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# Status and Constraints of Agricultural Diversity Practice in Malawi: Case of Lilongwe District Smallholder Farmers

Paul Falakeza Fatch[1], Charles Masangano[1], Irmgard Jordan[2], Ernst-August Nuppenau[3]

[1] *Lilongwe University of Agriculture and Natural Resources, Extension, Malawi*
[2] *Justus-Liebig University Giessen, Center for International Development and Environmental Research, Germany*
[3] *Justus-Liebig University Giessen, Inst. of Agric. Policy and Market Res., Germany*

## Abstract

Malawi, a country with 70 % of the land allocated to maize production and having maize dominated diets, is engaged in a serious drive towards agricultural diversity. A comprehensive understanding of the current state of agricultural diversity in Malawi was needed since existing studies were limited to either crop, livestock or agroforestry diversity alone. The Crops for Heathy Diets: Linking Agriculture and Nutrition (HealthyLAND) project conducted a study in Lilongwe District of Malawi to document the status of agriculture diversity related farming systems. A survey targeting 424 smallholder households was conducted in 2016 and 2017. Stratified sampling was used to select the farmers from 36 villages of four ecological zones administratively called Extension Planning Areas (EPAs).

Results showed that land holding sizes were small, with a mean of 1.682 acres per household, on which a mean of 2.41 different crops were grown. Farmers identified maize (82.5 %) as their main crop followed by groundnuts (5.4 %) then soy beans (4.7 %). Main cropping patterns were crop rotation (46 % of households), permanent stand (34.7 %) and intercropping (19.6 %). Significantly low proportions of households had backyard gardens at 22.4 %, while 18.4 % practised irrigation and 21.5 % practised conservation agriculture. Agroforestry practice (73.4 % of households) was significantly high but the growing of trees for fruits was low as 40.3 % of households grew mangoes, 2.9 % grew guavas, 3.3 % grew paw paws, 2.4 % grew bananas, 1.9 % grew Mexican apples and lemons. Livestock production was also low since only 50.9 % of households owned chickens, having a mean of 7.97 chickens per owning household; 26.2 % of household owned a mean of 2.8 goats; 17.5 % of the households owned a mean of 3.27 pigs; and only 1.7 % of the households owned a mean of 3.43 cows. The results reflected low agricultural diversity.

Farmers cited low access to seeds and inputs, limited access to land, poor access to markets, poor security, inadequate knowledge for production, and bad weather patterns as reasons why they were not practicing agricultural diversity. Policy makers and stakeholders should support farmers to address the bottlenecks to agricultural diversity so that farmers can have more diversified and therefore resilient farming systems.

**Keywords:** Agricultural diversity, agroforestry, crops, livestock, malawi

**Contact Address:** Paul Falakeza Fatch, Lilongwe University of Agriculture and Natural Resources, Extension, Area 49 New Shire, Lilongwe, Malawi, e-mail: pfatch@bunda.luanar.mw