



PROFILE

Parama has over 19 years of experience in **action-based research with a focus on human-nature interaction, stakeholder/community engagement and urban planning**. Using interdisciplinary approaches, she has worked on contemporary planning and policy challenges related to socio-ecological systems, land-use development, waste and water management, food insecurity and disaster vulnerability. Her expertise lies in co-producing knowledge and institutional strategies for sustainable development. She has taught at several academic institutions abroad like Georgia State University, Binghamton University and University of Copenhagen, before moving back to her home country, joining Okapi and taking on an adjunct faculty position in IIT Madras.

CONTACT

PHONE:
WhatsApp: 7358732906;
Phone: 9748219355

WEBSITE:
<http://okapia.co/>
<http://paramaroy27.wix.com/researcher>

EMAIL:
proy@okapia.co
paramaroy@iitm.ac.in

DR. PARAMA ROY

Executive Director (Okapi Research & Advisory)

EDUCATION

PhD in Urban Geography with specialization in community planning from University of Wisconsin-Milwaukee
2003 - 2008
GPA:3.9/4 Dissertation funded by National Science Foundation

BSc and MSc from Presidency College, Kolkata
1997 - 2002

WORK EXPERIENCE

June 2017- to present: Executive Director - Okapi Research and Advisory, Chennai, India

Jan 2020 - to present: M&E Advisor - Chennai Resilience Center for The Chennai Urban Farming Initiative

Sept 2017 - to Sept 2023: Adjunct Faculty, Civil Engineering, Indian Institute of Technology

June 2016 - Jan 2017: Research Assistant Professor, Dept. of Geography, State University of New York, Binghamton, USA

July 2011 - Dec 2015: Assistant Professor, Dept. of Geography, University of Copenhagen, Denmark

Aug 2008 - June 2011: Assistant Professor, Dept. of Geosciences, Georgia State University, USA

FUNDED PROJECTS

For IIT Madras

2023 July-ongoing: Exploratory Research Proposal (PI-Ashwin Mahalingam) "We Segregate - Behavioural Change Towards Fostering Lifestyle for Environment Through Sustainable Solid Waste Management" – this is a participatory action research study to understand, if and how infrastructural/technological interventions induce behaviour change among residents by increasing people's capabilities (e.g. awareness / knowledge) and available opportunities (e.g. infrastructure).

2023 Aug-ongoing: A LIDAR scanning integrated with GIS technology to optimize the Construction and Demolition (C&D) waste supply chain for urban areas in India (PI – Nikhil Bugalia) The primary purpose of this study is to develop simple technologies that various municipal corporations in India can readily deploy for effectively managing the collection and transportation of C&D Waste in their respective cities. Qualitative research to understand stakeholder perceptions, preferences and needs will be led by Parama.

2023 Sept – ongoing: Sustainable Sandhai – A 'Carbon Neutral' Koyambedu Market (PI Indumathi Nambi)- IIT Madras and Centre for Urbanization, Buildings and Environment is preparing a Detailed Project Report for (re)developing the Koyambedu Wholesale Market as a Carbon Neutral Zone. This Project is



Based on the work done under the Urban Ocean Program, a competitive proposal was developed targeting behaviour change for increased waste segregation by Parama, **which was selected by NITI Aayog as one of the top 75 ideas to promote LiFE.**

The idea can be viewed on Pg 100 in the Niti Aayog publication: Global Call for Ideas and Papers: 75 ideas to promote LiFE.

<https://www.niti.gov.in/sites/default/files/2023-06/Thinking-For-Our-Planet-75-Ideas-to-Promote-LiFE.pdf>

funded by the Tamil Nadu Pollution Control Board. The work on social assessment and stakeholder mapping and management is led by Parama.

2021 Sept – 2022 Sept: Green Printing Chennai – a collaboration between the Nature Conservancy, IIT Madras, and The Care Earth Trust - In close collaboration with CMDA and engagements with other relevant government agencies the Green Printing team developed simulations of alternative scenarios for Chennai's development that will assess the impacts of these development trajectories on ecology, wetlands, biodiversity, and climate change & adaptation. Learnings are intended for informing upcoming Master planning process.

2019 May – 2022 Dec: Worked on **“UP-AGri - Urban and peri-urban agriculture as green infrastructure”** a three-year research project examining the implications of urban agriculture on human well-being and urban sustainability. The project draws on research in Tanzania and India. UP-AGri is funded by the British Academy's "Urban Infrastructures of Well-Being" programme, under the UK Government's Global Challenges Research Fund (GCRF).

2017 Sept–2019 April: Headed a Tamil Nadu State Land Use Research Board funded project titled: **A Platform for Integrated Water Governance in Metropolitan Chennai: Developing Future Scenarios and Strategies through Participatory Simulations.** The project goal was to develop a deliberative platform and a simulation tool to help policy-makers to move towards an integrated decision-making regime for a more sustainable urban future. Three policy-oriented reports have been completed under Parama's guidance as part of this work.

For Okapi

2023 July-ongoing: Implementing a **pilot project, We Segregate**, funded by the Circulate Initiative and the Resilient Cities Network in Kasturbanagar **to** raise citizen awareness, improve at-source segregation rates, and divert organic waste and MLPs from the dump yards by setting up lane composters and distributing PnP hooks amongst residents to collect MLPs.

2020 – ongoing: Facilitating initiation of one of the **Resilience Chennai Strategy's flagship projects on Urban Horticulture.** This work involves fundraising, conceptualizing, evaluating and monitoring the rooftop vegetable gardening program introduced in schools, ICDS centers, Homeless Shelters as well as middle-income residential neighborhoods. Purpose is to trigger a city-wide movement for a healthier, cooler, greener, and cleaner Chennai by leveraging this NbS while interweaving waste segregation, water conservation, food security and empowerment of the poor into this program.

2021 Aug – 2022 August: Lead the preparation of a **Wetland Restoration Guidebook** funded by Azim Premji University Foundation. The primary objective of this project was to provide a simple step by step guide for multiple public and private stakeholders involved in lake restoration efforts in order to ensure that such processes are holistic and scientific in nature. For long term sustainability of restoration efforts the handbook also puts forward a framework for community involvement and institutionalization of multi-stakeholder managerial arrangements.

2021- ongoing: Heading the **Urban Ocean Program in Chennai** – *This is a partnership of The Circulate Initiative, Resilient Cities Network and Ocean Conservancy. The programme is designed to help member cities solve interrelated problems around materials/waste management that have implications for public health, environmental pollution including leakage into our water bodies and oceans, and economic development.*

2019 Aug- Feb 2021: Lead a research project funded by Azim Premji University titled, **Understanding disaster vulnerability of Chennai's homeless**. The goal of this project was to develop a community-based understanding of the homeless group's vulnerability to disasters. Using a participatory and mixed methods approach this project findings will inform policy and support more equitable thinking and action in Chennai city's governance of disaster management efforts.

2018 Aug – 2019 July: Headed Chennai Resilience Strategy development for Chennai Resilience Team/100 Resilient Cities Program pioneered and funded by Rockefeller Foundation. **The Chennai Resilience Strategy** was released by GCC and 100RC on the 27th June 2019. This strategy highlights the challenges associated with Chennai's urbanization, water system, disaster management, governance processes, and vulnerable communities and proposes interventions to address these challenges.

TEACHING AND STUDENT ADVISING

Classes taught/Lectures:

Oct 2017: Guest Lecture for CE 1010: Introduction to Civil Engineering

Oct 2017: Two Guest Lectures for CE 5870: Infrastructure Planning & Management

Sept 2018: Guest Lecture for CE 5870: Infrastructure Planning & Management

June 2019: Lecture on Chennai Resilience Planning for - Collaborative for Urban Resilience & Effectiveness ([IITM](#), [UBC](#), and [Yale-NUS](#))

Sept 2019: Guest Lecture for CE 5870: Infrastructure Planning & Management

Oct 2019: Guest Lectures for CE 5870: Infrastructure Planning & Management

Sept 2020: Guest Lectures for CE 5870: Infrastructure Planning & Management
March 2021: Contributed to the Faculty Development Program organized by School of Planning Architecture and Design Excellence (SPADE) in [Hindustan Institute of Technology and Science \(HITS\)](#) and [Council of Architecture \(CoA\)](#)

Sept 2021: Guest Lectures for CE 5870: Infrastructure Planning & Management

Sept 2022: Two-week Module on Stakeholder Management in Urban and Infrastructure Planning for CE 5870: Infrastructure Planning & Management

February 2023: Lecture at the Construction Management Researchers Forum (CMRF), Civil Engineering Dept – Bringing Circularity in Chennai's Solid Waste Management-Way Forward

Student mentoring:

Ashwani Kumar Jaiswal - A LIDAR scanning integrated with GIS technology to optimize the Construction and Demolition (C&D) waste supply chain for urban areas in India, PhD student, Dept. of Civil Engineering, IITM

Utkarsh Kumar – Development of a Resilience Index, Dual Degree Student, Dept. of Civil Engineering, IITM

Junior Duplessis - Collaborative for Urban Resilience & Effectiveness (IITM, University of British Columbia, and Yale-NUS)

Srinidhi Santosh – Master's Thesis from CEPT University: Governance in Scenario-Based Planning: An agent-based simulation modelling approach

Gladys Tan – Capstone Project from Yale-NUS: Governance in Scenario-Based Planning: An agent-based simulation modelling approach

VijayaLakshmi Sahadevan – Guided her on Focus Group Research methodology for her PhD work in Construction Management at BTCM, IITM.

RECENT PUBLICATIONS

Peer Reviewed Publications:

1. Maddaline et al, (2023) Circularity in cities: A comparative tool to inform prevention of plastic pollution Resources, Conservation & Recycling 198 (2023) 107156
2. **Roy, P.** and A. Ayyangar (2022) Leveraging Chennai's Complex Governance Network for Addressing the City's Water Woes, in Urbanization 7(2) 185-210
3. Rao N., Patil S., Singh C., **Roy, P.**, Pryor C., Poonacha P. and M. Genes (2022) Cultivating sustainable and healthy cities: A systematic literature review of the outcomes of urban and peri-urban agriculture, in Sustainable Cities and Society.
4. **Roy, P.** (2019) Community Gardening for Integrated Urban Renewal in Copenhagen: Securing or Denying Minorities' Right to the City? In Just Green: Urban Gardening and the Struggles of Social and Spatial Justice, Certoma C, Noori S, and Sondermann M (Eds).
5. **Roy, P.** (2017) "Welcome in my backyard"...but on my terms: making sense of homeless exclusion from renewed urban spaces in Copenhagen. GeoJournal, DOI 10.1007/s10708-017-9769-8
6. Agger, A, **Roy, P.** and Ø. Leonardsen (2016) Anchoring Network-Based Community Projects in Copenhagen. Planning Theory and Practice, Vol 17 Number 3 pg. 325-343.
7. **Roy, P.** (2015) Collaborative planning - a neoliberal strategy? A study of the Atlanta BeltLine *Cities*, Vol 43 pg. 59-68.

In-the-pipeline/In-review

1. Jaiswal, **Roy**, Bugalia, Varghese and Phuc Ha (2023) Framework to Identify Directions for Future Construction and Demolition Waste Management Technologies) submitted to 2024 International Conference on Energy, Infrastructure and Environmental Research
2. Derkzen, Patil, Koduganti Venkata and **Roy**, (2023) Oota Kathegalu: Tracing the food stories of Bengaluru, India In Urban Food Mapping (Routledge)

Funded Research Reports:

1. **Roy P.** and Ayyangar, A (2023) Social and Stakeholder Assessment – Baseline Report for Sustainable Sandhai – A 'Carbon Neutral' Koyambedu Market.
2. **Roy, P.** and Ayyangar, A (2022) (Okapi contributors) Circularity Assessment Protocol-Chennai (Urban Ocean Program)
3. Vencatesan, J., **Roy, P.**, Ayyangar, A., Vencatesan, A., Venkateswaran, U. & Thirunavukkarasu, S. (2021). Wetlands Restoration: A Handbook, Case Studies from Chennai, Okapi Research & Advisory and Care Earth Trust, Funded by Azim Premji University
4. **Roy P.**, Peters V. and A. Ayyangar, 2021, Understanding Disaster Vulnerability of Chennai's Homeless – A Policy Paper
5. **Roy P. et al** (Strategy Lead) (2019) Resilient Chennai-Kaleidoscope: My city through my eyes, 100 Resilient Cities Program
6. **Roy, P. et al**, (2019) Strategy Report, A Platform for Integrated Water Governance in Metropolitan Chennai: Developing Future Scenarios and Strategies through Participatory Simulations.
7. **Roy, P. et al**, (2018) Chennai: Urban Visions (A report from TN State Land Use Board funded project - A Platform for Integrated Water Governance in Metropolitan Chennai: Developing Future Scenarios and Strategies Through Participatory Simulations)

8. **Roy, P. et al**, (2018) Chennai: Emerging Tensions in Land, Water, and Waste Governance (A report from TN State Land Use Board funded project - A Platform for Integrated Water Governance in Metropolitan Chennai: Developing Future Scenarios and Strategies Through Participatory Simulations)

Conference Papers:

1. Selvaraj, K., Mahalingam A. and **Roy, P.** (2019) The role of Integrator in Public Space Design Projects, Engineering Project Organization Conference 2019.
2. Selvaraj, K., **Roy, P.** and Mahalingam, A. (2017), Stakeholder Management in Public Space Design Projects – Strategies For Sustainable Change: The Luz Church Road Case In Chennai, Engineering Project Organization Conference 2017