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Title: Agricultural Productivity and Rural Household Incomes: Household Survey Evidence from Zambia



In this paper, we analyze the relationship between agricultural land productivity and rural household incomes among smallholder farmers in Zambia.

While it is widely agreed that agricultural growth in early-stage developing economies is almost always at the heart of broader economic development, the micro-level empirical support for this narrative is surprisingly weak. Particularly for Africa, we are unaware of any micro-level studies that estimate the impact of agricultural productivity on household incomes or consumption, largely because of the unavailability of annual household or regional data on agricultural productivity over a reasonably long time period.

Our study identifies the effects of agricultural land productivity on rural household per capita incomes using two waves of micro-level panel data of smallholder farms in Zambia, and multiple years of cross-sectional crop productivity data. It finds that, not surprisingly, the strongest positive impact of farm land productivity is on farm income. The relationship between farm land productivity and non-farm income is mostly not significant, however, there is some tentative evidence that the productivity on smaller farms, those under 2 hectares, has a positive spillover effect on household non-farm income.

Overall, this study does not confirm the mainstream narrative that agricultural productivity overall has spillover effects for rural non-farm incomes, with the exception of productivity on smaller farms. It suggests that policies that promote agricultural productivity on smaller farms in particular is what most impacts rural non-farm incomes.

More generally, these results may suggest that smaller farmers may have a higher income elasticity of demand for non-farm goods and services. In other words, higher productivity on smaller farms creates surplus earnings and a market for rural non-farm economic activity, leading to more opportunities for non-farm income generation, something that has shown to be of great importance to rural African household livelihood strategies in the last couple of decades.