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EDUCATIONAL QUALIFICATIONS

Ph.D. in Development Studies (2011), Indira Gandhi Institute of Development Research, Mumbai. Thesis title: *Indicators of Sustainable Resource Use and Human Development*. CGPI 3.3/4 in course work.

Master of Technology (M.Tech.) (2001) in Thermal Engineering, Indian Institute of Technology (IIT), Delhi. Thesis title: *Design and Fabrication of Test Facility to Collect Dust Particles through Spray Water*. CGPI 8.98/10 (2nd rank in Department, 10/10 in Thesis).

Bachelor of Engineering (B.E.) (1998) in Mechanical Engineering, University College of Engineering (UCE). (Sambalpur University, Orissa). Percentage: 80.69. (2nd rank in University).

+2 Science (1994), BJB College, Bhubaneswar. Percentage: 91.89. (23rd rank in State of Orissa).

Matriculation (1992) at Govt. High School, Unit-1, Bhubaneswar. Percentage: 84.67. (32nd rank in State of Orissa).

RESEARCH PUBLICATIONS

REFEREED JOURNAL (PUBLISHED):

- "A MANUSH or HUMANS Characterisation of the Human Development Index", *Journal of Human Development and Capabilities*, (web: <http://www.tandfonline.com/doi/full/10.1080/19452829.2017.1422703>) Online published 19 Jan, 2018. Jointly with Srijit Mishra.
- "Towards sustainable development: planning surface coal mine closures in India", *Contemporary Social Science*, (web: <http://dx.doi.org/10.1080/21582041.2017.1394484>) Academy of Social Sciences. 2017; Jointly with R. Srikanth.
- "Group differential for attainment and failure", *Journal of International Development*, Vol. 29, No. 4, pp. 520–532, 2017. (web: <http://onlinelibrary.wiley.com/doi/10.1002/jid.2898/abstract>, Jan 29, 2013). Jointly with Srijit Mishra.
- "Social dimension of India's Energy Future", *RITES Journal*. Vol. 18, No. 1, pp. 12.1–12.20, Jan, 2016. Jointly with Baldev Raj and TS Gopi Rethinaraj.
- "India's 100GW of solar by 2022 – Pragmatism or Targetitis", *Economic and Political Weekly*. Vol. L, No. 50, pp. 10–14, Dec 12, 2015. (web: <http://www.epw.in/journal/2015/50/commentary/indias-100gw-solar-2022.html>)

- “The Elephant and the Tiger: Energy Security, Geopolitics, and National Strategy in China and India’s Cross Border Gas Pipelines”, *Energy Research and Social Science*, Vol. 11, pp. 183–194, Jan, 2016 (web: Oct 30, 2015; <http://www.sciencedirect.com/science/article/pii/S2214629615300621>). Jointly with Sanket S. Kulkarni.
- “Solar energy for Rural Electricity in India – A Misplaced Emphasis”, *Economic and Political Weekly*. Vol. XLIX, No. 50, pp. 60–67, Dec 13, 2014 (web: <http://www.epw.in/journal/2014/50/special-articles/solar-energy-rural-electricity-india.html>)
- “Pipeline Politics - Study of India's Proposed Cross Border Gas Projects”. *Energy Policy*. Vol. 62, pp. 145–156, Nov, 2013 (web: Aug 15, 2013; <http://dx.doi.org/10.1016/j.enpol.2013.06.073>). Jointly with Sanket S. Kulkarni and Dilip R. Ahuja.
- “Urban Transport Sustainability Indicators – Application of Multi-view Black-box (MVBB) Framework”, *International Journal of Environment and Sustainable Development*, Vol. 12, No. 3, pp. 285–312, 2013 (web: <http://www.inderscienceonline.com/doi/abs/10.1504/IJESD.2013.054955>) (An earlier version of the paper is available as IGIDR working paper: WP-2011-022, IGIDR, September, 2011 (<http://www.igidr.ac.in/pdf/publication/WP-2011-022.pdf>)). Jointly with B. Sudhakara Reddy.
- “Energy in the Development Strategy of Indian Households—The Missing Half”, *Renewable and Sustainable Energy Reviews*. Vol. 18, pp.203-210, Feb, 2013 (web: Nov 14, 2012; <http://dx.doi.org/10.1016/j.rser.2012.10.023>) (An earlier version of the paper is available as IGIDR working paper: WP-2012-003, IGIDR, January, 2012 (<http://www.igidr.ac.in/pdf/publication/WP-2012-003.pdf>)). Jointly with B. Sudhakara Reddy.
- “Towards a Conceptual Framework for Development of Sustainable Development Indicators for an Urban Set Up”, *International Journal of Sustainable Development*. Vol. 15, No. 3, pp. 187–205, 2012 (web: <http://www.inderscience.com/info/inarticle.php?artid=47753>). (An earlier version of the paper is available as IGIDR working paper: WP-2008-003, IGIDR, March, 2008 (<http://www.igidr.ac.in/pdf/publication/WP-2008-003.pdf>)). Jointly with B. Sudhakara Reddy.
- “Criteria Selection for Sustainable Development Indicators”, *International Journal of Multicriteria Decision Making*. Vol. 1, No. 3, pp. 257–279, 2011 (web: <http://dx.doi.org/10.1504/IJMCDM.2011.041189>). (An earlier version of the paper is available as IGIDR working paper: WP-2010-013, IGIDR, August 2010, <http://www.igidr.ac.in/pdf/publication/WP-2010-013.pdf>). Jointly with B. Sudhakara Reddy.
- “Progress in Human Development – Are We on the Right Path?” *International Journal of Economic Policy in Emerging Economies*, Vol. 3, No. 3, pp. 199–221, 2010 (web: <http://dx.doi.org/10.1504/IJEPEE.2010.035178>). (An earlier version of the paper is available as IGIDR working paper: WP-2010-010, IGIDR, July, 2010 (<http://www.igidr.ac.in/pdf/publication/WP-2010-010.pdf>)). Jointly with Srijit Mishra.
- “Commercialization of Sustainable Energy Technologies”, 2010, *Renewable Energy*, Vol. 35, No. 8, pp. 1842–1851, Aug, 2010 (web: Jan 27, 2010; <http://dx.doi.org/10.1016/j.renene.2009.12.020>). Jointly with P. Balachandra and B. Sudhakara Reddy.
- “Universalization of Access to Modern Energy Services in Indian Households—Economic and policy analysis”, *Energy Policy*, Vol. 37, No. 11, pp. 4645-4657, 2009 (web: Jun 23, 2009; <http://dx.doi.org/10.1016/j.enpol.2009.06.021>). Jointly with B. Sudhakara Reddy and P. Balachandra.

BOOK CHAPTERS:

- Indo-Myanmar Electricity Cooperation: Prospects and Challenges, in Mayilvaganan M. (ed.) *Myanmar at the crossroads* (tentative title), Routledge (forthcoming). Jointly with Sanket S. Kulkarni.
- “Towards measuring interventions in rainfed areas”, In J. Devi Prasad, B. Gangaiah and K. Suman Chandra (eds.) *Agricultural Risk Management*, PharmaMed Press/BS Publications, Hyderabad, Chapter 17, pp. 274–293, 2015. Jointly with Rajendra and Srijit Mishra.
- “Self Help Group (SHGs) – A Medium of Water Management and Conflict Resolution”, In Shantha Mohan and Sailen Routray (eds.) *Sharing Blue Gold: Locating water conflicts in India*, NIAS Books and Special Publications No. SP6-2015 (web: <http://eprints.nias.res.in/686/2/2015-ShanthaMohan-SP6.pdf>), Chapter 10, pp. 183–198. Jointly with Jayasree V.
- “Emerging Energy insecurity— the Indian Dimension”, In *India Development Report 2011* (web: <http://www.igidr.ac.in/pdf/publication/IDR-2011.pdf>), Chapter 14, Page 135–150, Oxford University Press, New Delhi. Jointly with B. Sudhakara Reddy.
- “Energy for High Humane and Low Carbon Future”, In J. Ramos-Martín, M. Giampietro, S. Ulgiati, and S.G.F. Bukkens (eds.), *Can we break the addiction to fossil energy? Advances in Energy Studies 2010* (AES 2010), Unicamp, pp. 39–47. Jointly with B. Sudhakara Reddy.
- “On measuring group differential: some further results”, Chapter 3, pp. 54–61, In Himanshu Sekhar Rout and Prasant Kumar Panda (eds.), *Human Development: Dimensions and Strategies*, New Century Publications, New Delhi, 2009. (An earlier version of the paper is available as IGIDR working paper at: <http://www.igidr.ac.in/pdf/publication/WP-2008-002.pdf>). Jointly with Srijit Mishra.

RESEARCH REPORT

- “Institutional Rooftop Solar NIAS: Experience with a 100 kWp Solar System”, NIAS Special Publication, January, 2017 (web: <http://eprints.nias.res.in/1223/1/SP8-2017-AnasuyaG-and-HSKNathan.pdf>) Jointly with Anasuya G.

BOOK REVIEW

- Book review of Gulshan Dietl, *India and the Global Game of Gas Pipelines*, London and New York: Routledge, 2017, 213 pp., Rs. 695 (Hardback), ISBN: 978-1- 138-74401- 1; forthcoming in *India Quarterly*.

REFEREED JOURNAL (UNDER REVIEW):

- “A ‘MANUSH’ or ‘HUMANS’ characterisation of the Human Development Index”, *Journal of Human Development and Capability* (post resubmission stage). Jointly with Srijit Mishra.

WORKING PAPERS:

- “Measuring HDI - The old, the new and the elegant: Implications for Multidimensional Development and Social Inclusiveness”, Asia Research Center working paper no. 63, London School of Economics,

September, <http://www.lse.ac.uk/asiaResearchCentre/files/ARCWP63-MishraNathan.pdf>). Jointly with Srijit Mishra.

- “Gender Development Index: Two Corrections”, IGIDR, PP-062-19, August, 2009 (<http://www.igidr.ac.in/pdf/publication/PP-062-19.pdf>). Jointly with Priya Rampal and Srijit Mishra.
- “On A Class of Human Development Index Measures”, IGIDR working paper: WP-2008-020, IGIDR, October, 2008, <http://www.igidr.ac.in/pdf/publication/WP-2008-020.pdf>). Jointly with Srijit Mishra.
- “Gender-based Indicators in Human Development: Correcting for Missing Women”, IGIDR working paper: WP-2008-018, IGIDR, September, 2008 (<http://www.igidr.ac.in/pdf/publication/WP-2008-018.pdf>).
- “An Alternative Approach to Measure HDI”, IGIDR working paper: WP-2008-001, IGIDR, January, 2008 (<http://www.igidr.ac.in/pdf/publication/WP-2008-001.pdf>). Jointly with Srijit Mishra and B. Sudhakara Reddy.

LETTERS/CORRESPONDENCE

- “Indivisible Morality” - Comment on “Intrinsic honesty and the prevalence of rule violations across societies”, by Simon Gächter & Jonathan F. Schulz, *Nature* 531, 496–499. Published on 11 Apr, 2016. (web: <http://www.nature.com/nature/report/index.html?comment=68069&doi=10.1038/nature17160>) (with Venkat Posina Rayudu)

COMMENTARIES:

- “The rising girl power in India”, *My voice*, May 17, 2017. (web: <http://myvoice.opindia.com/2017/05/the-rising-girl-power-in-india/>)
- “India can learn from Bhutan’s happiness in electricity for all”, *The Indian Economist*, May 08, 2017. (web: <http://theindianeconomist.com/energy-equality-equitable-society/>) (with Baldev Raj)
- “Can energy equality improve India’s human development index?”, *The Indian Economist*, Dec 11, 2016. (web: <http://theindianeconomist.com/energy-equality-equitable-society/>) (with Baldev Raj)
- “Undimmed: Nurturing Indian solar-power technology within the strictures of the WTO”, *The Caravan*, Apr 2016, pp. 22–24. (web: <http://www.caravanmagazine.in/perspectives/undimmed-nurturing-indian-solar-power-technology-within-wto-strictures>) (with Manmeet Singh)
- “Equal democracy: election system needs change”, *Janata*, Vol. 70, No. 45, pp. 16–19, 13 Dec 2015.
- “The other house: why legislative councils serve little purpose”, *The Caravan*, Jul 2015, pp. 5–7. (<http://www.caravanmagazine.in/perspectives/other-house-legislative-councils>)
- “Solar Energy: Urban first and Rural later” *SANDEE blog*, Mar 22, 2015. (web: <https://sandeeresearch.wordpress.com/2015/03/12/solar-energy-urban-first-rural-later/>)
- “Global grid – Harnessing Green Power Round the Clock” *Geopolitics*, Vol. V, No. I, Aug, 2014, pp. 71–73.
- “Uttarakhand Tragedy—the question one prefers to ignore” *Humanist Outlook*, Vol. 13, No. 9, Autumn 2013, pp. 290–292.
- “Science and non-Science” *Science Reporter*, (October, 2013) Vol. 50, No. 10, p.41.

(web: <http://nopr.niscair.res.in/handle/123456789/21642>)

- “Blind beliefs – the other name of unfreedom”, 2012, Anti-Caste Marriage One-Child Family Organization of India (AMOFOI) Year Book, AMOFOI, Odisha.
- “A Healthy World – In Truest Sense”, In *Karika 2011*, IGIDR Newsletter (forthcoming).
- “The Beauty of Ownership”, In *Karika 2009-10*, IGIDR Newsletter, Page 10–11, IGIDR, Mumbai.
- “Dichotomy”, In *Karika 2007-08*, IGIDR Newsletter, Page 6–7, IGIDR, Mumbai.
- “AMOFOI: Fighting Caste and Religious Bigotry in India”, *International Humanist News (IHN)*, Page 15, February, 2003, International Humanist Ethical Union (IHEU), London.
- “Humanist Work: A Spark”, *The Worldwide (Scientific Outlook and Uniform Civil and Criminal Code)*, Page 93–94, 2003, AMOFOI Year Book, AMOFOI, Odisha.
- “War, Kashmir, and World Government”, *The Worldwide (Scientific Outlook and Uniform Civil and Criminal Code)*, 2002, Page 125–127, AMOFOI Year Book, AMOFOI, Odisha.

POPULAR PRESS (SELECTED):

- “Energy Conservation Day: Symbolism doesn’t pay” *The Pioneer*, Dec 20, 2014.
- “India polls: Choosing none of the above” *Al Jazeera*, Apr 5, 2014. (web: <http://aje.me/1e0vwrN>)
- “The two-seat solution” *The Indian Express*, Mar 31, 2014.
(web: <http://indianexpress.com/article/opinion/columns/the-two-seat-solution>)
- “Reducing wastage of food is key to saving environment” *Deccan Herald*, Jun 5, 2013.
- “World Government – Why and How”, In *GAM Souvenir*, Jan 2013, VSSUT, Odisha.
- “Address people ‘right’ly”, *The Hans India*, Dec 11, 2012
- “Gandhi’s Ideas on World Government”, *The Hans India*, Oct 2, 2012

Articles about my works

- “Rooftop solar power output up, but future hazy”, *The Hindu*, Jan 23, 2017. (web: <http://www.thehindu.com/news/cities/bangalore/Rooftop-solar-power-generation-is-up-but-future-uncertain/article17078885.ece>)
- “Can India meet its target of 100GW of solar power by 2022?”, Mar 15, 2016
(web: <http://www.indiawaterportal.org/articles/can-india-meet-its-target-100gw-solar-power-2022>)
- “US hinders India’s Cross Border Projects” *Expert Talk, The Hans India*, Jan 28, 2013.
- “Righting the wrongs”, *Chatline, Metro Plus, The Hindu*, Feb 2, 2013.
(web: <http://www.thehindu.com/todays-paper/tp-features/tp-metroplus/righting-the-wrongs/article4370794.ece>)

PROJECT REPORTS SUBMITTED:

- “Development of Water Entrepreneurs for integrated Eco-WASH technology & practices literacy through women SHG in marginalized areas”, submitted to DST as First Six Month Progress Report in Eco-WaSH project, February 28, 2017. Jointly with Jayashree V.

- “Inclusiveness in human development in India”, submitted to Global Development Network, New Delhi, October 31, 2016. Jointly with Srijit Mishra.
- “Hydro-power development and trade in South Asia - *A tale of two Himalayan countries*”, submitted to South Asia Network of Economic Institute, Dhaka, Jan 13, 2015. Jointly with Sanket S. Kulkarni.
- Background study report on “Remote Village Electrification Scheme of Ministry of New and Renewable Energy, Govt. of India”, submitted to South Asia Network of Development and Environment Economics, Kathmandu, Apr, 2013.

WORK-IN PROGRESS (SELECTED):

- “Rural lighting through Solar PV– A supply side analysis of home lighting systems in Karnataka”.
- “Energy ~ human development paradox: the Kerala puzzle and Chhattisgarh dilemma”.
- “Call for an energy survey in India”. Jointly with Sravanthi Choragudi.
- “Solar Water Heater and Electrical Geyser – *is a marriage workable?*”. Jointly with Rekha R.
- “Urban Rooftop PV Electricity: Is this the answer to India’s solar question?”
- “Urban Energy Poverty in India: A household level analysis”. Jointly with L. Hari.
- “Can school buses offset gap in urban public transport – A Bangalore case”. Jointly with R. Dubey.
- “Arms Trade – the deficit politics and illicit economics”. Jointly with Badri Narayan G.
- “The Great Climate Divide –*An intra-country perspective.*”
- “The tripod of lighting: Incandescent, Fluorescent, and LED”. Jointly with H. Mitavachan, L. Hari, and S. Sundaraiah.
- “Augmentation of thermal power stations by solar energy technologies.”
- “Effective public road transport: A tale from India’s two megacities”. Jointly with L. Hari.
- “Can India go nuclear energy free?”
- “A Measure of Fairness”.
- “Higher Education in India – Mismatch in Demand and Supply”.
- “Dying in Silence: A Study on Mortality-Morbidity Gap in India”, Jointly with T. Tripathi.
- “Informal settlement vs. formal development – *Revisiting Dharavi Redevelopment Project*”, Jointly with R. Ashraf.
- “Health Accessibility in India – A Socio-Economic Study”. Jointly with T. Tripathi.
- “Coping with Water Stress – A Tale of Two cities”. Jointly with Jayasree V.
- “Sustainability of sub-urban rail – A case study of Mumbai Local”. Jointly with L. Hari.

RESEARCH AWARDS

- NASI Scopus Young Scientist Award – 2017 in Social Sciences by Elsevier and National Academy of Science India (NASI) conferred on Oct 31, 2017 at New Delhi) The award is given on the basis of overall *quality and number of publications, nature and uniqueness of research, outcomes of research, impact on society, and vision of the researcher*. (web: <http://southasia.elsevier.com/ElsevierDNN/ScopusAward2017/tabid/3051/Default.aspx>)
- International Fellowship Award from Urban Studies Foundation: Awarded a six-month fellowship (2016-2017) for the proposal “Urban Sustainability frameworks: Case of Mumbai Transportation battleground” at the McGill University, Montreal.
- Subir Chowdhury Fellowship on Quality and Economics 2016, London School of Economics and Political Science. The study proposal accepted for this fellowship is entitled as “Energy Poverty and Quality of Life in India: *A household-level analysis*”.
- Best Paper Award at IPE Golden Jubilee International Conference on 'Climate Change and Sustainable Development: Global Perspective', at Institute of Public Enterprise, Hyderabad, February 20-21, 2014 for the paper “Mumbai Public Road Transport at Crossroads: Will it Perish or Prosper?” With Lakshmikanth Hari, Dhruv Sanghavi, & Arif Virani.
- Second runner up in the category of ‘Outstanding Research in development’ for the research proposal “Inclusiveness of Human Development in India” in Global Development Awards and Medals Competition hosted by Global Development Network (GDN). This proposal topped amongst all the proposals received under the theme Inclusive Growth. Presented the proposal at 14th Annual Global Development Conference at Asian Development Bank Headquarters, *Manila*, Philippines, Jun 19-21, 2013. The proposal was jointly developed with Dr Srijit Mishra.
- Young Scientist Award at Odisha Environment Congress (OEC) - 2012 for the paper titled “Pipeline Politics - Study of India's Proposed Cross Border Gas Projects”, organized jointly by Human Development Foundation (HDF), Bhubaneswar, Centre for Environment and Development (CED), Tiruvananthapuram, and Regional Museum of Natural History (RMNH), Govt. of India held at RMNH, *Bhubaneswar*, Dec, 2012.
- Best Paper Award in Doctoral Colloquim-2010 (in Advanced Papers category) for the paper titled “Gender-based Indicators in Human Development: Correcting for Missing Women”, at Indian Institute of Management (IIM), *Ahmedabad*, Jan, 2010.
- Best Paper Award (first prize) in COSMAR-08 for the paper titled “Gender-based Indicators in Human Development: Correcting for Missing Women”, at Dept of Management Studies, *Indian Institute of Science (IISc), Bangalore*, Nov, 2008.
- Best Paper Award (first prize) in COSMAR-07, for the paper titled “An Alternative Approach to Measure HDI”, at Dept of Management Studies, *Indian Institute of Science, Bangalore*, Dec, 2007.
- Best Paper Award (first prize) in SCODER-07, for the paper titled “An Alternative Approach to Measure HDI” at *Indira Gandhi Institute of Development Research (IGIDR), Mumbai*, Sep, 2007
- M Tech thesis got nominated from IIT Delhi for “*inter IIT Innovation Potential of Students Projects Award – 2001*”.

REVIEWER

- *Energy Research and Social Science*
- *Margin*
- *Renewable and Sustainable Energy Review*
- *Energy Policy*
- *Renewable Energy*

MEMBERSHIP OF PROFESSIONAL BODIES

- Royal Economic Society
- Development Studies Association
- Human Development and Capability Association (Coordinator for South Asia region group)
- Indian Society for Ecological Economics

RESEARCH PROJECT EXPERIENCE

Projects undertaken

- ◆ *Village electrification in India through solar home systems—assessment and options* (Aug 2013 to Aug 2016): This project evaluates the effectiveness of solar home based lighting systems are installed. Rural Karnataka is the study area for the project. The project was supported by SANDEE (South Asian Network for Development Environment and Economics). I was the PI of the project.
- ◆ *Cross border electricity trade in South Asia and regional integration— potential assessment, underlying factors, and policy options* (Jan 2014-Jan 2015): The objective of the project was to analyse the past trends and estimate the future potential in cross border electricity trade in the South Asian region teasing out factors influencing such trade and their impact on overall regional integration. The project is supported by SANEI (South Asian Network for Economic Institutes). I was the PI of the project.
- ◆ *Inclusiveness in human development in India* (October 2013-December 2016): The objective of the project is to analyse the past trends and estimate the future potential in cross border electricity trade in the South Asian region teasing out factors influencing such trade and their impact on overall regional integration. The project is supported by GDN (Global Development Network). I was the PI of the project.
- ◆ *Development indicator framework to evaluate the themes under RRA* (2013- 2014) (Consultancy project): The objective of the project was to develop tools to evaluate the progress and facilitate monitoring of different themes like soils, seeds, water, millets, fisheries, livestock etc. The project was supported by Revitalizing Rainfed Agriculture (RRA) Network, Secunderabad, India.

Ongoing and Sanctioned

- ◆ *Facilitating target of 100 GW solar by 2022* (Sep 2016 to Dec 2017): The objective of the project is to look into the policy, regulatory, technical, social, and financial challenges and their mitigation to achieve 100GW target by 2022. The project is supported by Ministry of New and Renewable Energy, New Delhi. I am the Co-PI of the project.
- ◆ *Interdisciplinary Forays into Human-Environment Interactions: An Integrative Research Initiative in Energy,*

Ecology and Non-Linear Modelling (March 2017 to April 2020): The objective of the project is to conceptualize and assess self-sustaining ecosystem in case of open cast mine closure; study the institutional arrangements in such closure to explore the scope of unified coal regulator, and assess the combined impact on air pollution because of coal mines and power plants. The project is supported by Science and Engineering Research Board, Department of Science and Technology, Govt. of India, New Delhi. I am the Co-PI of the project.

- ◆ *Annual School on Grassroots Innovations* (March 2017 to April 2020): The objective of the project is to provide a common cross-learning platform for different stakeholders for understanding the theoretical and practical aspects of grassroots innovations and their different applications to the societal problems. The project is supported by National Council for Science & Technology Communication, DST, Govt. of India. I am the PI of the project.
- ◆ *Sustainable Tourism for Development and Creation, Evaluation and Monitoring of Consumption Patterns and Adoption of Sustainable Practices in the Hospitality Sector* (March 2017 to April 2020): The objective of the project is to develop framework and indicators to assess sustainability of hotel and tourist spots and rank them for the state of Karnataka. The project is supported by Department of Tourism, Govt. of Karnataka. I am the Co-PI of the project.
- ◆ *Analysing Poverty Change in India: Decomposition, Inclusiveness and Multidimensional Nutritional Deprivation* (March 2016 to March 2018): The objective of the project is to decompose poverty change into growth, inequality and population effects, measure inclusiveness for this poverty change across different groups of population, and assess nutritional deprivation through household-specific poverty line method. The project is supported by Indian Council of Social Science Research (ICSSR). I am the Co-PI of the project.
- ◆ *Development of “water entrepreneurs” for ‘integrated Eco-WaSH technology and practices’ literacy through women Self-Help Groups (SHGs) in marginalized areas* (March 2016 to March 2018): The objective of the project is to To develop a cadre of women members from SHGs into water entrepreneurs, who will act as diffusion point to transfer the Eco-WaSH technologies and practices that are efficient, sustainable and viable. The project is supported by DST (Department of Science and Technology). I am the Co-PI of the project.
- ◆ *Valuation of amenities tree in Mumbai* (Consultancy project) (Consultancy project): The objective of the project was to To develop tools at the microlevel to value individual amenity tree. The project is being supported by Terracon Ecotech Pvt. Ltd.

Project submitted and under review

Sl. No.	Project title	Objective	Funding agency	Duration	My role
1	<i>Water, Energy and Agriculture Nexus - Evaluating approaches for sustainable use of water in semi-arid, hard-rock regions of India</i>	To understand the linkages in water-energy-agriculture nexus in terms of (i) electricity subsidy depleting ground water and (ii) inefficient water use in power plants depriving agriculture of water.	Niti Ayog, New Delhi	18 months	PI
2	<i>An Integrated Approach to Development and</i>	To find optimal technology and policy interventions to be implemented at the	DST, Ministry of	Three years	Co-PI

	<i>Environment in the Power Sector</i>	State and Central level to meet Southern Region's growing needs for reliable, low-cost, energy while mitigating the environmental impacts of coal utilization.	Science and Technology		
3	<i>Natural resources, conflict, and consciousness: dissecting people's movements in Odisha</i>	To examine the role of natural resources in fueling and sustaining conflicts between the state and different sections of the society and how these skewed distribution of resources reinforces into identity consciousness.	Indian Council of Social Science Research (ICSSR)	Two years	Co-PI

Program level grants submitted and under review

Sl. No.	Project title	Funding agency	Duration	My role
1	<i>Institutional Grant Proposal for Energy and Environment Research Programme</i>	Ministry of Earth Science, New Delhi	Five years	Co-PI

Travel Grants received

	Purpose	Organization	When
1	<i>Presenting at Human Development and Capability Association (HDCA) Annual Conference – 2015 at Georgetown University, USA</i>	Global Development Network, New Delhi	September, 2015
2	<i>For participating in Oxford Poverty and Human Development Initiative Summer School 2015 on Multidimensional Poverty Analysis held at Georgetown University, Georgetown, Washington DC, 3rd Aug – 15th Aug, 2015.</i>	Sahyadri Foundation, Managlore, Karnataka	August, 2015

Projects undertaken during and prior to doctoral work

- ◆ *Development of CSR framework for Gayatri Power Project (2010):* This project involves a need assessment study of the local community affected by Gayatri Power (the project proponent) at Nellore, AP. My role has been to design and implement the survey, organize workshop involving different stakeholders (project proponents, government officers, academia, policymakers, civil society and citizens) and draft the report strategizing CSR for Gayatri Power.
- ◆ *Socio-economic study to assess the impact of coal mining (2008-10):* The objective of the study is to assess the impact on the displaced and partially and indirectly affected people's livelihood, education, health and their local environment on account of the coal mining activity of SCCL (Singareni collieries Company Ltd). The study includes survey in the affected villages and development of human development parameters. The study has been initiated by Ministry of Power, Govt of India.

My role was to act as a resource person and provide expertise in the design and implementation of the project. This also involved liaising with different stakeholders of the project. I am one of the lead authors of the report.

- ◆ *Construction of National Youth Development Index (YDI) (2009-10)*, Project sponsored by Rajiv Gandhi National Institute of Youth Development (RGNIYD). I have contributed towards methodological part of YDI construction exercise – i.e. selections of individual dimensions, weights, indicators and aggregation techniques. I am one of the contributors to the report.
- ◆ Part of the IGIDR team involved in preparation of *State of Environment Report: Maharashtra- 2005* sponsored by Maharashtra Pollution Control Board. I acted as a research assistant for the project.
- ◆ *M Tech Thesis (2000-01)*: A test facility was designed, fabricated and calibrated for studying capture of Suspended Particulate Matter (SPM) by water spray. The facility consisted of air, water, dust feeding and dust capture systems. This project was in the area of controlling air-pollution and providing a clean environment – for humans and equipments. The thesis was awarded *Outstanding Grade* was nominated for “*inter IIT Innovation Potential of Students Projects Award – 2001*”
- ◆ *B. E. Project (1997-98)*: Design and Fabrication of a Paraboloid Solar Cooker. The goal of this project was to study the performance of Paraboloid Solar Cooker as an innovative enhancement over Planar Solar Cooker and design its tracking system.

ACADEMIC POSITIONS

Assistant Professor at National Institute of Advanced Studies, Bangalore. I am currently associated with Energy and Environment Policy Programme of School of Natural Sciences and Engineering at NIAS.

PREVIOUS ACADEMIC POSITIONS

- ❖ Feb 22, 2017 to May 22, 2017: Subir Chowdhury Fellow on Quality and Economics, London School of Economics and Political Science. The study proposal accepted for this fellowship is entitled as “*Energy Poverty and Quality of Life in India: A household-level analysis*”.
- ❖ Feb, 2012 to Feb, 2014: *Post Doctoral Associate* at National Institute of Advanced Studies (NIAS), Bangalore. I am currently associated with Energy and Environment Policy Programme of School of Natural Sciences and Engineering at NIAS.
- ❖ Jun, 2011 to Sep, 2011: *Visiting Faculty* at School of Business Management, Narsee Monjee Institute of Management Studies (NMIMS) and taking Development Economics course for PTMBA SE, II Yr, Tri IV for the academic year 2011 – 12.
- ❖ Aug, 2009 to May, 2011: *Research Associate* at Indira Gandhi Institute of Development Research (IGIDR), Mumbai. During this period I worked in two projects, namely, *Socio-economic study to assess the impact of coal mining* and *Development of CSR framework for Gayatri Power Project*.

INDUSTRY EXPERIENCE

- **Geometric Ltd., Mumbai** (Jul, 2001 to Jul, 2004) Post: Software Designer– Worked in the Product development, Algorithm design, Implementation & Testing. The different clients/projects I was associated with were: FeatureRecognition, FeatureWorks, StructureWorks, 3DSearchIT, FeatureExchange. The software I have worked with were: Applications- *SolidWorks, Windows 2K/XP*, Languages- *C,C++, SQL, OOP,COM, VB, PHP, Perl*, Databases- *MS SQL Server and My SQL*, Other package- *Installshield*.
- **Infosys Technologies Ltd., Bangalore** (May, 1998 to May, 1999) Post: Software Engineer – Worked in Project development, and Maintenance. The client/project I was associated with was: North West Mutual Life (NML), US. The software I have worked with was: Application- *Mainframe*, Language- *PL1*, Database- *Supra*.

TEACHING EXPERIENCE/GUEST LECTURES

- ❖ **Full course:** *Measuring Development* (under the Foundation Course), National Institute of Advanced Studies (NIAS), Bangalore Aug-Dec, 2017.
- ❖ **Part course:** Four lectures on the sub-topics ‘Frameworks for measuring sustainability’ and ‘Indicators of sustainability’ under the course – *Managing Technology for Sustainability* at Department of Management Studies, Indian Institute of Science (IISc), Bangalore in Feb-Mar, 2018; Jan-Feb, 2017; Mar-Apr, 2016, 2015, 2014, 2013, and 2012. The course is being floated by Dr. P. Balachandra.
- ❖ **Part course:** *Energy, Environment, and Natural Resources - Policies and Practices in the Indian context*, National Institute of Advanced Studies (NIAS), Bangalore Aug-Dec, 2017. The course is being floated by Prof. R. Srikanth.
- ❖ **Part course:** *Energy Systems and Sustainability* at Center for Sustainable Technologies, Indian Institute of Science (IISc), Bangalore in Aug-Dec, 2017. The course is being floated by Prof. S Dasappa and Dr. P. Balachandra.
- ❖ **Guest lecture:** Lecture on the topic ‘Powerful Application of Simple Mathematics in Development Research: How I Stumbled Upon It’ to the faculty and students at the *Department of Mathematics*, Christ University, Bangalore, on Feb 15, 2017.
- ❖ **Part course:** Lecture on the sub-topic ‘Sustainable development’ under the Foundation Course at National Institute of Advanced Studies (NIAS), Bangalore in Nov 10, 2016.
- ❖ **Guest lecture:** Lecture on the topic ‘Energy access and energy poverty: Concepts and insights on measurements’ to the first year MBA students, Acharya Bangalore Business School, Bangalore on Sep 16, 2016.
- ❖ **Part course:** Lecture on the sub-topic ‘Data Gathering and Survey Design’ under the *Data module* in the Research Methodology Course at National Institute of Advanced Studies (NIAS), Bangalore on Mar 01, 2016; Mar, 10, 2015.
- ❖ **Part course:** Lecture on the topic ‘Understanding energy sustainability’ under the *Energy Environment Policy Programme* module in the *Foundation Course* at National Institute of Advanced Studies (NIAS), Bangalore on Nov, 17, 2015.

- ❖ **Part course:** Lecture on the topic 'Energy access and Energy poverty' under the Course *Energy Systems: Technology and Policy* at National Institute of Advanced Studies (NIAS), Bangalore on Nov 04, 2015.
- ❖ **Guest lecture:** Lecture on the topic 'Rural lighting through solar options— expectations and realities' at Department of Economics, School of Graduate Studies, Jain University, Bangalore on Jul 24, 2015.
- ❖ **Part course:** Lecture on the sub-topic 'Sustainability of resource use and human development' under the broader theme of 'Natural resources and social questions' in Foundation Course at National Institute of Advanced Studies (NIAS), Bangalore in Oct 15, 2013.
- ❖ **Guest lecture:** Lecture on the topic 'Technology: diffusion, sustainability, and human development' as a part of guest lecture to Management students at Sahyadri College of Engineering and Management, Mangalore, in Nov 09, 2012
- ❖ **Guest lecture:** Lecture on the topic 'India's Power Poverty: *Poverty of Ideas*' to Mechanical Engineering students at Sahyadri College of Engineering and Management, Mangalore, in Nov 09, 2012.
- ❖ **Part course:** Two lectures under the course – 'Sustainable Energy Systems' at National Institute of Advanced Studies, Bangalore during Mar-Apr, 2012.
- ❖ **Part course:** Lecture on sub-topic 'Technology: diffusion, sustainability, and human development' under Foundation Course at National Institute of Advanced Studies (NIAS), Bangalore in Oct, 2012.
- ❖ **Full course:** Development Economics at School of Business Management, Narsee Monjee Institute of Management Studies (NMIMS) for PTMBA SE, II Yr, Tri IV for the academic year 2011 – 12.
- ❖ **Part course:** To Postgraduate students of Indira Gandhi Institute of Development Research (IGIDR), Mumbai: *Energy* portion in the course "Energy and Environment" for the academic year 2005-06.
- ❖ **Teaching Assistant:** TA to "Energy and Environment" course at IGIDR for both the semesters in 2005-06, 2006-07.

TRAINING COURSE LECTURES

- ❖ **NIAS training Programme for Fijian officials:** A lecture on 'Energy Access and Energy Poverty' at NIAS, Dec 12, 2017 at the NIAS-DST Training Programme on Multi-Disciplinary Perspective on Science Technology and Society (Dec 11 to Dec 22, 2017) (acted as the coordinator of this workshop).
- ❖ **NIAS training Programme for Fijian officials:** A lecture on 'Sustainable resource use and human development: Measuring and Achieving the Goals' at NIAS, Jul 19, 2017.
- ❖ **NIAS-DST training Programme:** A lecture on 'Urban Institute Rooftop Systems – Is this the answer to India's solar question?' at the NIAS-DST training Programme (Feb 06 to Feb 17, 2017) on Science Policy and General Management at NIAS, Feb 08, 2017.
- ❖ **NIAS-DST training Programme:** A lecture on 'Urban Energy Poverty of India: A new approach' at the NIAS-DST training Programme (Feb 28 to Mar 11, 2016) on Science Policy and General Management, Mar 02, 2016.

SUPERVISION/COMMITTEE MEMBER OF PHD/MASTERS THESIS

- ❖ **Supervisor (PhD):** Ms. Jahnvi Sharma (topic: *Self sustaining ecosystem for surface coal mine closure: conceptualization and assessment*) at NIAS, Bangalore (Academic year 2017-18)
- ❖ **Co-Supervisor (PhD):** Mr. Sarvajeet Kumar Sinha (topic: *Consolidation of Laws Related to Environment Protection in Surface Coal Mining in India - Prospects and Challenges*) at NIAS, Bangalore (Academic year 2017-18)
- ❖ **Supervisor (MTech):** Ms. Anasuya Gangopadhyay, *Development of model to forecast short-term Electricity demand of the State, 2016-2018* at Birla Institute of Technology and Science, Pilani.
- ❖ **Supervisor (MPhil):** Mr. Ravikant Dubey, *Role of school buses in sustainable urban transport: A case study of Bangalore*, thesis awarded 2015 at Banaras Hindu University (BHU), Banaras.
- ❖ **Supervisor (M Tech):** Ms. Upasna Ranjan, *Techno-economic assessment of rooftop solar in India*, Final year student at Centre for Energy Engineering, Central University of Jharkhand, Ranchi.
- ❖ **Supervisor (Masters in Public Policy):** Mr. Manmeet Singh, *Solar manufacturing in India – understanding the possibilities*, Final year, Master of Public Policy, National Law School, Bangalore.
- ❖ **Supervisor (Masters in Public Policy):** Ms. Swasti Raizada, *Effectiveness of the subsidy and feed-in tariff schemes for rooftop solar*, Final year, Master of Public Policy, National Law School, Bangalore.
- ❖ **External examiner for PhD proposal:** Ms. A. Lakshmi Paladugala (topic: *Sustainability Assessment of Urban Public Transport Investments* scheduled on July 29, 2016) and Mr. Akhil Joseph (topic: *Conceptualization, Development and Validation of an Energy Internet for India* on Jun 17, 2016) of Department of Management Studies, IISc, Bangalore.
- ❖ **Committee member (PhD):** Mr. Kiran Limaye, *Some issues of housing situation in Mumbai Metropolitan Region*, thesis to be awarded 2016 at Indira Gandhi Institute of Development Research (IGIDR), Mumbai.
- ❖ **Committee member (PhD):** Mr. Rishi Kumar, *Issues in Poverty in Rural India*, thesis awarded 2015 at Indira Gandhi Institute of Development Research (IGIDR), Mumbai.

CONFERENCES/PRESENTATIONS/TALKS

RESEARCH PAPER PRESENTATIONS

- ❖ CSCS (Centre for the Study of Contemporary Societies) National Conference on Transforming Odisha: *Policies, Institutions and Innovations: “A measure of children’s health using distance method: Application to different regional and socio economic groups in Odisha”* at KIIT Convention Center, Bhubaneswar during 03 Mar – 04 Mar, 2018.
- ❖ AIEFS (Association of Indian Economic and Financial Studies) 22nd Biennial Conference 2017: *“Substitutes and complements – the curious case of poverty measure”* at Nabakrushna Choudhury Centre for Development Studies, Bhubaneswar during 31 July – 01 Aug, 2017.
- ❖ *Quest for Equity: Reclaiming social justice; Revisiting Ambedkar (Dr. BR Ambedkar International Conference):* presented paper *“A new PR system of election: Proposal for Political Justice in India”* at University of Agricultural Sciences, Bangalore, Jul 21- 23, 2017.

- ❖ *LSME International Conference on Responsible Research and Transformation in Education 2017*: presented a paper “Correcting for ‘missing women’ in Gender Development Indicators: Responsible application of simple mathematics in development studies” at Grange City Hotel, London, April 05, 2017.
- ❖ *HDCA (Human Development and Capability Association) 2016 Annual Conference on Capability and Diversity in a Global Society*– paper presentation “Dying in Silence: A Study on Mortality-Morbidity Gap in India” - at *Hitotsubashi University, Tokyo*, on Sep 01-03, 2016.
- ❖ *8th INSEE (Indian Society for Ecological Economics) 2016* – paper presentation “Urban Energy Poverty in different states of India: A household level analysis”, organized by *Indian Institute of Science, Bangalore*, Jan 04-06, 2016.
- ❖ *HDCA (Human Development and Capability Association) 2015 Annual Conference on Capabilities on the Move: Mobility and Aspirations*– paper presentation “Inclusiveness of human development in India” - at *Georgetown University, Washington DC*, on Sep 10-13, 2015.
- ❖ *Conference on Myanmar at the crossroads: Current realities, challenges and opportunities* – paper presentation “Indo-Myanmar Electricity Cooperation: Prospects and Challenges”, organized by *International strategic security studies programme, NIAS, Bangalore*, Jul 20-22, 2015.
- ❖ *International symposium in Microgrid* – paper presentation “Solar Microgrid in India – different perspectives” at the *National Institute Engineering, Mysore*, May 15-16, 2015.
- ❖ *HDCA (Human Development and Capability Association) 2014 Annual Conference on Human Development in Times of Crisis: Renegotiating social justice*– paper presentation “Gender-based Indicators in Human Development: Correcting for ‘Missing Women’” - at *President Hotel, Athens, Greece*, on Sep 02-05, 2014.
- ❖ *2nd CUTS (Consumer Unity and Trust Society) International Conference on Regional Cooperation for Energy Security in South Asia* – keynote presentation “Think global act regional– Setting the agenda through Global grid” - at *Hotel Hindustan International, Kolkata*, on Aug 07-08, 2014.
- ❖ *26th International Summer Symposium on Science and World Affairs* – presented the paper “Key to Global Arms Control through Determinants of Arms Trade” - at *Princeton University, Princeton, New Jersey*, Jul 25 – Aug 01, 2014.
- ❖ *IPE Golden Jubilee International Conference on Climate and Sustainable Development* – coauthors presented the paper “Mumbai Public Road Transport at Crossroads: Will it Perish or Prosper?” - at *Institute of Public Enterprise, Hyderabad*, on Feb 20-21, 2014. This paper is one of the three papers which received the Best Paper Award in the conference.
- ❖ *IWRM-2014 (Integrated Water Resource Management - 2014)* – presented the coauthored paper “Water and Sanitation Literacy through Women Self-Help Groups (SHGs) in Marginalized Areas – Enabling the ‘Water Users’ to ‘Water Entrepreneurs’” - organized by *Center for Water Resource Development and Management (CWRDM)*, held at *CWRDM, Calicut*, on Feb 19-21, 2014.
- ❖ *IWRM-2014* – presented the coauthored paper “Is roof water harvesting an answer to urban water crisis? –A case study of Bangalore” - organized by *Center for Water Resource Development and Management (CWRDM)*, held at *CWRDM, Calicut*, on Feb 19-21, 2014.
- ❖ *National Seminar on “Agricultural Risk Management: Challenges and Strategies in Making Small and Marginal Farm Holdings Sustainable and Profitable”* – presented the paper “Towards measuring RRA's

interventions in rainfed areas” - organized jointly by National Institute of Rural development and Centre of Good Governance (CGG), held at CGG, Hyderabad, on Jan 03-04, 2014.

- ❖ 4th National Research Conference on Climate Change (2013) – presented the paper “Solar PV microgrid: ‘tragedy of commons’ or ‘community wisdom- A case study of electrification projects in Komna” – held at *Indian Institute of Technology (IIT), Chennai*, Oct 26-27, 2013.
- ❖ 3rd National Research Conference on Climate Change (2012) – presented the paper “Can India go Nuclear Energy Free—the Pathways and Aftermaths” – held at *Indian Institute of Science (IISc), Bangalore*, Nov 03-04, 2012.
- ❖ BIWAES-2012 (8th Biennial International Workshop in Advanced Energy Studies - 2012) - presented the paper “Pipeline politics - study of India’s proposed cross border gas projects” - held at *Indira Gandhi Institute of Development Research (IGIDR), Mumbai*, Oct 25-27, 2012.
- ❖ URBIO-2012 (Urban Biodiversity Conference - 2012) - presented the paper “Towards a Set of Urban Biodiversity Indicators for Indian Cities” - held at *Indian Institute of Technology, Bombay*, Oct 08-12, 2012.
- ❖ URBIO-2012 - presented the paper “Urban Water Bodies - Tale of Two Cities” - held at *Indian Institute of Technology, Bombay*, Oct 08-12, 2012.
- ❖ URBIO-2012 - presented the paper “Food Security in context of Urban Biodiversity: An Indian Dimension” - held at *Indian Institute of Technology, Bombay*, Oct 08-12, 2012.
- ❖ *Inside China* (Second Annual Conference - 2012) - presented the paper “China’s Path Towards Democracy: Prospects and Challenges” – held at India Habitat Centre (IHC) in New Delhi, by *Institute of Peace and Conflict Studies(IPCS), New Delhi*, Sep 08, 2012.
- ❖ PPG-2012(International Conference on Public Policy and Governance - 2012) - presented the paper “Measuring poverty – Do we need to cut the cake in two halves?” – held at Dept of Management Studies, *Indian Institute of Science (IISc), Bangalore*, Sep 04-06, 2012.
- ❖ *National Seminar on Contemporary Nonviolent Movements in India and Abroad – 2012* - presented the paper “World Government for World Peace: A Gandhian agenda for research and activism” - held at School of Gandhian Thought and Development Studies, *Mahatma Gandhi University, Kottayam, Kerala*, Aug 23-24, 2012.
- ❖ ISC-2011 (98th Indian Science Congress-2011) - participated as a symposia speaker on “Higher Education – Mismatch in Demand and Supply”, at *SRM University, Chennai*, Jan 3-7, 2011.
- ❖ *Doctoral Colloquium -2010* (IIM, Ahmedabad) - presented the paper “Gender-based Indicators in Human Development: Correcting for Missing Women” - held at *Indian Institute of Management, Ahmedabad*, Jan 08-09, 2010.
- ❖ CDE Winter School-2009 (DSE) - presented the paper “Measurement of Group Differential: A Formal Treatment for Two Group Case” - held at Centre for Development Economics, *Delhi School of Economics, Delhi*, Dec 11-14, 2009.
- ❖ QAPP-09 (Quantitative Approaches to Public Policy – 2009) - presented the paper “Gender Development Index: Two Corrections” - held at Center on Public Policy, *Indian Institute of Management (IIM), Bangalore*, Aug 11-12, 2009.

- ❖ COSMAR-08 (8th International Consortium of Students in Management Research) - presented the paper "Gender-based Indicators in Human Development: Correcting for Missing Women" – held at Dept of Management Studies, *Indian Institute of Science (IISc), Bangalore*, Nov 20-21, 2008.
- ❖ TIES-08 (44th Annual Conference of The Indian Econometric Society) - presented the paper "An alternative approach to measure HDI" – held at Department of Economics, University of Hyderabad, Jan 03-05, 2008.
- ❖ COSMAR-07 (7th International Consortium of Students in Management Research) - presented the paper "An Alternative Approach to Measure HDI" – held at Dept of Management Studies, *Indian Institute of Science (IISc), Bangalore*, Dec 12-13, 2007.
- ❖ SCODER-07 (Students Colloquium on Development Research - 2007) - presented the paper "A Framework for SDIs for Urban Resource Dynamics in Mumbai" – held at *Indira Gandhi Institute of Development Research (IGIDR), Mumbai*, Sep 28-29, 2007.
- ❖ SCODER-07 (Students Colloquium on Development Research - 2007) - presented the paper "An Alternative Approach to Measure HDI" – held at *Indira Gandhi Institute of Development Research (IGIDR), Mumbai*, Sep 28-29, 2007.
- ❖ ICHE-07 (International conference on Higher Education-2007) - presented the paper "Higher Education – Mismatch in Demand and Supply", at Centre for Continuing Education (CCE), *Indian Institute of Science (IISc), Bangalore*, Jul 12-14, 2007.

RESEARCH POSTER PRESENTATIONS

- ❖ HDCA (*Human Development and Capability Association*) 2014 Annual Conference on Human Development in Times of Crisis: Renegotiating social justice– poster presentation "Measuring poverty: Do we need to cut the cake in two parts" - at *President Hotel, Athens, Greece*, on Sep 02-05, 2014.
- ❖ 4th National Research Conference on Climate Change (2013) – presented the poster "Solar PV for rural electricity– A misplaced emphasis for mitigating climate change" –held at *Indian Institute of Technology (IIT), Chennai*, Oct 26-27, 2013.
- ❖ 3rd National Research Conference on Climate Change (2012) – presented the poster "Assessment of Electrification Projects in India's Remote Villages where Grid-extension is Infeasible" – held at *Indian Institute of Science (IISc), Bangalore*, Nov 03-04, 2012.

TALKS

- ❖ Talk on the topic "Simple ideas on Energy" to the students at *Jammu University* during the National Conference on Climate change and sustainable development: Perspectives and transformational challenges organized jointly by Department of Law, University of Jammu and CEERA, National Law School of India University, Bengaluru, Nov 07-08, 2017.
- ❖ NIAS Wednesday Talk – presented the paper "Substitutes and complements – the curious case of poverty measure" – held at *National Institute of Advanced Studies, Bangalore*, Oct 4, 2017.

- ❖ Seminar Talk– “Rural lighting through Solar PV – A supply-side analysis of home lighting systems in Karnataka, India”, Organized by *Environment and Sustainability Institute, University of Exeter, Exeter, UK*, May 19, 2017 (<http://www.exeter.ac.uk/esi/events/ourseminars/hippusalkristlenathan/>)
- ❖ Seminar Talk – “On human development index (HDI) - the old, the new, & the elegant”, Organized by *Department of Economics and Department of Social and Policy Science, University of Bath, Bath, UK*, May 17, 2017.
- ❖ Seminar Talk – “Dying in Silence: A Study on Mortality-Morbidity Gap in India”, (a paper with Dr. Tulika Tripathi) Organized by *Faculty of Education and Humanities, University of Northampton, Northampton, UK*, May 15, 2017.
- ❖ India Observatory Seminar – “Energy Poverty: Concepts, Measurement and Impacts on Quality of life”, Organized by *India Observatory*, May 10, 2017 (http://sticerd.lse.ac.uk/new/events/IO_Events.asp).
- ❖ Seminar Talk – “Energy access and energy poverty: Some Concepts and insights on measurement”, Organized by *Center of Development Studies, University of Cambridge, UK*, May 02, 2017.
- ❖ NIAS Wednesday Talk – presented the paper “Dying in Silence: A Study on Mortality-Morbidity Gap in India”(a paper with Dr. Tulika Tripathi) – held at *National Institute of Advanced Studies, Bangalore*, Feb 1, 2017.
- ❖ Invited talk on “Sustainability of Urban Transportation Systems” at the *Faculty Development Programme (Recent Advancements in Transportation Engineering)*, Department of Civil Engineering, Ramaiah Institute of Technology, Bangalore, on Jan 20, 2017.
- ❖ Invited talk on “Innovations in the Energy Environment Policy Programme at NIAS” at the *Faculty Development Programme (Energy conservation and Management)*, College of Engineering and Technology, Bhubaneswar, on Sep 22, 2016.
- ❖ ADBI Seminar talk “Energy Access and Energy Poverty: Concepts and Insights on Measurements” at *Asia Development Bank Institute, Tokyo*, Aug 31, 2016.
- ❖ GIDR discussion series talk “Energy Access and Energy Poverty: Some Concepts and Insights on Measurements” at *Gujarat Institute of Development Research, Ahmedabad*, Jul 22, 2016.
- ❖ Invited talk “Urban Energy Poverty in India: Towards a new methodological framework” at *CUTS International, Jaipur*, Mar 16, 2016.
- ❖ Pre-dinner talk at *Institute of Social and Economic Change (ISEC, Bangalore)* on “Solar PV for rural electricity in India: Current realities, challenges and opportunities” –presentation to research scholars of ISEC, Bangalore, Mar 03, 2016.
- ❖ Chair at the session on “Innovation and Technologies for Energy” in the Indo-French Collège de France Innovation Workshop on “Innovation: Technological, Political and Societal dimensions”, held at the *National Institute of Advanced Studies, Bangalore* (Feb 24-25, 2016)
- ❖ Invited talk “Solar PV for Electricity in India– lessons for Myanmar” at the *Yangon University, Yangon, Myanmar* organized by the Physics Department and University Research Center of Yangon University, Dec 21, 2015.
- ❖ Special talk on the topic “Simple ideas on Energy” in the Exposure Program for Students of North East at *National Institute of Advanced Studies, Bangalore*, Dec 15, 2015.

- ❖ Seminar talk “Energy Access and Energy Poverty: Some concepts and insights on measurements” at the *Nabakrushna Choudhury Centre for Development Studies*, Bhubaneswar on Dec, 05, 2015.
- ❖ NIAS Wednesday Talk – presented the paper “Urban Energy Poverty in different states of India: A household level analysis” (a paper with Dr. Lakshmikanth Hari) – held at *National Institute of Advanced Studies, Bangalore*, Oct 7, 2015.
- ❖ NIAS Wednesday Talk – presented the paper “Rural lighting through Solar PV–A supply side analysis of home lighting systems in Karnataka, India”– held at *National Institute of Advanced Studies, Bangalore*, Mar 11, 2015.
- ❖ Invited as Chair at the National Seminar on “Gender Budgeting in India: Emerging Issues and Challenges” held at *Acharya Bangalore B School*, Bangalore on Dec 5-6, 2014.
- ❖ Invited as a discussant in the National Seminar on Social Innovation, organised by Indian Institute of Management Ahmadabad in collaboration with National Innovation Foundation, International Longevity Centre – India, SRISTI, and other honey bee network partners held at Yashada, Pune on Nov 17, 2014. Spoke about NIAS Innovations in Energy Environment Policy Programme.
- ❖ NIAS Wednesday Talk (2013) – presented a coauthored paper “Measure of human development index (HDI) - the old, the new, & the elegant”– held at *National Institute of Advanced Studies, Bangalore*, Mar 13, 2013.
- ❖ “Indicator Development – frameworks and methods” as a part of workshop by ResRA (RRA network) at Center for Economic and Social Studies (CESS), Hyderabad, on Jan 25, 2013.
- ❖ Invited for a valedictory talk on “Experiments with Science” at Golden Jubilee Science Exhibition at Gora Science Center, Vijayawada on Dec 05, 2012.
- ❖ Invited talk: on Engineering as a career option entitled ‘Engineering: *A giant step in an Unknown direction*’ to the first year engineering students of Sahyadri College of Engineering and Management, Mangalore, in Nov 09, 2012 Also conducted a session.
- ❖ Invited for a talk on “CDM for India’s Energy Security – universalization and low carbon future” at Green Industrial Evolution, India – 2010, Black 2 Green- an Industrial Summit, at Orchid, Mumbai, Organized by Helping Hand Foundation, Jan 14, 2010.
- ❖ Invited for a valedictory talk on “Energy for Everybody: Strategies and Policies” at National Youth Seminar on Green Energy Solutions meeting Global Concerns”, conducted by Green Energy Initiatives of Maris Stella (GEMS 2009), Sponsored by UGC, Nov 19-20, 2009.
- ❖ Invited for a lecture on *Alternative Technology in Domestic Energy* in the Energy Workshop in NK Varadkar Arts, RV Belose Commerce College, Dapoli, Ratnagiri, Maharashtra, Jan 27-28, 2006.

WORKSHOP/COURSE PARTICIPATION (RECENT ONES)

- ❖ *Panel speaker at the 3rd Idea Conclave for Better Bengaluru” on Challenges, gaps, and role of active citizen in Sustainable transformation of Bengaluru at Satish Dhawan Auditorium, IISc 14 Oct, 2017.*
- ❖ *Roundtable discussant at Vision 2025: Invitation for Sector Consultation Workshop on (i) Urban Development, Transport and Renewable Energy Sector on Sep 27 , 2017 (ii) Urban Infrastructure & Energy Sector on Sep 22 , 2017, at JW Marriott Hotel, UB City – Bengaluru.*

- ❖ *Urban Policy Dialogue 2016 Sustainable Development Goals and Urban India*, was part of the deliberating panel on 'Energy' at Indian Institute of Human Settlements (IIHS), Bnagalore, Nov 10-11, 2016
- ❖ *The 5th Global Conference of the Initiative on Climate Adaptation Research and Understanding through the Social Sciences (ICARUS)*, Climate Social Science: Towards a transformative science of climate change, at Indian School of Business, June 30 – July 2, 2016.
- ❖ *Roundtable workshop on “Renewable Energy: Policy Creation, Implementation and Efficacy”* organized by *King Abdullah Petroleum Studies and Research Center* held at Jaipur, Mar 14, 2016.
- ❖ *A Stakeholders Consultations Workshop* on policy framework for achieving the ambitious targets of renewables and nuclear power at *Windsor Manor, “Windsor Square”*, Bangalore on 13th Oct – 14th Oct 2015.
- ❖ *OPHI (Oxford Poverty and Human Development Initiative) Summer School 2015 on Multidimensional Poverty Analysis* held at Georgetown University, Georgetown, Washington DC, 3rd Aug – 15th Aug, 2015.
- ❖ *A Solar xChange Workshop* on “Indian and South Asian experience of implementing community solar power plants” jointly organized by The Energy Resources Institute (TERI) and University of Oslo at *TERI Southern Regional Centre*, Bangalore on 21st Apr 2015.
- ❖ *A roundtable on “Make in India for a Solar India: The need to boost R&D and local manufacturing in the Solar PV sector”* organized jointly by National Centre for Photovoltaic Research & Education (IIT Bombay) and Observer Research Foundation Mumbai at IIT Mumbai on 18th Apr 2015.
- ❖ *26th International Summer Symposium on Science and World Affairs* held at Princeton University, Princeton, New Jersey, 25th Jul – 1st Aug, 2014.
- ❖ *15th GDN (Global Development Network) Annual conference* held at Accra, Ghana, from 18th – 20th Jun, 2014.
- ❖ *Research and Training workshop (28th) of SANDEE (South Asian Network for Development and Environmental Economics)* held at *Druk Hotel*, Thimpu, Bhutan, from 16th – 20th Jun, 2014.
- ❖ *Winter School in Environment and Resource Economics*, by South Asian Network for Development and Environmental Economics held at *Godavari Resort*, Kathmandu, Nepal, from 4th – 13th Mar, 2014.
- ❖ *Tata Energy Research Institute Workshop on Mini-Grid Development for Livelihood Generation Opportunities*, Shared experience in the breakaway working group discussion on 'Institutional and operational challenges in implementation of decentralized electricity solutions' - held at Xavier Institute of Management, Bhubaneswar, Jan 3, 2014.
- ❖ *Research and Training workshop (27th) of SANDEE (South Asian Network for Development and Environmental Economics)* held at *Gokarna Forest Resort*, Kathmandu, Nepal, from 9th – 14th Dec, 2013.
- ❖ *Cost Benefit Analysis Course*, by South Asian Network for Development and Environmental Economics held at *Gokarna Forest Resort*, Kathmandu, Nepal, from 6th – 8th Dec, 2013.
- ❖ *Silver Jubilee Conference on Cities and Sustainability* held at *Indira Gandhi Institute of Advanced Studies (IGIDR)* in Mumbai, India from 29th – 30th October, 2013.
- ❖ *Silver Jubilee Conference on Human Development* held at *Indira Gandhi Institute of Advanced Studies (IGIDR)* in Mumbai, India from 26th – 28rd September, 2013.

- ❖ *Orientation Programme for the empanelled NGOs/NPOs under Rural Area Energy Access Programme of Ministry of New and Renewable Energy* – participated on behalf of NIAS, held at *India Habitat Center*, Lodhi Road, New Delhi, on 16th Sep, 2013.
- ❖ *Research and Training workshop (26th) of SANDEE (South Asian Network for Development and Environmental Economics)* held at *The Tide Resort, Baeng Saen, Thailand* from 19th – 23rd Jun, 2013.
- ❖ *Communications Surgery for Awards & Medals Finalists of GDN (Global Development Network) under 4th Annual Global Development Conference on Inequality, Social Protection and Inclusive Growth at Asian Development Bank (ADB) Head Quarters, Manila, Philippines, Jun 19–21, 2013.*
- ❖ *SANDEE-Summer School in Environmental and Resource Economics, 2013 (South Asian Network for Development and Environmental Economics)* held at *Srinakharinwirot University* in Bangkok, Thailand from 29th April – 17th May, 2013.
- ❖ A workshop on “Solar photovoltaics for off-grid electricity access in rural India”, organized by *Imperial College London* in collaboration with *Divecha Centre for Climate Change, Indian Institute of Science, Bangalore*, on 14th Jan, 2013.
- ❖ Training Course on “*Mapping Essentials*” by Gubbi labs aiming at equipping the participants with the essentials of mapping offering insights and hands-on exposure to working with various free-and-open-source mapping applications. The workshop was held at *National Institute of Advanced studies (NIAS), Bangalore* from 9th – 10th Aug, 2012. The workshop
- ❖ Training Course on “*Understanding Conflict and Conflict Analysis*” by *United Nations Institute for Training and Research (UNITAR)* and *Delhi Policy Group (DPG)* held at *India Habitat Centre (IHC)* in New Delhi from 25th – 29th June, 2012.
- ❖ *Research and Training workshop (24th) of SANDEE (South Asian Network for Development and Environmental Economics)* held at *International Water Management Institute (IWMI)* in Colombo, Sri Lanka, Sri Lanka from 18th - 22nd June, 2012.
- ❖ *NIAS Durban Round Table on “Developing an Indian Working Response to the Decisions adopted by The Durban Platform for Enhanced Action”* with support from *Ministry of Earth Science (MoES)* and *Department of Science and technology (DST), Govt. of India* at *National Institute of Advanced Studies, Bangalore* on 31st Mar 2012.
- ❖ A *Civil Society Workshop on “Energy Subsidies”* jointly organized by *The Energy Resources Institute (TERI)* and the *International Institute for Sustainable Development’s Global Subsidies Initiative (GSI)* at *TERI Southern Regional Centre, Bangalore* on 30th Mar 2012.
- ❖ Three day *Bruno Latour Workshop - “Climate Change and Controversy Mapping”* from Mar 19th to 21st at *Devechia Centre for Climate Change, Indian Institute of Science, Bangalore* organized jointly by *Sciences Po, France* and *Devechia Centre, IISc, Bangalore*.

WORKSHOP/EVENTS ORGANIZED (RECENT ONES)

- ❖ *Organizer and workshop coordinator: A NIAS-NIF-TDU-MGIRED workshop on “Annual School on Grassroots Innovations”* with support of *Department of Science and Technology, GoI*, at the *National Institute of Advanced Studies*, during Jan 10-18, 2018.

- ❖ *Organizer and workshop coordinator:* A NIAS-MNRE-TERI-INAE workshop on “Enabling 100GW Solar Power Capacity by 2022” under the Ministry of New and Renewable Energy project “Facilitating target of 100 GW solar by 2022” at the India International Centre Annex, New Delhi, on Nov 11, 2017.
- ❖ *Organizer and workshop convener:* A one-day workshop on “Enabling 40GW Solar by 2022” under the Ministry of New and Renewable Energy project “Facilitating target of 100 GW solar by 2022” at the National Institute of Advanced Studies, Bangalore on Jan 11, 2017.
- ❖ *Co-coordinator:* A two-week training program on Science Policy and General Management: A multi disciplinary dialogue on Science, State and Society at the National Institute of Advanced Studies, Bangalore (Feb 29-Mar 11, 2016)
- ❖ *Organizing team member:* Two-Day Indo-French Collège de France Innovation Workshop on “Innovation: Technological, Political and Societal dimensions”, which was held at the National Institute of Advanced Studies, Bangalore (Feb 24-25, 2016)
- ❖ *Facilitator:* A Round Table on Addressing Economic Inequality in India at NIAS organized by International Centre for Human Development (IC4HD), a partnership between the Indian Institute of Advanced Study (IIAS), Government of India and United Nations Development Programme. (8-9 January, 2015).
- ❖ *Mentor:* National Seminar on “Gender Budgeting in India: Emerging Issues and Challenges” held at Acharya Bangalore B School, Bangalore (Dec 5-6, 2014).
- ❖ *Organizing committee member:* Two-Day Workshop on “Sustainable Technologies for Educational Campuses”, which was held at the Golden Jubilee Seminar Hall, Indian Institute of Science, ECE Department, IISc, Bangalore (Nov 7-8, 2014)

INSTITUTIONAL COLLABORATION

Facilitated and in-charge of collaboration between NIAS-NIF (National Institute of Advanced Studies, Bangalore – National Innovation Foundation, Ahmedabad). The MoU was signed in April 2015.

OTHER EXPERIENCES

Director-Operations of Peoples Foundation for Scientific Socio Economic Development www.pefssed.org – a non-profit non-government organization which works in education, health and livelihood issues in Maharashtra, Orissa, and Uttar Pradesh. The activities are mostly located as urban slums and remote rural areas. I happen to be the founder secretary of the Organisation.

Life member of Anti-Caste Marriage and One-Child Family Organisation of India (AMOFIOI) – which works in the area of social reform, green environment, disarmament and world government. I have participated in organizing different workshops on scientific education and social justice.

Committee Member (from April 2003 to Mar 2004) of Geometricians’ Care – CSR wing of Geometric Ltd, Mumbai. Involved in development of CSR manifesto, and taken the responsibility for of coordinating CSR projects execution for Mumbai office for a year.

Member (from May 1998 to May 1999) of Infosys Foundation Committee – CSR wing of Infosys Technologies Ltd, Bangalore. Involved in the implementation of school development projects in the outskirts of Bhubaneswar, Orissa.

HOBBIES

- Interest in *modern Oriya literature*, Creative writing (*plays and short stories*). Scripted and staged plays on social issues like child labour, casteism, dowry, and inter-personal relationships. Some of recent literary publications can be seen at: <http://hippu.wordpress.com>.
- Organizing socio-cultural activities in creating public awareness on science and development.
- Literary Society Secretary and Academic Society Representative during my bachelor degree. Also acted as *Editor in Chief* for the College Magazine during the same period.
- Debating, has acted as a Jury member for the IISc Ranade Library Gymkahana, Open Debate competition, held on Feb 23, 2013.

PERSONAL DETAILS

Date of Birth: 17-01-1977, Sex: Male, Marital Status: Married with a son.

Domicile State: Orissa, Nationality: Indian; Language known: Odia, Hindi, and English

Hippu Salk Kristle Nathan

Last updated: 14/03/2018

HIPPU SALK KRISTLE NATHAN