



Can off-farm participation improve agricultural production and farmer welfare in Tanzania and Uganda?

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Key messages

IMPACTS OF OFF-FARM EMPLOYMENT



- Has a positive impact on farmers' welfare in Tanzania.
- Complements farming households' income.



- Has a negative impact on agricultural production.
- Competes with farming for family labor.



Leveraging the Trade-off

- Policies that aim to minimize the trade-off and enhance the synergy between off-farm employment, agricultural production, and welfare are vital.

Farmers turn to off-farm employment to support production

With the majority of East Africa's rural poor depending on agricultural employment, sustained agricultural growth is essential for reducing hunger and poverty in the region. Recently, however, agriculture's contribution to economic growth has declined significantly. Smallholder farmers, in particular, tend to experience poverty and low agricultural production.

Farmers may seek off-farm employment to supplement farm income, finance farm inputs, or as a risk management strategy. As limited liquidity and credit access are binding constraints to agricultural production, off-farm participation may be crucial for increased production and improved welfare. As such, the agricultural sector and the non-farm sector usually coexist.

Evidence off-farm employment threatens production

However, reallocation of farm labor to off-farm employment decreases the available pool of family farm labor and may diminish agricultural production and income.

The real impact of off-farm participation on agricultural production and household welfare is a complex question for which findings are generally inconclusive.

Additionally, there is increasing evidence of declining agricultural production in the East African region. This is attributed to off-farm participation in the growing rural non-farm economy. However, the effect of this decline on farmers' welfare has not been thoroughly investigated.

Policies introduced encourage off-farm employment

Tanzania and Uganda have recently implemented policies that promote off-farm employment as a path to growth. One of the main objectives of the 2013 Tanzania National Agriculture Policy is to develop an agricultural sector that significantly contributes to overall economic growth and poverty reduction. Similarly, the 2013 Uganda National Agriculture Policy's primary objectives include increasing agricultural incomes and poverty reduction.

A team of local researchers examined the impacts of off-farm participation on agricultural production and farmers' welfare in Tanzania and Uganda.

The analysis

The research team used nationally representative data from the *Living Standards Measurement Study-Integrated Surveys on Agriculture* (LSMS-ISA), from the Tanzania National Panel Survey for 2008-2012, and from the Uganda National Panel Survey for 2009-2011. These surveys provided detailed individual, household, and community-level data. Using an econometric approach, the team investigated the impact of off-farm participation on agricultural production and household welfare.

Key findings

The research team's results indicate that **off-farm employment decreases agricultural production in Tanzania and Uganda** but **only improves farmers' welfare in Tanzania**.

Specifically, compared to on-farm households:

- The total **value of agricultural harvest** for households participating in off-farm activities is about **83% lower for Tanzania** and **29% lower for Uganda**.
- The **consumption expenditure (as an indication of welfare)** of households participating in off-farm activities is about **26% higher** for Tanzania only.

The findings suggest that, in farming households, off-farm participation competes with agricultural production for family labor.

Off-farm participation is likely to reduce agricultural production because it limits the farmer's capacity to increase agricultural production or shift resources to high value crops.

The findings also indicate that off-farm participation may be necessary where there are poorly functioning credit markets, but it does not make up for liquidity and credit constraints.

Furthermore, off-farm income is not necessarily invested in farm-productive assets (e.g. new technologies for increasing agricultural production). The probability of intensive agricultural production is, therefore, reduced.

Lastly, off-farm employment may result in seasonal migration, meaning that fewer inputs are devoted to farming.



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Conclusions and policy recommendations

The findings suggest that, **rather than being a complement to agricultural production, off-farm participation acts as a substitute**. Although it competes with and diminishes agricultural production, it can improve household welfare.

Over time, the change in labor supply composition has pushed highly productive farmers into off-farm participation, contributing to a reduction in agricultural production.

The finding that off-farm participation has a positive impact on household welfare in Tanzania supports the argument that off-farm income has the potential for increasing wealth and income for farm households by complementing farm income. It also suggests that income from off-farm employment is channelled to consumption.

Policymakers should therefore recognize that a synergy between pro-agriculture and pro-welfare policies is critical for ensuring desirable outcomes from off-farm participation.

Policies that aim to encourage off-farm participation while reinforcing agricultural production and household welfare are vital. For instance, policies fostering processing and commercialization of agricultural produce may offset the adverse effects of off-farm participation on agricultural productivity.



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