

Current Appointment

Professor, Centre for International Trade and Development, School of International Studies, Jawaharlal Nehru University, (2012-present).

Education

Ph.D. in Economics, Columbia University (1995).

M.A., Economics, Delhi School of Economics (1990). (*Ranked First class second in Part I, Delhi University*)

B.Sc., Economics, Lady Brabourne College, Calcutta University (1987). (*Ranked First class first in Part I, and first class third in Part II, Calcutta University*).

Honours

Member, Advisory Committee on Trade and Environment Issues, Trade Policy Division, Ministry of Commerce and Industry, Government of India, (2016-18).

External Expert, Consultative Committee on Trade and Environment, Ministry of Environment and Forest, Government of India, (2007-14).

Senior Visiting Fellowship, Department of Economics, University of Applied Sciences (HTW) Berlin, (2012). (Not availed)

President's Fellow, Columbia University, (1991-95).

University Fellowship, Columbia University, (1990-91).

Prof. Naqwi Memorial Scholarship, Delhi School of Economics, Delhi University, (1988-90).

Merit Scholarship, National Scholarship Scheme of the Government of India, (1988-90). (Not availed)

Pradip Kumar Ghosh Memorial Prize, Lady Brabourne College, (1987).

Professional Experience

Consultant, International Food Policy Research Institute, Washington D.C. (February 2024-present)

Vice President, Indian Society for Ecological Economics (2020- 22)

Chairperson, Centre for International Trade and Development, Jawaharlal Nehru University, (December 2015- January 2018)

Visiting Scholar, joint appointment in the Institute of Environment and Sustainability and the Luskin Center for Innovation, University of California, Los Angeles, (January-July 2011)

Associate Professor, Centre for International Trade and Development, Jawaharlal Nehru University (2006-12)

Assistant Professor, Department of Economics, Indian Institute of Management Bangalore (2001-06)

Consultant for World Bank (2009); Indian Council for Research on International Economic Relations (2001-10); International Centre for Trade and Sustainable Development, Geneva (2005); The Energy Research Institute, New Delhi (2003); Indian Institute of Foreign Trade (1998).

Visiting Faculty, Centre of International Trade and Development, Jawaharlal Nehru University (1997-99)

Senior Economist, Environmental Policy Cell, National Institute of Public Finance and Policy (1996-98).

Research Interests

International Trade; Climate Change; Renewable Energy; Environmental Goods and Services; Sustainable Development.

Publications

Book

The New Face of Environmental Management in India under the Ashgate Studies in Environmental and Natural Resource Economics, Ashgate Publishers, UK, (2004).

Journal Articles & Book Chapters

1. "Understanding the Structural Decomposition Analysis of Export-Generated Employment in India", (with Prithu Sharma), *Economic Systems Research* (2024) <https://doi.org/10.1080/09535314.2024.2404563>
2. "Tradeable Renewable Energy Credits Markets: Lessons from India" in Han Phoumin, Rabindra Nepal, Fukunari Kimura and Farhad Taghizadeh-Hesary ed. *Large-Scale Development of Renewables in the ASEAN – Economics, Technology and Policy*, Springer: pages 79-99, (2024)
3. "Striving towards a circular economy: climate policy and renewable energy in India", *Clean Technologies and Environmental Policy*, Volume 23, Issue 2, pages 491-499, (2021)
4. "Sustainability and Comprehensive Wealth Accounting: The Case of India", (with Priti Agarwal), *Environment, Development and Sustainability*, Volume 23, Issue 3: pages 3762-3786, (2021)
5. "Does Past Performance in Home Market Affect Export Participation of New Exporters? Evidence from Indian Firms" (with Priyanta Ghosh), in Lakhanpal et al ed. *Trade, Investment and Economic Growth: Issues for India and Emerging Economies*, Springer: pages 23-36, (2021).
6. "Manufacturing agglomeration and export dynamics across Indian states", (with Piyali Majumder), *Indian Economic Review*, Volume 55, Issue 1, pages 2-26, (2020)
7. "The Pattern of Inbound Foreign Direct Investment into India" (with Rashmi Rastogi) in Lakhanpal et al ed. *Trade, Investment and Economic Growth: Issues for India and Emerging Economies*, Springer: 121-131, (2021).
8. "Tracking Efficiency of the Indian Iron and Steel Industry" (with Piyali Majumder) in F. Abergel, et al ed. *New Perspectives and Challenges in Econophysics and Sociophysics*, New Economic Windows Series, Springer: 203-209, (2019).
9. "FDI in Indian Manufacturing: Whither high-tech industries?", (with Rashmi Rastogi), *Economics Bulletin*, Volume 39, Issue 3, pages 2192-2209, (2019)
10. "Development Policy Implications for Growth and Regional Inequality in a Small Open Economy: The Indian Case" (with Alokesh Barua), *Review of Development Economics*, Volume 19(3): 695-709, (2015).
11. "Is India Specializing in Polluting Industries?" (with Rashmi Rastogi), *The World Economy*, Volume 38(2): 360-378, (2015).
12. "Examining the Regional Pattern of Renewable Energy CDM Power Projects in India" (with M. Rahul), *Energy Economics*, Volume 42: 240-247, (2014).
13. "Renewable Energy Policy: Addressing Climate Mitigation in India" *Review of Environmental Economics and Policy*, Volume 7, Number 2: 296-312 (2013).
14. "Understanding cross-national trends in high-tech renewable power equipment exports to the United States" (with Matthew E. Kahn), *Energy Policy*, Volume 46: 308-318, (2012).
15. "Examining tradeable permits with market power, banking and non-compliance: a finite period model" (with Susmita Mitra), *Economics Bulletin*, Volume 31, Number 2: 1265-1274, (2011).

16. "Environmental Services in the EU-India BTIA and Beyond", in Arpita Mukherjee, Rupa Chanda and Tanu M. Goyal ed. *Trade in Services and Trade Agreements: The Case of India and the European Union*, Sage Publications India: pp 311-344, (2016).
17. "Growth of Clean Energy Capacity in India and Associated Technology Import" (with Susmita Mitra), in Manmohan Agarwal, Jiahua Pan and John Whalley ed. *Sustainability of Growth: The Role of Economic, Technological and Environmental Factors*, The World Scientific Asia and the World Economy series, Volume 1, World Scientific: 249-260, (2015).
18. "Indian Perspective on Clean Energy and Energy Efficiency" (with Meeta Mehra), in Parthasarathi Shome and Pooja Sharma ed. *Emerging Economies: Food and Energy Security, and Technology and Innovation*, Springer: 215-237, (2015).
19. "Interface of Income, Health and Environment: An Econometric Investigation" (jointly with A. L. Nagar, A. S. Ray, and S. Samanta) *Journal of Indian School of Political Economy*, Volume 24: 13-32, (2012).
20. "GATS Negotiations in Environmental Services: A developing country perspective with special reference to India", in Alokesh Barua and Robert Stern ed. *India and the WTO: Issues and Negotiating Strategies*, Orient Black Swan: 279-293, (2010).
21. "Questioning the Sustainability of India's Economic Growth", in Manmohan Agarwal ed. *India's Economic Future: Education, Technology, Energy and Environment*, Social Sciences Press-Berghahn Books, Oxford and New Delhi: 247-274, (2009).
22. "Environmental Compliance in India", in A. Tarantino ed. *Governance, Risk and Compliance Handbook: Technology, Finance, Environmental and International Guidance Best Practices*, chapter 29, Wiley Publishers, (2008).
23. "Rejuvenating SAARC: The Strategic Payoffs for India" (with Rajiv Kumar), *Global Economy Journal*, Berkley Electronic Press, Volume 8, Number 2, (2008).
24. "Addressing Barriers to Intra-SAARC Trade" (with Nisha Taneja, and Rashmi Rastogi), *Man and Development*, Volume 30, Number 1: 6776, (2008).
25. "WTO Environmental Negotiations and Sustainable Development", *Focus WTO*, Volume 8 (6), Indian Institute of Foreign Trade, April 2007: 1-6, (2007).
26. "Revitalizing SAARC Trade" (with Nisha Taneja), *Economic Political Weekly*, Volume 42, Number 13, 2007: 1081-1084, (2007).
27. "Environmental Services", chapter in Centre for Trade and Development book, R. Chanda ed. *India's Trade in Services: opportunities and challenges*, Wiley Publishers: 279-298, (2006).
28. "An Analysis of Factors Responsible for the Indian IT Export Sector Growth: Signaling Quality", in T. Thatchenkery and R. Stough eds. *Information Communication Technology and Economic Development: Learning from the Indian Experience*, Edward Elgar Publishing: 69-86, (2006).
29. "Quality Measures in Food Trade: The Indian Experience", *The World Economy*, Blackwell Publishing Volume 28 (3): 329-348, (2005).
30. "Greening Indian Businesses for the World Market", *Asian Economic Review*, Volume 46 (3): 413-442, (2004).
31. "Trade and Environment: Competing in a Global World" (with P.D. Jose), *IIMB Management Review*, Volume XV, Number 4, 2003: 89-91, (2003).
32. "Managing Pollution: Public Interest Litigation as Indirect Market-based Tool", *Economic and Political Weekly*, Volume XXXVIII, 1: 32-37, (2003).

33. "Preparing for Cancun Ministerial: The Environment Agenda", *Focus WTO*, IIFT, Volume 4 (5): 1-4, (2003).
34. "How Environmental Provisions Affect Asian Developing Countries", *IIMB Management Review*, Volume XV, Number 1: 11-18, (2003).
35. "GATT/WTO and Environmental Provisions" in *Seattle and Beyond: The Unfinished Agenda*, (ed. B. Bhattacharyya), Indian Institute of Foreign Trade: 191-207, (2000).
36. "Development and the Environment" in Phillip O'Hara (ed.) *Encyclopedia of Political Economy*, Routledge, Volume 1: 196-99, (1999).
37. "Internationalizing the Role of Domestic Pollution Permit Markets", *Eastern Economic Journal*, Volume XXII, Number 4: 449-456, (1996).

Other research publications

38. "Trade and Connectivity in the Transition to Net Zero of the Bay of Bengal Nations" in Anasua Basu Ray Chaudhury and Harsh V. Pant ed. *Anchoring the Bay of Bengal in a Free and Open Indo-Pacific*, Global Policy ORF Series, Observer Research Foundation: 119-130 (2024)
39. "Renewable Energy Certificates Trading in India: A Decade in Review", *ADB Working Paper 1313*, Asian Development Bank Institute, Tokyo, (2022).
40. "Compliance dilemmas in Indian environmental policy", *East Asia Forum*, Crawford School of Public Policy, Australian National University, 10 October 2018 (2018).
(<http://www.eastasiaforum.org/2018/10/10/compliance-dilemmas-in-indian-environmental-policy/>)
41. *The Pattern of Inbound FDI in India in Dirty Sectors* (with Rashmi Rastogi), IEG Working Paper No. 374, Institute of Economic Growth, New Delhi, (2018)
42. "Is India becoming a waste haven of metal scrap?" (with Piyali Majumder) *MPRA Paper 67186*, University Library of Munich, (2015).
43. "What Attracts FDI in Indian Manufacturing Industries?" (with Rashmi Rastogi) *Berlin Working Papers on Money, Finance, Trade and Development* 2/2014, (2014).
44. *International Trade and Carbon Leakage: An Analytical Framework for India and Russia*, (with Meeta Mehra, Rashmi Rastogi and Piskulova Natalia), Virtual Institute, UNCTAD, (2011).
45. *Environmental Economics with an International Dimension* (with Sangeeta Bansal and Meeta Mehra), Virtual Institute UNCTAD, (2009)
46. *Why SAFTA?* (with Rajiv Kumar), Commonwealth Secretariat and CUTS International (2008).
47. *India-EU Trade and Investment Agreement: Environmental Services Sector Study*, Indian Council for Research on International Economic Research, New Delhi, (2008).
48. "Building Supply Capacity for Environmental Services in Asia: The Role of Domestic and Trade Policies", *ICTSD Issue Paper No. 5*, International Centre for Trade and Sustainable Development, Geneva (2007).
49. "WTO-Related Matters in Trade and Environment: Relationship between WTO Rules and Multilateral Environmental Agreements", *ICRIER Working Paper 133*, and *WTO Research Series No. 5*, Indian Council

for Research on International Economic Research, New Delhi, (2004).

50. "Urban Planning" in the *Karnataka State of The Environment Report 2003* (with K. Anantharamaih, R. Gowda, and S. Reddy), Department of Forest, Ecology and Environment, Government of Karnataka & World Bank: 201-216, (2004).
51. "Transport" in the *Karnataka State of The Environment Report 2003* (with K. Anantharamaih, R. Gowda, and S. Reddy), Department of Forest, Ecology and Environment, Government of Karnataka & World Bank: 99-114 (2004).
52. *Liberalization of Environmental Services*. Indian country paper presented at the *Expert Meeting on Definitions and Dimensions of Environmental Goods and Services in Trade and Development*, Palais des Nations, Geneva, (2003).
53. "Trade in Environmental Services: Opportunities and Constraints" (with Rupa Chanda), *ICRIER Working Paper # 103*, and *WTO Research Series No. 3*, Indian Council for Research on International Economic Research, New Delhi, (2003).
54. "A Review of Market-Based Instruments for Pollution Control: Implications for India" *NIPFP Working Paper 1997 #2*, National Institute of Public Finance and Policy, New Delhi, (1997).

Conference Presentations/ Discussions/ Lectures

Invited panelist for panel discussion on "Sustainability-based Trade Measures: An Emerging Challenge for Global Trade", in the 15th South Asian Economic Summit on *Unleashing an equitable green transformation in South Asia*, organized by South Asia Watch on Trade, Economics and Environment, Nepal, and Indian Institute of Foreign Trade. Kathmandu, Nepal, 11-13 December 2024.

Invited lecture on "Socioeconomic and Environmental Co-benefits of Climate Smart Agriculture in the SAARC Region," *High-level Policy Forum on Scaling-up Climate Smart Agriculture in South Asia*, organized by the SAARC Agriculture Centre, International Food Policy Research Institute, and the Ministry of Agriculture and Animal Welfare of the Maldives, Maldives, 14-15 November 2024.

Invited lecture on "Exploring the Future Landscape of Agri-food Trade: Environmental Perspective", in research dissemination event on *Shaping Climate Resilient and Sustainable Food System*, organized by BIMSTEC Secretariat, International Food Policy Research Institute and Research and Information Systems for Developing Countries, Bangkok, Thailand, 3-4 October 2024.

Invited panelist for panel discussion on *Brazil's G20 Presidency: Sustainable Development Dimension*, organized by Jindal Global Centre for G20 Studies, O.P. Jindal Global University, New Delhi, 13 August, 2024.

Invited lecture on "Exploring the Future Landscape of Agri-food Trade: Environmental Perspective", in Capacity Strengthening Workshop on *Agri-food Trade Policy Analysis in Bangladesh*, organized by Policy Research Institute and International Food Policy Research Institute, Dhaka, Bangladesh, 26-27 June 2024.

Invited lecture on "International Environmental Issues", *Environmental Economics Workshop*, organized by ICSSR Eastern Regional Centre and Victoria Institute, Calcutta University, Kolkata, 20-22 March 2024.

Invited lecture on "Natural Capital and Sustainable Development Goals", *Workshop on Sustainable Development Goals*, organized by Planning and Development Unit (NITI Aayog), Jadavpur University, Kolkata, 14-15 March 2024.

Invited panelist in session on “The Promise of a Secure Tomorrow: India’s Role in Shaping Global Financial, Economic and Environmental Institutions”, *Pandit Hriday Kunzru Memorial Lectures*, School of International Studies, Jawaharlal Nehru University, New Delhi, 1 March, 2024.

Invited chair for session on Environmental Economics, *CESP Golden Jubilee Conference*, Jawaharlal Nehru University, New Delhi, 11-13 December 2023.

Invited lecture on “Historic treaties, Carbon trading and taxation”, *BIMSTEC-IFPRI Capacity Building Program on Environment and Climate Change*, organized by BIMSTEC Secretariat, IFPRI and Ministry of Energy and Natural Resources (Royal Government of Bhutan), Paro, Bhutan, 9 October 2023.

Invited lecture “Integrated approach to climate goals, finance, and governance in BIMSTEC” at *BIMSTEC-IFPRI Conference on Environment and Climate Change*, Paro, Bhutan, 11 October 2023.

Invited lecture on “India’s Environmental Policy in Relation to International Trade” in the seminar on *India and International Trade: Analyzing the Legal, Economic and Policy Dimensions* organized by NALSAR University of Law, Hyderabad, 23 September 2023.

Invited panel discussant on “Trade, Investment, and Climate Change in Asia and the Pacific” (Theme chapter, Asian Economic Integration Report 2023) organized by Indian Council for Research on International and Economic Relations, IHC, New Delhi, 24 April 2023.

Invited panelist in Roundtable discussion on “Analyzing the role of India’s emission trading scheme in net zero policy: a modelling assessment”, organized by the Council on Energy, Environment and Water (CEEW), New Delhi, 29 March 2023.

Invited panelist in IFPRI-panel discussion on “The Role of agricultural trade in food system transformation”, organized by International Food Policy Research Institute, Indian Economic Association conference, Ranchi, 28 December 2022.

Conference paper (co-authored with Rumi Azim) “Import of intermediate inputs, export participation and environmental performance of Indian manufacturing firms” at the *Winter School 2022*, Delhi School of Economics, 16 December 2022.

Conference paper (co-authored with Komal Biswal) “Impact of European Union Policy Tools on CER Prices” at the *Winter School 2022*, Delhi School of Economics, 15 December 2022.

Invited panelist on “Localising Globalisation in the Bay of Bengal” (Session 2) in *International Conference on Situating Bay of Bengal in a Free and Open Indo-Pacific*, organized by Observer Research Foundation Kolkata and Consulate General of Japan, Kolkata, 3-4 November 2022.

Presented paper “Economic Geography and Export Behaviour of Manufacturing Plants in India”, Economics Seminar Series, *South Asian University*, New Delhi, 19 October 2022.

Invited paper presented on “Trade and Energy Security in Context of Uncertain Geopolitical Environment” (in Sub Theme 1) at the *Dilli Series Sea Power Webinar 2022*, organized by Indian Naval Academy, 10 October 2022.

Invited paper presented on “Regional Inequality, Growth and Export Participation: The Indian Experience” at Workshop on *Trade, Unequal Gains and Development*, jointly organized by Delhi School of Economics, Institute of Developing Economies, Chiba, and Toyo University, Tokyo, in New Delhi, 16-17 September 2022.

Invited panelist in Roundtable discussion on “Implications of India’s domestic carbon market for voluntary carbon market, international carbon market, and alternative market mechanisms”, organized by the Council on Energy, Environment and Water (CEEW), New Delhi, 6 September 2022.

Invited lecture on “International Trade Theories: An Overview”, on 9 July 2022 in the *Capacity Building Programme for Social Science Faculty Members of Universities*, organized by the Centre for Economic and Social Studies, Hyderabad, 4-16 July 2022.

Conference paper (co-authored with Rumi Azim) “Export participation and environmental performance: Firm-level evidence from Indian manufacturing” at the 27th *Annual Conference of the European Association of Environmental and Resource Economists*, Rimini, Italy, 28 June- 1 July 2022.

Invited panelist and speaker on “India – UAE Comprehensive Economic Cooperation and Partnership Agreement: Opportunities and Areas of Cooperation” online panel discussion organized by the Observer Research Foundation, 8 March 2022.

Invited lecture on “Industrial Agglomeration and Trade” on 22 February 2022 at *ISID Capacity Building Programme: Issues, Challenges and Prospects for the Indian Industry*, organized by the Institute for Studies in Industrial Development during 16 February- 1 March 2022.

Invited chair of session “Environmental Policy, Competitiveness and Green Technology” in the 11th INSEE Biennial on *Sustainable Societies, Ecological Systems and Economic Development*, international conference organized by the Indian Society of Ecological Economics, 15-17 December 2021.

Conference paper (co-authored with Prithu Sharma) “Structural Decomposition Analysis of Final Export Generated for India” at the *Winter School 2021*, Delhi School of Economics, 17 December 2021.

Conference paper presented (co-authored with Rumi Azim) “Export participation and environmental performance: Firm-level evidence from Indian manufacturing” on 17 December 2021 at the 11th INSEE Biennial, online international conference 15-17 December 2021.

Invited paper presentation on “Renewable Energy Certificates Trading in India: A decade in review”, ADBI virtual workshop *Effective Greenhouse Gas Emission Control Policies*, organized by the Asian Development Bank Institute, Tokyo, Japan, 25-27 August 2021.

Invited lecture on ‘Empirics of International Trade and GVCs’, in The Indian Econometric Society and IIT Kanpur Quality Improvement Program (TIES QIP) in *Frontier Areas of International Trade and Econometrics*, 15-21 March 2021, organized by Indian Institute of Technology Kanpur, 18 March 2021.

Invited paper presentation on “Economic Geography and Manufacturing Export Behaviour in India”, First Biennial Conference on Development: *Trade and Development*, Indira Gandhi Institute of Development Research, Mumbai, December 17-19, 2020.

Invited panelist and speaker on “Balancing Ecology and Economy: In light of Water Governance in India”, organized by *Asian Confluence* in collaboration with Hanns Seidel Foundation, 15 October 2020.

Invited panelist and speaker on “Importance of policy in sustainable environmental management” in CSIR-NEERI Webinar on *Sustainable Environmental Management in the Post-COVID Economy*, organized by the Council of Scientific and Industrial Research and National Environmental Engineering Research Institute, 14 August 2020.

Invited lecture on “Trade and Environment: Challenges and Strategies of Developing Countries in Global Negotiations”, ITEC-SCAAP, Indian Technical and Economic Cooperation- Special Commonwealth

Assistance for Africa Programme of the Ministry of External Affairs, organized by RIS, New Delhi, 28 February 2020.

Invited panelist and speaker on “The Role of Mathematics in Sustainable Development of Economies” at the Annual Academic Meet *Enigma*, Department of Mathematics, Lady Shri Ram College, New Delhi, 24 January 2020.

Invited lecture on “Green Economy: Role of Public Policy in Environmental Security” as Guest Speaker at *YESM 2020*, the Young Economist Students’ Meet in Jadavpur University, Kolkata, 8 January 2020.

Invited discussant on “Trade and Environment” in seminar on *25 Years of the WTO and India: A Retrospective*, India International Centre, organized by Engineering Export Promotion Council and RIS, New Delhi, 5-6 September 2019.

Presented paper on “Trade in Recyclable Waste: A Study of Steel Scrap Imports in India”, in the Annual International and Area Studies Convention on *Ascending India: Reflections on Global and Regional Dimensions*, Jawaharlal Nehru University, New Delhi, 30 January-1 February, 2019.

Invited Session Chair of “Trade Policy Issues and Their Implications” in the Sixth IIFT Conference on the *Empirical Issues in International Trade and Finance*, Indian Institute of Foreign Trade, New Delhi, 13-14 December, 2018.

Invited lecture on “Export Behaviour of Indian Manufacturing”, Department of Trade and Logistics, Graduate School of CAU, Chung-Ang University, Seoul, South Korea, 7 December, 2018.

Invited lecture on “2018 Nobel Prize in Economics: Environmental Economics and Climate Change”, at symposium on *The 2018 Nobel Prizes*, Jamia Hamdard University, New Delhi, 15 November 2018.

Invited presentation on “Sustainability Through Recycling: A Study of the Indian Steel Industry”, DAAD Workshop in Comparative Economic Development Studies, organized by University of Pretoria, HTW Berlin and Freie University Berlin, in Pretoria, South Africa, 10-14 September, 2018.

Invited lecture on “Trade in Environmental Goods and Services” in ITEC Course on Trade and Sustainability, Ministry of External Affairs organized by RIS, New Delhi, 12th July 2018.

Invited presentation on “Economics of Rising India”, Research Workshop at University of Agder, Kristiansand, Norway, 24 May 2018.

Invited presentation on “The Economics of Climate Change and Clean Energy: An Indian Perspective” at the *Europe-India Roundtable on Climate Change and Clean Energy*, University of Agder and Jawaharlal Nehru University, New Delhi, 19 March 2018.

Invited presentation on “Tracking Energy Efficiency of the Indian Iron and Steel Industry” at the *Econophysics and Asia Pacific Econophysics Conference 2017*, international conference organized by Jawaharlal Nehru University and University of Delhi, New Delhi 15-18 November, 2017.

Invited lecture on “Energy and Environment: India and China in Climate Change Mitigation” in the Pandit Hridaya Nath Kunzru Memorial Lecture Series, Jawaharlal Nehru University, New Delhi, 14 September 2017.

Invited seminar presentation on “Are recycling plants more energy-efficient? Study of secondary steel manufacturing in India” at Indira Gandhi Institute of Development Research, Mumbai, 12th April 2017.

Invited speaker and presentation on “Data in International Economics” at the *Big Data Science* panel discussion organized by Heidelberg Central South Asia, Heidelberg University, Germany, and School of Computational and Integrative Sciences, Jawaharlal Nehru University in New Delhi, 11th April 2017.

Invited speaker on “Achieving Sustainable Development Goals in India” at the National Seminar on Environmental Concerns and Sustainable Development: An Indian Perspective”, Department of Economics, Jamia Milia Islamia University, New Delhi, 21-22 September 2016.

Invited speaker at *Stakeholders’ Meeting on Export of Green Energy Sector Products*, EEPC, Ministry of Commerce and Industry, New Delhi, 2 June 2016.

Invited lecture series (four) on “International Trade” in induction level training programme for Indian Economic Service Officer-trainees Batch 2015, Institute of Economic Growth, 16-18 February 2016.

Invited seminar presentation on “Regional Pattern of Renewable Energy CDM Power Projects in India” Central University of Finance and Economics, Beijing, China, 9 December, 2015.

Invited lectures on “Environmental Services Trade” and “Renewable Energy Policy in India”, Central University of Finance and Economics, Beijing, China, 7-8 December, 2015

Invited panelist in the workshop on “EU FLEGT and Timber Trade in South Asia”, organized by EU-European Forest Institute FLEGT Facility, Hotel Oberoi, New Delhi, 30 November 2015.

Invited seminar lecture “Testing for the Waste Haven Effect in India”, Delhi School of Economics, Delhi, 5 November 2015.

Invited discussant on “Negative Carbon Leakage: Evidence from South Asian Countries” and panelist for *Carbon Leakage and Climate Policy*, SANDEE Dissemination Workshop on *Carbon Embodied Trade and Trade Resistances*, organized by SANDEE and Delhi School of Economics, 13 August 2015.

Invited panelist in the Roundtable on *Cross border intra-regional timber trade in South Asia: India’s trade linkages with SAARC countries and Myanmar*, organized by European Forest Institute FLEGT Facility, New Delhi, 24 September 2014.

Invited discussant on “BP Statistical Review of World Energy 2014”, seminar organized by BP and ICRIER, India Habitat Centre, New Delhi, 1 July 2014.

Invited discussant on “Trade in the Pharmaceutical Sector” at the 2nd *Annual Conference on Normalizing India-Pakistan Trade* organized by ICRIER, India Habitat Centre, New Delhi, 21-22 January 2014.

Presented invited paper “What Attracts FDI in Indian Manufacturing? Examining Industry Characteristics”, *DAAD Partnership Workshop on Development Strategies*, Shanghai, November 11-15, 2013.

(Paper also presented at the *IGIDR Silver Jubilee Conference* on “Trade and Industry in India: Patterns, Trends and Policies”, Mumbai, October 22-24, 2013)

Lecture on “Sustainability and Trade in Environmental Goods and Services”, programme on *Trade and Sustainable Development: Issues for developing countries*, Indian Technical and Economic Cooperation / Special Commonwealth Assistance for Africa Programme, Government of India, organized by TERI, New Delhi, November 25, 2013.

Invited panelist in brainstorming session on the “New Climate Economy Initiative” of the Global Commission, organized by ICRIER, New Delhi, November 19, 2013.

Roundtable discussion on “India’s economy and foreign policy”, India and Globalization Series, under the Initiative on the Future of India and South Asia, Hudson Institute, Washington D.C. held at the Imperial Hotel, New Delhi, October 14, 2013.

“Sustainability and Trade in Environmental Goods and Services”, programme on *Trade and Sustainable Development: Issues for developing countries*, Indian Technical and Economic Cooperation / Special Commonwealth Assistance for Africa Programme, Government of India, organized by TERI, New Delhi, November 26, 2012.

“Trade in Renewable Energy Equipment”, *NBER-ICRIER-NCAER Annual Neemrana Conference*, Neemrana, 16-18 December, 2011.

“Trade and Climate Change: Is this the new lever for climate actions?”, *South Asian Media Briefing Workshop on Climate Change*, organized by Centre for Science and Environment, New Delhi, November 16-17, 2011.

“Trade, WTO and Climate Change” in Seminar on *International Trade and Climate Change: Emerging Issues*, organized by RIS and ITPO, Ministry of External Affairs, New Delhi, 16 November, 2010.

“Trade, Technology and Climate Change”, *Seminar on Trade and Environment*, organized by Madras School of Economics and Ministry of Environment and Forest, Chennai, 26-27 October, 2010.

“India-Japan Partnership towards a Low-Carbon Economy: An Indian perspective”, *Opportunities for Global Partnership between India and Japan- Infrastructure, Environment and Finance*, organized by Japan Bank for International Cooperation and ICRIER, New Delhi, 13-14 September 2010.

Presented paper “Structural Change, Economic Growth and Trade: Case for Regional Reallocation of Investment in India”, Asia Pacific Economic Association Annual Conference, Hong Kong, July 8-9, 2010

“Why SAFTA?” in the Regional conference on *Services Trade Liberalization in South Asia and SAFTA*, organized by South Asian Network on Economic Modeling, Dhaka, Bangladesh, 23-24 January 2008.

“Role of SAARC in Asian Regionalism” at the *Expert Meeting on Regional Integration in Asia*, organized by International Trade Centre, Geneva and ICRIER, New Delhi, March 28-29, 2007.

“Environmental Services Sector in Developing Asia and Latin America”, *Delivering on Sustainable Development in the Environmental Goods and Services Negotiations*, Roundtable organized by ICTSD in Geneva, October 12-13, 2006.

“An Evaluation of Domestic and Trade Policies in Building Environmental Services Capacity in Asia: Balancing Diverse Interests and Priorities” at the *Asia Regional Dialogue on Environmental Goods and Services*, organized by the ICTSD, Boracay, Philippines, March 2-3, 2006.

“Liberalization in Environmental Services”, *Seminar on Trade Liberalization in Environmental Goods and Services*, organized by Ministry of Commerce and Industry, UNCTAD and TERI, New Delhi, May 16, 2003.

“Sanitary and Phytosanitary Measures in India”, *Seminar on Sanitary and Phytosanitary Measures*, organized by Asian Productivity Council, Tokyo, Japan, December 4th-11th, 2002.

“Environment and Trade: Emerging Issues for Asia”, Asia Regional Round Table *From Development Aid to Economic Cooperation: Converging Paths to Environmental Sustainability in Asia*, organized by Asian and Pacific Development Centre, Malaysia, July 2001.

Research Projects and Commissioned Policy Papers

Developing a regional cooperation strategy and program to support scaling-up of Climate Smart Agriculture technologies in South Asian Association for Regional Cooperation, collaborative research assignment with International Food Policy Research Institute, Washington D.C. (2024)

Climate Change and Technology Transfer, commissioned by the World Bank and Department of Economic Affairs, Ministry of Finance, New Delhi, (2010).

Indian Perspective on Clean Energy and Energy Efficiency (with Meeta Mehra), commissioned by IDRC and Indian Council for Research on International Economic Research, New Delhi, (2010)

International Trade and Carbon Leakage: An Analytical Framework for India and Russia, (with Meeta Mehra, Rashmi Rastogi and Piskulova Natalia). Commissioned by Virtual Institute, UNCTAD, Geneva, (2009)

India-EU Trade and Investment Agreement: Environmental Services Sector Study, commissioned by Ministry of Commerce and Indian Council for Research on International Economic Research, New Delhi, (2008).

Why SAFTA? (with Rajiv Kumar), commissioned by Commonwealth Secretariat and CUTS International (2008).

Environmental Economics with an International Dimension (with Sangeeta Bansal and Meeta Mehra), chapters on “Environmental Goods and Services Market” and “Environmental Governance: Institutional Response”, study commissioned by the Virtual Institute UNCTAD, (2008).

“An Evaluation of Domestic and Trade Policies in Building Environmental Services Capacity in Asia: Balancing Diverse Interests and Priorities”, commissioned by the International Centre for Trade and Sustainable Development (ICTSD), Geneva. (2006)

“WTO-Related Matters in Trade and Environment: Relationship between WTO Rules and Multilateral Environmental Agreements”, commissioned by Ministry of Commerce and Indian Council for Research on International Economic Research, New Delhi. (2004)

Liberalization of Environmental Services. Commissioned by UNCTAD and TERI. Submitted as Indian country paper at the *Expert Meeting on Definitions and Dimensions of Environmental Goods and Services in Trade and Development*, Palais des Nations, Geneva, (2003).

“Trade in Environmental Services: Opportunities and Constraints” (with Rupa Chanda) commissioned by Ministry of Commerce and Indian Council for Research on International Economic Research, New Delhi. (2002-03)

“Urban Planning” and “Transport” for the *Karnataka State of The Environment Report 2003* (with K. Anantharamaih, R. Gowda, and S. Reddy), Department of Forest, Ecology and Environment, Government of Karnataka & World Bank.

Environment and Trade: Emerging Issues for Asia, commissioned by the European Commission, Economic

Planning Unit of Malaysia and Asian Pacific Development Centre, (2001).

Trade-Environment Linkages: The Issues from Indian Standpoint, commissioned by the Ministry of Commerce and the Indian Institute of Foreign Trade, (1999).

Teaching Experience

Graduate courses:

At JNU:-

International Trade Theory (MA)

International Economics (MPhil & PhD)

Pure Theory of International Trade (M Phil)

International Trade, Environment and Multilateral Institutions (MA)

Introduction to Statistics and Econometrics (MA)

Environmental Economics (MA)

Principles of Economic Organization (MA)

At IIM Bangalore:-

Managerial Economics

Microeconomic Foundations of Public Policy

Environment and Development

Environment and Business

Student Supervision

Ph.D. Supervision

Susmita Mitra “Mitigating Greenhouse Gases Through Emissions Trading: A Theoretical Analysis”, Jawaharlal Nehru University, (*submitted 2012, awarded 2013*)

Rashmi Rastogi ‘Testing for Pollution Haven Hypothesis in India-US Bilateral Trade since 1991’, Jawaharlal Nehru University, (*submitted 2013, awarded 2014*)

Piyali Majumder “Industrial Agglomeration and Its Impact on the Environment: A Study of the Indian Manufacturing Sector”, Jawaharlal Nehru University, (*submitted 2019, awarded 2020*)

Samridhi Bimal “International Trade and foreign Direct Investment: Complements or Substitutes? An Empirical Investigation”, *co-supervisor*: Prof. Manoj Pant, (*submitted 2019, awarded 2020*)

Priyanta Ghosh “Theory and Empirics of Firm Export Behaviour: Revisiting the Home Market Hypothesis”, Jawaharlal Nehru University, *co-supervisor*: Prof. Alokesh Barua, (*submitted 2019, awarded 2021*)

Priti Agarwal “Sustainability of India’s Growth: An Empirical Analysis”, Jawaharlal Nehru University, (*submitted 2020, awarded 2021*)

Rumi Azim “International trade and carbon intensity in the Indian manufacturing sector”, Jawaharlal Nehru University, (*ongoing*)

M. Phil Supervision

M. Rahul “Development of Renewable Energy under Clean Development Mechanism in India: 2004-2010”, Jawaharlal Nehru University, (*submitted 2012, awarded 2013*)

Piyali Majumder “Determinants of Metal-Bearing Waste Import in India”, Jawaharlal Nehru University, (*submitted 2014, awarded 2015*)

Komal Biswal “Certified Emission Reductions and the EU Emission Trading Scheme”, Jawaharlal Nehru University, (*submitted 2017, awarded 2018*)

Prithu Sharma “An exploration of the employment effects of exports for India using hypothetical extraction input-output methodology”, Jawaharlal Nehru University, (*submitted 2021, awarded 2022*)

Master’s Thesis Supervision

Radhika Piplani, "Border Carbon Adjustment: An Empirical Investigation into the Politics of Climate Change", TERI University, 2015-16 (Co-supervisor: Prof. Kanchan Chopra)

Arun Kumar Verma, “Indian Environmental Diplomacy: Focus and Framework”, Post Graduate Programme in Public Policy Management, IIM Bangalore, 2002-04 (Co-supervisor Prof. Rajeev Gowda)

Sharda Subramaniam “Environmental Audit”, Post Graduate Programme in Public Policy Management, IIM Bangalore, 2003-05 (Co-supervisor Prof. Rajeev Gowda)

MPhil External Examiner

Kajari Saha, Indira Gandhi Institute of Development Research (2021)

Rashika Nagar, Indira Gandhi Institute of Development Research (2020)

Ph. D. External Examiner

Puneet Kumar Arora, Indian Institute of Foreign Trade, New Delhi (2023)

Jessica Thacker, South Asian University (2023)

Rahul Singh, Indian Institute of Management Bangalore (2020)

Rishika Nayyar, Indian Institute of Foreign Trade, New Delhi (2020)

Perna Prabhakar, Delhi University, New Delhi (2017)

Samraj K. Sahay, Institute of Economic Growth, New Delhi (2016)

Nilotpall Goswami, Indian Institute of Foreign Trade, New Delhi (2014)

C Nalin Kumar, Indian Institute of Technology, Chennai (2007)

Administrative and other Professional Services

Member, Editorial Board, International Studies, Sage Publishing in association with Jawaharlal Nehru University, 2024-present

Member, Review Committee and Advisory Committee, Energy Studies Programme, School of International Studies, Jawaharlal Nehru University, 2024-26.

Member, Collaboration and Placement Cell, School of International Studies, Jawaharlal Nehru University, 2024.

External Member, Center Committee, Centre for International Politics, Organization and Disarmament, Jawaharlal Nehru University, August 2023-present.

Coordinator of Colloquium (jointly with Jayati Srivastava, CIPOD) on “Sustainable Development and Circular Economy”, School of International Studies, Jawaharlal Nehru University, 3 April 2023.

Conference Convenor: International Conference on *Sustainable Societies, Ecological Systems and Economic Development*, 11th Biennial conference of the Indian Society for Ecological Economics, organized by INSEE

and IIITD, New Delhi, 15-17 December 2021.

Member, Environmental Task Force, Jawaharlal Nehru University (2016-18)

Member, Advisory Committee on Trade and Environment issues, Trade Policy Division, Department of Commerce, Government of India (2016-18)

Chairperson, Centre for International Trade and Development, Jawaharlal Nehru University, (December 2015- January 2018)

Member, Expert Committee for Environmental Economics curriculum, IGNOU (2016-17)

Coordinator for the DAAD Partnership on Economic Development Studies HTW Berlin (under UNCTAD Vi) at Centre for International Trade and Development, JNU, (2011- 2014).

Conference Convener, International Conference on *Trade, Growth and Development: Two Decades of Reform in India and After*, Centre for International Trade and Development, JNU, April 3-4, 2012.

UGC Remedial Programme Coordinator, Centre for International Trade and Development, JNU, (2009-13).

MA Coordinator, Centre for International Trade and Development, JNU, (2008-10, 2012-14).

Chairperson, Financial Aid Committee, Indian Institute of Management Bangalore. (2002-04).

Course Director for Short-term General Management Programme for Indian Administrative Service Officers, IIM Bangalore, (2002, 2003).

Journal Referee

Energy Economics; Environment and Development Economics; Environmental Economics and Policy Studies; Journal of International Development; Indian Economic Review; Journal of Quantitative Economics, Management Review; The World Economy, International Review of Applied Economics; Indian Growth and Development Review; Economics Bulletin; Economics and Politics; Ecology Economy and Society; Climatic Change; International Studies.