

Co-production and interdisciplinary research in the BRECcIA project: bringing together different expertise and actors for addressing water and food security challenges in sub-Saharan Africa

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Water and food security research challenges are inherently inter-disciplinary and require a broad set of research approaches. The project "Building research capacity for sustainable water and food security in drylands of sub-Saharan Africa" (BRECcIA) is a collaborative research programme aiming at addressing water and food security challenges in sub-Saharan Africa. The project involves 6 Universities located in 4 countries (UK, Malawi, Kenya and Ghana), and partnerships with 8 international organizations for a total of 52 researchers. The expertise pertains to several disciplines, from hydrology to policy and from remote sensing to anthropology to bridge the gap between high quality academic research and real-world water and food security problems. The project framework is based on the co-production of the research questions and activities among the different institutions involved in the project and a series of different stakeholder (from local communities to policy makers) to ensure that the research is demand-driven and impact-orientated. Capacity building of the researchers involved in the project plays a major role in enabling a research community that is capable of conducting fruitful interdisciplinary research. This contribution presents the BRECcIA project, its methodological framework, expected outcomes and impacts. It also discusses how research in the field of hydrology can link different disciplines in addressing water-related problems and the difficulties of conducting quantitative research in data-scarce regions such as sub-Saharan Africa.