

Between Agricultural Research and Policy: Ghana's Crops Research Institute as a Boundary Organisation

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Background

The Crops Research Institute (CRI) is a centre for translational agricultural research in Ghana, headquartered in Fumesua, near Kumasi, in the Ashanti Region. As part of the Council for Scientific and Industrial Research (CSIR), CRI is mandated to integrate basic and applied research to inform policy and practice. It

- Operates within governance structures, navigating resource constraints and transnational agendas.
- Collaborates with farmers, policymakers, and international organisations to address food security challenges, enhance productivity, and support agricultural policy development.

Theoretical framing: Boundary work.

- How does CRI navigate stakeholder interests (Gieryn 1983) and leverage boundary objects (Star & Griesemer, 1989) to bridge scientific, local and policy domains (Guston, 2001)?

Method

Ethnography

Participant observation and 25 semi-structured interviews with scientists, technologists, technicians, administrators, and communicators at CRI from September–December 2023.

Analysis

- Integrative: Applied a sociological lens informed by Science and Technology Studies (STS) to examine the interplay between research, policy, and practice.
- Intersectional: Analysed how expertise, power, and influence intersect in agricultural research and policy, considering the roles of different stakeholders.
- Hermeneutic: Engaged in an interpretive process, analysing empirical data through field observations, interviews, and document analysis to construct claims about the dynamics at play.

CRI produces crop varieties as boundary objects that are shared, interpreted and engaged with differently by diverse stakeholders.



Findings

- Agricultural research in Ghana functions as a boundary space where diverse knowledge systems, institutional priorities, and sociopolitical interests converge.
- CRI mediates these interactions but faces challenges in funding, regulation and knowledge translation.
- Although research is ideally expected to drive policy decisions, fieldwork revealed that policy often shapes the direction of scientific inquiry.

Are values, priorities, and expectations equally negotiated across stakeholder networks? Further analysis will investigate how influence is distributed in agricultural research and policy, and the mechanisms through which different actors assert or negotiate their positions with these networks.



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References

- Gieryn, T. F. (1983). Boundary Work and the Demarcation of Science from Non-science: Strains and Interests in Professional Ideologies of Scientists, *American Sociological Review*, 48, 781–795.
- Jasanoff, S. (2004). *States of Knowledge: The Co-Production of Science and Social Order*. Routledge.
- Star, S. L. and Griesemer, J. R. (1989). Institutional Ecology, "Translations," and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907–39. *Social Studies of Science* 19 (3): 387–420.
- Guston, D. H. (2001). Boundary Organisation in Environmental Policy and Science: An Introduction, *Science, Technology, & Human Values*, vol. 26 no. 4, 399–408.