



# ISEC

CENTRE FOR  
ECOLOGICAL ECONOMICS AND  
NATURAL RESOURCES (CEENR)





## THE INSTITUTION

The Institute for Social and Economic Change was established in 1972 by the visionary, scholar, statesman and distinguished social scientist Prof. V K R V Rao. It has always been conceived as an all-India institute of interdisciplinary research and training in social sciences. The principal objective of the Institute is conducting research, pure and applied, in social sciences and enlarging the canvas to include doctoral programme, training and policy dissemination.

The main objectives of the Institute summarily stated are to:

- undertake pure and applied research in social sciences encompassing all aspects of a developing society in an inter-disciplinary framework;
- assist central, state and local governments by providing advice based on policy-related studies;
- undertake regular training of doctoral students and teachers in universities and colleges, and for the officials and political functionaries, particularly at local levels;
- maintain a documentation and data centre in social sciences;
- take all measures within the competence of the Institute for the promotion of pure and applied research in social and economic development and change;
- assist the multilateral organisations such as the World Bank, Asian Development Bank, UNFPA , UNICEF, WHO and ILO in undertaking research and training programmes and
- collaborate with universities, research institutions and the non-governmental organisations (NGO) in the region in improving the quality of research and training.



## **CENTRE FOR ECOLOGICAL ECONOMICS AND NATURAL RESOURCES (CEENR)**

ISEC was the first social science research institution to establish a separate 'Ecological Economics Unit', now renamed the 'Centre for Ecological Economics and Natural Resources' (CEENR), as far back as in 1981, which testifies to the vision of its founding fathers. The mandate of the Centre is to analyse the interface between economics, ecology and institutions, the trade-off between growth and ecological balance, socio-cultural dimensions of ecology, gender and governance issues and analysis of nature-society interface. With ecological/environmental issues of development coming to the fore, the Centre has emerged as an important focal point to analyse and identify various policy alternatives relating to sustainable development and management of natural resources. The Centre has expertise in the field of forest use and management, CPRs, climate change, protected areas management, resource-people conflicts, biodiversity conservation, water resource management and command area development, Remote Sensing and GIS, production system analysis. The Centre has completed 21 research projects, published 13 books and 48 research papers in the last five years.

### **GOALS AND MISSION**

The goal is to make CEENR a centre of excellence with a mission to develop expertise in the field of Ecological/Environmental Economics and Natural Resources Management.

### **RESEARCH PERSPECTIVE**

CEENR keeps in view the overall focus on Ecological/Environmental Economics, in particular on Natural Resources Use and Management, Ecosystem Services, Climate Change, Renewable Energy, Solid Waste Management, Bio-diversity, monitoring and mapping. The Centre endeavours to undertake Capacity Building and Outreach along with development of strong policy and institutional framework. The areas of expertise of CEENR faculty include: Natural Resources Use and Management; Water Resources; Sustainable Forestry; Economics of Bio-diversity Conservation and Institutional Alternatives; Renewable Energy and Alternative Fuels; Irrigation Systems and Command Area Development; Urban Ecology; Economic Growth; Resource Depletion and Pollution; Environmental Governance; Landscape Ecology, Ecological Modeling, Remote Sensing and GIS; Sustainable development & Climate Change; Natural Resources Accounting; Ecology & Culture; Environmental Governance.



## BOOKS & MONOGRAPHS (2009-2013)

1. **Nautiyal S**, Rao, KS, Kaechele **H**, **Raju KV**, and Schaldach R. Eds. (2013). Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change, Environmental Science and Engineering, DOI: 10.1007/978-3-642-36143-2\_1, Springer-Verlag Berlin Heidelberg. 724pp
2. **Nautiyal. S**, Babu, MS., Nayak B.P. (2012). Public Expenditure and Strategies for Sustainable Management of Environment and Forest Ecosystems in Karnataka, Institute for Social and Economic Change Monograph 27 (ISBN 81-7791-126-0)
3. **Manasi. S**, Bibhu Prasad Nayak, N. Latha, (2011). *Ecothreats of E-Waste – A case study of Bangalore City*, LAP LAMBERT Academic Publishing GmbH & Co. Germany,
4. **Raju, K.V.** and **Manasi, S.** (eds.), (2011). *Integrated Water Resources Management in Tungabhadra Sub Basin – Issues and Trends*, LAP LAMBERT Academic Publishing GmbH & Co. Germany.
5. **Raju, K.V.**, **Manasi. S**, K. Lenin Babu, 2011, *Tanks in Mid Godavari Basin, India, Building Techno-Ecological Status*, LAP LAMBERT Academic Publishing GmbH & Co. Germany.
6. Devi, K G Gayathri, (2011). *Institutional Design for tackling Child Labour Problem*, (with Dr. D Rajasekhar & Dr. V Anil Kumar) Concept Publications, New Delhi.
7. **Nautiyal Sunil** (2011). *Development of Rural and Peri-urban Landscapes: Socioeconomic and Ecological Perspectives of Urbanization in India*, Lambert Academic Publishing, Germany.
8. **Nautiyal Sunil** and Bibhu Prasad Nayak (Eds.) (2010). *Ecological Economics: An Approach towards Socioeconomic and Environmental Sustainability*, ISEC and NIE Publication, July.
9. Yves Saillard and Gundappa Sathyanarayana Sastry (Eds.) (2010). *Access to water in urban areas of developing economies Experiences of India and France [Acces a l'eau dans les territoires urbains: experiences indiennes et francaises (Collection Territoires: analyse, modelisation et simulation)]*, Hermes Science Publication, Paris, France.
10. Devi, K G Gayathri (2010). *Gender and Governance In Rural Services*, The World Bank (Agriculture & Development) with International Food Policy Research Institute, Washington, DC., Co-authors: Regina Birner and Madhushree Sekher and the team from Ethiopia and Ghana.
11. Babu, K. Lenin (2010). *Small Tea growers in South India*, Verlag Publishers, Germany.
12. **Nautiyal Sunil** and Bibhu P. Nayak (Eds.) (2009). Proceedings of the Seminar on *Climate Change: Data Requirement and Availability* organized by Centre for Ecological Economics and Natural Resources, Institute for Social and Economic Change, Bangalore, sponsored by Ministry of Statistic and Programme Implemenation, Government of India, Central Statistical Organization, New Delthi.
13. Ninan, K.N (2009). *Conserving and Valuing Ecosystem Services and Biodiversity: Economic, Institutional and Social Challenges*, Earthscan Publications, London and Washington DC. Paperback edition in 2010.

## RESEARCH PAPERS (2009-2013)

1. **Nautiyal Sunil** (2013). A Transition from Wood Fuel to LPG and Its Impact on Energy Conservation and Health in the Central Himalayas, India. *Journal of Mountain Science* 10(5): 898-912.
2. Semwal, R.L., **Nautiyal Sunil**, Rao, K.S., Maikhuri, R.K., Saxena, K.G. (2013). Growth and carbon stocks of multipurpose tree species plantations in degraded lands in Central, *Forest Ecology and Management* 310(15): 450–459.
3. **Nautiyal Sunil**, Bhaskar K, Khan YDI, Venkateshalu (2013). Biodiversity Monitoring and its Distribution in and Around Uranium Mining Area of Gogi, Gulbarga (Yadgir), Karnataka: A Case Study. *Journal of Biodiversity*, 4(2): 69-77.

4. Kumar, P.J. Dilip, (2013). Village communities and their common property forests. *Economic & Political Weekly*, (Vol. XLVIII, No.35), pp.33-36.
5. **Balasubramanian, M.** (2013.) Integrating forest resources into national accounts in Karnataka, India, *International Journal of Green Economics* (Inderscience), Vol 7, No.3, pp 276-298.
6. **Nautiyal Sunil**, Rao, K.S., Kaechele, H., **Raju, K.V.** and Schaldach, R. (2013). Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change: Prologue. In: Nautiyal, S. et al., (eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 1-6.
7. Maikhuri R.K., Rawat L.S., **Nautiyal S.**, Negi V.S., Pharswan D.S. and Phondani P. (2013). Promoting and Enhancing Sustainable Livelihood Options as an Adaptive Strategy to Reduce Vulnerability and Increase Resilience to Climate Change Impact in the Central Himalaya. In: Nautiyal, S. et al., (eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 555-576.
8. Kaechele H., Kutter T., Specht K., **Nautiyal S.**, Amjath-Babu T. S., Müller K. and Raju K.V. (2013). Rural India as Key Factor to Cope with Climate Change. In: Nautiyal, S. et al., (Eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 693-716.
9. **Nautiyal Sunil**, Rao, K.S., Kaechele, H., **Raju, K.V.** and Schaldach, R. (2013). Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change: Epilogue. In: Nautiyal, S. et al., (Eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 717-720.
10. **Raju K.V.**, et al., (2013) Bhoochetana: Innovative Institutional Partnerships to Boost Productivity of Rainfed Agriculture in Karnataka, India, Research Report No.59, ICRISAT, AP.
11. **Raju K.V.**, et al., (2013) Bhoochetana: Process Documentation. A Programme that helped farmers come out of low productivity and poor economic status, Research Report 60, ICRISAT, AP.
12. **Manasi S**, (2013). Water Pollution impacts on Livelihoods- A case study of Fishing Communities in Tungabhadra sub-basin, 2013, In: Nautiyal, S. et al., (eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 347-366.
13. **Manasi S** and Umamani, K.S. (2013). Water Conservation in Urban Areas- A Case of Rain Water Harvesting Initiative in Bangalore city, 2013, In: Nautiyal, S. et al., (Eds.), *Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change*, Springer-Verlag Berlin Heidelberg, Germany, pp 303-328.
14. Ninan, K.N., Inoue, M. (2013). Valuing Forest Ecosystem Services-Case study of a Forest Reserve in Japan, *Ecosystem Services (Elsevier)*, Vol.5, pp.e78 - e87.
15. Panda, A., Sharma, U., Ninan, K.N. Patt, A. (2013). Adaptive capacity contributing to improved agricultural productivity at the household level: Empirical findings highlighting the importance of crop insurance, *Global Environmental Change*, Vol.23, pp.782-790.
16. Ninan, K.N. and Inoue M. (2013).Valuing Forest Ecosystem Services-What we know and what we don't, *Ecological Economics*, Vol.93, pp.137-149.
17. **Raju, K V** with Avinandan Taron, (2012). Valuing attributes of canal irrigation for Boro cultivation in West Bengal: An application of choice experiments in *Rabindra Bharati University Journal of Economics*, Vol.VI.
18. **Nautiyal, Sunil**, and Nidamanuri R.R. (2012). Ecological and socioeconomic impacts of conservation policies in biodiversity hotspots: a case study from Rajiv Gandhi National Park, India, *Journal of Environmental Studies and Sciences* 2(2): 165-177.



19. Devi, K G Gayathri (2012). Political Economy of Women's Health: Case of Beedi Rollers in Karnataka, in *Economic Paradigms of Healthcare in India* edited by Dr.Vilas M Kadrolkar, Dr.Jayasheela and Dr.Ravindra Kumar B, Global Research Publications.
20. **K.N.Ninan** (2012) 'Electricity Pricing Reforms in Karnataka-An Appraisal', *Journal of the Institute of Public Enterprises*, Hyderabad, Vol.35 (3-4), July-December, pp. 67-81.
21. **Nautiyal, Sunil** (2011). Can Conservation and Development Interventions in the Indian Central Himalaya Ensure Environmental Sustainability? A Socioecological Evaluation, *Sustainability Science*, 6(2), 151-167.
22. Navaneethan, P., **Nautiyal Sunil** and Rajasekaran, C (2011). "Cross-cultural Ethno-botany and Conservation of Medicinal and Aromatic Plants in the Nilgiris, Western Ghats: A Case Study. Medicinal Plants", *International Journal of Phytomedicine and Related Industries*, 3(1): 27-45.
23. **Nautiyal, Sunil** (2011). Plant Biodiversity and Its Conservation in Institute for Social and Economic Change (ISEC) Campus, Bangalore: A Case Study, *Journal of Biodiversity*, 2(1): 9-26.
24. Kaechele, H., Babu, T.S., Kutter, T, Specht, K, **Nautiyal, S.**, Mueller, K. and **Raju, K.V.** (2011). Confronting the Climate Change Challenge: Discussing the Role of Rural India under Cumulative Emission Budget Approach, *Environmental Science and Policy*, 14(8), pp. 1103-1112.
25. Babu, M S Umesh (2011). Emissions and Sinks of Greenhouse Gases, in Raju, K.V. and **Manasi, S.** (eds.), *Integrated Water Resources Management in Tungabhadra Sub Basin – Issues and Trends*, LAP LAMBERT Academic Publishing GmbH & Co. Germany.
26. **Nautiyal, Sunil**, Maikhuri, R.K., Rao, K.S. and Saxena, K.G. (2011). Livelihood and Natural Resources in Asian Cold Desert: A case study from selected villages in Central Himalaya, India, in K.G. Saxena, Luohui Liang, Xian Xue (eds) *Global Change, Biodiversity and Livelihoods in Cold Desert Region of Asia*, Bishen Singh Mahendra Pal Singh, Dehradun, pp.161-176.
27. Devi, K G Gayathri (2011). Tackling Exclusion of Women in Agriculture Through Institutional Reforms: A Critical Analysis' in the report (Proceedings) of the National Workshop on 'Inclusive Agricultural Growth: Regional Perspective, edited by Dr. Elumalai Kannan & Dr. G B Lokesh, brought out collaboratively by the ADRTC, ISEC, Bangalore and ICAR, New Delhi, pp. 191-210.
28. **Manasi S**, Ingrid Nesheim, K.J. Joy, Suhas Paranjape, **K.V. Raju**, Nagothu Udaya Sekhar (2011). Going beyond the Rhetoric of IWRM: The Case of Tungabhadra Sub-basin in South India, *Economic and Political Weekly*, Special Article, Vol XLVI No. 34.
29. Bhattacharya, P., **Ninan, K.N.** (2011). Social Cost Benefit Analysis of Intensive Vs Traditional Shrimp Farming: A Case Study from India" (with Poulomi Bhattacharya), Proceedings of 27<sup>th</sup> International Conference of Agricultural Economists held at Beijing, China, August 16-22, 2009: revised version in *Natural Resources Forum*, United Nations Sustainable Development Journal, Vol. 35, No. 4.
30. **Ninan, K.N.** (2011). The Business of Biodiversity, Review of Mark Everard's Book, *Ecological Economics*, Vol 70 (5), pp. 1016.
31. **Nautiyal Sunil** (2011). Macro to micro Viewpoint of Climate Change- Linking Karnataka to Global Issue", *Natural Resources* 2, pp. 22-27.
32. **Nautiyal Sunil** and R.R. Nidamanuri (2010). Conserving biodiversity in protected area of biodiversity hotspot in India: a case study.*International Journal of Ecology and Environmental Sciences*, 36, pp. 195-200.
33. Kaechele, H., **Nautiyal Sunil** (2010). "From Thaer and Thünen until Today: Past and Future of Agricultural Landscape Use in Germany", *Natural Resources*, 1(2), pp. 57-68.
34. **Nautiyal Sunil**, Rao. K.S., Kaechele, H., Zander, P. (2010). Conceptual model development for landscape management in the mountains of the Indian Himalayan region: an approach for

- sustainable socio-ecological development”, Landscape Online, *Journal of International Association of Landscape Ecology*, 18, pp.1-19.
35. Ingrid Neishem, Desomod Mc Neill, K.J. Joy, **Manasi S**, Dan Thi Kim Nhung, Maria Manuela Portela, Suhas Paranjape (2010). The Challenge and Status of IWRM in Four River Basins in Europe and Asia, *Irrigation and Drainage Systems*, Vol 24, Numbers 3-4, pp. 155-225.
  36. **Manasi. S**, Ingrid Neishem, K.J. Joy, Suhas Paranjape, K.V. Raju, Nagothu Udaya Sekhar, ‘Integrated Water Resources Management’, Gooch G.D., Riew Clarke A and Stalnacke P, International Water Association Publishers, London, 2010.
  37. **Ninan, K.N.** co-author with S.White, Patrick ten Brink (2010). Recognising the value of biodiversity: New approaches to policy assessment (Chapter 4) In: Patrick ten Brink (Ed) *The Economics of Ecosystems and Biodiversity (TEEB) in National and International Policy Making*, An output of TEEB, Earthscan, London and Washington DC.
  38. **Nautiyal Sunil** (2010). Impact of Land use Change: Socio-economic and Ecological Perspectives. in Nautiyal, S., Nayak. B.P. (Editors). *Ecological Economics: An Approach towards Socioeconomic and Environmental Sustainability*, ISEC and NIE Publication, pp. 239-247.
  39. **Devi, K G Gayathri** (2010). Employment Generation and Natural Resource Management: A Critical Reflection on Governance Issues in Nautiyal, S., Nayak. B.P. (Editors). *Ecological Economics: An Approach towards Socioeconomic and Environmental Sustainability*, ISEC and NIE Publication, pp 200-208.
  40. Bruna Grizetti, Antonio Lo Porto, Line J. Barkved, K.J. Joy, Suhas Paranjape, Johannes Deelstra, Faycal Bouraoui, **S. Manasi** (2010). *The Science-Policy Stakeholder Interface in Water Pollution Assessment*, in Science, Policy and Stakeholders in Water Management – An Integrated Approach to River Basin Management Edited by Geoffrey D. Gooch and Per Stalnacke (ed.), Earthscan pp.67-82.
  41. **Manasi, S.**, K.J. Joy, Suhas Paranjape, Udaya Sekhar Nagothu, Dale Campbell, N. Latha, Maria Manuela Portela, Antonio Betamio de Almeida, Marta Machado, K.V. Raju and Santiago Begueria Portugues (2010). *The Science-Policy Stakeholder Interface in Land and Water-use Interactions*, in Science, Policy and Stakeholders in Water Management – An Integrated Approach to River Basin Management Edited by Geoffrey D. Gooch and Per Stalnacke, Earthscan pp.83-104.
  42. **Ninan K.N.** (2009). Chapter 1: Introduction: Biodiversity, Ecosystem Services and Human Well-Being” in K N Ninan (ed.) *Conserving and Valuing Ecosystem Services and Biodiversity – Economic, Institutional and Social Challenges*, Earthscan, London.
  43. **Ninan, K.N.** (2009). Chapter 6: Non-Timber Forest Products and Biodiversity Conservation – A Study of Tribals in a Protected Area in India in K.N. Ninan (ed.) *Conserving and Valuing Ecosystem Services and Biodiversity – Economic, Institutional and Social Challenges*, Earthscan, London.
  44. **Nautiyal Sunil** (2009). “Research approach to understand the climate change impact at micro level: A case study”, in Nautiyal, S., Nayak, B.P. (Editors). Proceedings of the National Seminar on “Climate Change: Data Requirement and Availability”, ISEC-CSO, MoSPI, 2009. p. 150-161.
  45. **Nautiyal, S.**, Kaechele, H., Rao, K.S. and Maikhuri, R.K. (2009). An Economic Evaluation of Introduced Crops Cultivation in a part of the Indian Himalayan Region”, *The Botanica*, 57, pp. 102-106.
  46. **Nautiyal Sunil** and Kaechele, H. (2009). Natural resource management in a protected area of Indian Himalaya: A modeling approach for anthropogenic interactions on ecosystems, *Environmental Monitoring and Assessment*, 153, pp. 253-271.
  47. Lenin Babu, K, B.K. Harish Kumara and **Raju KV** (2009). Environmental Flows in River Basin: A Case Study of Tungabhadra in South India, *Current Science*, Vol. 96(4):475-479.
  48. Pattanayak, M and Bibhu Prasad Nayak (2009). Crop Diversification in Orissa: A Spatio Temporal Analysis, *Agricultural Situations in India*, 35 (8):529-536.



## WORKING PAPERS (2009-2013)

1. **Manasi S.** and Umamani K S (2013) Rainwater Harvesting in Bangalore City – Problems and Prospects. ISEC Working Paper 302.
2. Attri S. and **Nautiyal, S** (2013) Vulnerability Assessment of the Agricultural Sector in Yadgir District, Karnataka: A Socio-economic Survey Approach. ISEC Working Paper 295.
3. Manasi S (2013) Emerging Trends in E- Waste Management – Status and Issues - A Case Study of Bangalore City, ISEC Working Paper 297.
4. **Manasi, S.** and **Raju KV** (2012). WATER – A Heritage Perspective, Working Paper 004, Development Foundation, Bangalore,
5. **Babu, M S Umesh** and **Nautiyal Sunil** (2012). Forest Resources Management and Conservation in Ancient India: A Historical Review, Working Paper 003, Development Foundation, Bangalore.
6. **Babu, M S Umesh** and **Nautiyal Sunil** (2012). Socioeconomic and Ecological Consequences of Biofuel Development in India, Working Paper 807, Norwegian Institute for International Affairs (NUPI).
7. Ninan, K.N and **Bedamatta Satyasiba** (2012). Climate Change, Agriculture, Poverty and Livelihoods: A Status Report, Working Paper No.277, ISEC, Bangalore.
8. **Bedamatta Satyasiba** and Jyotishi A. (2011). Indian Agricultural Sector towards Food Security: Some Policy Issues, ASB Working Paper Series, WP No 107.
9. **Bedamatta Satyasiba**, Jyotishi A., and Mahapatra S. (2012). Wetland Valuation: A Review of Theoretical and Empirical Issues, ASB Working Paper Series, WP No 116.
10. **Nautiyal, Sunil** (2010). “Plant-Biodiversity Conservation in Academic Institutions: An Efficient Approach for Conserving Biodiversity across Ecological Regions in India”, Working Paper No. 258, ISEC, Bangalore.
11. Nautiyal, Sunil (2010). Climate Change: Copenhagen to Karnataka, Institute for Social and Economic Change, Bangalore, State Macro Scan, p. 6.
12. Devi, K G Gayathri, Raabe Katharina, Sekher M, Birner R. (2010). How to Overcome Governing Challenges of Implementing NREGA: Insights from Bihar Using Process Influencing Mapping, IFPRI Discussion Paper No.00963.
13. **Manasi S**, Latha N and **Raju KV** (2009). Fisheries and Livelihoods in Tungabhadra Basin, India: Current Status and Future Possibilities Working Paper No. 217, ISEC, Bangalore.
14. Kumar, B K Harish and Babu L (2009). Traditional Knowledge System (Medicine): A Case Study of Arakalgud Taluk, Karnataka, India, Working Paper No. 214. ISEC, Bangalore.
15. **Nautiyal, S.** (2009). Spatio-temporal analysis of forests under different management regimes using LANDSAT and IRS images, Working Paper no. 213. ISEC, Bangalore.
16. Manasi S, Latha N and Raju KV (2009). Emerging Trends in Managing Drinking Water - Case Studies of Coastal Villages in Karnataka, Working Paper No.212, ISEC, Bangalore.
17. Babu, K Lenin and **Raju KV** (2009). Greenhouse Gases Emission and Potential Carbon Sequestration: A Case Study of Semi-arid Area in South India, Working Paper No. 211. ISEC, Bangalore.
18. Devi, K G Gayathri (2009). Gender, Ecology and Development in Karnataka: Situation and Tasks Ahead, Working Paper No. 210, ISEC, Bangalore.
19. Devi, K G Gayathri (2009). Poverty and Natural Resources: Measuring the Links (Some Issues in the Context of Karnataka, Working Paper No. 207, ISEC, Bangalore.



## COMPLETED STUDIES (2009-2013)

Sl. No.	Title of the Project	Project Director/s	Year
1.	Evaluation Study on Western Ghats Development Programme	Dr Sunil Nautiyal	2013
2.	Tata Coffee Limited: Human Development Report of Plantation Workers	Dr Syed Ajmal Pasha	2013
3.	Baseline study of Flora Fauna at Proposed Uranium Mining Site at Gogi, Gulbarga District, Karnataka	Dr Sunil Nautiyal	2012
4.	Evaluation of Udyogini Scheme in Karnataka	Dr K G Gayathri Devi and Dr S Erappa	2011
5.	Vulnerability Index Project under EOAM	Dr G S Sastry	2011
6.	The Impact of Forest Coffee Certification Schemes on the Socio-Economic Sustainability: Case Studies from Nicaragua, India, and Ethiopia	Dr Bibhu Prasad Nayak	2011
7.	Health and Livelihoods of Community and Traditional Medicinal Plants: SWOT of Two Agroclimatic Zones of India	Dr K Lenin Babu	2010
8.	Gender and Governance in Rural Services	Dr KG Gayathri Devi Dr Regina Birner (IFPRI) & Dr Madhushree Sekher (TISS, Mumbai)	2010
9.	Eco-threats of E-Waste: A Case Study of Bangalore City	Dr S Manasi Dr Bibhu Prasad Nayak	2010
10.	Review of Developmental Programmes and Schemes of the Departments of Forest, Ecology and Environment	Dr Sunil Nautiyal	2010
11.	Towards Improving Participatory Irrigation and Performance of Water Users Associations under JICA Assisted Irrigation Projects in India- Understanding the Institutional Dynamics, Performance and Benefits	Dr RS Deshpande Dr S Manasi Dr Bibhu Prasad Nayak Dr K Lenin Babu	2010
12.	Forest Resources and Economic Growth: An Enquiry into the Growth Linkages of Forest Cover in Indian States	Dr Bibhu Prasad Nayak Dr Sunil Nautiyal	2010
13.	Urban Influence on Rural and Peri-urban Landscapes: Socioeconomic and Ecological Perspective	Dr Sunil Nautiyal Dr KG Gayathri Devi, Dr Bibhu Prasad Nayak	2010
14.	Evaluation of Sanitary and Phytosanitary Measures of Uruguay Round on Supply Chain: A study on Tea sector of Nilgiri region of South India	Dr KV Raju Dr K Lenin Babu	2010

15.	Climate Change, Agriculture, Poverty and Livelihoods: A Status Report	Dr K N Ninan	2010
16.	Comprehensive District Development Plan (CDDP): Jajpur District (Orissa State)	Dr Bibhu Prasad Nayak Dr R S Deshpande	2010
17.	Strategy and Methodology for improved IWRM – An Integrated Interdisciplinary Assessment in Four Twinning River Basins	Prof K V Raju Dr S Manasi	2009
18.	To create content and learning modules for a mobile ecology laboratory	Dr K V Raju	2009
19.	Making Decentralisation and Local Governance Work for the Rural Poor: Lessons from India	Dr K V Raju Dr Madhushree Sekher	2009
20.	Review and Strategy Guidelines and Institutional Mechanisms for Watershed Programmes in India	Dr K V Raju Dr Madhushree Sekher	2009
21.	Electricity Pricing in Karnataka: An Analysis	Dr K N Ninan	2009

## CURRENT RESEARCH

Sl. No.	Title of the Project	Project Director/s
1.	Towards Improving Urban Sanitation Management and Performance in Bangalore' sponsored by Infosys. Coordinator:	Dr S Manasi and Dr Sunil Nautiyal
2.	Socio-Economic Vulnerability Profile Development at the District and Block (Taluk) Level for Karnataka' sponsored by Global Green Growth Initiative (GGGI), South Korea.	Prof K V Raju (From August 21, 2013)
3.	Eco-diversity study in and around the BARC Project site at Challakere, Chitradurga District, Karnataka	Dr Sunil Nautiyal
4.	Enabling tribal communities to improve livelihoods and enhance biodiversity conservation: Scientific and technological interventions for sustainable ecosystem development in BR Hills, Western Ghats	Dr Sunil Nautiyal
5.	Livelihoods, Vulnerability and Adaptation Strategies to Climate Variability and Change: A bottom up approach to simulate the climate change impacts in two sensitive ecological regions (biodiversity hotspots) of India	Dr Sunil Nautiyal and 1. Dr K S Rao, Faculty, Department of Botany, Delhi University; 2. Dr K V Raju CEENR, ISEC
6.	Socio-economic Impact of Project Intervention in Two Zones - Malnad and Dry Zones in Karnataka (Case Study)	Dr Syed Ajmal Pasha



7.	Land Policy and Administration (Assignment)	R S Deshpande, P G Chengappa, N Sivanna & S Manasi
8.	Status of Women in Karnataka - A Monograph	Dr K G Gayathri Devi Dr Lekha Subaiya
9.	Assessing the Environmental Burden of disease of air pollution: A case study of two metropolitan cities–Bangalore and Hyderabad	Dr Syed Ajmal Pasha

## SEMINARS, CONFERENCES, WORKSHOPS AND TRAINING PROGRAMMES ORGANISED/ CO-ORDINATED BY CEENR (2009–2013)

CEENR has been organizing, annually once a four-week international training course on “Approaching the Environment in India – Issues and Methods in the Study of the Nature-Economy-Society Interface” for the post-graduate students from universities in Nordic countries in association with Nordic Centre in India. This is a regular post-graduate course, equivalent to 7.5 or 10 ECTS (European Union Credits). For more details, please see the website: [www.nci.uu.se](http://www.nci.uu.se).

CEENR has been participating in public dialogues pertaining to contemporary issues and ecological concerns and also organizing workshops, seminars and conferences to disseminate knowledge and ideas on its thrust areas of research. The faculty members have been actively involved in dissemination through policy briefs, seminars, workshops and training, publications in the form of papers, books, working papers, monographs, besides acting as resource persons in various platforms.

Sl. No.	Title of the Training Programmes/Workshops	Sponsored by	Dates
1.	One-day training workshop on medicinal plants cultivation and biodiversity conservation at Muntipalya Village, Chamrajanagar, Karnataka. Coordinator: Dr. Sunil Nautiyal	With financial support from DST, Govt. of India	July 20, 2013
2.	ISEC-NCI International Post-Graduate Course on “Approaching the Environment in India – Issues and Methods in the Study of the Nature-Economy-Society Interface”. Coordinators: Dr. S. Manasi and Dr. Sunil Nautiyal	In association with the Nordic Centre in India	July 7 to August 3, 2013
3.	Green Economy: Policy and Challenges Coordinator: Dr. M Balasubramanian	ICSSR, New Delhi	May 8, 2013
4.	One day Workshop on ‘Water Supply and Sanitation Solutions for Bangalore: Exploring Innovative and Constructive Ideas. Coordinator S Manasi	In association with the Institute of Water Policy, National University of Singapore.	December 14, 2012
5.	One day workshop on ‘Indic Economic Thought in Pursuit of Happiness and Sustainable Development: Its Relevance and Applications’. Coordinator: Dr. Sunil Nautiyal	In association with Development Foundation, Bangalore	November 9, 2012

6.	ISEC-NCI International Post-Graduate Course on "Approaching the Environment in India – Issues and Methods in the Study of the Nature-Economy-Society Interface". Coordinator: Dr. Syed Ajmal Pasha	In association with the Nordic Centre in India	June 24 to July 21, 2012
7.	Social Science Talent Search Scheme Coordinators: Dr. K G Gayathri Devi and Dr. M Lingaraju	ISEC Programme	June-July 2012
8.	Orientation to the 2010 batch of IAS & IPS officers of Karnataka. Coordinators: Dr. K G Gayathri Devi and Dr. M Lingaraju	DPAR, GoK	May 14-18, 2012
9.	Certificate Course in Methods and Applications in Social Science Research. Coordinators: Dr. K G Gayathri Devi and Dr. M Lingaraju	ISEC Programme	May 14-25, 2012
10.	ISEC course on 'Certificate Course in Methods and Applications in Social Science Research'. Co-ordinator: Dr. K G Gayathri Devi	ISEC Programme	November 14-25, 2011
11.	International Conference (International Humboldt Kolleg - IHK) on "Adaptive Management of Ecosystems: The Knowledge Systems of Societies for Adaptation and Mitigation of Impacts of Climate Change, 19th to 21st October 2011. IHK 2011 was organized to commemorate the 60th Anniversary of Diplomatic relations between Germany and India. Convener: Dr. Sunil Nautiyal	Alexander von Humboldt Foundation, Germany	October 19-21, 2011
12.	ISEC-NCI International Post-Graduate Course on "Approaching the Environment in India – Issues and Methods in the Study of the Nature-Economy-Society Interface" Coordinator: Dr. Syed Ajmal Pasha	In association with the Nordic Centre in India	July 10 to August 6, 2011
13.	Non-Residential Course on "Administrative, Managerial and Engineering Training for the Engineers from BWSSB". Coordinator: Dr. Syed Ajmal Pasha	Sponsored by Bangalore Water Supply and Sewerage Board (BWSSB)	July 25-30, 2011
14.	Training on "Methods and Techniques used in Action Research".Coordinator: Dr. K G Gayathri Devi	Administrative Training Institute, Mysore	May 28, 2011
15.	Five day training programme was organized by CEENR at ISEC for IAS & IPS probationers of 2009 Karnataka batch. Coordinator: Dr. K G Gayathri Devi	Sponsored by the DP & AR, Government of Karnataka	May 9-13, 2011
16.	Social Science Talent Search Scheme Examination at 10 centres of Bangalore Division.Coordinator: Dr. K G Gayathri Devi	ISEC Programme	February 6, 2011
17.	Non-Residential Course on "Administrative, Managerial and Engineering Training for the	Sponsored by Bangalore WaterSupply and Sewerage	August 16-21, 2010



	Engineers from BWSSB".Coordinators: Dr. Syed Ajmal Pasha and Dr. Sunil Nautiyal	Board (BWSSB)	
18.	Non-Residential Course on "Administrative, Managerial and Engineering Training for the Engineers from BWSSB". Coordinator: Dr. Syed Ajmal Pasha	Sponsored by Bangalore Water Supply and Sewerage Board (BWSSB)	July 12-17, 2010
19.	ISEC-NCI International Course on 'Approaching the Environment in India: New Theories and Methods in the Study of the Nature-Society Interface'.Coordinators: Dr. K.G. Gayathri Devi & Dr. Sunil Nautiyal	In association with the Nordic Centre in India	July 4-31, 2010
20.	ISEC course on 'Certificate Course in Methods and Applications in Social Science Research'.Co-ordinator: Dr. K G Gayathri Devi	ISEC Programme	July 12-24, 2010
21.	Certificate Course in Methods and Applications in Social Science Research. Coordinators: Dr. K G Gayithri Devi and Ms. Sahithi Sanaka	ISEC Programme	February 15 to March 11, 2010
22.	Training-cum-Workshop to the staff of Administrative Training Institute, Abdul Nazir Sab State Institute for Rural Development and State Institute of Urban Development, GoK, Mysore Co-ordinators: Dr. K G Gayathri Devi & Dr. S. Madheswaran.	Administrative Training Institute, Mysore	October 3, 2009
23.	National Conference on "Ecological Economics: An Approach towards Socioeconomic and Environmental Sustainability" & <u>Prof. R. Misra Birth Centenary Lecture</u> , 30 September - 1 October 2009. Convener: Dr. Sunil Nautiyal	Science and Engineering Research Council (SERC), Govt. of India, Central Statistical Organization, Govt. of India, and Environmental Management and Policy Research Institute (EMPRI), Govt. of Karnataka	September 30 to October 1, 2009
24.	ISEC-NCI International Course on 'Methods and Applications in Social Science Research'. Co-ordinator: Dr. K G Gayathri Devi	In association with the Nordic Centre in India	August 2-29, 2009
25.	ISEC-NCI International Course on 'Approaching the Environment in India-New Theories and Methods in the Study of the Nature-Society Interface'.Co-ordinators: Dr. S Manasi and Dr. Bibhu Prasad Nayak	In association with the Nordic Centre in India	July 5 to August 1, 2009
26.	National Conference on "Climate change and its impact at micro level: Data requirement and availability", 16-17 April 2009. Convener: Dr. Sunil Nautiyal	SocialStatistics Division, Central Statistical Organisation (CSO), Ministry of Statistics and ProgrammImplementation, Government of India	April 16-17, 2009
27.	ISEC-NCI International Course on 'Methods and Applications in Social Science Research'. Co-ordinator: Dr. K G Gayathri Devi	In association with the Nordic Centre in India	January 4-31, 2009

## FACULTY

Sl. No.	Name of the Faculty	Specialization
1.	<b>Prof K V Raju</b> , Professor kvraju@isec.ac.in kvraju2008@gmail.com	Ecological Economics / Water Resources Management, Agricultural Economics, Regional Planning
2.	<b>Dr Sunil Nautiyal</b> , Associate Professor sunil@isec.ac.in nautiyal_sunil@rediffmail.com	Natural Resource Management and Conservation; Rural and Agro-Ecosystems, Remote Sensing and GIS, Ecological Modeling
3.	<b>Dr S Manasi</b> , Assistant Professor manasi@isec.ac.in	Urban Ecology, Water Resource Management, Solid Waste Management
4.	<b>Dr M Balasubramanian</b> , Assistant Professor balasubramanian@isec.ac.in balasmku@gmail.com / @isec.ac.in	Ecological Economics, Institutional Economics

## HONORARY VISITING PROFESSORS

1.	Prof. M V Nadkarni Former Vice Chancellor, Gulbarga University 'Samagama' 2 <sup>nd</sup> Cross to West from ISEC, Nagarbhavi, Bangalore 560 072 Phone: 23213677 Email: mv_nadkarni@rediffmail.com
2.	Prof. V M Rao Former Member, Commission for Agricultural Costs and Prices # 22, CHBS Layout, Vijayanagar, Bangalore 560 040 Email: vmadianan@hotmail.com vidyanand23@yahoo.com
3.	Prof. Sudashan Iyengar Vice-Chancellor, Gujarat Vidya Peeth, Gujarat University Asharma Road, Ahmedabad 380 014 Phone: 079-2754392 / 27541148; Res: 079-65449002 sudarshan54@gmail.com
4.	Dr. M K Ramesh Professor of Law, National Law School of India University Nagarbhavi, Bangalore 560 072 Mobile: 9242447847 Email: mkramesh@nls.ac.in

## VISITING PROFESSOR

1.	Prof. Giridhari Lal Pandit Emeritus Fellow of the UGC and Fellow of the AvH, University of Delhi South Campus 23, Uttaranachal Apartments, I P Extension 5 Mother Diary Road, Patparganj New Delhi 110 092 Email: giripandit@yahoo.co.in
----	---



## STUDENTS AWARDED PhD (2009-2013)

Sl. No.	Name of the Student	Name of the Supervisor	Year of Award	Topic
1.	Mr. Anantha K H	Prof. K V Raju	2011	Externality of Irrigation Wells in Karnataka: A Study in Environmental Economics
2.	Ms. R Sarala	Dr. K G Gayathri Devi	2010	Social Networking for Survival in Slums: A Case Study of Bangalore
3.	Ms. Anitha V	Dr. Madhushree Sekher	2010	Institutions and Changing Role of Bureaucracy: A Case Study of Higher Level Bureaucracy in Karnataka
4.	Ms. Sarbani Mukherjee	Prof. K V Raju	2009	Impact of Power Subsidy on Groundwater Extraction for Agriculture: A Study in Madhya Pradesh
5.	Mr. Geetanjoy Sahu	Dr. Madhushree Sekher	2009	Environmental Governance and Role of Judiciary in India
6.	Ms. Poulomi Bhattacharya	Dr. K N Ninan	2009	Economics of Aquaculture: A Comparative Analysis of Traditional Vs. Scientific Systems in West Bengal

## PHD STUDENTS ON ROLL

Sl. No.	Name of the Student	Name of the Supervisor	Year of Joining	Topic
1.	Ms. Chaya Ravishankar	Sunil Nautiyal, S. Manasi	2012	Ecosystem Functions in Protected Areas: an Integrated Modeling approach for Sustainable Socioecological Development
2.	Ms Mrinalini Goswami	S Manasi, Sunil Nautiyal	2012	Ecosystem modelling approach for assessing livelihood dependency and landscape development; a study in a rural- peri-urban interface of Northeast India
3.	Ms. Subhashree Banerjee	Dr. Syed Ajmal Pasha	2011	Ecosystem Service and Livelihood System – A Study in Orissa
4.	Mr. Architesh Panda	Dr. K N Ninan	2007	Climate Induced Vulnerability and Adaptation by Rural Households: A Study of Some Drought Prone Districts in Orissa
5.	Ms. Kanchan Bharathi	Dr. K G Gayathri Devi	2007	Surviving Spouses: A Sociological Study of Old Widows in Rural Haryana
6.	Mr. Avinandan Taron	Prof. K V Raju	2006	Economic Valuation and Efficiency of Canal Water Use for Boro Cultivation: A Case Study of West Bengal

## COLLABORATIONS

Right from the beginning, the CEENR has collaborated with many institutions in India and abroad. The international institutions include: The Alexander von Foundation, Germany; The World Bank; International Centre for Research in Agro-Forestry (ICRAF), Nairobi, Kenya; Leibniz Centre for Agricultural Landscape Research, Muencheberg, Germany; Centre for Environmental System Research, University of Kassel, Germany; International Crops Research Institute for the Semi Arid Tropics (ICRISAT), Hyderabad, India; International Food Policy Research Institute (IFPRI), Washington DC, USA; Nordic Centre in India (NCI); The University of Tokyo, Japan, International Water Management Institute (IWMI), Colombo and IWMI-TATA programme; World Wide Fund for Nature (WWF), Geneva, and WWF-India; Norwegian Institute for Water Research (NIVA), Norway; University of Copenhagen; South Asia Network of Economic Research Institutes (SANEI), European Commission have been our collaborators in various studies.

In India, CEENR has established a large network of collaborators which include: Bhabha Atomic Research Centre, Government of India; Water Resources Engineering and Management Institute (WREMI), Baroda, Gujarat; Department of Science and Technology, Government of India; Central Statistical Organisation, Government of India; Expenditure Reforms Commission, Government of Karnataka; Tata-Coffee Limited; Agaz Foundation, Mumbai; Karnataka Forest Department, Government of Karnataka; Rural Development and Panchayati Raj, Govt. of Karnataka; Ministry of Environment and Forests, Government of India; State Planning Board, Government of Karnataka; and Indian Space Research Organisation, Ahmadabad, Delhi University; Jawaharlal Nehru University; VIT University, Vellore; University of Agricultural Sciences, Raipur College of Agriculture Bheemarayanagudi.

## POLICY INTERFACE

CEENR emphasizes policy-oriented research and has attempted several studies that have lead to policy interventions. The Centre has strongly worked in the areas of Bio-diversity, Forest Policy, Hill Area Development and Water Resources Management. All the studies conducted at the Centre have been utilised towards policy formulations. Moreover, the faculty members of the Centre have participated in many Committees and Groups helping to formulate policies pertaining to Natural Resources and Environmental Implications.

---

### INSTITUTE FOR SOCIAL AND ECONOMIC CHANGE

Dr. V K R V Road, Nagarabhavi, Bangalore 560 072  
Phone: +91-80-23215468, 23215519, 23215592 Fax: +91-80-23217008  
Email: admn@isec.ac.in Web: <http://www.isec.ac.in>