

GANESH HEGDE

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EDUCATION

- | | | |
|------------|---|-------------|
| PhD | Indian Institute of Technology Bombay
<u>Thesis Title</u> : “Understanding Rural Electrification Policy Evolution and Inequality in Residential Electricity Consumption in India”
<u>Supervisors</u> : Prof Anand B. Rao and Prof Satish B. Agnihotri | 2021 |
| ME | Bangalore University, Power and Energy Systems
<u>Dissertation Title</u> : “GIS-based renewable energy potential assessment and Decentralised energy planning” | 2015 |
| BE | Visweswaraiiah Technological University (VTU),
Electrical and Electronics Engineering | 2012 |

HONORS AND AWARDS

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|---|-------------|
| Sahyadri Young Ecologist Award 2014 | 2014 |
| Received at LAKE 2014 organised by Energy and Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science, Bangalore. | |
| Best Poster Award | 2017 |
| ‘Understanding the Trends in Electricity Supply and Its Implications on Rural Residential Feeders’ at the 6 th International Conference on Advances in Energy Research (ICAER) from 12-14 December 2017, Indian Institute of Technology Bombay, Mumbai, India. | |

EXPERIENCE

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| Project Coordinating Officer
TUM SEED Centre, IIT Bombay | Sept. 2020 - Nov. 2021 |
| <ul style="list-style-type: none">The living labs will be implemented in a step-wise process between 2020 and 2024. In each step, we integrate the community members to co-create, validate, test and further develop the new technologies in this setting (more). | |
| Research Consultant
IIT Bombay-Monash Academy | Nov. 2018 - Jun. 2019 |
| <ul style="list-style-type: none">This study examines three logics of public service delivery – clientelism, incrementalism and maximin – concerning the recent massive expansion of electricity access in India using spatial and national-level survey data (more). | |

Project Staff

- Renewable Energy Potential Assessment using Remote Sensing and GIS
- Optimisation and Planning of Decentralised Energy Systems
- Ecological Carrying Capacity Assessment ([more](#))

TEACHING

IIT Bombay, Mumbai

2016 to 2019

Centre for Technology Alternatives for Rural Areas

- Energy Policy and Planning, a post-graduate course covering the following topics: global energy scenario, national energy policy, energy access issues, policy design, policy history, energy planning philosophies (top-down/bottom-up), fieldwork.
 - Developed quizzes, exams, and homework
 - Revised the syllabus to meet accreditation standards
 - Coordinated grading and field visits
- 9 weeks Field stay a mandatory post-graduate course, where students will be required to undertake a 9-week stay in a rural region. The objective is to familiarise a rural setting as planners for a region or a public utility project.
 - Developed survey methods, household survey forms
 - Introduced instruments for field data collection and GIS for mapping
 - Coordinated grading and field visits

PUBLICATIONS

Google Scholar: <https://scholar.google.co.in/citations?user=tg57FhcAAAAJ&hl=en>

Book Chapters

Hegde G., Rao A.B., and Agnihotri S.B., “Understanding Energy Inequality in India”, State of India’s Environment Report 2022, Center for Science and Environment, New Delhi, India ([more](#))

Hegde G., Rao A.B., and Agnihotri S.B., “Analysing the Inequality Pathways of Domestic Electricity Consumption in India”, In: Singh S., Ramadesigan V. (eds) *Advances in Energy Research*, vol. 1, 2020, pp. 715 – 727, Springer Proceedings in Energy, Springer, Singapore ([chapter](#)).

Swami S., Hegde G., Rao A.B., and Agnihotri S.B., “How Do Supply-Side Constraints Affect the Rural Residential Feeder Parameters?”, In: Singh S., Ramadesigan V. (eds) *Advances in Energy Research*, vol. 1, 2020, pp. 505 – 518, Springer Proceedings in Energy, Springer, Singapore ([chapter](#)).

Journal Publications

Arranz A.M., Thomson R., Zech S., Hegde G., Arunachalam D., and Rao A.B., “The uneven expansion of electricity supply in India: The logics of clientelism, incrementalism and maximin”, *Energy Research and Social Science*, vol. 78, August 2021, 102126 ([paper](#)).

Ramachandra T.V. and Hegde G., “Energy Trajectory in India: Challenges and Opportunities for Innovation”, *Journal of Resources, Energy and Development*, vol. 12 (1&2), 2015, pp. 1-24 ([paper](#)).

Ramachandra T.V., Hegde G., and Krishnadas G., “Scope for Solar Energy in Uttara Kannada, Karnataka state, India: Rooftop PV for Domestic Electricity and Standalone Systems for Irrigation”, *Productivity*, vol. 55, 2014, pp. 101-119 ([paper](#)).

Ramachandra T.V., Hegde G., and Krishnadas G., “Potential Assessment and Decentralised Applications of Wind Energy in Uttara Kannada, Karnataka”, *International Journal of Renewable Energy Research*, vol. 4, no. 1, 2014, pp. 1-10 ([paper](#)).

Ramachandra T.V., Hegde G., Setturu B., and Krishnadas G., “Bioenergy: A sustainable Energy Option for Rural India”, *Advances in Forestry Letters (AFL)*, vol. 3, issue 1, 2014, pp. 1-15 ([paper](#)).

Ramachandra T.V. and Hegde G., “Decentralized Renewable Energy Options for the Western Ghats”, *The Journal of MGIREED*, vol. 1, issue 1, pp. 24-43 ([paper](#)).

Conference Papers

Hegde G., Agnihotri S.B., and Rao A.B., “Tracing the Contours of Inequality in Household Electricity Consumption in India”. 36th International Energy Workshop (IEW), 12-14 July, 2017, University of Maryland, College Park, Maryland. (https://events.pnnl.gov/Default.aspx?topic=IEW_2017: Papers and Slides)

Ramachandra T.V. and Hegde G., “Scope for Distributed Renewable Energy Systems in South India”, IEEE Global Humanitarian Technology Conference, South Asia Satellite, 26-27 September 2014, Kottayam, Kerala. (DOI: <https://doi.org/10.1109/GHTC-SAS.2014.6967557>)

Ramachandra T.V. and Hegde G., “Energy Latitude in Western Ghats through Decentralized Renewable Energy Resources”, SYNERGY with ENERGY: 9th National Conference on Indian Energy Sector, May 23-24, 2014, Ahmedabad, India.

Technical Reports

Ramachandra T.V., Hegde G., and Jain R., “Solar Energy – The Sustainable Energy Option in Karnataka”. CES Technical Report 132, Energy & Wetlands Research Group, Centre for Ecological Sciences, Indian Institute of Science, Bangalore – 560012 ([report](#)).

Ramachandra T.V., Chandran S.M.D., Joshi N.V., Hegde G. and Krishnadas G., “Sustainable Energy Alternatives for Uttara Kannada”, ENVIS Technical Report 58, Environmental Information System [ENVIS], Centre for Ecological Sciences, Indian Institute of Science, Bangalore – 560012 ([report](#)).

PRESENTATIONS AND INVITED LECTURES

Guest Lecture, “Analysing the Rural Electrification Policies and Inequality in Residential Electricity Consumption in India,” at Indira Gandhi Institute of Development Research, Mumbai, India.

Invited Talk, “Sustainable Decentralised Green Energy Model for Rural India”, Thirtieth National Convention of Environmental Engineers and National Seminar on Fostering Greenovations for Green Growth, The Institution of Engineers, India (IEI), August 22-23, Bangalore.

PROFESSIONAL TRAINING

Certificate Course in Methods and Applications in Social Science Research (CCMASSR) Institute for Social and Economic Change (ISEC), Bengaluru, India

SCADA/EMS, protection and stability of power system
Southern Region Load Despatch Center (SRLDC), Bangalore, India

Solar PV Grid Connected Power Plant
National Training Centre for Solar Technology, Karnataka Power Corporation Limited, Bangalore, India. November 13 - 18, 2014.

Western Ghats Biodiversity using Free and Open-Source Geospatial Tools (FOSS4G)
Indian Institute of Science Bangalore, India. February 24 – 28, 2014.

DST-SERB school on Smart Transmission Grid using Synchrophasor Technology
Indian Institute of Technology Kanpur, India. December 10-15, 2013.

COMMUNITY SERVICE

Aseem Foundation, Pune

Volunteer, Kashmir, May/June 2016 and February 2021

With help from the Indian Army, Aseem Foundation and GS Lab Pune, successfully commissioned and handed over the first Solar Micro-Grid in a remote village Ghaggarhill, located 6,000 ft. above sea level in J&K ([more](#)).

LANGUAGES

Kannada: Native Language

English: Advanced Reading, Writing and Speaking

Hindi: Novice Reading, Writing and Speaking

Marathi, Telugu, Tamil, Malayalam: Intermediate Listener and Speaker

COMPUTER SKILLS

Programming: R, Python

Applications: STATA, IBM SPSS, Minitab, GIS (Arc, QGIS), MatLab, HOMER

OTHER INTERESTS

Photography, Chess, Badminton, Politics