Title		First		Last		Photograph
		Name		Name		
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Dr.		Seema		Sharma		
Designation	Assist	ant Profe	ssor		3.40	Will Control of the C
Address		tment of		onmental		
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(Residence)	20101	-				
Phone No.	01122	150100				
(Office)						
(Residence)						
Mobile	+91-9	97100678	30		1	
Fax					A.	
Email	Seema	a.sharma. <sub>j</sub>	<u>phd@</u>	gmail.com		
Web-Page	https:/	//in.linked	lin.co	m/in/seema		
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Educational					M S S S	
Qualifications						
Degree	Institu	ution				Year
M.Sc.	Delhi	Universit	y			2003
Ph.D.	Teri U	Jniversity				2011
<b>Career Profile</b>						
Designation						Duration
1. Content						June 2012—May 2013
		eCooper (	PWC	) Private		
Limited,						
Gurugra	m					
2. Research		`	, ,			August 2004—June 2012
				— The Ene		
	ources I	Institute (	ľERI)	), New Delh	i,	
India						
Administrative	Assign	nments				
At present						

- 1. Coordinator of Environment Society
- 2. Member of Planning and Proposal Committee
- 3. Member of Garden and Environment society
- 4. Teacher in-charge of Department of Environmental Studies

## Key Tasks being handled at PWC

- Content Management, Content development and Editorial activity under Environment, Energy, Agriculture, sustainable development and Natural Resource Management sector.
- Business development in terms of project proposals, expression of interest, concept note.
- Advisory & Consulting
- Coordination of Project activities
- Report writing & presentations

# Key Tasks being handled at TERI

Major responsibilities includes: Primary and secondary research & analysis, Project proposal development, Report writing and Presentation.

## **Subjects Taught**

Environmental Studies
Industrial Waste Management
Urbanization
Climate Change
Sustainable Development

### **Areas of Interests:**

Environment

Social and Ecological Resilience

Sustainable development

Climate change

Urbanization

Smart cities

Community engagement

**Industrial Waste Management** 

#### **Research Guidance:**

• Undergraduate Research Guidance in collaboration with Resilience Relations (Resilience Center Global Network)

Project details	Student details	Duration	Status
	<ol> <li>Mahima, B.A. (P), 2<sup>nd</sup> Year,</li> <li>Renuka Pandey, Political Science (H), 2<sup>nd</sup> Year,</li> </ol>		On-going

2.	Social Media optimization; focused on community resilience at local level	4.	Anupama Verma, Pol. Science (H), 2 <sup>nd</sup> Year Ayushi, Pol. Science (H), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi  Ankita Kaushik, B.A. (P), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi	May-2016- May 2017	On-going
3.	Issues and Challenges to attain elderly and child friendly parks in East Delhi.	2.	Vichandana Bothara, B.Com. (H), 2 <sup>nd</sup> Year; Shubhangi Jha, B.Com. (H), 2 <sup>nd</sup> Year; Prachi, B.Com (P), 2 <sup>nd</sup> Year Vivekananda College, University of Delhi	March-2016- March 2017	On-going
4.	Feasibility study to attain resilient transport in Vivek Vihar, Delhi-95	<ol> <li>1.</li> <li>2.</li> <li>3.</li> </ol>	Abhishek Mahajan, B. Com. (H), 2 <sup>nd</sup> Year; <b>Maharaja Agrasen College</b> , University of Delhi Gurneet Kaur B.Com (P), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi Niharika Mahajan, B.com (P),	Summer internship May 2015-July 2015	Completed
		<ul><li>4.</li><li>5.</li></ul>	2 <sup>nd</sup> Year, Vivekananda College, University of Delhi Medhavi, B.Com (P), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi Priyanka Goel, B. Com (p), 2 <sup>nd</sup>		
		<ul><li>6.</li><li>7.</li></ul>	Year, Vivekananda College, University of Delhi Aarushi Sharma, B. Com (P), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi Iti Sharma, B.Com (P), 2 <sup>nd</sup> Year, Vivekananda College, University of Delhi		
5.	Community Interaction study on air pollution in Vivek Vihar,	1.	Ashwal Malik, B. Com (H), 2 <sup>nd</sup> Year, <b>Deshbandhu College,</b> University of Delhi  Himani Gupta, English (H),	Summer internship May 2015-July 2015	Completed

	Delhi-95		2 <sup>nd</sup> Year, Vivekananda
			College, University of Delhi
6.	Feasibility stud	ly 1.	Taniya Malhotra, B.Com. (H), Summer internship Completed
	to attain resilie	nt	2 <sup>nd</sup> Year, <b>Mata Sundari</b> May 2015-July 2015
	toilet a	nd	College, University of Delhi
	sanitation	in 2.	Manshi Choudhary, History,
	Vivek Vih	ır,	3 <sup>rd</sup> Year, Vivekananda
	Delhi-95 Colle		College, University of Delhi
		3.	Arshi Shamsi, English (H),
			2 <sup>nd</sup> Year, Vivekananda
			College, University of Delhi

## **Publications profile:**

## **Paper Publications**

- 1. **Seema Sharma** and Arnab Bose (2016), The second avatarana of Ganga, editorial article in everything about water (EAW) magazine, April issues, 2016.
- 2. **Seema Sharma** and Alok Adholeya (2012); Hexavalent chromium reduction in Tannery effluent by bacterial species isolated from Tannery effluent affected soil. Journal of Environmental Science and Technology, 5(3): 142-154
- 3. **Seema Sharma** and Alok Adholeya (2011); Detoxification and accumulation of chromium from tannery effluent and spent chrome effluent by *Paecilomyces lilacinus* fungi. International Biodeterioration and Biodegradation, 65: 309-317
- 4. **Seema Sharma** and Alok Adholeya (2010); Filamentous saprobe fungi: An important component of mycorrhizosphere for growth and heavy metal resistance in AM-plants. Mycorrhiza News, 22(1): 21-25.
- 5. **Seema Sharma** and Alok Adholeya (2011); Phytoremediation of Cr contaminated soil using *Aloe vera* and *Chrysopogon zizanioides* along with AM fungi and filamentous saprobe fungi: a research study towards possible practical application. Mycorrhiza News, 22(4):16-20.
- 6. **Seema Sharma** and Alok Adholeya (2011); Green technology of chromium removal from tannery industry effluent using novel fungal isolate: An alternative for chemical methods. Terragreen, 4(2):8-9.
- 7. Arnab Bose, Jed Wolf, **Seema Sharma** (2012); Future of adaptation finance, Discuaaion paper in COP 18, 2012, Doha, Qatar.
- 8. Arnab Bose, Jed Wolf, **Seema Sharma** (2012); Future of adaptation finance: Methods and Perspectives. International Journal of Policy and Governance, 12(2):145-172.
- 9. **Seema Sharma**, D. Pant, Sujan Singh, R. R. Sinha & Alok Adholeya (2007); Mycorrhiza in crop protection (chapter). Eds *by* Chantal Hamel *and* Christian Plenchette, Haworth's press, UK, pp: 239-192.

**Paper presentations**—in national/international seminars/workshops/conferences

- 1. **Seema Sharma**, Taniya Malhotnra, Arshi Shashmi and Mansi Chaudhary (2016). Feasibility study to attain Resilient Health nd Sanitation System in Vivek Vihar, Delhi-95, **In second national symposium on Environment: Greener future**, 19<sup>th</sup> March 2016, Organized by Deshbandhu College, University of Delhi.
- 2. **Seema Sharma**, Arnab Bose, Vichandana Bothra and Shubhangi Jha (2016). Need and Importance of Elderly and Child Friendly Parks for Social and Ecological Resilience, **In second national symposium on Environment: Greener future**, 19<sup>th</sup> March 2016, Organized by Deshbandhu College, University of Delhi.
- 3. Mrinalika Chauhan, Shilpi Gupta and **Seema Sharma** (2014). Waste to Energy: a Sustainable Solution for Municipal Solid Waste. *In National Symposium on Environment: Challenges and Awareness*, 5<sup>th</sup> November 2014, Organized by Deshbandhu College, University of Delhi.
- 4. Swati, Sanjana Sharma and **Seema Sharma** (2014). Current status of Solar Energy and its future prospects. *In National Symposium on Environment: Challenges and Awareness*, 5<sup>th</sup> November 2014, Organized by Deshbandhu College, University of Delhi.
- 5. **Seema Sharma**, Parul Pant, RK Sharma and Alok Adholeya (2013). Bioremediation of Cr contaminated soil using mycorrhized plants & ATA-SG: A Feasibility Study to Assess the Economic Viability of the Practice. *In seventh International Conference on Mycorrhizae (ICOM 7)*, 7-11Jan, 2013. The Energy and Resources Institute, IHC, New Delhi, India.
- 6. **Seema Sharma** (2013). Adaptation Finance through Public Private Partnership: Methods and Perspectives. In *UGC-National seminar on Public Private in Global Perspective*, 22-23 April, 2013, Kirorimal College, University of Delhi, India.
- 7. **Seema Sharma** (2013). Phyto-remediation and recycling of heavy metal: A sustainable waste management solution. *In National seminar on Current Environmental challenges and possible solution*, 15-16 February 2013, Ramjas College, University of Delhi, India.
- 8. **Seema Sharma (2013).** Bioremediation and recycling of Cr metal: An economically viable option. *In national conference on advances in environmental sciences and plant biotechnology.* 4-5 February 2013, Deen Dayal Upadhyaya college, University of Delhi, India.
- 9. **Seema Sharma,** Arnab Bose (2013). Resilience Center: An approach towards sustainable livelihood. *In national seminar on "Climate Change and Sustainable Development: Issues and Challenges*", 23-24 Jan, Planning Commission's Centre for Planning in Research and Development (CPD), Department of Economics, Faculty of Arts, The Maharaja Sayajirao, University of Baroda.
- 10. **Seema Sharma,** R K Sharma and Alok Adholeya (2012). Removal and Recovery of Chromium from Tannery Effluent using Cr Resistant Microorganism and Green Chemistry. **In International conference on Interphase between Chemistry and**

- Environment, November 22-24, Ramjas College, Delhi University, India.
- 11. Amritpreet K Minhas, **Seema Sharma**, Shanuja Beri, Vidya Ramakrishnan, Alok Adholeya (2012). Screening, isolation and characterization of microalgae for high lipid profile and oil content to achieve enhanced biofuel extraction from India origin. *In 52nd Annual Conference, of Association of microbiologist of India (AMI)*, Punjab university, Chandigarh, Nov. 3-6, 2011.
- 12. Seema Sharma & Alok Adholeya (2010); Influence of chromium resistant-plant growth promoting filamentous fungi and arbuscular mycorrhizal fungi on growth and chromium accumulation by plants grown on tannery sludge. In International Workshop on Rhizosphere Biology of Agriculture, Horticulture and Forestry Present and Future, 25- 27 February, G.B. Pant Agriculture University, Pant Nagar, India.
- 13. **Seema Sharma**, Parul Pant, RK Sharma & Alok Adholeya (2009); Enhanced chromium accumulation and recovery of pure metal from three mycorrhized plant species grown on tannery sludge. *In sixth Phytotechnology Conference*, 1-4 *December*, *Hyatt Regency*, *St. Lousi Riverfront*, *Missouri*, *USA*.
- 14. **Seema Sharma**, H S Uppal & Alok Adholeya (2009); Beneficial effect of arbuscular mycorrhizal fungi and indigenous filamentous fungi on chromium accumulation by plants grown on tannery sludge. *In sixth International Conference on Mycorrhizae* (ICOM 6), 9-14 August, Belo Horizonte, Brazil.
- 15. **Seema Sharma** & Alok Adholeya (2006); Mycorrhizal inoculation enhances chromium accumulation in three species grrown in chromium sludge. *In fifth International Conference on Mycorrhizae (ICOM 5)*, 23 27 July, Granada, Spain.

#### Seminars/ Conferences/Workshops organized (in the last three years):

S.N.	List of	Dates	Organized	Funding	No. of
	Activities/seminars/worksho		by	agency	Participant
	ps				S
1	Workshop on "Community	11 <sup>th</sup> Jan	Department	Resilience	More than
	engagement activity to	2015.	of	Center	100
	identify issues by the		Environment	Global	community
	community to the community		al studies	Network	participants
	in Vivek Vihar area"		(EVS Dept.)	and College	
2	Capacity building workshop	12 <sup>th</sup> Jan	EVS Dept.	Resilience	20 students
	for students on resilience to in	2015.		Center	participants
	still resilience in society at			Global	
	community level.			Network	
				and College	
3	Workshop on "Health and	31 <sup>st</sup>	EVS Dept.	Resilience	More 400
	Sanitation: Women's	January		Center	participants
	Perspective"	2015		Global	
				Network	

				and TIENS Healthcare india	
4	Workshop on women empowerment and Livelihood- plausible options and way forward.	11 <sup>th</sup> March 2015	RCVNC and EVS Dept.	Resilience Center Global Network and Yes Bank	More than 300 participants
5	Implementation of the resilience framework in North campus area –by organizing a community engagement activity using Daulat Ram College, University of Delhi as a platform.	11 <sup>th</sup> of April 2015	EcoClub- Daulat Ram College	Daulat Ram College	More than 100 participants
6	Official launch of Resilience Center Vivekananda College Chapter (RCVNC) and internship opportunities to the undergraduate and post graduate students on the occasion of world environment day 2015.	8 <sup>th</sup> June 2015	RCVNC and Vivekananda College, University of Delhi	Vivekanand a College, University of Delhi and RCGN	More than 200 participants
7	Event to conclude the summer internship activity by undergraduate students under RCVNC	31 <sup>st</sup> July 2015	RCVNC and Dept. of Environment al Studies	Vivekanand a College, University of Delhi and RCGN	More than 200 participants
8	Workshop on importance of soils for food security, agriculture, as well as in mitigation of climate change, poverty alleviation, and sustainable development.	12 <sup>th</sup> , 17 <sup>th</sup> , 18 <sup>th</sup> and 26 <sup>th</sup> of Septembe r 2015.	RCVNC and EVS Dept.	College and Resilience Center Global Network	More than 150 participants
9	Workshop on air pollution: need and role of public participation in control and measures.	15 <sup>th</sup> and 30 <sup>th</sup> Septembe r and 1 <sup>st</sup> and 3 <sup>rd</sup>	RCVNC and EVS Dept.	Resilience Center Global Network	More than 150 participants

		October 2015.						
10	Workshop on energy efficiency for a sustainable way of life.	7 <sup>th</sup> , 9 <sup>th</sup> . 24 <sup>th</sup> and 30 <sup>th</sup> October.	RCVNC and EVS Dept.	Resilience Center Global Network	More than 150 participants			
11	Capacity building program for local community (electricians, plumbers, car mechanics etc.) on energy efficiency.	6 <sup>th</sup> October 2015.	RCVNC and EVS Dept.	RCGN	25			
12	Resilience week celebration:	12 <sup>th</sup> -16 <sup>th</sup> October 2015.	RCVNC and EVS Dept.	RCGN	More than 250 participants each day			
	for issues at community level - 1(12 <sup>th</sup> - 16 <sup>th</sup> October) to be celed "Resilience Week"  Day wise activities were plant non-teaching staff of the college	brated as ned for stude and for oth	ents, their imme her community p	diate relatives, eople.	teaching and			
13	non-teaching staff of the colleg  Community Day Celebration	e and for oth	RCVNC and	eople.  RCGN	More than			
		October	EVS Dept		250 participants			
	The last day of the Resilience Week was celebrated as <b>Community Day</b> in the college, in which community of Vivek Vihar came into the college and interacted with the college Principal, faculty and students and share their views and opinion on academia-industry-policy-community interface (RCVNC) and how it can be made more impactful and useful with the community support.							
14	Launch of Resilience Atlas  First of its kind initiative with Academia-Industry-Policy and Local Community on Board.	17 <sup>th</sup> October, 2015	RCVNC and EVS Dept	RCGN And College	More than 300 participants			
	About Resilience Atlas Resilience Atlas speaks about specific needs and issues of the community identified by the community itself. It also provides suggestions on the needs and issues of the community and recommendations on the same by experts. Therefore, Resilience Atlas							

	can be used as a guideline by community members. The atlas would provide with key information to each member of the community on their locality and the existing sustainable practices which can create opportunities to improve their quality of life at an individual and community level It can also be used for local area reference purposes by policy makers or industry/corporate or academia or NGOs specifically working for this locality.						
15	Intercollege power point presentation competition on environmental issues for undergraduate and post graduate students.	17th October	RCVNC and EVS Dept	RCGN and Vivekanand a College	More than 250 participants		
16	Panel discussion on Air quality and Charter declaration on air quality with Academia-Industry-Policy and local Community on board	16 <sup>th</sup> January 2016	RCVNC and EVS Dept	Eco club Dept. of Environmen t, Govt. of Delhi	More than 250 participants		
17	Open competition for innovative ideas on how to control air quality at local level	23 <sup>rd</sup> January 2016	RCVNC and EVS Dept	Eco club Dept. of Environmen t, Govt. of Delhi	More than 250 participants		
18	Launch of neighbourhood project to instil social resilience at local level—by the District Magistrate of area	23 <sup>rd</sup> January 2016	RCVNC and EVS Dept	Eco club Dept. of Environmen t, Govt. of Delhi	More than 300 participants		
19	Intercollege competition on how to make elderly and child friendly parks.	4 <sup>th</sup> March 2016	EVS Dept	College	More than 200 participants		
20	Launch of Police Public partnership project in Vivek Vihar	31 <sup>st</sup> March 2016	Resilience relations	Community of Vivek Vihar	More than 300 participants		
21	Waste Management Workshop; interaction to real ground implementation	17 <sup>th</sup> Sept. 2016	Environment Society	Vivekanand a college	More than 100 participants		

Research Projects (Major Grants/Research Collaboration)

- Major ongoing projects handling as a project investigator
  - 1. Resilience project—supported by Resilience Center Global Network (RCGN)
    - Objective 1: To instill resilience in society at community level
      - By creating resilience center as an interface to bridge the gap between academia, industry, policy and community people at local level
    - **Objective 2**: To meet the aim of liberal education, socialization and social change: academic institutions perspective
      - By creating resilience center as an interface with in the academic institution to meet their aim
  - **2. Police-Public Partnership Project**—(supported by East Delhi Member of Parliament and Community of Vivek Vihar, Delhi-95)
  - **3. Bring your neighbor closer campaign**—(supported by RCGN and community of Vivek Vihar, Delhi-95)
  - **4.** Air pollution issues and challenges at community level: awareness and action plan at local level campaign —(supported by RCGN and community of Vivek Vihar, Delhi-95)
  - **5. Health and sanitation: women's perspective, awareness campaign** (undergraduate research project) —(supported by Vivekananda College and RCGN)
  - **6.** Baseline study of stray dog issues, reasons and possible management solutions in Delhi—(supported by RCGN and community of Vivek Vihar, Delhi-95).
  - **7.** Women empowerment and livelihood options—(supported by Resilience relations and Community of Vivek Vihar).
  - **8.** Walkability and last mile connectivity issues in Delhi (supported by Resilience relations).

#### **Awards and Distinctions:**

- 1. **TEDx walled city speaker** on Urban Habitats: 5th April 2016.
- 2. Received special acknowledgement from East Delhi-Member of Parliament for community engagement initiatives in the area,. November 2015.
- 3. **Received special acknowledgement** from Dean Alumni, University of Delhi for social and ecological initiatives, Sept. 2016.
- 4. Have been successful in creating an interface (Resilience Center, under Dept. of Environmental Studies, Vivekananda College, Delhi University) between academia-industry-policy-community, in June 2015 to meet the aim of liberal education, socialization and social change and to instill resilience in society at community level.
- 5. Under project Resilience, have been successful in creating processes which are place specific and not person specific—one of the important key to attain social resilience, socialization and social change at local level.
- **6.** Conceptualized and worked upon successfully on the concept of resilience atlas (prototype I) at local level for local area reference purposes.

- **7.** Launched successfully the first ever Resilience Atlas-Vivek Vihar (prototype I) on 17<sup>th</sup> October, 2015, in presence of local academia-industry-policy and community together.
- 8. Celebrated Resilience Week and Community Day (12-16 October 2015) in Vivekananda College, University of Delhi (first time ever in India) to inculcate the sense, responsibility and understanding of resilience at local level in students, their immediate relatives and local community of Vivek Vihar.
- 9. Have been successful in creating a framework (resilience atlas-prototype II) to measure/recognize relevant and pivotal community action at local level (patent under filing).
- 10. Received excellent comment on Ph.D. work (thesis) from the international reviewer of the thesis—document attached for your reference.
- 11. **Invited for oral presentation** in Hebei International Biotechnology Forum, November 6-8, 2011 in Shijiazhuang, Hebei, China.
- 12. Received **Biocenterra Prize** for best research presentation in International Conference on Mycorrhizae (ICOM6), 9-14 August, 2009, Belo Horizonte, Brazil.
- 13. Received **Best Poster Presentation award** in International Workshop on Rhizosphere Biology of Agriculture, Horticulture and Forestry Present and Future, February 25-27, 2010. GB Pant Agriculture University, Pant Nagar, India.
- 14. **Received fellowship** from IRRI (international rice research institute), Philippines to visit Martin Luther University, Germany.
- 15. Participated in **Indo-US Workshop** on green chemistry, 7-9 January 2006, Department of Chemistry, University of Delhi, Delhi, India, and joined the green chemistry network.
- 16. Secured **First position** in pre-Ph.D course work (2006) with **A**+ (outstanding) and **A** (excellent) **grades**.
- 17. Qualified CSIR-UGC joint NET in 2003.

#### **Association with Professional Bodies:**

- 1. Founder member of **Resilience Center Global Network** since 2011.
- 2. Founder member of **Resilience Relations** (social enterprise) since 2016.
- 3. Invited **Reviewer** of international **Bioremediation Journal** (Taylor and Francis Inc.) January 2010.
- 2. Member of **Green Chemistry Network** (GCN) since 2006.
- 3. **Technical Editor** of International Journal of Agricultural Research
- 4. Technical Editor of Research Journal of Environmental Science
- 5. **Technical Editor** of Research Journal of Environmental Toxicology
- 6. **Technical Editor** of Asian Journal of Biotechnology

#### Other Activities