Manish Kumar Shrivastava, Ph.D.

Assistant Professor, Department of Energy and Environment, TERI School of Advanced Studies Plot No. 10 Institutional Area, Vasant Kunj, New Delhi - 110 070 / India.

Tel. +91 11 71800222. Mob: +91-9891884894. E-mail: manish.shrivastava@terisas.ac.in

Research/teaching Interests

Climate policy, technological change, institutional economics, just transition to low carbon development pathways, gender justice, global governance, polycentric governance, frugality studies, STS studies

Education

- 2014, PhD Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, India Thesis: Market-based Approaches in Negotiations at UNFCCC: Implications for 'environmental justice'
- 2008, M.Phil. Centre for Studies in Science Policy, Jawaharlal Nehru University, New Delhi, India Dissertation: Convergence in climate change institutions and consequences for developing countries: A case study of supercritical technology adoption by NTPC
- 2002. MA Economics, Centre for Studies in Economic Planning, Jawaharlal Nehru University, New Delhi, India

Professional Experience

- June 2018-Present, Assistant Professor, Dept. of Energy and Climate Change, TERI School of Advanced Studies, New Delhi
- April 2014 May 2018, Fellow, Earth Sciences and Climate Change Division, The Energy and Resources Institute (TERI) New Delhi
- August 2012-April 2014, Associate Fellow, Earth Sciences and Climate Change Division, The Energy and Resources Institute (TERI) New Delhi
- August 2008- August 2012, Research Associate, Earth Sciences and Climate Change Division, The Energy and Resources Institute (TERI) New Delhi
- August 2007-July 2008, Research Fellow, Indian Institute of Foreign Trade, New Delhi
- September 2004-August 2005, Research Associate, Council for Social Development, New Delhi

Teaching and Research

Courses offered

- Law and Justice in Globalizing World (2018-2020)
- Governance and Climate Change (2013, 2014, 2018-2021)
- India and the World (2018-2021)
- Assessing Public Policy (2019)
- Climate Change and Law (2019-2021)
- Economics of Climate Change (2019-2021)
- Environmental Economics (2021)

Supervision

• **Ph.D. Candidates:** 4 (ongoing) Themes: Internal Carbon Pricing; Polycentricity and Frugality in Climate Governance; Federalism, Polycentricity, and Capacity Building for Climate Action; Social Development Context of Low Carbon Transition.

Ongoing Academic/Research Collaborations (Networks)

- Gender and Just Transition in India: I coordinate this informal group of about 20 young researchers
 and development practitioners in India exploring theoretical and empirical issues around just
 transition from the lens of gender justice. We explore just transition in the context of mitigation of
 climate change but also adaptation to climate change. Efforts of this exercise are to be published as
 an edited volume by Routledge, U.K. (Tentatively in 2022)
- Steering Committee Member: Galvanizing Groundswell of Climate Action, A network of young researchers and organizations focusing on climate initiatives by sub-national and non-state climate action
- Expert Stakeholder: The Shape Project, a four year project led by the Institute for Advanced Sustainability Studies, Potsdam, developing scenarios for the Sustainable Development Pathways (SDPs).
- Transdisciplinary Cluster on Frugality Studies, Jawaharlal Nehru University: Part of an evolving network of researchers in Europe, Africa and Asia exploring the concept of frugality in the context of innovation, governance, sustainability, and development.
- Research Network on Energy Workforce Transitions (ReNEWT): Led by the Grantham Research
 Institute on Climate Change and Environment, the network brings together more than 25 institutions
 across countries in monthly deliberations sharing ongoing research and ideas from participants.
- Member, Just Transition Task Force, Powering Past Coal Alliance (PPCA): The Taskforce is made up
 of individuals and organisations from around the world who are experts in their field. Drawing on the

expertise of the international Trade Union movement, academics and community groups to drive ambition and provide practical support not just to existing PPCA members but also reaching out to the big coal users.

Editorial/Reviewer Assignment

- Editorial Advisory Board Member of the Springer Nature journal, Climate Action.
- Technical Working Group Member, Transformational Change Guidance, ICAT (Initiative for Climate Action Transparency)
- Reviewer for journals Climate Policy, Climate and Development, Environmental Politics, Political Ecology -Frontiers in Human Dynamics, Environmental Justice, Current Opinion in Environmental Sustainability, Resources for Environment and Development

Select Projects (PI/Co-PI for India component)

- 2020-2025: India's ambitions and possibilities of becoming a global green leader (INDGREEN) Funded by the Research Council of Norway
- 2021-2022: Frugality and Polycentric Climate Governance, funded through TRFCS, JNU. New Delhi
- Jan-July 2020: Climate risk assessment for the proposed Petrochemical complex in Mundra, Gujarat, Funded by BASF.
- 2016-2018: A study on Climate Change Risks and Preparedness for Oil and Gas Sector in India, Funded by a consortium of 7 Indian public secotor companies in the sector.
- 2017-2021: Strengthening Non-State Climate Action in Global South, Funded by Volkwagen Foundation,
- 2017-2020: Developing Country Participation in Addressing Climate Change, Funded by the Royal Norwegian Embassy, New Delhi,
- 2013-2019: Global Good Practice Analysis on LEDS, NAMA and MRV (3 phases), funded by GIZ, Germany,
- 2010-2014: Developing Country Participation in Addressing Climate Change: Analyzing issues and options for implementing NAMAs, funded by The Royal Norwegian Embassy in India, New Delhi.
- 2014-15. Technical Assistance to Government of Nepal for developing request for assistance from the Climate Technology Centre and Network of mitigation, funded by the Climate Technology Centre and Network.
- 2014: International Technology Cooperation and Technology Transfer for Sustainable Development Goals, Funded by UNDP, India.
- 2011-2013, Compendium for African Climate Policy-makers, funded by the African Climate Policy Centre, UNCEA, Addis Ababa.

- 2009-2010, Global Climate Network (GCN) Research Program (2009-2010), Funded by DFID
- 2008-2010: Key Issues in the Negotiations Funded by the Ministry of Environment and Forest, Government of India,
- 2008-2010: CLIPORE: Climate Policy Research, Funded by MISTRA Foundation, Sweden,

Publications

Research Papers/Book Chapters

- Chan et. al. (2021). Bolstering Global Climate Action Beyond 2020: A Catalytic Framework for Ambition and Sustainable Development. *Global Policy*.
- Upadhyaya, P., Shrivastava, M.K., Gorti, G., and Fakir, S. (2020), "Capacity building for proportionate climate policy: Lessons from India and South Africa, *International Political Science Review*. https://doi.org/10.1177/0192512120963883
- Michael, K., Shrivastava, M.K., Hakhu, A., and Bajaj, K. (2020), Integrating Gender Justice into Mitigation Policy: Examples from India, *Climate Policy*. DOI: 10.1080/14693062.2019.1676688
- Shrivastava, M.K. and Bhaduri, S. (2019), Market-based Mechanism and 'Climate Justice': Reframing the debate for a way forward, *International Environmental Agreements: Politics, Law and Economics*.
 DOI: https://doi.org/10.1007/s10784-019-09448-5
- Mathur, R. and Shrivastava, M.K. (2017), "INDC and Low-Carbon Technology Deployment Scenarios: India" in Venkatachalam Anbumozhi and Kaliappa Kalirajan (Eds.), Globalization of Low-Carbon Technologies: The Impact of the Paris Agreement, Springer Verlag, Singapore, 57-82.
- Shrivastava, M.K., Machineni, N., Mohan, D. and Agarwal, S. (2016), "Climate Change" in Dhar Chakrabarty, P.G. (Ed.), People, Planet and Progress Beyond 2015, TERI Press, New Delhi, 16-44
- Mathur, A. and Shrivastava, M.K. (2015), "The Pursuit of Sustainable Development in India" in Pachauri, R.K. et al. (Eds), Building the Future We Want, Delhi: AFD New, IDDRI and TERI, pp. 83-95.
- Shrivastava, M.K. (2015), "Greenhouse Gas Emission" in Dhar Chakrabarty, P.G. (Ed.) Global Sustainable Development Report 2015: Climate Change and Sustainable Development Assessing Progress of Regions and Countries, New Delhi: Oxford University Press, pp. 71-83.
- Shrivastava, M.K., Pahuja, N., Tewari, R., Pandey, N. and Agarwal, S. (2014), "Mainstreaming development imperatives into NAMAs: An approach" in Jooste, M, Tyler, E, Coetzee, K, Boyd, A and Boulle, M. (Eds). Proceedings of the Forum on Development and Mitigation, Cape Town 2014. Cape Town: Energy Research Centre, University of Cape Town, pp. 22-38.
- Shrivastava, M.K. and Upadhyaya, P. (2014), "Whither multilateralism? Implications of bilateral NAMA finance for development and sovereignty concerns of developing countries" in Jooste, M, Tyler, E, Coetzee, K, Boyd, A and Boulle, M. (Eds). Proceedings of the Forum on Development and Mitigation, Cape Town 2014. Cape Town: Energy Research Centre, University of Cape Town, pp. 65-77.

- Olbrisch, S., Haites, E., Savage, M., Dadhich, P. and Shrivastava, M.K. (2013), "Estimates of incremental investment for and cost of mitigation measures in developing countrie"s, in in Haites, E. (Ed.), International Climate Finance, Earthscan/Routledge, London & New York, , pp. 32-53
- Torvanger, A., Shrivastava, M.K., Pandey, N., and Tørnblad, S.H., (2013), "A two-track CDM: improved incentives for sustainable development and offset production", Climate Policy, 13(4), pp. 471- 489.
- Shrivastava, M.K., (2013), "Nationally Appropriate Mitigation Actions: A vehicle for Green Economy", Green Growth and Development Quarterly, Vol. 1(2), pp. 21-26.
- Atteridge, A., Shrivastava, M.K., Pahuja, N. and Upadhyay, H. (2012), "Climate Policy in India: What Shapes International, National and State Policy?", Ambio, Vol 41, Supllement 1. pp. 68-77.
- Fischer, C., Torvanger, A, Shrivastava, M.K., Sterner, T. and Stigson, P. (2012). "How Should Support for Climate Friendly Technologies be Designed?", Ambio, Vol. 41, Supplement 1. pp. 33-45. DOI. 10.1007 /s13280-011-0239-0
- Olbrisch, S., Haites, E., Savage, M., Dadhich, P., and Shrivastava, M.K. (2011). "Estimates of incremental investment for and cost of mitigation measures in developing countries", Climate Policy, Vol. 11(3), pp. 970-986.
- Shrivastava, M.K. and Goel, N. (2010), "Shaping the Architecture of Future Climate Governance: Perspectives from the South" in, F. Biermann, P. Pattberg and F. Zelli. (eds.) Global Climate Governance beyond 2012: Architecture, Agency and Adaptation, Cambridge University Press.
- Shrivastava, M.K. (2009). "Towards a Green Techno-Economic Paradigm", Journal of Resources, Environment and Development, 6(2): pp-67-80.
- Sahabuddin, G., Kumar, R. and Shrivastava, M.K. (2007), "Creation of 'Inviolate Space': Lives, Livelihoods and Conflict in Sariska Tiger Reserve", Economic and Political Weekly, May 19, pp. 1855-1862.
- Shrivastava, M.K. and Chowdhary, C. (2006), "Marketing Education: Where are We Heading?", Social Change, Vol. 36, No. 3, September, pp. 177-194.
- Sahabuddin, G., Kumar, R. and Shrivastava, M.K. (2006), "Policy and Process of Relocation from Conservation Areas: The Case of the Sariska Tiger Reserve, Rajasthan", Social Change, Vol. 36, No. 1, March 2006, pp. 130-140.
- Sahabuddin, G., Kumar, R. and Shrivastava, M.K. (2005), "Pushed over the Edge: Village Relocation from Sariska", Economic and Political Weekly, Volume 40, Number 32, August 6 12, pp. 3563-3564.

Policy Briefs/Reports

- Shrivastava, M.K. and Shanmuganathan, K. (2020), *Towards a Technology Roadmap for achieving India's NDC goals*, The Energy and Resources Institute, New Delhi.
- Shrivastava, M.K. et al. (2018), Preparing India's Oil and Gas Sector for Changing Climate, TERI Press, New Delhi.

- Shrivastava, M.K. (2015), Republic of Korea: Web-based GHG Management System of the Republic of Korea, Global Good Practice Analysis on LEDS, NAMA and MRV, International Partnership on Mitigation and MRV. <www.mitigationpartnership.net>
- Shrivastava, M.K., Agarwal, S. and Pahuja, N. (2014) India: Evolution of Federal Energy Targets and Supporting Strategies, Global Good Practice Analysis on LEDS, NAMA and MRV, International Partnership on Mitigation and MRV. <www.mitigationpartnership.net>
- Shrivastava, M.K. (2014), Philippines: Coordinating National Climate Change Action, Global Good Practice Analysis on LEDS, NAMA and MRV, International Partnership on Mitigation and MRV.
 <www.mitigationpartnership.net>
- Shrivastava, M.K., Shin, Y. D., and Chuang, J. (2014) Republic of Korea: Implementation of a Green Growth Strategy and Emission Trading Scheme, Global Good Practice Analysis on LEDS, NAMA and MRV, International Partnership on Mitigation and MRV. <www.mitigationpartnership.net>
- Shrivastava, M.K., Pahuja, N. and Surawatanapongs, P. (2014), Thailand's Alternative Energy Development Plan (AEDP) and its integration with waste management policy framework at national and sub-national level, Global Good Practice Analysis on LEDS, NAMA and MRV, International Partnership on Mitigation and MRV. <www.mitigationpartnership.net>
- Shrivastava, M.K., Tewari, R. and Agarwal, S. (2013), Leveraging NAMAs for Development in Africa, TERI-ACPC Policy Brief 2013/4. TERI, New Delhi
- Shrivastava, M.K., Pahuja, N., Tewari, R., Pandey, N. and Agarwal, S. (2013), Nationally Appropriate Mitigation Actions: An Approach to Design, Label and Monitor, TERI Policy Brief, TERI, New Delhi.
- Nandakumar, J. and Shrivastava M.K. (2012), MRV Challenges of Integrating National Initiatives into International Mechanisms: A Case of Perform, Achieve and Trade Mechanism in India, IGES Working Paper-CC-2012-03, IGES. http://enviroscope.iges.or.jp/modules/envirolib/view.php?docid=4170
- Srivastava, L., Mathur, R., Kumar, A., Pahuja, N., Shrivastava, M.K., Ramaprasad, A. and Thilakasiri, S. (2010). National and International Policy Response to the Carbon Budget Approach: An Indian Perspective. Discussion paper for the COP-16 held at Cancun, Mexico from 29 November to 10 December 2010. TERI: New Delhi.
- Shrivastava, M.K. and Upadhayay, H. (2009), Climate Change and Technology: Perceptions from India.
 Discussion paper- TERI/GCN-2009:1. TERI.
- Shrivastava, M.K. (2009). "A Global Climate Regime: Rethinking Future Technology". Annual Report 2009. CLIPORE, a MISTRA funded climate policy research program. pp. 28-29.
- Shrivastava, M. K. and Upadhyaya, P. (2008). "Promotion of demand side energy efficiency: evaluation
 of clean development mechanism", Annual Report 2008. CLIPORE, a MISTRA funded climate policy
 research program. pp. 14-15.
- Shrivastava, M.K. and Upadhayay, P. (2009), Shared Vision: From General to Precise. Discussion paper for COP-15. TERI. New Dehli;
- Srivastava, L., Pahuja, N., Shrivastava, M.K. and Upadhyaya, P.(2009), Right to Sustainable Development: An Ethical Approach to Climate Change, Discussion paper for COP-15.
- TERI (2009) (team member), Emerging Asia Contribution on Issues of Technology for Copenhagen, The Energy and Resources Institute, New Delhi. Report no. 2008RS09.

- Shrivastava, M.K. (2008), Technology Development and Transfer, TERI View Point Paper # 1. prepared for the 14th Conference of Parties to the United Nations Framework Convention on Climate Change, 1–12 December 2008, Poznan, Poland
- Shrivastava, M.K. (2008), "Women & Trade Liberalisation", Gender and Trade Newsletter VI (September-December).
 - http://www.genderandtrade.org/gtinformation/164143/179758/187287/187289/review/
- Sahabuddin, G., Kumar, R. and Shrivastava, M.K. (2005), 'Forgotten Villages: A People's Perspective on Village Displacement from Sariska Tiger Reserve', Technical Report, Council for Social Development and National Foundation for India. Delhi.

Opinion articles

- Cleaning Delhi's Air An Ethical and Economic Dilemma, The Pioneer, 10 November 2019.
- Good thing about Lima talks, The Pioneer, 23 December 2014
- NAMAs and emerging economies in the post-2020 climate regime" in Xander van Tilburg and Shikha Bhasin (Eds.), Annual Status Report on Nationally Appropriate Mitigation Actions (NAMAs) 2014, pp. 40-41
- Mitigation in Developing Countries: Impressions from South Asia and Africa", Mitigation Talks (Series
 on Nationally Appropriate Mitigation Actions), Vol. 3(1-3), pp.20-22.
 http://www.teriin.org/projects/nfa/pdf/NAMAs_newsletter.pdf>
- Appropriateness of mitigation actions—what does it entail?, Mitigation Talks (Series on Nationally Appropriate Mitigation Actions), Vol. 1(1), pp. 5-6.
 http://www.teriin.org/projects/nfa/pdf/volume1.pdf>
- Copenhagen Summit: A Turning Point?". Energetica India E-newsletter. January 2010.
 http://www.energetica-india.com/highlight_detail.php?id=Njk=>
- Great Expectations: Speculating the outcome of COP 15. TERRAGREEN. Vol 2. Issue 9. December. pp. 10-13.

Administrative roles

- Convenor, Internal Grants Committee, 2021-22
- Member, Admissions and Scholarship Committee, 2020-2022
- Convenor, Admissions and Scholarship Committee, 2019-2020
- Co-Convenor, Institutional Seminar Committee, 2019-2020
- Convenor, TERISAS Student Union Rules Moderation Committee, 2021
- Member, TERI SAS VISION 2020-25 Committee.