Title: Political Economy of Bioenergy Transitions in Developing Countries: A case study of Punjab, India

This paper explores, through a case study, two underlying conference themes: “Energy Provision and Access” and “Equality, Equity, and Development” in the context of bioenergy transitions in developing economies.

Bioenergy occupies an important place in the sustainable development discourse. It was widely touted as a “fuel of the future” at the beginning of the 21st century and a means to create a bio-based model of the economy. However, in recent years many adverse impacts of commercial bioenergy developments have come to the forefront. These include changes in land use patterns, limited ecological benefits, competition with food crops leading to heightened food insecurity across many developing countries as well as the exploitation of local residents by commercial bioenergy producers. There remains a dearth of empirical evidence on the potential of bioenergy to provide a sustainable energy alternative in the developing countries.

It is against this background that the present paper has developed an alternative conceptual framework rooted in an eco-socialist perspective to interrogate bioenergy developments in developing economies. Eco-socialism is based on the integration of biological egalitarianism with the socialist ideals of equality and social justice. An eco-socialist perspective treats environmental degradation as a “systemic issue” and considers the power and class structures in society as the central explanatory parameters in explaining the process of environmental degradation. Eco-socialists advocate for a “bottoms up” participatory approach to environmental decision making to ensure that environmental justice emerges as the central parameter of sustainable development.

The eco-socialist framework was used to conduct an in-depth case study of bioenergy projects in the region of Punjab, India. The case study employed a “multiple stakeholder” perspective to explore the opportunities and contestations surrounding bioenergy projects. The analysis unearthed the value chains, actors, drivers and discourses surrounding these developments as well as the inter-relationships between bioenergy projects and household energy aspirations. Our research revealed that in order to enable bioenergy to emerge as a sustainable energy alternative, bioenergy policies need to be more people-centric, address the needs of local communities, and be cognizant of the inherent socio-economic embeddedness of these initiatives.