

Centre of Excellence in Environmental Economics

Madras School of Economics, Chennai

Summary of Activities Since 2012

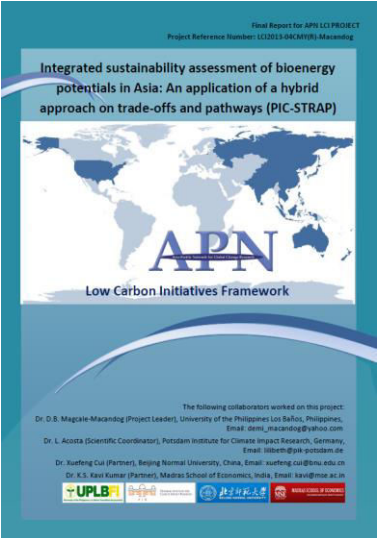
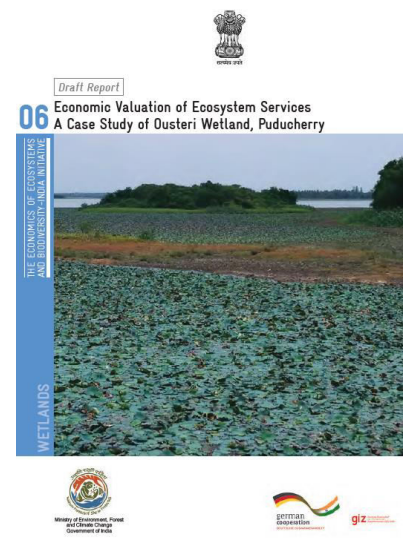
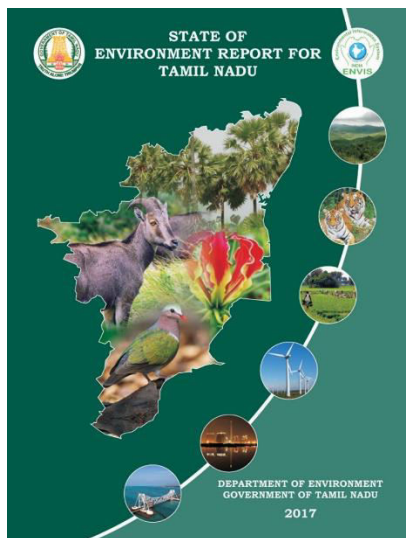
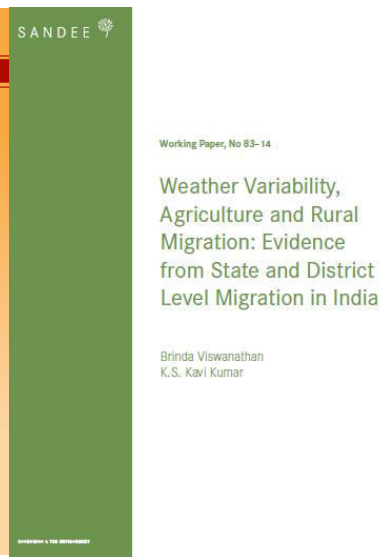
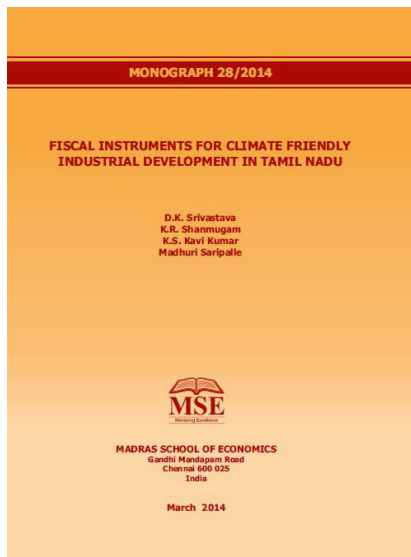
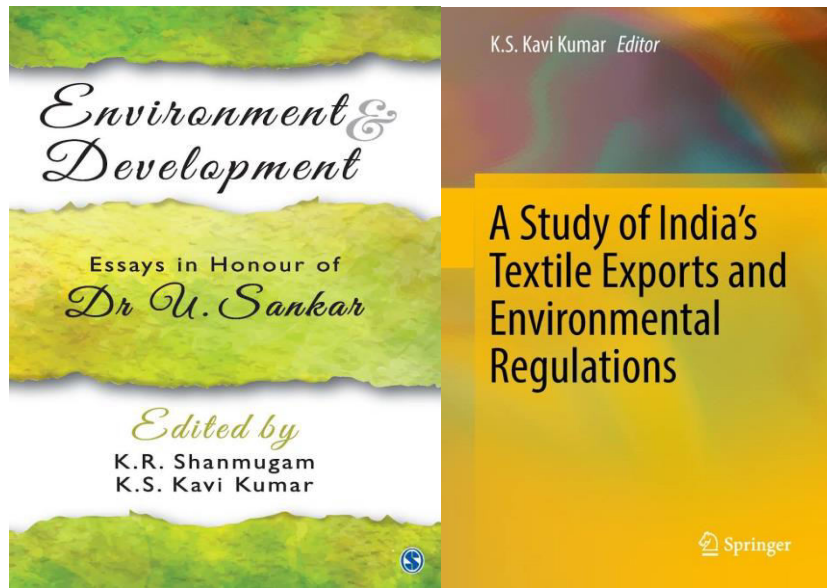
Background and Context

Madras School of Economics (MSE) was founded in 1993 as a (largely) privately funded independent institution of higher learning in social sciences. Several eminent economists of India including late Dr. Raja J. Chelliah, Dr. C. Rangarajan, Dr. Kaushik Basu, Dr. Montek Singh Ahluwalia and Dr. U. Sankar have provided support in establishing the School. The Madras School of Economics is a specialized institution in Economics, focusing on Public Finance, Finance, Macro-modeling, Environment, Trade, Development, Insurance, and Industry. In addition to the academic research, the MSE has been conducting policy oriented research works with support from several Ministries of State and Central Governments. MSE has also carried out research projects funded by several national and international agencies including the World Bank, the World Resource Institute, the British High Commission, the Global Development Network, South Asian Network for Development and Environmental Economics, GIZ, the Reserve Bank of India, Indian Space Research Organization, Union Planning Commission, Tamil Nadu State Planning Commission, Finance Commission of India, Tamil Nadu State Finance Commission etc. So far MSE has successfully completed more than 100 research projects, and organized several training programs, workshops and conferences.

The World Bank Aided: Environmental Management Capacity Building Technical Assistance Project was implemented by the Ministry of Environment and Forests (MoEF) and executed by the Madras School of Economics (MSE), Chennai. Following the successful completion of this project, the MoEF has designated MSE as a Centre of Excellence (CoE) in Environmental Economics under its CoE Scheme. The CoE at MSE has completed first five years of its work on March 31, 2007. The Centre was set up on the basis of a MoU between the Ministry of Environment and Forest and the Madras School of Economics. The objectives of the Centre were to carry out research projects, operate a website, conduct training programmes and provide policy inputs to the Ministry. With funding given by the Ministry of Environment and Forests on project mode, the Centre has successfully completed first ten years of work in 2012. The support from the Ministry of Environment and Forests, Government of India has further been extended to additional five years – 2012 to 2017. A brief summary of various activities carried out by the Centre since 2012 is given here.

Reports and Books

- 1) The Centre's work in the area of eco-taxes culminated in the publication of book, "Environment and Fiscal Reforms in India", edited by D.K. Srivastava and K.S. Kavi Kumar, Sage Publications, New Delhi, 2014.
- 2) The Centre brought out a book in honour of Prof. U. Sankar titled, "Environment and Development: Essays in Honour of Dr. U. Sankar", edited by K.R. Shanmugam and K.S. Kavi Kumar, Sage Publications, New Delhi, 2016.
- 3) The Centre's work in the area of trade and environment with focus on textile sector culminated in the publication of book, "A Study of India's Textile Exports and Environmental Regulations", edited by K.S. Kavi Kumar, Springer Nature, Singapore, 2017.
- 4) The Centre brought out several reports (published as MSE Monographs) including: (i) "Green Economy – Indian Perspective" (2012); (ii) "Fiscal Instruments for Climate Friendly Industrial Development in Tamil Nadu" (2014); (iii) "Valuation of Coastal and Marine Ecosystem Services in India: Macro Assessment" (2017).
- 5) The Centre prepared the "State of Environment Report for Tamil Nadu" for the Department of Environment, Government of Tamil Nadu, 2017.
- 6) The Centre's researchers authored the report titled, "Weather Variability, Agriculture and Rural Migration: Evidence from State and District Level Migration in India", South Asian Network for Development and Environmental Economics, Kathmandu, 2014.
- 7) The Centre's researchers contributed to the report titled, "Economic Valuation of Ecosystem Services: A Case Study of Ousteri Wetland, Puducherry", The Economics of Ecosystems and Biodiversity India Initiative, GIZ India, 2016.
- 8) The Centre's researchers contributed to the report titled, "Integrated Sustainability Assessment of Bioenergy Potential in Asia: An Application of a Hybrid Approach on Trade-offs and Pathways (PIC-STRAP)", Asia-Pacific Network for Global Change Research, Kobe, 2016.
- 9) The Centre's researches carried out various other projects that include:
 - a. 'Sustainable Development Indicators for India – Framework' (MoEF&CC, 2015)
 - b. 'Urbanization and Environment' (MoEF&CC, 2015)
 - c. 'Economy-wide Impact of Pollution in India' (MoEF&CC, 2016)
 - d. 'Social Cost Benefit Analysis of Bithnok Lignite Mine Project' (Neyveli Lignite Corporation Ltd., 2012)
 - e. 'Environmental Cost Benefit Analysis – NTPC Dadri' (NTPC, 2012)
 - f. 'Environmental Cost Benefit Analysis – NTPC Kawas' (NTPC, 2014)



Training Programs, Workshops, and Conferences

1. The Centre organized three training programs on “Environmental Fiscal Reforms: International Experience and Relevance for India”
 - a. For Tamil Nadu and Central Government Officers at Madras School of Economics, Chennai, March 2013
 - b. For the Officers from Tripura and other North-Eastern States at Tripura University, Agartala, November 2013
 - c. For the Officers from Bihar, Odisha and West Bengal at Jadavpur University, Kolkata, November 2014
2. The Centre organized a series of six short-term training programs in Environmental Economics for the senior scientists and engineers of Tamil Nadu Pollution Control Board during March 2015, August 2015, October 2015, November 2015, January 2016, and February 2016.
3. The Centre organized a two-day conference on “The Science and Economics of the Environmental Issues: The Twain Shall Meet”, during 19-20 November 2012 in collaboration with Lancaster University.
4. The Centre organized “National Conference on Water Security”, on 22 March 2018 in collaboration with IIT-Madras.
5. The Centre organized a two day national workshop on, “Economic Costs of Climate Change in Rural India”, during 12-13 July 2018 in collaboration with GIZ, New Delhi.
6. The Centre organized a conference on “Technology and Development”, on 11 August 2018 in collaboration with Forum for Global Knowledge Sharing.



Training Programs on “Environmental Fiscal Reforms” @ Chennai, Agartala and Kolkata



Short-term Training Programs in
Environmental Economics, TNPCB
Officers



National Conference on Water Security
March 2018



National Workshop on "Economic Costs of Climate
Change in Rural India", July 2018

Policy Notes

The Centre provided periodic policy inputs to the Ministry on a range of issues:

- a) “Intellectual Property and Environmentally Sound Technologies”, May 2012
- b) “Issues related to Environment, Ecology and Climate Change in the ToR of 14th Finance Commission”, April 2013
- c) “Inclusive Wealth Report 2012: Measuring Progress towards Sustainability”, July 2013
- d) “India and APEC List of 54 Environmental Goods: Approach Paper”, July 2015
- e) “Does Carbon Tax Make Sense: Assessing across Nations and Addressing Indian Perspective”, February 2016
- f) “South Asia’s Hotspots – The Impact of Temperature and Precipitation Changes on Living Standards”, July 2018

Capacity Building, Dissemination and Networking

- a) The Centre has brought out a number of *Dissemination Papers* on various environmental economics concepts written in simple language to reach wider audience. Some of the topics covered include: ‘Biofuels and Sustainable Development’, ‘Urbanization and Environment’, ‘Behavioral Economics and Environment’, ‘Choice of Policy Instruments’, ‘Energy, Economy and Environmental Models’, ‘Value of Statistical Life’, ‘The Economics of Biodiversity’, ‘Environment and Development’, ‘Trade and Environment’, ‘Travel Cost Method for Environmental Valuation’, ‘Economics of Natural Resources’, ‘Green Economy’, ‘Common Property Resources and Collective Action’.
- b) The Centre has brought out a number of *Bibliographies* aimed at researchers and scholars working in the broad domain of environmental economics. The registered users after due declaration are given the option to access the full-length papers from the Centre. Some of the topics on which the bibliographies are written include: ‘Economics of Forest Management’, ‘Trade and Environment’, ‘Climate Change and Adaptation’, ‘Air Pollution Impacts’, ‘Economics of Water Pollution’, and ‘Biofuels’.
- c) The Centre has brought out Newsletters (“*Green Thoughts*”) twice a year to disseminate research and policy related information.
- d) The Centre invited scholars to MSE under the “*Visiting Researchers*” program for wider networking. Some of the scholars who visited the Centre for a period of one-two months include: Dr. Chandra Krishnamurthy (Umea University, Sweden); Dr. Suneetha (UNU-IAS, Tokyo); Prof. Peter Lambert (University of Oregon, USA); Dr. Pranab Mukhopadhyay (Goa University).

Faculty @ CoE (EE)

No.	Faculty Members	Designation	Expertise
1.	Dr. K.R. Shanmugam	Director and Professor	Economic Instruments, Fiscal Policy, Environmental Valuation
2.	Dr. K.S. Kavi Kumar	Professor	Economic Instruments, Environmental Policy, Environmental Valuation, Economics of Climate Change, Environment-Development Inter-linkages
3.	Dr. Zareena Begum	Associate Professor	Water, Solid Waste Management, Environmental Health
4.	Dr. Brinda Viswanathan	Professor	Air Pollution, Environment-Development Inter-linkages
5.	Dr. R. Hema	Associate Professor	Energy and Environment, Renewable Sources of Energy
6.	Dr. Anubhab Pattanayak	Assistant Professor	Economics of Climate Change, Environmental Policy, Environment-Development Inter-linkages
7.	Dr. U. Sankar	Honorary Professor, MSE	Economic Instruments, Industrial Pollution Control, Energy, Environmental Policy, Trade and Environment
8.	Dr. Paul P. Appasamy	Honorary Professor, MSE	Urban Economics, Economics of Biodiversity, Water Pollution Control, Economic Instruments, Environmental Policy