration from full-time to part-time after one year or after completion of course work and comprehensive examination whichever is later, if they get employed in the University's/ TERI's sponsored projects.

(e) Full-time Ph.D. scholars in the Faculty of Applied Sciences with M.Sc. qualifications can be permitted to convert their registration from full-time to part-time after two years or after completion of course work and comprehensive examination, whichever is later, if they get employed in the University's/TERI's sponsored projects. Such conversion will be permissible only if the work is in the projects of the University/TERI and not for employment outside. This provision will also be applicable to Ph.D. scholars with a B.Tech. degree.

\* This maximum time period for submission of thesis is under review and is likely to be revised downward, subject to approvals.

# PhD students Enrolled at DBS

Name	Торіс	Year of registration	Supervisor	Whether Awarded
Achla Behl	A study on the Evaluation of the Mobile Medical Units (MMUs) in Uttarakhand	7/1/2010	Dr Sapna A.Narula	
Vipan Kumar	Mapping Climate Technologies for Energy Sector in India: A Comparitive Study vis-à-vis China and US	2010-11	Dr Sapna A. Narula	Yes
Neeraj Dangi	Consumer Buying Behavior in organic food and the role of eco-labels	2011-12	Dr Sapna A. Narula	
Anupriya Sharma	A Study of Environmental and Social Practices in Indian Texitile Industry	1/7/2013	Dr Sapna A. Narula	
Nidhi Gautam	Searching for Financial Sustainability of Micro, small and Medium Enterprises (MSMEs) in India: An analysis in retrospect and prspect	1/7/2013	Dr. Akash Sondhi	
Amit Kumar Thakur	CorporateSocialResponsibilityandBusinessSustainability in India - InRetrospect and Prospect	7/22/2013	Dr Manipadm Datta	
Shinu Vig	Corporate governance and sustainable value creation in Business: A study of select Indian firms	7/22/2013	DrManipadmaDatta	
Vivek Tyagi	Studying cases of business failures: A critical analysis aiming enhanced business sustainability	1/6/2014	Dr Manipadma Datta	Yes
Sangeeta Agasty	Diffusion of cleaner production innovation in MSME sector in India: a study of Drivers and inhibiters in select sectors	7/21/2014	Dr Sapna A. Narula	
Sulaksha Shetty	A study on organisation and its leadership for sustainable development with particular reference to the Indian situation	1/5/2015	Dr Manipadma Datta	
Anushree Poddar	CSR Orientation, Implementation and its relation	7/20/2015	Dr Sapna A. Narula	

	with Firm Performance - A study of selected firms in India			
Himanshu	5		Dr Sapna A. Narula	
Arora	reporting process & practices of			
	energy sector			
Manjusha		7/24/2017	Dr Manipadma Datta	
Jain				
Amit Nanda		1/18/2018	Dr Ritika Mahajan	

# 5. Research

The Faculty has an ambitious research agenda that is built upon multidisciplinary and interdisciplinary work, international research collaborations and a deep understanding and appreciation of global social responsibility.

At the Department of Business and Sustainability, we believe it is our inherent duty to help businesses embrace sustainability at all levels

- Faculty engaged in both research and consultancy assignments with corporates / multilateral organizations.
- Sectoral focus of our research engagements is diverse i.e. **infrastructure, energy, textiles, mining, hospitality, agriculture and forestry, oil and gas, health, education**
- Teaching in MBA programmes is deeply embedded around the research.
- Findings of this research reach the classrooms in form of **business cases**, **practical modules**, **role playing and publications**.
- Students are involved in live research projects being undertaken by faculty.

Through a dedicated team of research scholars, the faculty is undertaking research in following areas:

- Corporate Sustainability
- CSR and Business Ethics
- Sustainability Reporting and Sustainability standards
- Responsible Investments
- Business, Ecosystems and Community
- Integrating Sustainability in Management Education (SIME)

- Financial Reporting and International Financial Accounting Standards (IFRS), Green Indices
- Financial and Weather Derivatives
- Climate Change and Implications on Business
- Sustainable Consumption and Production
- Green supply Chains
- Agribusiness and Food Supply Chain issues
- Environmental Health, Equity in Healthcare Access and Financing, Health Systems and Epidemiological Transition
- ICTs for Sustainable Development
- Eco-entrepreneurship
- Infrastructure Financing and Projects
- Value chain Analysis of Forest Products

## **PARTNERSHIPS (Deptt. Specific)**

Besides the University level collaboration, the Department has very specifically engaged with business schools in various capacities for knowledge exchange. There are regular visits of faculty from these schools who interact with staff and students as teaching and engagement. The department is also seeking more collaborations with Universities across the world

Deakin University, Australia

Western Sydney University, Australia

Copenhagen Business School, Denmark

Martin Whitman School of Management, Syracuse University, US

Deptt of Management, RMIT, Australia

**Appalachian State University** 

**United Nations University, Japan** 

University of Graz, Austria

Friere University, Berlin

SN O	SPONSOR'S NAME	PROJECT NAME	PROJECT INVESTIGATOR	PROJEC T START DATE	PROJECT CLOSING DATE	CURREN CY	PROJECT AMOUNT SANCTIONED
1	Decentralized Off Grid Electricity Generation in Developing Countries*	University of Dundee	Dr. Arabinda Mishra/ Dr. Sapna A. Narula/ Dr. Gopal Sarangi	01.04.2009	31.03.2016	INR	19,984,843
2	Registration Fee	Building Learning in Sustainability Science (BLISS)	Dr. Sapna Narula Arora	16.05.2013	31.07.2013	INR	2,50,000
3	Sustainable livelihood activities on reclaimed open cast coal mines: a technology enabled integrated approach in Indian Coal sector**	Ministry of Coal	Dr. Arabinda Mishra/Dr. Sudipto Chatterjee/Dr. Sapna Arora Narula	01.04.2015	31.03.2018	INR	30,000,000
4	Amar Ujala Publications Limited, Bharat Petroleum Corporation Limited, Mature Media Limited, Orient Cement Limited, Agriculture Skill Council of India, Jindal Saw Limited, Container Corporation India Limited, The Cotton Corporation of India Limited & Misc.	International Conference on Business Economics and Sustainable Development - 2018	Dr. Manipadma Datta	22.02.2018	23.02.2018	INR	744,492
5	German Cooperation Deutsche Zusammenarbeit	Hosting of Exhibition on German Energy Transition in TERI SAS on behalf of GIZ Betreuug der Wanderausstellung Deutschlands Energiewende Project	Dr. Rajiv Seth	19.03.2018	23.03.2018	INR	408,870
6	Ernst & Young	International Conference on Business, Economics and Sustainable Development (ICBESD 2019)	Dr. Manipadma Datta	17.01.2019	18.01.2019	INR	1,000,000
7	Hazardous Substance Management (HSM), Chulalongkorn University and United Nations Environment Programme	Key Person of Module 4 'Business Models' in Asian Circular Economy Leadership Academy	Dr. Ritika Mahajan	01.11.2018	31.03.2019	USD	7,500
8	L&T Financial Services	Finclusion: Empowering	Dr. Sapna Narula	01.02.2019	01.02.2019	INR	3,80,650

		Women through Digital Finance	Arora				
9	University of Guelph	Research Grant: A study of	Dr. Sapna Narula	01.04.2014	31.03.2016	CAD	7,500
		MSME Enterprises	Arora				
10	Deakin University	Sustainability Strategies of	Dr. Sapna Narula	01.04.2013	31.03.2015	AUD \$	2,275
		Indian Hotel Industry	Arora				
11	Sonalika Social Development	International Conference on	Dr. Sapna Arora	03.01.2018	04.01.2018	INR	19, 50, 000
	Society, Agriculture Insurance	Agribusiness in Emerging	Narula				
	Company of India Limited, Indian	Economics - 2018					
	council of Agricultural Research,						
	Agricultural Insurance Corporation						
	of India, TATA Trusts, Syracuse						
	University, CSIR+OTHER						
	SOURCES						
12.	Indian Oil, PPAP Automotives, SB	MDP on Sustainability	Dr. Sapna Arora	16.8.2018	17.8.2018	INR	3.00.000
	Energy	Reporting	Narula				

\*This project was in conjunction with Deptt of Policy Studies, TERi SAS \*\*This project was in conjunction with Deptt of Natural Resources, TERi SAS

# 6. Management Development Programme

One of the main objectives of our department is to encourage learning at all levels of management and hence need to provide capacity building in area of sustainability and CSR for working professionals is our prime focus. Conducted both structured and tailor-made MDPs on Sustainability Reporting, Corporate Social Responsibility, Integrating Sustainability in Business where we had participants from diverse industry sectors including Hindustan Petroleum, ONGC, BCCL, Vedanta, Mahindra and Mahindra.

• Two days Training of Trainers programme was held during World Environment Day Celebration at Dhanbad on "Eco-Restoration and Livelihood activities in Coal Mining Areas". This training was attended by 40 officials of BCCL i.e, Assistant Environment Managers, Management Trainees and others. The programme was inaugurated by Shri B K Panda, Director (Personnel), BCCL, Shri D. Gangopadhyay, Director (Technical) P&P, BCCL.Dr. Sapna A. Narula delivered a lecture on Sustainable Livelihoods , Dr. Sudipto Chatterjee deliberated the participants about Eco-restoration on Coal Mining Areas, Dr. Raj Shekhar (Sr. Scientist, bCIMFR) Talked about the Carbon Sequestration and Climate Change, Dr. S K Maiti (Prof. ISM, Dhanbad) delivered a lecture on Land Reclamation and Dr. Ajay Kumar (Sr. Scientist, CIMFR talked about Clean Coal Technologies)



# List of other MDPs organized are -

- Reporting Sustainability in Business at TERI School of Advanced Studies, New Delhi (August 20-21, 2018)
- MDP for Bharat Coking Coal Ltd Official on Feb 14-15, 2018 on Eco-Restoration and Livelihood activities in Coal Mining Areas: Opportunities and Challenges
- MDP on Eco-restoration & Sustainable Livelihoods for BCCL Officers at Dhanbad (June 6-7, 2017)
- Sustainability for HPCL Officers (March 20-21, 2017)
- Reporting Sustainability in Business (July 6-8, 2016)
- Building Learning in Sustainability Science (BLISS) Winter School on Sustainable Consumption and Production from 02-Nov-2015 to 06-Nov-2015 (5 days); funding agency: United Nations Environment Programme
- Building Learning in Sustainability Science (BLISS) Summer School on Sustainable Consumption and Production from 18-Apr-2016 to 22-Apr-2016 (5 days); funding agency: United Nations Environment Programme
- Workshop on Business Communication from 17-Mar-2015 to 17-Mar-2015 at TERI University

- Co-organized Seminar on Qualitative Research Methods for Interdisciplinary Research from 07-Apr-2016 to 08-Apr-2016 at TERI University
- Co-organized Building Learning in Sustainability Science (BLISS) Summer School on Embracing People and Planet from 10-Mar-2014 to 14-Mar-2014 at TERI University
- Seminar on Student's Initiative for Integrated Rural Development (SIIRD) from 20-Feb-2015 to 20-Feb-2015 at TERI University

# 7. Outreach

# INTERNATIONAL CONFERENCE ON AGRIBUSINESS IN EMERGING ECONOMICS (JANUARY 3-4, 2018)

This conference brought together scholars, practitioners, policymakers, and other stakeholders from around the world to present and share their original research and expertise on agribusiness in the developing and emerging economies. The conference covered a broad spectrum of themes, methodologies, and research approaches including empirical, conceptual, review, and case studies. Whitman School of Management, the South Asia Centre at Syracuse University in the United States and the Journal of Agribusiness in Developing and Emerging Economies (JADEE) were the primary collaborator of the conference. Over 230 participants from India, Bangladesh, United Kingdom, Nepal, Nigeria, Mexico, the United States of America, Uganda, Indonesia, Malaysia, and Iran attended the conference, which was a great platform to showcase work in the field of agribusiness. The conference was kept in lines with the SDGs where keynote speakers from around the world chaired various sessions, these sessions were co-hosted by ICIMOD, ICAR, IFPRI, UN Global Compact, BCCL, HUC, Amul Dairy, Sonalika Tractors.

# International Conference on Agribusiness in Emerging Economics





# INTERNATIONAL CONFERENCE ON BUSINESS, ECONOMICS & SUSTAINABLE DEVELOPMENT (ICBESD 22 - 23 2018)

In view of the changing scenario of risks, environmental and otherwise, it has become imperative for a paradigm shift in business and economics. We need a development that will have zero impact on environment and should not be at the cost of posterity: sustainable development. In fact, business is being increasingly viewed by all the stakeholder groups involved as a powerful force in promoting the cause of sustainable development. The future lies with firms that internalize stakeholder inclusivity, resource efficiency, and environmental conservation as key elements in their core business strategy and process. However, it is easier said than done.

A plethora of research works are already in place to take up the challenges. Sustainable business or business sustainability is no more that unknown in our economic vocabulary.

The efforts have received a new fillip with the declaration of Sustainable Development Goals (SDG)- the 2030 Agenda by the UN.In this backdrop, the Department of Business and Sustainability, TERI SAS, the pioneer institution of international importance in sustainability research, had resolved by providing a platform to the likeminded researchers by hosting its annual international conference: ICBESD 2018.The conference brought together various stakeholders including academia, industry, government, to discuss the need, challenges, and roadmap to approach long-term viability of business without compromising on profitability, competitiveness, and sustainable development.

# ICBESD 2018



The First International Conference on Business, Economics, and Sustainable Development organized in 2018 (ICBESD 2018) was a grand success with your active participation and patronage all over the globe. Here is a glimpse of The 2nd International Conference on Business, Economics and Sustainable Development(ICBESD 2019) held on January 17-18, 2019, in collaboration with the Government of India Rooftop Solar Assistance Program supported by the World Bank.

Papers received: more than 150

Participants: around 200

Countries represented: UK, Canada, Italy, Kuwait, Bangladesh,

Bahrain, Malaysia, Nigeria, Mexico, Spain and Poland.

# **Institutional Representation:**

- IIMs, IITs, B-schools like MDI, IMT, Symbiosis, BITS Pilani,
- Central Universities of Kashmir, Haryana, Rajasthan and the like,
- JNU, BHU, AMU, DU, University of Calcutta
- corporate organizations like EY, PwC, Adani Port and SEZ Ltd., Indian Railways



# PRAVAAH 2017 /- 2018







**TERI SAS** joined L and T financial services as an academic partner for a participatory dialogue on opportunities and challenges of digital finance for women empowerment.



Dr. Sapna A. Narula delivers a talk on Leadership for Sustainability at Faculty of Business and Law at <u>Deakin University</u>, Australia, as a visiting Academic.



Experiential learning is an important part of MBA curriculum at TERI SAS. As a part of their field trip to Goa during March 4-8, students of MBA (Business Sustainability) visited Hindustan Unilever Ltd, Vedanta Eco-restoration and CSR initiatives and TERI field sites to study sustainability strategy, CSR practices and upcoming sustainable technologies.







# 8. Publications

Narula, S.A., Magray, M.A., Mathur, A (2019).: Business –Community Engagement: A Case of Mining Company in India (Accepted in Business Strategy and Development)

Poddar, A., Narula, S.A. & Zutshi, A. (2019) A Study of Corporate Social Responsibility Practices of the top BSE 500 Companies in India and their alignment with Sustainable Development Goals CSR and Environmental Management (published online March, 2019: doi.org/10.1002) (Impact Factor: 4.918)

Poddar, A. & Narula, S.A. (2018) Sustainability Reporting practices in India: A Study of Selected Conglomerates; *Strategic Change*, 27 (6), 543-557

Narula, S.A., Magray, M.A., Desore, A. (2018): A Sustainable Livelihood Framework to implement CSR in Coal Mining Sector, *Journal of Sustainable Mining*, 16 (2), 83-9.

Kumar, V. & Narula, S.A. (2017): Social Networking Analysis of Renewable Energy Research in India, *Journal of Scientiometric Research*, 6(92), 102-108.

Narula, S.A. and Bhattacharyya, S., (2017): Off-grid Electricity Interventions for Cleaner Livelihoods: A Case study of Value Chain Development in Dhenkanal District of Odisha. *Journal of Cleaner Production*, *142*, pp.191-202. (Impact Factor of Journal: Five-year Impact Factor: 6.2 and current year:5.715).

Desore, A. and Narula, S.A. (2017), An Overview on Corporate Response towards Sustainability 12. Issues in Textile Industry. *Environment, Development and Sustainability*, pp.1-21. (2015-16 RG Journal Impact: 1.54)

Magray, M.A., Narula, S.A & Anwer, R. (2017): Scope of Lac as Enterprise Development in Jharkhand; *Indian Journal of Economics and Development*, 13 (2), 387-392 (NAAS Score of Journal- 4.82).

Khanna, A. B. & Kumar, V. (2017): Mobile Medical Units-Can they improve the quality of Health Services in Developing Countries? *Journal of Health Management*, 19 (3), 508-521

Agasty, S., Raut, M., Narula, S.A., Yap, N., Vaidyanathan G (2016): Using Innovation Diffusion Approach to understand factors determining Innovative Practices amongst microunits at Kolkata and Howrah; *International Journal of Development and Social Research*, 4(2), 1-18.

Khanna, A. B. & Narula, S.A. (2016): Mobile Health Units: Mobilizing healthcare to reach unreachable, *International Journal of Healthcare Management*, 1-9.

Narula S.A. & Desore, A. (2016) Framing Green Consumer Behaviour Research: Opportunities and Challenges, *Social Responsibility Journal*, 12 (1), 1-22.

Narula, S.A. (2011), Reinventing Cold-Chain Industry: Need of the Hour, Journal of Agribusiness in Developing and Emerging Economies, *Journal of Agribusiness in Developing and Emerging Economies*.

Narula, S.A. & Upadhyay, K.M. (2011): Sustainability Strategies of Indian Pesticide Industry: A Comparative Study of domestic vis-à-vis Multinational Firms, *International Journal of Sustainable Strategic Management*, 2(4), 365-382.

Narula, S.A. & Upadhyay, K.M. (2011) Product and Market Strategy Dilemma: Are Strategies of Pesticide manufacturers Green? *Social Responsibility Journal, Vol.7, No.2,282-294*.

Narula, S.A. & Upadhyay, K.M. (2010) Strategy in Turbulent Environment: A Case of Domestic Pesticide Company in India, *American Journal of Economics and business Administration*, *Vol.2, No.2, 160-168*.

Narula, S.A. & Chopra, S. (2010) Identifying Stakeholders' Needs and Constraints Adoption of ICT Services in Rural Areas: The Case of India, *Social Responsibility Journal*, Vol.6, No.2, 222-236.

Narula, S.A.; Sikka, B.K.& Singh S. (2005): on Strategic Planning Framework for Hortibusiness in Uttaranchal: The TOWS Matrix Approach presented in Annual Conference of Indian Society of Agricultural marketing, Pantnagar, *Indian Journal of Agricultural Marketing*, Vol 19, No.2, Conference Spl., May-August, 2005, pp 229-237 ISSN: 0971-8664.

Sikka, B.K., Sharma, M.L., Singh S. & Narula, S.A. (2005): on E-Marketing of Apples in Uttaranchal *Indian Journal of Agricultural M arketing*, Vol 19, No.2, Conference Spl., May-August, 2005, 218-227 ISSN: 0971-8664.

Bose M. and Dutta A. (2018): Health Financing Strategies to Reduce Out-of-pocket Burden in India: A Comparative Study of Three States, *BMC Health Services Research*, Vol.18(830). ISSN: 1472-6963.

Bose M. (2018): (In)equity in Utilization of Health Care Facilities in Urban India: An Application of Marginal Benefit Incidence Analysis, *International Journal of Health Sciences & Research*, Vol.8(2). ISSN: 2249-9571.

Bose M. (2018): Development, Globalization and Its Impact on Health Status: A Study from Developing Countries Perspective, *International Journal of Healthcare Sciences*, Vol.5(2). pp. 366-73. ISSN: 2348-5728.

Mahajan R. and Bose M. (2018): Business Sustainability: Exploring the Meaning and Significance, IMI Konnect, Vol. 7(2), pp. 8-14. ISSN: 2321-9378.

Bose M. and Dutta A. (2015): Inequity in Hospitalization Care: A Study on Utilization of Healthcare Services in West Bengal, India, *International Journal of Health Policy and Management*, Vol. 4(1), pp. 29-38.

Bose M. and Dutta A. (2014): Access to Non-hospitalisation Care in West Bengal: A Demand-Side Assessment Based on NSS Data, *Indian Journal of Human Development* (IJHD), Vol. 8(1).

Mahajan, R., Agrawal, R., Sharma, V. and Nangia, V.K. (2016): Analysis of Challenges for Management Education in India using Total Interpretive Structural Modelling, *Quality Assurance in Education*, Vol. 24 No. 1, pp. 36-49.

Mahajan, R. (2015): Corporate Social Responsibility Conundrum in India: Revisiting Carroll's Pyramid and The Road Ahead, *Pacific Business Review*, Vol. 28 No. 4, pp. 379-399.

Mahajan, R. (2015): India's Management Education Growth Story: A Retrospect, AIMA *Journal* of Management and Research, Vol. 9 No. 2/4, pp. 4-15.

Mahajan, R., Agrawal, R., Sharma, V. and Nangia, V.K. (2014): Factors affecting Quality of Management Education in India: An Interpretive Structural Modelling Approach, International *Journal of Educational Management*, Vol. 28 No. 4, pp. 379-399.

Mahajan, R., Agrawal, R., Sharma, V. and Nangia, V.K. (2014): Identification and Modelling of Winners and Qualifiers for Management Institutes: Evidence from India, *International Journal of Management in Education*, Vol. 9 No.1, pp. 70-79.

Sharma, V., Agrawal, R., Mahajan, R., and Sengar, S. (2013): Role of Qualitative Research Methodology in Radical Researches, *International Journal of Business and Management Studies* (IJBMS), Vol. 2 No.1, pp. 239-250.

Mahajan, R., Nangia, V.K. and Sharma, V. (2012): Management Education Landscape in India: Issues, Challenges and Strategies, *AIMA Journal of Management and Research* (ISSN: 0974–497), Vol. 6 No. 4.

Nangia, V.K., Sharma, V., and Mahajan, R. (2012): Postgraduate Management Education in India- A Researcher's Perspective, Indore Management Journal (ISSN No: 0975-1653), Special Issue, pp. 309-326. Mahajan, R., Nangia, V.K. and Sharma, V. (2014), "Management Education: Is it only for Business, *Asian Management Review*, 9(3), 52-57.

Mahajan, R. (2016): Commentary on "Out of Focus or Inappropriate Paradigm Choice: What happened to Management Research?", *Jindyasa*, Vol. 8(2): 57-62.

Datta M. (2018): Corporate governance and value creation: a study of selected Indian companies, *International Journal of Indian Culture and Business Management*, Inderscience, accepted for publication.

Datta M. (2018): Reviewing and revisiting the use of corporate governance indices, *International Journal of Corporate Governance*, Inderscience, accepted for publication.

Datta M. (2017): Integrating Environmental, Social and Governance Issues in the Business Process: The Position of Indian Firms - An Empirical Study. Paper accepted for publication in Critical Perspectives on International Business.

Datta M. (2017): Business and Changing Climate: A Commentary on the Regulatory Framework in India, *AIMS International Journal of Management*, Vol 8, No. 2.

Datta M. (2013): Environmental, Social and Governance Challenges to Business: The Emerging Paradigm in Managing Risks. *Indian Accounting Review* (IAR), Vol 17, No. 2.

Datta M. (2014): Problems and Prospect of Developing a Proper Mechanism for Measuring Impact of ESG factors on Business Finance: Developments in India and other countries. *Indian Accounting Review* (IAR), Vol 18, No. 2.

Datta M. (2015): Institutional Investors and Sustainable Investment Decisions: A Survey on Indian Financial sector as against select European Counterparts. Proceedings of the International Symposium on Emerging Trends in Social Science Research, ISSN: 978-1-941505-23-1.

Datta M. (2017): Bankruptcy Potential of Indian Aviation Industry: An Analysis of Selected Firms, *The Research Bulletin* (Vol.42, IV), The Institute of Cost Accountants of India, ISSN 2230 9241.

Datta M. (2018): Market Based Green Financing for Sustainable Development: India's Experiments with Masala Bonds", *Indian Accounting Review* (Vol. 21, 2), ISSN 0972-1754,

Datta M. (2017): Corporate Governance and Firms' Value Creation: A Study on Some Select Indian Firms, Conference Proceedings of 3rd Pan-IIM Conference at IIM Indore.

Datta M. (2017): Risk Aggregation and Reporting: Basel Committee Principles of 2013 Toward Sustainable Banking, *The Chartered Secretary*, Vol. XLIII, No.08.

Datta M. (2016): Principles of Responsible Investments and Environmental, Social and Governance Issues: The Emerging Horizon of Sustainable Global Financial Order, the Chartered secretary, vol. XLIII, No. 03.

Datta M. (2009): A Contingent Valuation Study of Willingness to Pay for Weather Derivatives by Small Farmers: A Survey in Rajasthan (India), *Journal of Risk Finance*, 10(1).

Datta M. (2009): Design and use of weather derivatives for farmers: the case of hedging rain risk by soya-bean growers in Jhalawar district in India, *International Journal of Financial Markets and Derivatives*.

Datta M. (2009): A Study of Basis Risk in Rainfall Hedging: The Case of Two Locations at New Delhi, *Journal of Agrometeorology*, Vol 11(1).

Datta M. (2016): Global Financial Crisis and Corporate Attitude toward Accounting: A critical analysis with reference to Efficacy of Forensic Accounting, the Chartered Secretary, Vol. XXXIX, No.07.

Datta M. (2008): Hedging Rainfall Risk by farmers growing soyabean in Jhalawar district: A theoretical analysis of willingness to pay, *The Journal of Applied Economic Research*, No.2: 2, SAGE, Los Angeles, London, New Delhi, Singapore.

Datta M. (2008): Tapping the Huge Potential of Securitization: the compatibility question of present accounting system- a commentary in the global perspective, *Journal of Accounting and Finance*, Vol.22, No.1, RDA, Jaipur.

Datta M. (2009): The Doctrine of a No-arbitrage Situation in Efficient Market Condition: An Attempt to Vindicate the Conceptual Validity even under Market Uncertainty, Management and Accounting Research, the research journal of the Institute of Chartered Accountants of India, New Delhi, Vol.11, No.1, New Delhi.

Datta M. Factors Affecting the Borrowing Decisions of Indian Corporates: How Far They Differ from the Global Trend? —An Empirical Study, *Indian Accounting Review*. Vol.11, no.2.

# **Chapters in Books:**

Narula S.A., Magray M.A. (2017) Ensuring Sustainable Production and Consumption Patterns 13 Adoption of Voluntary standards in Global Agri supply Chains: Way Forward in light of SDGs. (Edited by Syed Munir Khasru), Towards Sustainable Development: Lessons from MGDs & Pathways for SDGs.1st ed. Vol 1. Dhaka: IPAG, The institute for Policy, Advocacy and Governance, 397-403.

Narula, S.A., Zutshi, A. & Seth, R. (2011) Integrating Responsible Education Principles into a Conventional System: The Case Study of TERI School of Advanced Studies, India in Meeting Expectations in Management Education: Social and Environmental Pressures on Managerial Behaviour (Christopher, Elizabeth Ed.), Palgrave Macmillan.

Narula, S.A. (2017): Revolutionizing Food Supply Chains in Asia through ICTs in Sustainability Challenges in Agro-food Sector (Ed by Rajeev Bhat), Wiley Blackwell.

Narula, S. A. & Vishnoi, K (2017): Strengthening Food Supply Chains in Asia: Challenges and Strategies in Sustainability Challenges in Agro-food Sector (Ed by Rajeev Bhat), Wiley Blackwell.

Desore, A., Narula, S.A. and Zutshi, A., (2016): CSR and Sustainability Practices of Indian Hotel Industry: Corporate Social Performance in The Age of Irresponsibility: Cross National Perspective, p.169.

Desore, A, Narula, S.A. & Zutshi, A. (2015): Sustainability Practices of Hotel industry in Corporate Social Performance: Paradoxes, Pitfalls and Pathways for a Better World (Ed. Agata Stachowicz-Stanusch)

Thakur, A., Zutshi, A & Narula, S.A. (2015): Integrating and Implementing CSR: A Case of Concor in India in CSR in Developing countries: Towards a Development Oriented Approach (Eds. Dima Jamali, Charlotte Karam& Michael Blowfield), Greenleaf Publishing

Narula, S.A. & Dangi, N. (2014): Linking Local Suppliers to Global Food Markets: A critical Analysis of Food Safety issues in Developing countries in Practical Food Safety: Contemporary

Issues and Future Directions, 83-97 (Eds. Bhat, R. & Gomez-Lopez, V.M.), Wiley Blackwell, ISBN 978-1-118-47460

Vipan, Kumar, Sapna A Narula, Naresh Kumar (2013): Computational GIS Based Mapping of some Indicators of primary education in India, Book Chapter in 'India Science and Technology, Vol 2, Published by Cambridge University Press, ISBN 9789382264743.

Narula, S.A. & Dangi. N. (2013): Linking local suppliers to global food markets: A critical analysis of food safety issues in developing countries in Practical Food Safety: Contemporary Issues and Future Directions (Eds Rajiv Bhat & Lopez), Wiley Blackwell Publishers, Oxford.

Narula, S.A. (2009): Coping with Environmental Turbulence: A Case of Excel Crop Care Ltd., in Enhancing Organizational Performance through Management Cases: Handbook for Management Cases, McMillan Advanced Research Series, 178-189 ISBN:023-032-823.

Narula, S.A., Kataria, A.& Arora, P. (2009): Customer Knowledge and Awareness towards Insurance Products in Rural Areas of Indore District in Conf. Proceedings of 2nd Conference on Marketing to Rural Customers, IIMK publication.

Narula, S.A. & Sharma, A. (2009): Empowering Rural India through ICT Innovations: A Case of 14 Grasso in West Bengal in Advances in Technology and Innovation in Marketing; (Ed. Rajat Gera), McMillan Publishers (India), New Delhi, pp.416-421 ISBN:023-063-807-4.

Narula S.A. & Upadhyay K.M (2008): Product and Market Strategy Dilemma: How Firms in Pesticide Industry Shall Win the Race in Handbook on Management cases, eds. B.S. Sahay, Tojo Thatcherkery, G.D. Sardana; Allied Publishers, New Delhi, pp.360-375. ISBN:81-8424- 390-1.

Narula S.A., Upadhyay K.M., Sikka, B.K. (2008): Green Product Portfolio for Indian Pesticide Companies: An Analysis based on Market Attractiveness vs. Environmental Attractiveness International Conference on Green Marketing held at IMT, Ghaziabad September 26, 2008; In Green Marketing, (Eds Chakraborty & Rao), pp. 404-414 ISBN:81- 84-24-355-3.

Narula S. A., (2008): Leveraging ICT to Link Farmers to Markets: A Case of Indian E- Business Models Paper presented in International Conference on Technology and Innovation in Marketing held at IMT, Ghaziabad during 18-19 April, 2008; published in Technology and Innovation in Marketing, ed. By Rajat Gera, Allied Publishers, New Delhi, pp.49-58; ISBN: 81-84-24-308-1.

Sikka B.K, Narula S.A. & Suri P.K. (2008): Linking Farmers to Markets: A Case of Indian Fresh Produce Supply Chains Paper presented at Annual Conference on Global Institute of Flexible Systems Management (GLOGIFT 2008) held at Steven Institute of Technology, New Jersey, USA; published in Flexible Enterprise for Global Business, (eds. Edward Stohr & SusheeIISBN:978-81-906294-1-6.

Sharma, Nikhil & Narula, S.A. (2008): Design and Implementation of Communication Strategy in Rural Markets: A Case of Tata Shaktee GC Sheet Brand Paper presented at Conference on Marketing to Rural Consumers-Understanding and Tapping the Rural Market Potential held at IIM, Kozhikode, April 3-5,2008., published in Conference Proceedings Marketing to Rural Consumers, IIMK publication.

B.K. Sikka, Narula, S.A., (2006): Global Competitiveness of Organic Produce: Opportunities, Challenges and Strategies Paper presented at Annual Conference on Global Institute of Flexible Systems Management (GLOGIFT 2006), Asian Institute of Technology, Bangkok, Thailand: In Management of Innovation, Technology, Transfer & Flexibility for Competitiveness in Globalized World(Eds. Himangshu Pal, Nazrul Islam, Manoj Kr. Sharma) ISBN:81-903397-6-1.

Bose M. (2016): Access to In-Patient Healthcare in West Bengal: A Benefit Incidence Analysis, Population, Health & Environment, Eds. Unisa S. et.al., Rawat Publications,

Bose M. (2014): Pattern of Morbidity and Access to Health Care in West Bengal (PhD thesis), online:<u>http://gnhe.funsalud.org.mx/Documentos/Thesis\_Montu%20Bose.pdf</u>.

Bhattacharya, J., Banerjee S., and Bose M. (2013): On Assessment of Women Empowerment at Individual level: An Analytical Exposition, Development and Sustainability: India in a Global Perspective, Edited by Prof. Sarmila Banerjee and Prof. Anjan Chakrabarty, Springer.

# Articles in Magazines:

Bandhyopadhyay, K.R. and Mahajan, R. (2017): Faculty Experiences with Teaching Sustainability in Management Education: A Study of Select Management Institutions in India, Sustainability in Management Education: In Search of a Multidisciplinary, Innovative and Integrated Approach through University Leadership, Scholarship and Partnerships, New Hampshire: Edward Elgar Publications

# **Newspaper Articles:**

Narula, S. A. (2019): Demand for Sustainability Managers on the rise, India Today, April 3, 2019.

Narula, S.A. (2019): With focus on Synergy, The Tribune, Oct 10, 2018.

Narula, S. A. (2018): Creating better facilities, The Tribune, Sept 19, 2018.

Narula, S.A. (2010): Plugging Information gaps through ICTs: A Study on Prioritization of Information Related Needs of Farmers, I4D, Jan-March, 25-29.

Narula, S.A. & Nainwal N. (2010): ICTs and Agricultural Supply Chains: Opportunities for Successful Implementation, Information Technology in Developing Countries, Vol.20, No.1, 24-29.

Narula, S.A. (2009) ICT enabled Food Supply Chains, I4D (July-September 2009), Vol. VII, No.7, pp 29-31.

Narula, S.A. (2009): Social networking for Farmers, I4D, Feb 2009, pp32-34.

Narula, S.A., Sharma, N. (2008): Implementing ICTs in Agribusiness, I4D, September, 20-22 ISSN: 0972-804X.

Narula, S. A.: Special issue on Water Resource Management (2012) in Resources, energy and Development, TERI Press, India

Narula, S.A.: Special issue on Agriculture and Food Security (2013) in Resources, Energy and Development, TERI Press, India

# **Policy Document:**

Bose M., I Mukhopadhyay, G. Vaidyanathan, et al. (2017): State Health Accounts, Tamil Nadu: 2013-14; Publisher: Public Health Foundation of India, New Delhi.
#### Selected Publications



various ecological (water body pollution, waste generation, air pollution) issues throughout supply chain from fibre production till fabric finishing. This paper reviews the existing literature related to various sustainability issues surrounding the textile industry across the globe. The authors classify the literature to discuss the drivers, barriers, and responses of firms in the textile industry in favour of sustainability. Despite a growing body of research in this area, we identify significant gaps in the literature with special reference to managerial approaches being used for incorporating sustainability. While it is very important to understand the motivations that drive firms towards sustainability may barriers to implementation, attention is also drawn towards research aspects pertaining to managerial perception towards new technologies and processes. The article also provides future research opportunities in form of specific questions to strengthen existing literature in this field.

 $\label{eq:keywords} \begin{array}{l} {\bf Keywords} \ {\rm Sustainability} \ {\rm issues} \ \cdot \ {\rm Textile} \ {\rm industry} \ \cdot \ {\rm Textile} \ {\rm value} \ {\rm chain} \ \cdot \ {\rm Sustainability} \ {\rm strategies} \ \cdot \ {\rm Drivers} \ {\rm and} \ {\rm barriers} \ \cdot \ {\rm Strategic} \ {\rm response} \end{array}$ 

#### **Events (Campus to Corporate)**

Campus to Corporate is a lecture series organised by the Department of Business and Sustainability, TERI SAS with the aim of complementing classroom study with industry practices. The platform allows our students to discuss various aspects of business sustainability from challenges and opportunities with domain stalwarts, while enabling the speakers to identify partnership opportunities with TERI SAS. The series has successfully hosted speakers from organisations like Maruti Udyog Ltd., Indian Oil, HCL, Godrej, UNGC, Sonalika Group, Finovation, IHS Markit, MoEFCC, KPMG, E & Y etc.



The students of TERI School of Advanced Studies got an opportunity to gain more insights in big data and understand the challenges of high dimensional time series data. The session also focussed on clustering in the context of high dimensional data. The session ended with a discussion of strategies of handling noisy data taking the example of medical EEG analysis.



Mr. Bibhuti Pradhan, GM ( CSR ), Indian Oil for Campus2Corporate session at TERI SAS who shared his insights into business sustainability and alternative balance sheet.



#### CAMPUS2CORPORATE (C2C) — AN INDUSTRY INTERACTIVE SESSION —



Mr. Harjinder Singh, a CXO level executive and expert from the Oil & Gas Industry, was the first speaker of the initiative. He delivered a very practical session on Social Profiling to a group of enthusiastic management students.



The Future of the Corporate World will be in the hands of Leaders who can make sustainable Decisions. At the Department of Business and Sustainability, we prepare such Leaders through our MBA Business Sustainability Program.

TERI SAS team led by Amitav Mandal and Samarth Arora stood runner-up for 2nd Sustainability Quiz organised by UN Global Compact. Congratulations to the winners!

Students of MBA Business Sustainability - Class of 2019 and 2020, from the Entrepreneurship development cell, conducted a three-day 'Sustainability Entrepreneurship and Innovation Lab' at Climate Jamboree with sessions on real start-up stories, boot camp on accelerators, incubators and co-working spaces, social entrepreneurship, and Start-Up India delivered by eminent industry leaders and TERI SAS alumni.



#### **Faculties Invited Talks**



#### **Invited Presentations by Faculty**

*CSR: Reflection and the way forward*, speaker in CSR Round table meet organised by Delhi Management Association, March 19, 2019

Panel discussion on Role of private sector in fighting climate change and water pollution & Driving Sustainable business practices, in Ecothon 2019, March 2, 2019

Aligning SDG goals with CSR in india Panel Discussion on Reimagining a Sustainable Future-The SDG Framework at 6th International PRME Conference, IILM, New Delhi

*Business-Community Engagement: the case of a mining company in India* keynote speech for session in Business Initiatives for Sustainable Development; The 8th PRME Asia Forum organised by UN Global Compact & SP Jain Institute for Management Research, Mumbai (Dec 13-14, 2018)

*CSR and Sustainable Livelihoods: The Case of BCCL*, Centre for Sustainable and Responsible Organisations, Deakin University, Burwood, Melbourne (March 2018)

*CSR and Sustainable Livelihoods: The Case of Bharat Coking Coal Ltd* at School of Accounting, Law & Policy, RMIT, Melbourne, Australia (*April 2018*)

*Panelist in Session on Management Education* at the 3rd India and Sustainability Standards: International Dialogues and Conference 2016 from 16-18 November 2016 at India HabitatCentre (IHC), New Delhi organized by CRB.

Invited to the Thematic symposium and Dialogue on Emerging paradigms of Corporate Social Responsibility, Regulation and Governance on 14-15 November,2016 at IIM Lucknow, Nodia Campus .

Key note speaker on the topic '*Climate change and its impact on Agriculture: How can ICTs help?*' in the International Conference on Environment and Agriculture in the UN Sustainable Development Goals from 17th to 19th December, 2016 at Bhopal, Madhya Pradesh, India *Sustainability in Oil and Gas Sector* in Seminar on Sustainability and Sustainable Development organised by Petrotech Association and ONGC, July 2,2013, Delhi

*Innovations in m-agriculture: lessons from India* at Global ICT Forum 2013 by Commonwealth Telecommunications Organisation, New Delhi, May 5,2013.

*Greening Supply Chains: Opportunities and Challenges for Indian Businesses* in Symposium on Enterprise Redesign and Renewal for Sustainable Operations, Department of Management Studies, IIT Delhi, December 23, 2012

Agricultural Value Chain Development through Mobile based Information Delivery System in India in special session on ICTs for Reaching the Stakeholder as part of International Conference on Statistics and Informatics in Agriculture Indian Agricultural Statistics in Agriculture, New Delhi. (December 20, 2012)

Sustainable Development in India: Challenges and Opportunities in workshop on *New Product opportunities for Sustainable Development* held at Amrita University, Coimbatore

(December 2012)

Impacts of Climate Change on Agriculture: Case Studies from Assam and Maharashtra ICTs for Rural Development in Rural Marketing Summit on "Rural India in the New Millennium" on 23-24 February, 2012. Organized by Asia-Pacific Institute of Management

*Climate Change with Special Reference to Agriculture* for officers of NCDC in National Cooperative Development Corporation (Dec 1 2011)

*Mitigating the Impact – Measures, Possibilities and Policy Aspects* for officers of National Cooperative Development Corporation (Dec 1, 2011)

*Research in Management Studies-A pathway for knowledge creation* Faculty Development Programme on Research for management and Policy making

*Climate Change and Indian Agriculture: What ICTs can deliver?* eWorldForum 2011, The Ashok, New Delhi, August 1, 2011

*Role of ICTs in Agriculture and Food Security* **at** Prosper.NET Young Scientist Award Symposium organized by United Nations University at University of Phillipines, Manila, July 13,2011

Panel Discussion on e-Agriculture: Policies and Practices organized by FAO, Rome and UNESCO Chair in ICT for Development, Royal Holloway, University of London at ICTD2010 at London, 16-19 December, 2010

*Empowering Farmers through m-agriculture* **at** eIndia 2010, Hyderabad International Convention Centre, Hyderabad, August 5, 2010

*Strategic Management in Pesticide Industry: Case Study of Selected Firms*, Fourth International Conference on Managing in the New World Order: Strategies for Sustainable Business Development, Prestige Institute of Management Research, Indore , Jan30-31,2010

*Green Supply Chain Management,* presented at 2nd Supply Chain Seminar, India International Logistics Forum& Tata Diesl held at Mumbai, December 19, 2009

*Empowering Farmers through ICT enabled Agricultural Supply Chains in Uttarakhand,* presented at Fourth Uttarakhand Science & Technology Congress held at G. B. Pant University of 17

Agriculture & Technology, Pantnagar. November 11-12, 2009

Usage and Potential of ICT among Farmers: The Missing Link, Key Note Presentation, eIndia 2009 (India's largest ICT Event): eAgriculture, Hyderabad International Convention Centre, Hyderabad, August 25-27,2009

*ICT and Agribusiness: A Suggestive Model based on Mckinsey 7S Framework* paper presented in International Forum eIndia, 2008 held at New Delhi, 2008.

#### Awards/ Honors (Faculty )

#### Dr. Sapna A. Narula

**Prosper.Net Scopus Young Scientist Award** (ICTs and Sustainable Development) organized by United Nations University, German Federal Ministry of Education and Elsevier Publications (2011) (Runner-up) 8

**Young Scientist Award,** Uttarakhand Council of Science & Technology, Govt. of Uttarakhand (2009) (under the discipline Science and Society including science popularization for Work on Empowering Farmers through ICT enabled Supply Chains in Uttarakhand)

Award for Best Research Publication (2017), TERI School of Advanced Studies

Scholarship for participation in Panel Discussion on e-Agriculture: Policies and Practices

Organized by FAO, Rome and UNESCO Chair in ICT for Development, Royal Holloway, University of London at ICTD2010 at London, 16-19 December 2010

**Best Lecture Award**, AICTE sponsored Faculty Development Programme on Advances in Marketing, Jaipuria Institute of Management (2009)

**Best Group Discussion Award**, AICTE sponsored Faculty Development Programme on Advances in Marketing, Jaipuria Institute of Management (2009)

University Topper in master's degree M.Sc. (Gold Medalist) (1996)

Best Student Award in Miranda House, University of Delhi (1994)

#### Dr. Ritika Mahajan

Awarded Nancy Raina Best Research Paper Award by Integrating Spirituality and Organizational Leadership (ISOL) Foundation at the India International Centre, New Delhi in 2017

Awarded Neal Doerr Gold Medal for Best Research Paper by the Sugar Technologists' Association of India at the 71st Annual Convention & Sugar Expo, Hyderabad in 2012.

Awarded Junior Research Fellowship by University Grants Commission in June 2010

Awarded Gold Medal for securing the highest marks in MBA in 2010

Awarded Gold Medal for securing the highest marks in BBA (Hons.) in 2008

#### **Prof. Manipadma Datta**

Best author award by ICSI for the paper published in the Chartered Secretary: 'Principles of Responsible'

Investments and Environmental, Social and Governance issues: The Emerging Horizon of Sustainability-based Decision-making in Finance

Appointed Adviser to ASSOCIATION OF BUSINESS CHAMBERS OF COMMERCE AND INDUSTRY.

#### Dr. Montu Bose

Global Network for Health Equity Fellowship, 2013-14.

University Grants Commission - NET, 2013.

Project Fellowship at the Department of Economics, University of Calcutta, 2009-2012 (UGC-DRS I Special Assistance programme).

#### **Student's Activities**



One of our students participated in LinkedIn's 'Get A Job' contest The reality show aims to provide a platform for young talent to gain exposure from top corporates.



The Entrepreneurship Development Cell, managed by the students of TERI organizes regular events to promote and foster an environment of innovation and entrepreneurship The club, led by core team of MBA students organized 'Junkyard' for the freshers during the orientation week.



#### **Media Coverage**

### पद्मावरण संरक्षण व स्थानीय लोगा के उत्थान को प्रयासरत रहें : डीपी

 टेरी विवि, बीसीसीएल व सीएमपीडीआइ ने किया प्रशिक्षण कार्यक्रम का आयोजन

संवाददाता । धनवाद

देरी विश्वविद्यालय, बीसीसीएल व सोएमपीडीआइ (रांची) के संयुक्त मानव संसाधन विभाग. ना में प्रोराधाकी के लिए कोयला खनन क्षेत्रों में पारिस्थितिकी की पुनर्स्थापना और आजीविका संवर्धन विषय पर प्रशिक्षण कार्यक्रम का आयोजन किया गया. यह सात जन तक चलेगा. उद्घाटन बीसीसीएल तिदेशक (कार्मिक) विनय कुमार ांडा, निदेशक तकनीकी (योजना व रियोजना) देवल गंगोपाध्याय ने दीप ज्वलित कर किया, मौके पर निदेशक कार्मिक) विनय कुमार पंडा ने कहा ह हमें पूर्ण उत्साह के साथ पर्यावरण रक्षण एवं स्थानीय लोगों के उत्थान की शा में प्रयासरत रहना चाहिए. निदेशक नीकी (योजना व परियोजना) ल गंगोपाध्याय ने स्थानीय लोगों स्वरोजगार के लिए निरंतर अवसर न करने की बात कही, जिसके लिए

THE REAL PROPERTY OF THE PROPE



प्रशिक्षण कार्यक्रम में उपस्थित अधिकारी

प्रशिक्षण होना आवश्यक बताया. मौके पर टेरी विश्वविद्यालय के डॉ एस चटर्जी ने मुराइडीह परियोजना के अंतर्गत इको-रेस्टोरेशन में हो रहे कार्यों की जानकारी दी. उन्होंने बताया कि उत्क्रमित हुई भूमि पर उन्होंने कृषि के सफल परीक्षण किए हैं और साथ ही जैव विविधता की जानकारी दी. प्रशिक्षण कार्यक्रम में टेरी विवि के प्रशिक्षक डॉ एसए नरूला, जो परियोजना के आजीविका घटक की संचालन भी कर रही हैं. ने बताया कि इस योजना के अंतर्गत अभी तक वीटीसी बरोरा में लगभग 270 प्रतिभागियों को मशरूम खेती. बकरी पालन, मुर्गी पालन, मत्स्य पालन, एकीकृत खेती, कंप्युटर साक्षरता कार्यक्रम और मवेशी खेती पर विभिन्न प्रशिक्षण कार्यक्रमों के दौरान प्रशिक्षित किया है और उनमें से कई ने वित्त सहायता हासिल करने के लिए कदम उठाने शुरू कर दिये है. ये थे उपस्थित : मौके पर महाप्रबंधक (मानव संसाधन) विकास कुमा उप महाप्रबंधक (पर्यावरण) मोदी, वरीय प्रबंधक (पर्यावरण) र कुमार, सहायक प्रबंधक (पर्यावर) हरीश पाल व मुख्यालय तथा के अधिकारियों व कर्मचारियों बड़ी संख्या में भाग लिया. कार्य को सफल बनाने में टेरी विवि र सोम मंडल, सहायक प्राध्यापक अहमद व अनुश्री पोहार व पर्य विभाग के अधिकारियों व कर्मच की सराहनीय भूमिका रही.

## मछली पालन करेंगी हरिणा की महिलाएं, लिखेंगी स्वरोजगार की नई इबारत

कमलिया तालाब में मछली पालन कर स्वरोजगार से जुडेंगी महिलाएं-उपायुक्त ने तालाब के जीर्णोद्धार का दिया निर्देश

#### पिट् कुमार शर्म वाघमारा

बाधमारा प्रखंड के हरिणा पंचायत की महिलाएं नई गाया लिखने की तैयारी कर रही हैं। महिलाएं स्वरोजगार का प्रशिक्षण प्राप्त कर अब अपने पैरों पर खडा होने का काम करेगी। कल तक जो इन महिलाओं को अवला समझ कर घर की चहारदीवारी में केंद्र करने का काम करते थे। आज वही लोग महिलाओं के जज्बे को देख उनका उत्पाह बढा रहे हैं। महिलाओं को आत्मनिर्धर बनाने में टेरी विश्वविद्यालय दिल्ली की प्रो डॉ सपना नरुला का अग्रम योगदान है। उन्हीं के अथक प्रयास से महिलाओं को स्वरोजगार के लिए प्रशिधित किया गया। जिसका कारण है कि जा रहा है। र्श्वरेणा में स्थित कमलिया तालाव को मछली **कोशल विकास योजना की** थीम पर टेरी विवि, नीसीसीएल काम किया गया। इस बारे में पालन कार्य के लिए चिडित किया गया। जल्द श्वीम पर होगा काम ही तालाब का जीणोंदार कर महिलाओं को स्वरोजगार से जोड़ने का काम प्रारंभ किया। बनाने की जिम्मा उठाए टेरी को जगरूक कर प्रशिक्षण के। करवाया और इसे मछली पालन। विभाव द्वारा कराय जएव।'' जाएगा। क्षेत्र में इस तरह की पहली बार विश्वविद्यालय की प्रो डॉ सपना माध्यम से उन्हें स्वरोजगार से के उपयुंका पाया।



महिलाओं में काफी उत्साह देखा कि केंद्र सरकार द्वारा संचालित देकर उनलोगों को स्वरोजगार द्वारा हर संमय मदद किया जाएगा।

पिछले दिनों मुराइंडीह कोलियरी कौशल विकास योजना की से जोडने में सहयोग करने का तथा सीएमपीडीआई रांची द्वारा उपायुक्त से बात करने के बाद महिलाओं को आत्मनिर्भर कोलियरी क्षेत्र के प्रभावित लोगों उपायकत ने तालाब का निरीक्षण

नेब जन है। उन्होंने बताय कि पूर्व मुखिया की अगुवाई में जुड़ता गया कारवा

के चीटीसी सेंटर में प्रशिक्षण टेरीव विश्वविद्यलय दिल्ली, बीसीसेएल तथा सैएमपीडीआई द्वारा आयोजित कर परियोजना से परियोजना से प्रमावित क्षेत्रों में रहवे वाले क्रमीणे को आत्मविर्भर वनावे , प्रभावित क्षेत्रों के 270 लोगों के उद्देश्य से जब मुख्मडीह वीटीसी सेटर में प्रशिक्षण प्ररंभ किया गया को प्रशिक्षित करने का काम था। उस समय बहुत ही कम लोग उपरिवत हुए। इसके बढ़ हरिण किया गया है। जिसमें पुरुषों पंचयत की पूर्व मुखिया रिंकू देवी ने प्रशिक्षण कार्यक्रम से प्रमावित से ज्यादा महिलाओं का रखान । होकर पंचायत की महिलाओं को जगरूक करने का काम किया। उन्होंने था। इस दौरान प्रशिक्षणावियों उपायुक्त को संधुवद देते सुर कल कि केवल एक बर कमलिया तलव को मतस्य पालन, मुर्गी पालन, का जीजोंद्वार करते की वात कही गई और उपायुक्त वे उसे गंभीरता मशरूम उत्पादन, बकरी पालन, पूर्वक लेते हुए बाइमरा वीडीओ को तत्काल तालव का निरीक्षण कर एकीकृत खेती सहित अन्य अवितंव काम शुरू करने का निर्देश वे दिया। उन्होंने कहा कि महिलाओं स्वरोजगार से जुड़ने वाली नरूला ने जानकारी देते हुए कहा आवश्यक पहलुओं पर प्रशिक्षण को मछली प्रलंभ से लेकर बजर तक मछली प्रसुंघबे के कार्य में विधि

> 🔳 उपायक्त के निर्देश पर कमलिया तालाव का निरीक्षण किया जया है। जीजोंद्वार से संबंधित फाइल तैयार कर संबंधित विभाग को भेउने की प्रक्रिया प्रारंभ कर दी गई है। उक्त ताताब का जीजोंद्वार भूमि संरक्षण गिरिजानंद किस्क्, बीडीओ बाहमाज

# मुराईडीह में तीन दिवसीय प्रशिक्षण शिविर का उद्घाटन

#### डीबी स्टार. बाधमारा

ासीसीएल सीएमपीडीआई तथा टेरी बेश्वविद्यालय दिल्ली के संयुक्त तवावधान में मुराईडीह कोलियरी वियेलय स्थित वीटीसी सेंटर में खवार से तीन दिवसीय प्रशिक्षण शक्ति का आयोजन किया गया। द्याटन समारोह को संबोधित करते व विवि की प्रो. डॉ सपना नरुला ने हहा कि परियोजना से प्रभावित लोगों का मुख्य उद्देश्य है। प्रशिक्षण शिविर छठे चरण में लोगों को सिलाई इहाई तथा कंप्यूटर का प्रशिक्षण देकर वरोजगार से जोड़ने का काम किया



तहाई तथा कंप्यूटर का प्रशिक्षण देकर जाएगा। उन्होंने कहा कि इस प्रशिक्षण सामग्री तैयार किए जाएंगे उसे दिल्ली जाने के बाद प्रशिक्षण प्राप्त करने की कोलियरी क्षेत्रों में वरोजगार से जोड़ने का काम किया के दौरान प्रशिक्षणाधियाँ द्वारा जो भी के बाजारों में बेचकर लोगों को मुनाफा वाले क्या कर रहे हैं। स्वरोजगार से अनुभव मिल रहा है।

दिलाने का काम किया जाएगा। इससे जुड़े हैं या किसी प्रकार की परेशानी पूर्व संपन्न पांच चरणों मे आयोजित हो रही है। उसका इंपेक्ट लेने के लिए प्रशिक्षण को प्राप्त कर स्वरोजगार से विवि से आए छात्र मुनीर अहमद, जुड़े संतोष रवानी, जग्गू रवानी आदि देवेंद्र, आलोक, अभिनव, श्वेता, की तारीफ करते हुए प्रशिक्षणार्थियों को आरुषि, स्वप्निल तथा यूनिवर्सिटी रोल मॉडल मानते हुए ईमानदारी पूर्वक ऑफ ग्रेड्स ऑस्ट्रेलियन छात्र मैक्स, प्रशिक्षण प्राप्त करने की बात कही रसेला व यास्मीन प्रशिक्षण प्राप्त लोगों गई। डॉ सपना ने जानकारी दिया कि से जानकारी हासिल कर रहे हैं। साथ कंप्यूटर प्रशिक्षण के लिए विवि द्वारा 🛛 ही इन छात्र-छात्राओं द्वारा ग्रामीणौं छह केप्यूटर सेट प्रदान किया गया है। को स्वरोजगार से जुड़ने में उत्पन्न विवि तथा ऑस्ट्रेलियाई छात्रों द्वारा होने वाली परेशानियों को दूर करने लिया जा रहा इंपेक्ट विवि द्वारा का भी टिप्स दिया जा रहा है। ठात्र-मुराईडीह कोलियरी परियोजना से छात्राओं ने बताया कि मुराईडीह में प्रभावित ग्रामीणों को प्रशिक्षित किए आयोजित प्रशिक्षण शिविर तथा यहां जाने के बाद प्रशिक्षण प्राप्त करने की कोलियरी क्षेत्रों में आने से अलग







#### Way Forward

- Strengthening MDPs/ FDPs ( Pioneers in Education for Sustainable Development)
- Attracting future sustainability leaders as prospects
- Global Outreach
- Taking Industry-academia interface to the next level (Business Consulting, fellowships, Academic Chairs)
- In-house case study development
- Attracting global recruiters
- Strengthening alumni linkages
- Establishing Centre for Excellence in Business Sustainability Research
- Encouraging Entrepreneurial Culture
- Encouraging learning into SDGs thinking through teaching and research
- Curriculum Revision