



Tropentag, September 14-16, 2022, hybrid conference

“Can agroecological farming feed the world?
Farmers’ and academia’s views”

Food access and dietary diversity in subsistence farming contexts: Farm production and markets in Burundi

WILLY DÉsirÉ EMERA¹, MARIJKE D’HAESE², CARL LACHAT³

¹*Housing Office , <https://www.ugent.be/housing>, Faculty of Bioscience engineering, Department of Agricultural Economics, Belgium*

²*Ghent University, Faculty of Bioscience engineering, Department of Agricultural Economics,*

³*Ghent University, Dep. of Food Technology, Safety and Health, Belgium*

Abstract

Consumption of diversified foods guarantee diet quality and combat malnutrition in all its forms. Dietary diversity is important as a pathway that can alleviate food and nutrition insecurity. The interest in setting out this analysis was based on understanding the relationship between food access and dietary diversity in a context of subsistence farming of rural small-scale households, starting from the farm agricultural production diversity. This linkage between farm production diversity and individual dietary diversity remains unclear. By means of a survey study, this paper analyses this relationship, especially for women of childbearing age and children under 5 years.

The study covered two provinces in Burundi: Muyinga and Ngozi, accounting for 233 and 350 households respectively. For the children’s Dietary Diversity Score (DDS_C), data have been collected on 258 children under 5 years old, while 424 women have been surveyed. For both women and children, a 24-hour recall was used to assess the DDS. The level of diversification of the diet was generally low in the study area. Results showed a low diversity of diet for both women of childbearing age and children under 5 years old. For the women, the average number of food groups consumed during the 24 hours preceding the survey time were 4.64 and 4.34 respectively from Muyinga and Ngozi. As for the children under five years old, the average number of food groups consumed were 3.07 and 3.14 in Muyinga and Ngozi respectively. The recommended number of food group per individual is at least 5 and 4 food groups for women of childbearing age and children under 5 years-old respectively. Yet, rural farmers in the region produce mainly for food self-sufficiency, some of them get extra-farm income which can contribute to accessing food. Contrary to other similar studies, some agricultural production diversity indicators were not shown to be significantly associated with both the minimum dietary diversity for women (MDD_W) and the dietary diversity score for children (DDS_C). The off-farm income was significantly associated with both MDD_W and DDS_C. In a subsistence farming system context, the market plays an important role in dietary diversity.

Keywords: Burundi, dietary diversity, farm production diversity, market, nutrition quality, off-farm income