GCRF-AFRICAP is a new programme of work funded by the UK government, and being led by the University of Leeds and the Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN), in collaboration with the Met Office, University of Aberdeen and Chatham House. The programme aims to establish academic partnerships between UK and African research and policy institutions and develop capacity across these partnerships in the field of climate smart agriculture and food systems. It is driven by an aim to build capacity for, co-develop and demonstrate, nationally owned SDG-compliant agri-food development pathways that can be productive, sustainable and climate-smart

Evaluation of CA Interventions in Maize-based systems of central and southern Malawi

Global meta-analyses of Conservation Agriculture (CA) have shown that there is a lack of detailed soils, ecological and plant science research on the impacts of different combinations of intercropped maize with legumes (notably cowpeas and groundnuts), in relation to physical and chemical soil properties; biological communities found within soils; crop pests and diseases (including stem borer, fall army worms and mould toxins); and farmer livelihoods and decision making processes.

This work plan will address a number of these knowledge gaps through a combination of trial station research (at the Malawi Government Chitedze Agricultural Research Station) and farm/landscape level research (centred around on farm stations in Nkhotakota and Balaka Districts).

Through this work, GCRF-AFRICAP will maintain the Conservation Agriculture trial site jointly run by Leeds and DARS at the Chitedze Research Station, close to Lilongwe in central Malawi. This will enable: (1) continuity of the CA-based study design of the plot as followed over the last 10 years; and (2) expansion of current data collection to include soils, plant science and ecological (on crop pests and ecosystem services) research. The findings of this work will feed into the development of model representations of conservation agriculture practices (on both soil C storage (via Aberdeen) and maize yields (via Leeds)) to assess the likely impacts of greater CA uptake.

Collaborative work with CIMMYT on on-farm trial stations in Nkhotakota and Balaka Districts will enable assessments of on-farm practices and decision-making, and associated resource and technical constraints, in order to better understand how CA practices translate into real-world agricultural systems and the impact they have on farmer livelihoods.

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