



Strengthening Rural Ugandan Diets Through Improved Market Food Environments

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Key messages

- In addition to own production, rural populations in SSA are acquiring an increasing part of their food from local markets, making the market food environment an important contributor to household diet diversity.
- The limited food variety that characterizes rural food markets, in Uganda, translates to limited diet diversity with households characteristically consuming items from two staple food groups only.
- Availability of a variety of food in nearby/village markets positively influences rural household food purchase diversity.
- Policy support should encourage increased - production of non-staple foods for the rural markets and market participation. But since rural households depend largely on staple foods, interventions should be focused on increasing production and sell of nutrient-dense staples, for instance, through adoption of biofortification.



Introduction

A significant proportion of children under five years remains stunted and wasted in sub-Saharan Africa (SSA) (Madewell et al., 2024). Such malnutrition can reduce an individual's cognitive ability and economic productivity in the long-term. Due to low resources, rural households are affected more by illnesses stemming from undernourishment than the urban dwellers. A healthy diet with diversity and adequate food quantities is a sustainable strategy to combat undernourishment in low-resource populations. Through own production, rural smallholders have provided staple foods for their households. But they rely on markets to acquire non-staple food items and to guard against seasonality. However, in rural SSA, food markets typically have a limited variety of food. In addition, food markets in rural areas are characterized by low accessibility and low affordability because of remoteness and low incomes of the majority of the households (Downs et al., 2020). This has implications for the market food environment and nutrition of rural households. The foods sold frequently in the community define a household's market food environment. While nearly all small-farm households in SSA produce carbohydrate-rich staples, those that bring to the market non-staple foods like vegetables, fruits, and animal source foods support a nutrient-rich market food environment. An individual or household typically purchases what is in their market food environment.

Child undernutrition and micronutrient deficiencies remain at objectionable levels in Uganda, slowing the progress towards SDG 2. For instance, 27.4% of children under five living in rural Uganda are stunted (UBOS, 2023). This proportion is only 5 percentage points lower in urban areas. Only 10% of the children aged 6-23 months meet the minimum diet diversity. The typical Ugandan diet is undiversified with two or three food groups (made up of maize/millet/sorghum cereal, starchy roots/tubers/plantain, and pulses and leafy green vegetables as complements) consumed daily (Sekabira et al., 2022). Additionally, consumption of biofortified staples like the orange-flesh sweet potato and iron-rich beans is uncommon since adoption rates are very low (Bashaasha et al., 2020). Can food markets improve diet diversity of rural households in Uganda?

Key findings

As rural populations in SSA are acquiring an increasing part of their food from markets, understanding how the rural market food environment can be made to work to deliver nutrient-rich food is important to tackling undernourishment in SSA. Without diversity food market access per se does not translate to diet diversity of households or individuals. We employ regression methods to examine the effect of the market food environment on dietary behavior in rural Uganda. Our findings show that:

- Smallholder households market less than 25% of their food output.

- Food made available in the markets is mainly staples. Correspondingly, a greater percentage of households purchase staples than they purchase non-staples.
- Vegetables and fruits are marketed by a very small percentage of households. Respectively, consumption from purchase of these food items is low as is consumption from own production.
- Households purchase less than one non-staple food group in a 24-hour period and less than two non-staple food groups in a 7-day period.
- Aggregation of the food groups sold by smallholder households in each community indicates a very low market diversity. An average of one food group and a maximum of approximately two food groups is marketed in the community.
- Notwithstanding, the number of food groups sold in the community has a positive effect on non-staple purchase diversity. Additionally, having an off-farm income source increases household food purchase diversity.

These were the findings of an analysis of quantitative panel data collected as part of the Community Connector Project in the northern and southwestern regions of Uganda from 2012 to 2016.

Policy recommendations

The nutrition-sensitive policy message is: food available in the market influences what households choose to purchase, which has implications for household nutrition. Therefore, expanding diversity of food offered for sale in rural community markets would improve the nutrition of vulnerable household members such as children under five years and women of reproductive age.

- Smallholders need to be supported to increase the production of non-staple foods and have a marketable surplus. Support to farmers could be in form of subsidized inputs (improved seed, fertilizer), farmer training and extension contact, promotion of group finance/saving, and availing supportive marketing institutions.
- As households in our sample marketed mainly staples foods such as maize, beans and sweet potatoes, production and sale of biofortified variants would improve market diversity.

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