

# Exploring governance, resilience and justice in off-grid energy systems within the Brazilian Amazon

Rafael Cavalcanti Lembi - PhD Student in Community Sustainability  
Specialization in Gender, Justice and Environmental Change  
Michigan State University  
Advisor: Maria Claudia Lopez, PhD

Email: [lembi@msu.edu](mailto:lembi@msu.edu)  
WhatsApp: +1 517 980 0961  
Twitter: @rafael\_lembi

Key words: sustainability science, interdisciplinary research, community-engaged research, social-ecological systems, socio-technical systems

Areas of expertise: participatory research methods (e.g., visioning, scenario planning), qualitative data collection (interviews, workshops), qualitative data analysis, facilitation, community engagement, mixed-methods research design

## Research questions of interest

Context: Off-grid communities that have been a target of energy projects

Aim: Identifying barriers and conduits for achieving just and sustainable off-grid energy systems

### Governance

What are the impacts of a rural electrification federal policy (Programa Luz para Todos) for isolated communities?

In which ways do stakeholders collaborate to improve energy access for isolated communities?

### Justice

What are the gender-differentiated impacts of energy projects that improve energy access?

### Resilience

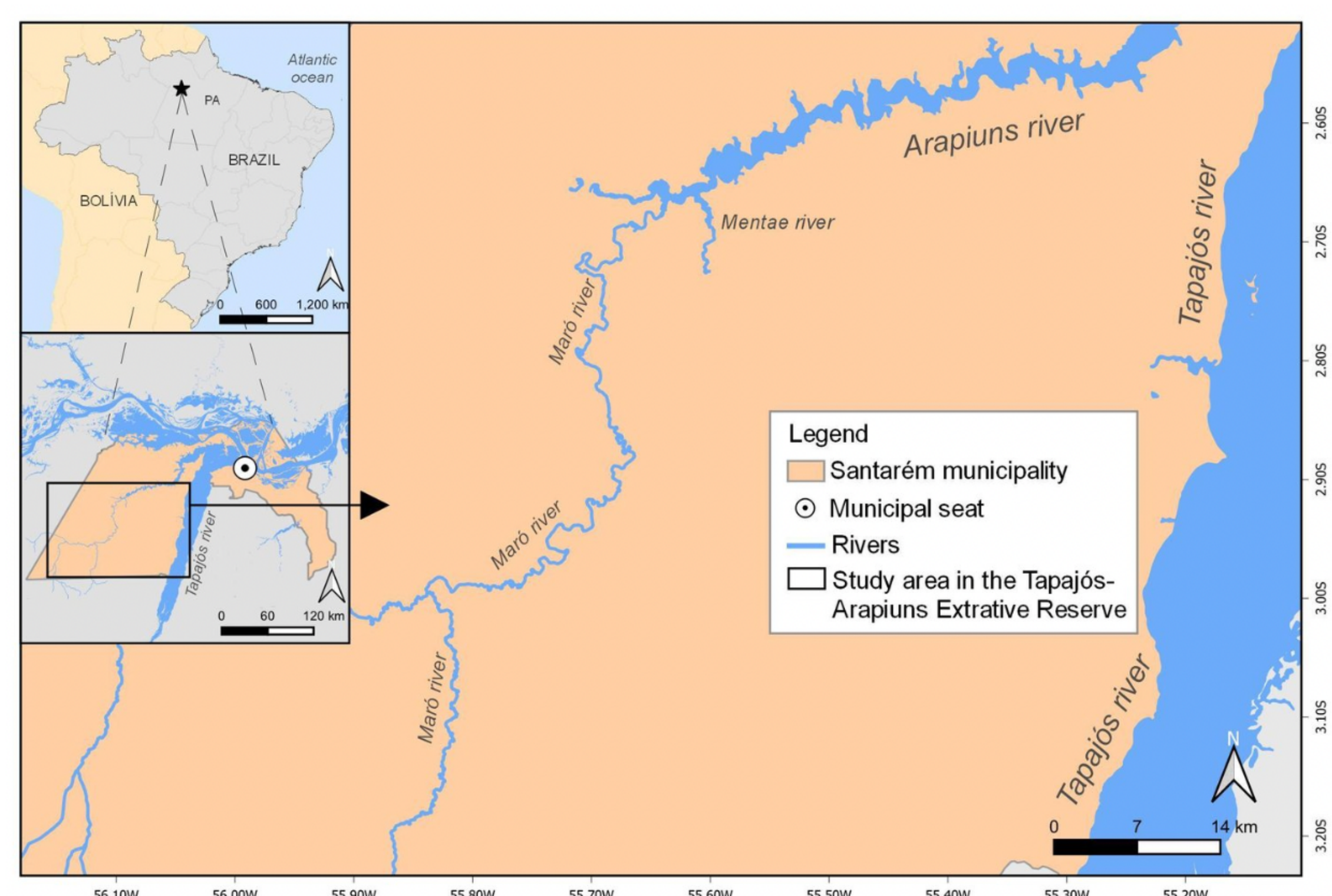
What are the social-ecological factors that build resilience of the energy system to unexpected shocks and crises?

How can energy projects contribute to transformative change towards desirable states for the social-ecological system?

## Areas for collaboration

- Water-energy-food nexus approach
- Practitioners doing community-based work
- Experts on sustainable energy technologies
- Interdisciplinary, mixed-methods researchers
- Social-ecological researchers
- Development practitioners
- Researchers and practitioners working in Western Pará

Focal area: RESEX Tapajós-Arapiuns, Santarém, PA



Map: Courtesy of Igor Cavallini Johansen