

List of publications on climate change

Dr. Jyoti Parikh



Professor Jyoti K Parikh

Positions held and Academic qualifications: Professor Jyoti K Parikh is Executive Director of Integrated Research and Action for Development (IRADe), New Delhi, as the Senior professor and Acting Director of Indira Gandhi Institute of Development Research (IGIDR), Mumbai 1986-2003. International Institute for Applied Systems Analysis (IIASA), Austria for 8 years (1980-86, 76-78) and Planning Commission, as senior energy consultant at New Delhi (1978-80).

She has served as energy consultant to the World Bank, the U.S. Department of Energy, EEC, Brussels and UN agencies such as UNIDO, FAO, UNU, and UNESCO, Environment Consultant to UNDP, World Bank and so on. She worked as an advisor to various ministries for Gov. of India

She obtained her M.Sc. from University of California, Berkeley, in 1964 and Ph.D. in Theoretical Physics from University of Maryland, College Park in 1967. She has guided 12 Ph.D. theses in energy, environment and climate change and given lectures in more than 40 countries around the world.

Publications include nearly 200 project research papers and 25 books and monographs in the area of energy economics, Climate Change and modeling, energy technology assessment, rural energy, power sector, environment economics and physics.

Professional Appointments:

Member of Prime Minister's Council on Climate Change – India

Scientific and Technical Advisory Panel (STAP) to Global Environment Facility (GEF) – 1995-1998.

Convening lead Author for 2nd Assessment IPCC and reviewing editor for 3rd and 4th IPCC
Convening Lead Author Millennium Assessment and IPCC.

Advisory Board of **Tyndall Center** for Climate Change, University of East Anglia, Norwich, UK, 2001-2004.

START (A Global Change System for Analysis, Research and Training) Scientific Steering Committee (SSC), USA - from May 1997.

Research management experience:

National Project Coordinator:

National Project Coordinator for India for the capacity building project of UNDP on inculcation of environmental economics for sustainable development into decision-making process. It covers four major focal areas: Air Quality; Water Quality; Community Land Regeneration and Biodiversity within the overall framework of sustainable development.(\$ 750,000) coming in kind and own contributions.

Capacity Building for Environmental Governance (1995-2000): UNDP project that involved government, academic and research organization, stakeholders, industries, and pollution control boards.

Chairperson of EERC (Environmental Economics Research Committee) of EMCaB Project of the World Bank, 1997-2003 distributing US\$ 1.5 million for 56 projects across India in Universities, NGO and Research Institutes.

Gender, Pollution and Health: Conducted one of the largest studies that for the first time captures pollution, health, energy, water, housing and socio-economic characteristics for 14000 households in 4 states of India in 12 districts and 100 villages. It involved surveyors, medical doctors, pollution measurement and stakeholder's perceptions. Massive (statistical) analysis was also carried out.

Honours and Awards:

Gold Medal from the Systems Society of India for energy and environment – 1988

Second prize IFORS IN "Operation Research for Power System Development" (1996)

Women Achievers Award – 2000

Professor Jyoti Parikh
Integrated Research & Action for Development
New Delhi

List of publications in
Climate Change and Global Environmental Issues

Climate Convention and Policy Instruments

1. Global Climate Change and India (2007) Lecture given at Yale University, edited by E.Z. Zedillo. To be published by Brookings institution.
2. Noble I., J. Parikh and R. Watson (2004), "Responses to Climate Change", Chapter in Millennium Assessment, Working Group report on responses (in publication)
3. Parikh J. and K. Parikh (2004), "Kyoto Protocol: The Indian Perspective", International Review of Environmental Strategies, Vol. 5(1).
4. Weyant J., and J. Parikh (2004), "India, Sustainable Development and the Global Commons", ICFAI Publication (Edited Book)
5. J. Parikh and K. Bhattacharya (2003) South Asian Energy and Emissions perspectives for 21st Century, IEW workshop at IIASA, Austria
6. Linking Technology Transfer with Clean Development Mechanism (CDM): A Developing Country Perspective, Jyoti K. Parikh, Journal of Global Environment Engineering, Vol. 6, pp. 1-12, 2000.
7. "Free Ride through Delay: Risk and Accountability for Climate Change", Jyoti Parikh and Kirit S. Parikh, Journal of Environment and Development Economics, Vol. 3 No. 3, pp. 384-389, 1998.
8. Climate Change, North-South Co-operation and Collective Decision-Making Post-Rio, Jyoti Parikh, P.G. Babu and K.S. Kavi Kumar, Journal of International Development, Vol.9, No.3, 403-413, 1997
9. North-South Cooperation in Climate Change through Joint Implementation. Jyoti Parikh, International Environmental Affairs. 7(1), Winter 1995. IGIDR-RP No.142, 1995.
10. "Decision Making Framework to Address Climate Change", Jyoti Parikh, P.G. Babu and K. Parikh, in Steps Towards a Decision Making Framework to Address Climate Change, G. Pillet and F. Gassmann (Eds.) Paul Scherrer Institute, Switzerland, 1994.
11. "North-South Issues for Climate Change", *Economic and Political Weekly*, Page No. 2940-2943, November 5-12, 1994.
12. Consumption Patterns: Economic and Demographic Change, Encyclopedia of Global Environmental Change, Volume 3, Causes and Consequences of Global Environmental Change, Edited by Professor Ian Douglas, Editor-in-Chief, Ted Munn, John Wiley & Sons, Ltd., Chichester, 2002, pgs 249-252.

Newspaper articles

13. J.Parikh (2006), A rival to the Kyoto protocol, Business Standard, 13th march 2006
14. J.Parikh (2006), Adapting to Climate Change, The Economic Times, 27th January 2006
15. J.Parikh (2005), Resolving the impasse at Montreal, Business Standard, 21st November 2005
16. J.Parikh (2002), Bargaining for a cleaner world, Business Standard, October 2002
17. Please, Stay with the Climate Change Convention, Jyoti Parikh, The Economic Times, Mumbai, June 7, 2001

IPCC Related Issues

18. "The Emperor Needs New Clothes: Long Range Energy-Use Scenarios by IIASA-WEC and IPCC", *Energy*, Vol.23, No.1, pp. 69-70, 1998.
19. K. Arrow, J. Parikh, J. Pillet, K.S. Kavi Kumar and P.G. Babu, "Decision Making Framework to Address Climate Change", Chapter 2 of IPCC WG III, Second Assessment Report, Cambridge University Press, Cambridge, U.K. 1996.
20. "Decision Making Framework for Climate Change", Parikh. J and K. Arrow, in *Poverty, Environment and Economic Development*, N.S.S. Narayana and A. Sen (Eds.), Interline Publications Pvt. Ltd., Bangalore, India, 1996.
21. IPCC Response Strategies Unfair to the South, *Nature*, Vol.360, p.507-508, 10th December 1992,

GEF Related Issues

22. "Technology Transfer for GHG Reduction: A Framework and Case Studies for India", Jyoti Parikh and Vinish Kumar Kathuria, Presented at the STAP workshop, Amsterdam, The Netherlands, Jan. 19-20, 1997.
23. Promoting Faster Diffusion of Energy Efficiency with Type 1 Projects, J. Parikh and R. Banerjee, *International Journal of Environment and Pollution*, Vol. 4, Nos. 1/2, 1994.
24. "The GEF Incremental Costs and the Paradigm of Partnership", Jyoti Parikh, *The Bulletin, The Centre for our Common Future*, March 1993.

National Studies in Climate Change

25. Parikh J and Chandrakiran (2007), "Economic Impact of Carbon Emission Restrictions: A case of India", *Energy Security, Climate Change and Sustainable Development*, edited by J. P. Mathur and N.Bansal. Anamaya Publishers, New Delhi, India.
26. MOEF (2004), "India's Initial National Communication to the United Nations Framework Convention on Climate Change", Ministry of Environment and Forests, Government of India, New Delhi, India.
27. India's Efforts to Minimise GHG Emissions: Policies, Measures and Institutions, Jyoti Parikh, article book by the resources for future", by Oxford University Press.
28. Jyoti Parikh (2000), *What is India Doing to Minimise GHG Emissions? Policies, Programmes and Institutions*, in P. Narasimha et al (eds.), *IGBP in India 2000: A Status Report on Projects*, Indian National Science Academy, New Delhi, 2000.
29. Jyoti Parikh (1997), "India's efforts to reduce GHG emissions: Policies, Programmes and Institutions", Presented at Bangladesh and at COP3 Kyoto. IGBP.
30. "Indicators of Carbon Emission Intensity from Commercial Energy Use in India", Barnali Nag and Jyoti Parikh, *Energy Economics*, Vol. 22, pp. 441-461, 2000.
31. "Sustainable Development of India: Scenarios for 2020 for poverty Alleviation and Technological Changes", J. Parikh and N.S. Murthy. Paper prepared for UNDP, January 1997.
32. "Economic Growth, Energy Demand and Carbon Dioxide Emissions in India: 1990-2020", N. S. Murthy, Manoj Panda and Jyoti Parikh, *Environment and Development Economics*, Vol.2, No. 2, 1997
33. "Energy Demand Forecasts with Investment Constraints", Saumen Majumdar and Jyoti Parikh, *Journal of Forecasting*, Vol.15, 549-576, 1997. IGIDR-RP No.251, 1997.
34. "Climate Change and India's Energy Policy Options: New Perspectives on Sectoral CO₂ Emissions and Incremental Costs", Jyoti Parikh and Subir Gokarn, *Global Environmental Change*, 3(3) September 1993.

Sectoral Studies in Climate Change

Power Sector

35. Purohit P. and J. Parikh (2005), "CO₂ Emissions Mitigation Potential of Bagasse Based Cogeneration in India", ISES Solar World Congress 2005, August 8-12, 2005 Orlando, Florida USA
36. Three-day conference titled "Indian and German Perspectives on Climate Change" held at Potsdam Institute for Climate Impact Research, 25-27th September 2002, Potsdam, Germany.
37. Barnali Nag and J. Parikh (2005) Carbon emissions coefficients of power consumption in India; *Energy Policy* vol 33 p777-786
38. "The Emperor Needs New Clothes: Long-Range Energy-Use Scenarios by IIASA-WEC and IPCC", *Energy*, Vol. 23, No. 1, pp. 69-70, 1998.
39. "Economic and Environmental Impacts of Demand Side Management Programmes", B. Sudhakara Reddy and Jyoti K. Parikh, *Energy Policy*, Vol.25, No.3, 1997.
40. "CO₂ Emissions Reduction from Power System in India", D. Chattopadhyay and J.K. Parikh, *Natural Resources Forum*, Vol. 17, No.4, pp.251-261, Nov. 1993.

Transport Sector

41. "Transport Sector in India: An Analysis in the Context of Sustainable Development", R. Ramanathan and Jyoti K. Parikh, *Transport Policy*, (6) 1, 35-45, 1999.
42. "Trends in Transport Sector in India", Jyoti K. Parikh and R. Ramanathan, *Energy Scenario*, 1(1), 15-20, 1997.
43. Indian Transport Sector: Energy and Environmental Implications", R. Ramanathan, *Energy Sources*, 18(7), 791-805, 1996.
44. Transport Scenarios in two metropolitan cities: Delhi and Mumbai, J. Parikh and Anjana Das *Energy Conversion and management*, Elsevier Press, UK
45. Yedla. S and J. Parikh, "Transport, Energy and Greenhouse gas emission: future scenarios for two mega cities in India" *Int. J. Environment and Pollution*, Vol. x, No. x, xxxx (in press)
46. Yedla. S and J. Parikh, "Long-term planning for GHG reduction targets in urban transport sector in India: a study on two mega cities", *Int. J. Environment and Pollution*, Vol. x, No. x, xxxx (in press)

Agriculture Sector

47. "Socio-economic Impacts of Climate Change on Indian Agriculture", Jyoti Parikh and Kavi Kumar, *International Review of Environmental Strategies*, Accepted.
48. "Indian Agriculture and Climate Change Sensitivity". K.S. Kavi Kumar and Jyoti Parikh, *Global Environmental Change*, Vol. 11(2), pp: 147-154, 2001
49. "Linkages among Energy, Agriculture and Environment in Rural India", Jyoti K. Parikh and R. Ramanathan, *Energy Economics*, Vol.21, No.6, pp.561-585, 1998.
50. "Climate Change Impacts on Indian Agriculture: Results from Crop Modelling Approach", K.S. Kavi Kumar and Jyoti Parikh. Communicated for journal publication. An earlier version presented at the workshop, *Measuring the impacts of Climate Change on Indian and Brazilian agriculture*, held at the World Bank, Washington D.C., 5-7 May 1997.
51. "Climate Change Impacts on Indian Agriculture: Ricardian Approach", Jyoti Parikh and K.S. Kavi Kumar. In Dinar et.al., *Measuring the Impact of Climate Change on Indian Agriculture*, World Bank Technical Paper No. 402, Washington, D.C., 1988.

52. "Rural Energy Planning Incorporating Energy and Agricultural Interactions", *RERIC - International Energy Journal*, 17(1), 73-81.

Construction Sector

53. "Climate Change and House Construction Options - Part of Structural Transformation Processes Towards Sustainable Development, Piyush Tiwari and Jyoti Parikh, INFRAS, Switzerland, 1996.
54. "Performance Evaluation of Cost Effective Building: A Cost, Emissions and Employment Point of View", Piyush Tiwari, Jyoti Parikh and V.K Sharma, *Building and Environment*. IGIDR-RP No.143, 1996
55. "Cost of Carbon Dioxide Reduction in Building Construction", Piyush Tiwari, and Jyoti Parikh, *Energy, The International Journal*, 20(6), 1995. IGIDR-RP No.145, 1995
56. "Structural Design Considerations in House Builders Model: An Optimization Approach", Piyush Tiwari, Kirit Parikh and Jyoti Parikh, *ASCE Journal of Infrastructure Systems*, October.
57. *Housing Paradoxes in India: Is There a Solution?*" Piyush Tiwari and Jyoti Parikh, *Building and Environment*.
58. "Demand for Housing in the Bombay Metropolitan Region", Piyush Tiwari and Jyoti Parikh, *Journal of Policy Modelling*, Vol. 19 (3), pp. 295-321, 1997.

Other Long-term Issues Sustainable Development

59. *Economic Development, Poverty Reduction and Carbon Emissions in India*, Murthy N.S., M. Panda and J. Parikh, *Energy Economics*, Vol.19, No.3, pp.327-354, 1997
60. *Economic Growth, Energy Demand and Carbon Dioxide Emissions in India: 1990-2020*, Murthy N.S., M. Panda and J. Parikh, *Environment and Development Economics*, Vol.2, No.2, 1997.

Consumption Patterns

61. *Consumption Patterns: Economic and Demographic Changes*, invited contribution in *Encyclopedia of Global Environmental Change*, John Wiley & Sons Ltd. Jyoti Parikh.
62. "Consumption Patterns by Income Groups and Carbon Dioxide Implications for India: 1990-2010", Jyoti K. Parikh, Manoj K. Panda and N.S. Murthy, *International Journal of Energy Issues*, 9(4-6), 1997.
63. *Structural transformation processes towards sustainable development in India: Macroeconomic scenarios and analysis of transport and construction sectors*, Jyoti Parikh, Manoj K Panda, R. Ramanathan, Piyush Tiwari and N.S. Murthy, 1995.
64. *Population, Consumption Patterns and Global Warming*, J. Parikh and J.P. Painuly, *AMBIO*, Vol. 23, No. 7, Nov. 1994.