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"Management of land use systems for enhanced food security: conflicts, controversies and resolutions"

## Common Resource Management and Sustainable Food Security: Evidence from National Surveys in Malawi, Nigeria and Uganda

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## Abstract

Sustainably responding to the food security challenge in Africa implies to go beyond agriculture and account for the wider landscape. Access to common resources plays an important role as rural source of income and as a safety net against poor agricultural output or seasonal food gaps, hence contributing to food security. The direct livelihood role of common resources management (CRM) has benefited from in-depth case studies and subsequent reviews of these but seldom from large data sets analysis such as the Household Living Standard Survey — Integrated Surveys on Agriculture (LSMS-ISA). Drawing on the latest LSMS-ISA developed in Malawi, Nigeria and Uganda (sample sizes of 3200 and 5000 households), this exploratory paper tests connections of CRM arrangements and perceived performance (e.g. satisfaction of resource users) with the recorded indicators for food security conditions of rural households (e.g. days without food for the household). In parallel to the surveys to households, information on the existence and status of CRM for water, grazing land, arable land and forest/bush was gathered in surveys to leaders of communities. For the analysis, the data was merged to associate households to the characteristics of their communities and CRM in particular. The identified CRM arrangements' performance is tested against their known characteristics, including their wider institutional connections such as local forums and assemblies dealing with natural resources and more broadly with justice. First analyses suggest that food security is associated with CRM, although not for all resources. For example, in Nigeria, the connection between CRM and food security is statistically significant for common forest, water and pasture, although with a notable lack of significant connection with regards to communal arable land. The paper closes with the further analysis options on the possible indirect effects of CRM on sustainable food security such as whether performing CRM at community level is also associated to the adoption/conservation of given agriculture practices at farm level.

Keywords: Common resources management, food security, LSMS-ISA, Malawi, Nigeria, Uganda

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