## T. Jayaraman

tjayaraman@gmail.com

## Experience

Current Position Jul. 2008 – Present Professor, School of Habitat Studies, Tata Institute of Social Sciences Mumbai, India

#### Current Responsibilities

Dean, School of Habitat Studies. Chairperson, Computer Centre

#### **Earlier Positions**

October 2006 – June 2008 Visiting Professor, Tata Institute of Social Sciences Mumbai, India

Sept. 2003-Sept 2006

Visiting Scientist (Theoretical Physics Group and School of Mathematics), Tata Institute of Fundamental Research, Mumbai.

Aug. 2002 – Aug. 2003 Professor, Theoretical High-Energy Physics Group, Institute of Mathematical Sciences Chennai, India

Jul. 1994 - Aug. 2002 Reader, Institute of Mathematical Sciences Jan. 1991 - Aug. 1994 Fellow, Institute of Mathematical Sciences

## Current Areas of Research Interest:

- Climate Change Related Issues including Climate Policy, Energy Issues, Global Mitigation and Carbon Budgets, and Vulnerability and Adaptation.
- Sustainability Studies with special emphasis on equity.
- Science and Technology Policy in advanced science and technology sectors including Nuclear Policy.
- Innovation Policies and Issues.

## Executive Committee Membership/other official positions:

• Member, Research Board, M. S. Swaminathan Research Foundation.

(2014 onwards)

Member, Editoral Board, Review of Agrarian Studies.

(2014 onwards)

- Member, Sustainable Development of MOU Task Force for the Petroleum and Gas Syndicate, Dept of Public Enterprises, Govt. of India, New Delhi.
   (2012-2013)
- Member of PPEC, Indian Statistical Institute, Kolkata. (2011-12).
- Participant, BASIC Experts' Group, nominated by Ministry of Environment and Forests, Government of India (July 2010 Nov. 2011)

# Conferences and Workshops organised:

- International Workshop on 'Equity, Sustainability and Climate Change' in Sept. 2011 in New Delhi, sponsored by Ministry of Environment and Forests, Government of India.
- AIPSN National Workshop on 'Consultation towards Policy Formulation, Popular Material Preparation and Advocacy of Climate Change' in March 2011 in Mumbai, sponsored by Climate Works Foundation.
- SANPAD Thematic Conference on 'Energy, Climate Change and Sustainable Development' in March 2011 in Mumbai, sponsored by South Africa-Netherlands Research Programme on Alternatives in Development.
- Visit of the delegation from Development Research Centre, State Council of the People's Republic of China in November 2011 in Mumbai, sponsored by TISS and DRC.
- BASIC Countries Experts Meeting organized at New Delhi, sponsored by Ministry of Environment and Forests, Govt. of India, 26-27 February 2011.
- Side Event at the UNFCCC COP 16 on "Equitable Access to Carbon Space", at Cancun, Mexico, sponsored by Ministry of Environment and Forests, Govt. of India, December 2010
- "Global Carbon Budgets: Equity in Climate Change", organized at TISS, sponsored by Ministry of Environment and Forests, Govt. of India, 28-29 June 2010.
- Workshop on "Breaking the Climate Deadlock: Towards a New Climate Policy for India, organised at TISS, July 31-Aug.1, 2009.
- Workshop on ``Unpacking Climate Change: A 3-day teach-in on global warming, its impact, energy policies and policy responses." organised at TISS, April 18-20, 2008.

## Outreach and Advocacy:

- Project Director, Assam Disaster Management Training Programme, (TISS-ASDMA Project) (2011-2013).
- Project Director, Preparation of the Jammu and Kashmir State Disaster Management Plan (ongoing).
- Project Director, TISS-IFRC Online Course on Disaster Management. (current).

## Teaching:

- ➤ Optional course titled ``Science, Technology and India's Development Experience' for M. Phil., offered occasionally.
- ➤ Optional course titled ``Perspectives in Science, Technology and Society" for M. A. (Development Studies), offered every year in I semester.
- Compulsory course titled ``Sustainable development and climate change'', for M. A. (Development Studies), offered every year in IV semester.
- ➤ Taught concentration on Climate Change in M.A./MSc. in Habitat Policy and Practice.
- Formulated a new course titled, "M.A. / MSc. In Climate Change and Sustainable Development" with other colleagues.
- New courses to be taught including Ecosystems and Habitats.
- ➤ Ph.D. Supervision 8 (Current)
- ➤ M.Phil Supervision 7 (Completed), 1 (Current)
- ➤ M.A. Dissertations Several

#### **Publications**

Chapters in Books

- Jayaraman, T., Kanitkar, T., D'Souza, M., `Equity and burden sharing in emission scenarios: a carbon budget approach' published in Handbook of Climate Change and India: Development, Politics and Governance, Dubash N.K. (ed), Nov. 2011, Routledge
  - http://www.cprindia.org/seminars-conferences/3364-handbook-climate-change-and-india-development-politics-and-governance
- Jayaraman, T., Kanitkar, T., D'Souza, M., `Equitable access to sustainable development: An Indian approach', published in `Equitable access to sustainable development: Contribution to the body of scientific knowledge', A paper by experts from BASIC countries, Winkler H. et al,. 2011 <a href="http://www.prayaspune.org/peg/publications/item/download/371.html">http://www.prayaspune.org/peg/publications/item/download/371.html</a>

#### Publications in Journals etc.

- Jayaraman T. and Murari, Kamal, "Climate Change and Agriculture: Current and Future Trends and Implications for India," Review of Agrarian Studies.
- Kanitkar Tejal, Jayaraman T., D'Souza Mario, Purkayastha Prabir, "Carbon budgets for climate change mitigation: A GAMS-based emissions model," Current Science, Vol. 104, No. 9, p. 1200, May 2013
- Jayaraman T., 'Holding back the 'Green Economy' Idea, but for how long?' Economic & Political Weekly, Vol. XLVII, No. 28, July 14, 2012.
- Jayaraman T., Kohli Divya Singh, Mittal Shruti, 'Rio +20, What is at stake', Economic & Political Weekly, Vol. XLVII, No. 23, June 9, 2012.
- Jayaraman T., 'Climate Change and Agriculture: A Review Article with Special

Reference to India', Review of Agrarian Studies, Vol. 1, No. 2, July-December, 2011

http://www.ras.org.in/index.php?Token=d860edd1dd83b36f02ce52bde626c653

- Lele S. & Jayaraman T., 'Equity in the context of Sustainable Development', Background paper submitted to Ministry of Environment and Forests, Government of India for presentation at the UN High-Level Panel on Global Sustainability, May 2011
  - http://atree.academia.edu/SharadLele/Papers/883412/Equity\_in\_the\_context\_of\_Sustainable\_Development
- Global Carbon Budgets and Burden Sharing in Mitigation Actions: Discussion Paper, Supplementary Notes and Summary Report', Jun. 2010 <a href="http://climate.tiss.edu/attachments/carbon-budgets-2010/at\_download/file">http://climate.tiss.edu/attachments/carbon-budgets-2010/at\_download/file</a>
- Jayaraman T., Kanitkar, T., D'Souza, M., 'Deconstructing the Climate Blame Game', Economic & Political Weekly, Vol. XLV No. 1, Jan. 2, 2010 www.epw.org.in/epw/uploads/articles/14306.pdf
- Jayaraman T., 'Will It Be a US Endgame at Copenhagen?', Economic & Political Weekly, Vol. XLIV No. 50, Dec. 12, 2009 <a href="http://www.epw.in/epw/uploads/articles/14232.pdf">http://www.epw.in/epw/uploads/articles/14232.pdf</a>
- Jayaraman T., 'Swinging from Inaction to Capitulation on Climate Policy', Economic & Political Weekly, Vol. XLIV No. 43, Oct. 24, 2009 www.epw.in/epw/uploads/articles/14060.pdf
- Kanitkar, T., Jayaraman, T., D'Souza, M., Purkayastha, P., Raghunandan, D., Talwar, R., 'How Much 'Carbon Space' Do We Have? Physical Constraints on India's Climate Policy and Its Implications', Economic & Political Weekly, Vol XLIV No. 41, Oct. 10, 2009
  <a href="http://www.epw.in/epw/uploads/articles/14044.pdf">http://www.epw.in/epw/uploads/articles/14044.pdf</a>
- T. Jayaraman, "Science, Technology and Innovation Policy under Economic Reform: A Survey" Invited paper presented to the conference on The Crisis of Neo-Liberalism in India: Challenges and Alternatives, organized by TISS and IDEAs, 13-15 March, 2009. Available on the net at http://www.networkideas.org/ideasact/jan09/PDF/Jayaraman.pdf.
- T. Jayaraman, "Does India need a Bayh-Dole Act: Misplaced priorities in STI policy," Paper presented to the International Conference on Science, Technology and Economy: Emerging and Developed Countries, organized by the Forum for Global Knowledge Sharing and TISS, 9-10, Oct. 2009. Available on the net at <a href="http://knowledgeforum.tifac.org.in/viewArticle.php?id=106">http://knowledgeforum.tifac.org.in/viewArticle.php?id=106</a>.

#### Commentary and Analyses in Print Media

- Jayaraman T., 'Post-Durban, India has its task cut out', The Hindu, Dec. 20, 2011
  http://www.thehindu.com/opinion/lead/article2729539.ece
- Jayaraman T., 'Taking stock of Copenhagen', The Hindu, Dec. 24, 2009 <a href="http://www.thehindu.com/opinion/op-ed/article70042.ece">http://www.thehindu.com/opinion/op-ed/article70042.ece</a>

- Jayaraman T., 'Carbon alert', Frontline, Volume 26 Issue 25, Dec. 05-18, 2009 <a href="http://www.frontline.in/fl2625/stories/20091218262502800.htm">http://www.frontline.in/fl2625/stories/20091218262502800.htm</a>
- Jayaraman T., 'India's strategy at Copenhagen', The Hindu, Nov. 26, 2009 http://www.hindu.com/2009/11/27/stories/2009112756100800.htm
- Jayaraman T., 'Keeping India's options open at Copenhagen', The Hindu, Oct. 29, 2009
  <a href="http://www.thehindu.com/opinion/lead/article40039.ece">http://www.thehindu.com/opinion/lead/article40039.ece</a>
- Raghunandan, D., Purkayastha, P., Jayaraman, T., 'Breaking the climate deadlock', The Hindu, Jun. 23, 2009
  <a href="http://www.hindu.com/2009/06/23/stories/2009062353970800.htm">http://www.hindu.com/2009/06/23/stories/2009062353970800.htm</a>
- T. Jayaraman and R. Ramachandran, Solving a conjecture, Frontline magazine, Vol. 23, No. 17, August 26, 2006.
- August 1998, pp. 60-64.
- T. Jayaraman, Obscurantism vs. Science: Behind the Milk-drinking Miracle, Frontline magazine, circa 1996, available at <a href="http://www.imsc.res.in/~jayaram">http://www.imsc.res.in/~jayaram</a>.
- T. Jayaraman, Celebrating the Eclipse: Taking Science to the People, Frontline magazine, circa 1995, available at http://www.imsc.res.in/~jayaram.

# Talks and Presentations in Conferences /Workshops/ Seminars:

- Presentation on 'India's Climate Policy Durban and After' at NIAS Roundtable on Climate Policy organised by National Institute of Advanced Studies (NIAS), Bengaluru, March 2012.
- Main speaker at India's Climate Policy after Durban organised by INECC and Bangalore Platform on Climate Change, Bengaluru, March 2012.
- Invited talk on 'Climate Policy Towards an Adequate Strategic Perspective' at the 14th Asian Security Conference organised by Institute of Defence Studies and Analysis, New Delhi, Feb. 2012.
- BASIC Experts Meeting as presenter, discussant, and for final report writing, organised by Chinese Academy of Social Sciences and Govt. of PRC, Beijing, China, Oct. 2011.
- Invited talk on 'Carbon Budgets and India's Climate Policy Asian Climate Change -Trends & Policy' organised by Divecha Centre for Climate Change, IISc, Bengaluru, July 2011.
- BASIC Experts Meeting as presenter, discussant, and for final report writing, organised by Energy Research Centre and Govt. of South Africa, Zimbali, South Africa, May 2011.
- Stakeholder consultation on the 'APHDR on Climate Change & Stakeholder Consultation on the global HDR on Sustainable Development' for interventions and comments, organised by UNDP, New Delhi, April 2011.
- Presented an invited paper on "Global carbon budgets, emissions trajectories and burden sharing in mitigation" in CASS Workshop on Carbon Budgets organised by

Chinese Academy of Social Sciences, Beijing, China, 15-16 April 2010.

# **Educational Qualifications**

- > Ph.D. (Theoretical Physics), University of Madras, Chennai, 1983.
- ➤ MSc. (Physics), University of Madras, Chennai, 1976.
- ➤ BSc. (Special) (Physics), Madurai Kamaraj University, Madurai, 1974.
- ➤ Indian School Certificate Examination, Loyola School, Jamshedpur, 1971.

# **Other Academic Matters**

Number of Ph.D. Thesis supervised: 3 (Dr. Varghese John; Dr. Tapobrata Sarkar; Dr. Bobby Vinod Kr. Ezhuthachan)