

## Tropentag, September 20-22, 2023, hybrid conference

"Competing pathways for equitable food systems transformation: Trade-offs and synergies"

## A political ecology approach for the co-production of knowledge in living labs

Ryan Nehring

International Food Policy Research Institute, Natural Resources and Resilience Strategies Unit, United States

## Abstract

The concept of "co-production" has gained notoriety among academics and development professionals as an umbrella approach for collaborative research. Although there are numerous critiques on the ubiquity of the concept, it does provide a useful way to consider the role of plural knowledges within scientific processes. Existing definitions of co-production are vast and often contradictory. This paper proposes a political ecology framework to be applied to the concept of co-production of knowledge in applied research on low emissions food systems. Political ecology is an interdisciplinary field that focuses on the relations of power between nature and society. When applied to the co-production of knowledge, political ecology offers a framework to situate plural knowledge systems within the relations of production and within specific groups of (marginalised) peoples and their relationship to environmental change. This paper develops a framework to analyse how knowledge is co-produced between CGIAR researchers and local stakeholders in order to develop innovations for low emissions food systems. The analytical framework will be applied in two case studies of knowledge co-production: in Nandi County, Kenya and in the Department of Caquetá in Colombia. These are two of the four target countries where the CGIAR Research Initiative on Low-Emissions Food Systems is working with food systems stakeholders to collaboratively identify and develop innovations. The political ecology framework for the co-production of knowledge is being developed in conjunction with this initiative to understand whose knowledge has authority in the regions and how collaborative relationships can have a long-lasting impact for inclusive development of the food system. This paper outlines the framework and provides the rationale for qualitative methodologies to be deployed in each of the two sites for data collection. It offers a practical application of the concept of "co-production" that is both place-based and adaptable to food systems context.

**Keywords:** Co-production, epistemology, food systems, knowledge, living labs, political ecology