Sweta Sen

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Positions

2026–present	**Fulbright–Nehru Postdoctoral Research Fellow**, School for Environment and Sustainability (SEAS), University of Michigan, USA
2023–2026	**Assistant Professor**, Madras School of Economics, Chennai, India
2024	**Guest Faculty** (Microeconomics, MA Economics), Department of Humanities and Social Sciences, IIT Madras, India
2023	**Postdoctoral Senior Research Analyst**, Institute of Economic Growth, New Delhi — Knowledge Partner for India's G20 Presidency
2017–2022	**Doctoral Researcher**, IIT Kharagpur — data analysis and reports for institute projects on MGNREGA convergence, financial inclusion and food security in Odisha
2014–2016	**Junior Research Fellow**, Department of Geology and Geophysics, IIT Kharagpur — geophysical and economic risk assessment of the Odisha coastal heritage belt

Education

2023	**PhD**, Indian Institute of Technology Kharagpur. *Thesis:* Cyclonic Disturbances in Asia — Long-term Forecasting, Impacts and Responses, with Special Reference to the Indian East Coast
2016	**MS (by Research)**, Indian Institute of Technology Kharagpur. *Thesis:* Vulnerability and Risk Assessment of Natural Hazards in the Puri–Konark Coastal Belt, Odisha
2013	**MSc Economics**, University of Calcutta — specialisation in applied econometrics and resource and environmental economics
2011	**BSc Economics (Honours)**, University of Calcutta

Research Interests

Applied microeconometrics; climate extremes, disaster risk and adaptation; spatial econometrics and remote sensing; carbon pricing and the energy transition; behavioral economics; welfare economics; public policy and governance.

Publications (peer-reviewed)

1. Nayak, N.C., Manaloor, V., **Sen, S.**, Samal, A., Mukhopadhyay, N., Sen Chatterjee, R. & Kumar, S. (2026). Impact of the COVID-19 pandemic on household vulnerability to food insecurity across Indian states. *SN Business & Economics*, 6, 274. doi:10.1007/s43546-026-01287-2

2. **Sen, S.** & Sahoo, P. (2024). Carbon pricing for sustainable transition in India. *World Development Perspectives*, 34, 100586. doi:10.1016/j.wdp.2024.100586

3. Nayak, N.C., Mahakud, J., Mahalik, M.K., Jenamani, M., Samal, A., **Sen, S.** & Mohanty, A.R. (2024). What determines financial inclusion? A household-level study in Odisha, India. *Journal of Social and Economic Development*, 26, 888–906. doi:10.1007/s40847-023-00302-8

4. **Sen, S.**, Nayak, N.C. & Mohanty, W.K. (2023). Choices between adaptation and coping strategies as responses to cyclonic shocks and their impact on household welfare in villages on the east coast of India. *International Journal of Disaster Risk Reduction*, 94, 103834. doi:10.1016/j.ijdrr.2023.103834

5. **Sen, S.**, Nayak, N.C. & Mohanty, W.K. (2023). Impact of tropical cyclones on sustainable development through loops and cycles: Evidence from select developing countries of Asia. *Empirical Economics*, 65, 2467–2498. doi:10.1007/s00181-023-02431-9

6. **Sen, S.**, Nayak, N.C. & Mohanty, W.K. (2023). Long-term forecasting of tropical cyclones over the Bay of Bengal using linear and non-linear statistical models. *GeoJournal*, 88(Suppl. 1), S85–S107. doi:10.1007/s10708-021-10543-x

7. **Sen, S.**, Nayak, N.C., Mohanty, W.K. & Keshri, C.K. (2023). Vulnerability and risk perceptions of hy-

drometeorological disasters: A study of a coastal district of Odisha, India. *GeoJournal*, 88(1), 711–731. doi:10.1007/s10708-022-10637-0

8. Sangwan, S., Nayak, N.C., **Sen, S.** & Sangwan, V. (2023). Does firm size affect client targeting? An investigation over the clients of the Indian microfinance institutions. *Humanities and Social Sciences Communications*, 10, 240. doi:10.1057/s41599-023-01728-5

9. **Sen, S.**, Nayak, N.C. & Mohanty, W.K. (2022). Estimating household vulnerability to tropical cyclones: An investigation of tropical cyclone shocks in coastal villages of eastern India. *International Journal of Disaster Risk Reduction*, 83, 103404. doi:10.1016/j.ijdrr.2022.103404

10. Chatterjee, D., **Sen, S.**, Gupta, S. & Verma, R.S. (2022). A profile of body composition and obesity-related gene polymorphism among eastern and north-eastern populations of India. *Meta Gene*, 31, 100984. doi:10.1016/j.mgene.2021.100984

Papers Under Review and Work in Progress

- **Sen, S.** & Mehta, S. Not whether but what: Renewable energy and the composition of women's work in India. *Under review.*
- **Sen, S.** The inequality toll of tropical cyclones in selected Asian countries: An empirical investigation. *Under review.*
- Arlikatti, S., Sudhakaran, P., Maghelal, P.K., **Sen, S.**, Chundeli, F.A. & Vetrivel, S. Beyond reconstruction: Field observations of post-tsunami resettlement housing in Tamil Nadu after 22 years. *Submitted.*
- **Sen, S.** The time tax of climate risk: Household time allocation, spatial spillovers and institutional buffers in India and the United States. *Work in progress.*

Grants and Consultancy

2025–2030 **Co-Project Director**, Indian Council of Social Science Research (ICSSR) longitudinal study: *Resilience in Transition — Post-Tsunami Housing Reconstruction and Livelihood Revitalization on the Vulnerable Coasts of India*

2025 **Consultant, World Bank:** *Quantifying Renewable Energy Drivers in India — A State-Level Analysis*, with Govinda Timilsina and Aparna Anand

Fellowships and Honours

2026–27 Fulbright–Nehru Postdoctoral Research Fellowship, United States–India Educational Foundation (USIEF)

2024 SANDEE Fellow, SANDEE–ICIMOD Summer School on Environmental and Resource Economics, Asian Institute of Technology, Thailand

2020 Berkner Travel Fellowship, American Geophysical Union (AGU) Fall Meeting

2019 National Eligibility Test (UGC-NET) in Economics, University Grants Commission, India

Conferences and Invited Talks

2026	Resource person, online short-term course on Smart Grid and Energy Economics: Market, Tariff and Technology, NIT Hamirpur
2025	Discussant, Special Interest Group on Circular Economy, Centre for Climate Change and Disaster Management, Anna University, Chennai
2025	Discussant, Workshop on Economic Valuation of Ecosystem Services of Wetlands in Tamil Nadu, Madras Institute of Development Studies
2024	Invited webinar: "The role of adaptation in vulnerable coastal India," NCAER, New Delhi
2024	"Adaptation behaviour matters for the vulnerable: A study on fishers and farmers of the east coast of India," Winter School, Delhi School of Economics
2023	"Forecasting the distribution of cyclonic disturbances over the Bay of Bengal till 2050," ICRC-CORDEX 2023
2022	"Choices in response to tropical cyclone shocks and their impact on household welfare," TIFAC–IIASA International Conference on Systems Analysis for Integrated Policy Making
2021	"Tropical cyclones' impact on income inequality, health and human capital accumulation," 19th World Congress of the International Economic Association
2020	"Tropical cyclones, climate change and income inequality: Evidence from ten vulnerable Asian countries," AGU Fall Meeting (GC054-0006)

Policy Writing and Media

- "El Niño and India's drought governance: From forecasting to governing risk." *The Policy Edge*, August 2026.
- With Anuraag Das Sarma: "Dying kidneys of Kolkata: How the East Kolkata Wetlands and their fishers fight for survival." *Down To Earth*, October 2025.
- With Pravakar Sahoo: "Create opportunities for labour force and new entrants by improving productivity." *The Indian Express*, July 2023.

Teaching

- **Madras School of Economics** (2023–2026): Microeconomic Theory; Advanced Microeconomic Theory (general equilibrium, game theory and welfare economics); Sustainable Development with Spatial Analysis and GIS; Economics of Climate Change — undergraduate and postgraduate.
- **IIT Madras** (2024): Microeconomics, MA Economics.
- **IIT Kharagpur**: teaching assistant in economics for BTech and master's students.

Supervision

- Supervised 12 MA dissertations at the Madras School of Economics (2024–2026), mainly on energy transition, climate change and disaster economics — including heat and labour markets, emissions gaps on the road to net zero, cyclones and time allocation, and spatial spillovers in carbon sequestration.
- Doctoral committee member, School for Sustainable Futures, Amrita Vishwa Vidyapeetham (2025–present).

Professional Service

- **Reviewer:** *International Journal of Disaster Risk Reduction*; *Climate Risk Management*; *GeoJournal*; *Environment, Sustainability and Development*; *Disaster Prevention and Management*; *Journal of Advances in Management Research*; *Future Business Journal*.
- **Coordinator**, MA Academics and Admissions Committee, Madras School of Economics (2023–2026).

Memberships

IUCN Commission on Environmental, Economic and Social Policy (CEESP); Indian Society for Ecological Economics (INSEE); South Asian Network for Development and Environmental Economics (SANDEE); The Econometric Society; Association of Environmental and Resource Economists (2021–22); American Geophysical Union (2020–22).

SKILLS

Stata, R, ArcGIS, EViews, MATLAB.

SELECTED TRAINING

- IZA/FCDO G^{2}LM|LIC Development Economics Course, London School of Economics (2025).
- IGC Delhi Summer School in Development Economics (2022).
- Workshop on Geo-Statistical Methods for Economic Analysis, IGIDR, Mumbai (2022).