SHYAMASREE DASGUPTA

Associate Professor School of Humanities and Social Sciences Indian Institute of Technology Mandi Himachal Pradesh, India

Area of Specialization: Energy and Environmental Economics



PERSONAL DETAILS

Date of Birth: 25th December 1982

Nationality: Indian
Sex: Female

Present Address: Indian Institute of Technology, Mandi

Kamand Campus, Himachal Pradesh 175005, India

Permanent Address: Flat no. 3A, Ankaita Apartment, 2/P-9 Jheel Road, Bank Plot,

Kolkata - 700075, West Bengal, India

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ACADEMIC QUALIFICATION

2015 Ph.D. in Economics, Jadavpur University, Kolkata, India

2010 M.Phil. in Economics, Jadavpur University, India

2006 M.A. in Economics, Delhi School of Economics, University of Delhi, India

2004 B.Sc. in Economics, Asutosh College, University of Calcutta, India

PROFESSIONAL EXPERIENCE

Nov 2021 - Associate Professor

School of Humanities and Social Sciences, Indian Institute of Technology Mandi, India

Jan 2016 – Nov 2021 Assistant Professor

School of Humanities and Social Sciences, Indian Institute of Technology Mandi, India

July 2014 – Jan 2016 Research Personnel

Global Change Programme, Jadavpur University, Kolkata, India in collaboration with University of California, Berkeley, USA

July 2006 – July Junior Research Fellow

2008 Collaborative Research and Dissemination (CORD), New Delhi, India

Report: Probe Revisited: A Report on Elementary Education in India. Published

by Oxford University Press in 2011 (ISBN13: 9780198071570).

VISITNG RESEARCH POSITIONS

Nov 2017 University of Stavanger, Norway

Dec 2016 Energy Studies Institute, National University of Singapore.

2013 (One Semester) Pacific Northwest National Laboratory, Joint Global Change Research

Institute at University of Maryland, USA

2010 (One Semester) Utrecht University School of Economics, The Netherlands

MEMBER of RESEARCH GROUP/ CONSORTIUM

• Member, Sectoral Working Group constituted by the Department of Science and Technology, Government of India, related to Himalayan Ecosystem for preparation of India's Adaptation Communication to UNFCCC (2022).

- **Researcher Member**, Project entitled "Road map for decarbonization of Indian energy system: exploring innovative solutions" under Indo-Norwegian Cooperation Programme 2014 (INCP).
- Contributing Author, Chapter 10 "Industry" in: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC AR5).
- Researcher Member (Jadavpur University: Sector Specific Behaviourial Models), India's GHG Emissions Profile: Five Climate Modelling Studies. Ministry of Environment and Forests, Government of India. 2009.
- **Researcher Member**, Indian-European Multilevel Climate Governance Research Network. https://www.indiaeu-climategovernance.org/about/index.html

RESEARCH/CONSULTANCY and OUTREACH PROJECTS

	Title of the project	Role	Status	Sponsoring Agency
1	Climate Change Risk Assessment and Mapping at District and State level in India	PI (Collaborators - IIT Guwahati and CSTEP, Bengaluru)	Status: Sanctioned	
			Start Date: 02.04.2022	DST, GoI
			End Date: 01.03.2024	
2	Race and Ethnicity as the Determinants of Racialized Coastal Experiences in the Indian Ocean Region	PI - India Sub Award (Collaborator Boise State University, USA and Khulna University, Bangladesh)	Status: Ongoing	Social Science Research Council, USA
			Start Date: 01.09.2021	
			End Date: 30.08.2022	

3	Coal-based economies in developing countries: An environmental, health and cost evaluation around mega thermal power plants (Co-PI; In Collaboration with Linköping University, Sweden)	Co-PI (Collaborator: Linkoping University, Sweden, CMRI, Kolkata, India, Dhaka University, Bangladesh	Start Date: 01.01.2021 End Date: 31.12.2023	VR: Swedish Research Council
4	Climate vulnerability and risk assessment at the national level using a common methodological framework	PI (Collaborator: IIT Guwahati and IISc Bangalore)	Status: Completed Start Date: 02.9.2019	SDC and DST
			End Date: 31.12.2020	
	Role of Aadhaar in improved last mile delivery of banking services: A study of Himachal Pradesh	Co-PI	Status: Completed	Indian School of Business
5			Start date: 01.01.2019 End date: 31.08.2020	
	Transitioning to E-Autos in hill states – A case study of Mandi town (PI)	PI	Status: Completed	IIT Mandi
6			Start date: 9.3.2018	
			End date: 31.5.2021	
	Smart Agriculture: Farmer Zone (Co-PI)	Co-PI	Status: Completed	DBT
7			Start date: 21.3.2018 End date: 20.3.2021	
	Evaluation of Business Correspondent Model of Banking: A Case Study in Himachal Pradesh	Co-PI	Status: Completed	
8			Start date: 21.2.2018 End date:	ICSSR
			31.08.2020	
	Capacity Building on Climate Change Vulnerability Assessment in States of Indian Himalayan Region	Co-PI (Collaborator: IIT Guwahati and IISc Bangalore)	Status: Completed	Swiss Agency for Development Corporation (SDC)
9			Start date: 9.2.2018	
			End date: 08.07.2019	
	Comprehensive valuation of forest ecosystem services and understanding the method of value formation: A case study in Himachal Pradesh	PI (Seed Grant)	Status: Completed	
10			Start date: 03.05.2017	IIT Mandi
			End date: 03.05.2021	
11	Indian Red Cross Society Project – IIT Mandi Collaboration	Co-PI	Status: Completed	
			Start date: 1.12.2016	Indian Red Cross Society
			End date: 28.2.2017	

SELECT PUBLICATIONS

Peer Reviewed Journal

- **1.** Dasgupta, S, Roy, J., Ghosh, M., Talukder, J. (2022). Willingness to pay (WTP) for arsenic-safe drinking water: A case study to understand societal embedding of ECAR technology in rural West Bengal, India. Development Engineering. Volume 7, 2022, 100096. DOI: https://doi.org/10.1016/j.deveng.2022.100096.
- 2. Alam, M.K., Dasgupta, S., Barua, A., Ravindranath, N.H. (2022). Assessing climate-relevant vulnerability of the Indian Himalayan Region (IHR): A district-level analysis. Natural Hazards. 112, 1395–1421. DOI: https://doi.org/10.1007/s11069-022-05233-x.
- 3. Lugovoy, O., Jyothiprakash, V., ... Dasgupta, S., et. al. (2021), Towards a zero-carbon electricity system for India in 2050: IDEEA model-based scenarios integrating wind and solar complementarity and geospatial endowments. Energies, 14(21), MDPI. DOI:
- Saunders, H., Roy, J., Azevedo, I. M.L., Chakravarty, D., Dasgupta, S., et al. (2021), Energy Efficiency: What Has Research Delivered in the Last 40 Years? *Annual Review of Environment and Resource*. 46 (October 2021), https://doi.org/10.1146/annurev-environ-012320-084937 (Annual Reviews, IF: 11.1)
- 5. Das, N., **Dasgupta, S**. Roy, J., Langhelle, O., Assadi, M. (2021). Emission Mitigation and Energy Security Trade-Off: Role of Natural Gas in the Indian Power Sector. *Energies*, 14(13), 3787. (June 2021) (MDPI, IF:3.0)
- 6. Sanyal, K., Kaur, A. and **Dasgupta, S*.** (2021). So near yet so far: A narrative from a Forest-dwelling Gaddi Community in Chamba, Himachal Pradesh. *Ecology, Economy and Society -the INSEE Journal*. 4 (2354-2021-249), pp, 123-128. (INSEE, IF: NA)
- 7. Barua, A., **Dasgupta, S,** et. al. (2020). How Vulnerable are India's Himalayan Region States to Climate Change? *Economic and Political Weekly Engage*. **ISSN- 2349-8846.** (IF: NA)
- 8. Sankhyayan, P. and **Dasgupta**, **S*.** (2019). 'Availability' and/or 'Affordability': What matters in household energy access in India? *Energy Policy*. 131 (2019) 131–143 (Elsevier, IF: 6.1)
- 9. Li, Y, Su, B, **Dasgupta, S.** (2018). "Structural path analysis of India's carbon emissions using inputoutput and social accounting matrix frameworks". *Energy Economics*. 76 (Oct 2018). pp 457-469. (Elsevier, IF: 7.04)
- 10. Roy, J., Chakraborty, D., **Dasgupta S**. et al. (2018) "Where is the hope? Blending modern urban lifestyle with cultural practices in India". *Current Opinion in Environmental Sustainability*. 31(April 2018) pp 96-103. (Elsevier, IF: 7).
- 11. **Dasgupta, S***, Satija, S and Gauba, P. (2017) "Energy use Behaviour of Manufacturing Industries in India: An Analysis using KLEMS framework". *Journal of Industrial Statistics*. 6(1), 72-88. (Ministry of Statistics and Programme Implementation, Govt. of India). (IF: NA)
- 12. **Dasgupta**, **S*.** and Roy, J. (2017) "Analysing energy intensity trends and decoupling of growth from energy use in Indian manufacturing industries during 1973-74 to 2011-12", *Energy Efficiency*, 10 (4), 925–943 (Springer, IF: 2.6).
- 13. **Dasgupta**, **S*.** and Roy, J. (2015). "Understanding technological progress and input price as drivers of energy demand in manufacturing industries in India". *Energy Policy*, 83 (August 2015), 1-13. (Elsevier, IF: 6.1)
- 14. Chakraborty, D. and **Dasgupta**, S*. (2014). "Assessing Information Gap in Industrial Performance

- Analysis for Sustainable Development: Insights from Case Study of Paper Industry in India". *Journal of Industrial Statistics*, 3(1), 23-39. (Ministry of Statistics and Programme Implementation, Govt. of India); (IF: NA)
- 15. Ghosh, D., **Dasgupta, S.,** Ghosh, A. and Ghosh, G. (2014). "Energy Consumption in the Manufacturing Sector in Odisha: Complexities for Sustainability Transition due to size mix within the Sector". *Journal of Industrial Statistics*, 3(2), 199-223. (Ministry of Statistics and Programme Implementation, Govt. of India). (IF: NA)
- 16. Chakraborty, D. and **Dasgupta**, **S.** and Roy, J. (2013). "Rebound Effect: How much to worry?" *Current Opinion in Environmental Sustainability*. 5(2), 216 228. (Elsevier, IF: 7).
- 17. Roy, J., Ghose, D., Ghosh, A., and **Dasgupta, S.** (2013). "Fiscal instruments: crucial role in financing low carbon transition in energy systems". *Current Opinion in Environmental Sustainability*. 5(2), 261 -269. (Elsevier, IF: 7).
- 18. Hill, E., Samson, M, and **Dasgupta**, **S**. (2011). "Expanding the School Market in India: Parental Choice and the Reproduction of Social Inequality". *Economic & Political Weekly*. XLVI (35). (IF: NA).

Chapter in Edited Volume

- 1. **Dasgupta, S*.**, Das, N. and Roy, J. (2021). Index decomposition analysis of energy use in India. in Chakraborty, T., Mukherjee, D., Saha, S. (Eds.) Contemporary Issues in Sustainable Development: The Case of India. Routledge. New York.
- 2. **Dasgupta, S*.**, Chakraborty, D. and Roy, J (2020). Selected Issues in Economics of Greenhouse Gas Emission Mitigation in Majumdar, B (Ed). Reference Module in Materials Science and Materials Engineering.

 Vol 9. Elsevier. https://www.sciencedirect.com/science/article/pii/B9780128035818110562?via%3Dihub
- 3. Roy, J., **Dasgupta, S*.**, et. al. (2018). "Governing National Actions for Global Climate Stabilization: Examples from India" in Barua, A., Narain, V., Vij, S. (Eds.) Climate Governance in South Asia. CRC Press: Taylor and Francis. https://www.taylorfrancis.com/books/e/9781315166704/chapters/10.1201/9781315166704-8
- 4. **Dasgupta S*.**, Sankhyayan P. (2018) A narrative analysis of state-level renewable energy policies in India. In: Gautam A., De S., Dhar A., Gupta J., Pandey A. (eds) Sustainable Energy and Transportation. Energy, Environment, and Sustainability. Springer, Singapore.
- 5. **Dasgupta, S*.**, van-der Salm, F. and Roy, J. (2015). "Designing PAT as a climate Policy in India: Lessons learnt from EU-ETS" in N. Ghosh, P. Mukhopadhyay, A. Shah, M. Panda (Eds.) Nature, Economy and Society: Understanding the Linkages. Springer. New Delhi.
- 6. Roy, J., **Dasgupta, S.** and Chakrabotry, D. (2013). "Energy Efficiency: Technology, Behavior and Development" in Andreas Goldthau (Ed.) The Handbook of Global Energy Policy. (First Edition, pp. 282-302) Wiley-Blackwell, Oxford, UK.
- 7. **Dasgupta, S*.** and Ghosh, G. (2013). "Efficiency in Input Use: Estimating Performance of Manufacturing Sector in West Bengal during 1990-91 to 2009-10" in S. Pan, S. Ghosh and A. Karmakar (Eds.), Two Decades of Economic Reforms in India (pp 202-216) Regal Publications: New Delhi, India.

Report and Resource Material

- Climate Vulnerability Assessment for Adaptation Planning in India Using a Common Framework. (2021). Report published by SDC and DST. https://dst.gov.in/sites/default/files/Full%20Report%20%281%29.pdf
- 2. Climate Vulnerability Assessment for the Indian Himalayan Region using a Common Framework (2019). Report under Indian Himalayas Climate Adaptation Programme. Available at: http://ihcap.in/reports
- 3. Sharma, J., Murthi, I., Esteves, T., Negi, P., Sushma, S., Dasgupta, S., Barua, A., Bala, G., Ravindranath, N.V., (2018) Climate Vulnerability and Risk Assessment: Framework, Methods and Guidelines for the Indian Himalayan Region. IISc, IHCAP, DST-NMSHE and SDC Publication. Available at http://ihcap.in/reports.
- 4. **Chapter 10 "Industry" in: Climate Change 2014: Mitigation of Climate Change.** Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change.

 Available at https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter10.pdf

INVITED TALKS

- 1. Invited delegate at CoP28 to showcase its significant achievements in climate change science on the theme "Climate Change Vulnerability in the Himalayan Region: Impacts and Implication" by Department of Science and Technology, Govt. of India. Dubait December 3, 2023.
- 2. Guest Faculty for EPTRI (Environment Protection Training & Research Institute, Telangana)-International Training Programme (ITP) on Climate Change and Sustainable Development for the session on Climate Change Vulnerability Assessment, EPTRI, Telangana, on 6th February 2023
- 3. Invited talk at St. Xavier's' College, Jaipur. Delivered lecture on "The Economics of Climate Change" on 4th November, 2022.
- 4. Invited talk and panellist in i-Connect, an initiative by Ministry of Science and Technology, Ministry of Earth Sciences, GoI, CSIR, NEERI, IITM Pune on Azadi ki Amrit Mahotsav (iCEN 54, Climate Vulnerability and Adaptive Practices. Topic: To cope or to adapt? A case study of Kulgam district in Jammu and Kashmir. 20th July 2022.
- 5. Invited talk at Anusandhan 2022 IIT Mandi Research Fest. Topic Willingness to pay (WTP) for arsenic-safe drinking water: A case study to understand societal embedding of ECAR technology in rural West Bengal, India, 12th June, 2022.
- 6. Invited lecture on "The Economics of Climate Change" Asuthosh College, University of Calcutta. 26th April, 2022.
- 7. Speaker in the webinar on Climate Change and State Finances organised by India Ratings and Research on 28th October, 2021.
- 8. Speaker in the webinar on Impact of Climate Change on Agritech Start-ups organised by Capsian Debt and TiE Bengaluru on 22nd July 2021.
- 9. Keynote address in the meeting with stakeholder State Government Departments of Punjab on Climate Vulnerability Assessment on 5th January, 2021.
- 10. 'Adam Smith, Karl Marx and J.M. Keynes in the history of development thoughts' Invited talk at Department of Economics, East Delta University, Bangladesh on 22nd November 2020.

- 11. Explaining the steps of vulnerability assessment: Role of indicators and data requirements. Webinar on Climate Change Vulnerability Assessment in Haryana State organized by the Environment & Climate Change Department, Haryana Climate Change Cell (NMSKCC). 20 July 2020.
- 12. Climate Change Risk Assessment: The Framework and its Application. Webinar on Climate Change, Organized by the NABARD on the occasion of the 39th Foundation of NABARD. 14 July 2020.
- 13. Training Session on "Methods of Collection of Quantitative Data" in the pre-conference workshop on research methods in social sciences organized by Indian Association for Social Sciences and Health and IIT Mandi. 5-7th December 2019.
- 14. Panellist of the session on "Vulnerability Assessment in the Indian Himalayan States" in the "Himalayan Summit on Climate Change" held on November 27 & 28, 2019 at Dr Ambedkar International Centre, Janpath, New Delhi, as part of the 10th CMS VATAVARAN International Film Festival and Forum on Environment & Wildlife.
- 15. "Energy Access and Sustainable Development: A case of lighting and cooking fuel demand in India" Distance talk delivered for Asian University for Women, Bangladesh (1st July 2019)
- 16. Panellist in the session "Environment and Sustainability" in the Local Association Networking Support (LANS) Meet, 2019 Organized by JU-SYLFF Association, Jadavpur University, Kolkata (14-15 March 2019)
- 17. Session on "Societal Embedding of Technologies" in the workshop on "Water Filtration Techniques Based on Solar Energy" at Indian Institute of Technology Mandi (11-13 February 2019).
- 18. Session on Electric Vehicle in the Pre-Congress Tutorial of 3rd Himachal Pradesh Science Congress held at Indian Institute of Technology Mandi (21st October 2018).
- 19. A talk on "Analyzing long-run trends of energy demand in the manufacturing industries in India" at Energy Research Institute, National University of Singapore, Singapore (8th August 2016)
- 20. SYLFF lecture on "The Role of Psycho-cultural Perspectives in Economic Valuation" at Jadavpur University, Kolkata, India (28th June 2016)
- 21. Two lectures on 'Energy and Industry: Growth Accounting and Decomposition Analysis' delivered at QIP Workshop on 'Sustainable Development' at Department of Humanities and Social Sciences, Indian Institute of Technology, Kanpur (1-4th December 2015).
- 22. Discussant in 2nd International Research Scholars' Workshop at Department of Economics, University of Calcutta (28-29th July 2015)

AWARD AND FELLOWSHIP

- 1. Young Faculty Fellow, 2023, Awarded by IIT Mandi
- 2. Teaching Role Award, 2019; IIT Mandi
- 3. '2012 Donella Meadows Fellow' nominated by The International Network of Resource Information Centers (The Balaton Group) in 2012
- 4. SYLFF Research Abroad (SRA) Award, 2010, 2013
- 5. SYLFF Fellowship (Sasakawa Young Leader Fellowship Fund) for M.Phil. (2009-2010) and Ph.D. (2011-2014)
- 6. Order of Merit for Bachelor's Degree (in Economics) in Calcutta University, India, 2004

PROFESSIONAL NETWORKS

- 1. Joint Secretary and In-charge, Ecology, Economy and Society The INSEE Journal, Indian Econometric Society (2022-24) (http://www.tiesindia.net/)
- 2. Board Member, SaciWATERs, http://www.saciwaters.org/about.php#team
- 3. Member, International Association for Energy Economics (https://www.iaee.org/)
- 4. Member, The International Society for Ecological Economics (https://www.isee.org/)
- 5. SYLFF Fellow, Jadavpur University SYLFF Network (http://www.jusylffprogram.org.in)
- 6. Life Member, Bengal Economic Association, India (http://goethals.in/bea/default.htm)

- 7. Life Member, Indian Society for Ecological Economics, India (http://www.ecoinsee.org/)
- 8. Sustainability Transitions Research Network (STRN) (http://www.transitionsnetwork.org)
- 9. The International Network of Resource Information Centre (The Balaton Group)

REVIEWER IN JOURNALS

- 1. Review Editor, Energy Economics (specialty section of Frontiers in Environmental Economics)
- 2. Social and Economic Development, Springer
- 3. Resource and Energy Economics, Elsevier
- 4. Energy Policy, Elsevier
- 5. Energy Economics, Elsevier

DECLARATION: I hereby declare that whatever I have stated above is true and complete.

Shyamasree Dasgupta.

Date: 10.04.2024