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## The Impact of Upgrading Strategies on Income Inequality in Rural Communities: Evidence from Tanzania

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### Abstract

Current agricultural research aims to increase the income and food security level of rural households in developing countries by implementing upgrading strategies. However, further effects e.g. on inequality is barely performed. It can be assumed that improvements in household welfare may result in income inequality rising in a region with implementation research. Most of the existing literature is based on region- or countrywide data; only fewer empirical studies exist at community levels. The study examines a) the effect of income sources on income inequality and b) the effect of implemented upgrading strategies on inequality. We use a panel dataset including 820 households from four treatment and two control villages located in Dodoma and Morogoro regions in Tanzania conducted in 2013 and 2015 for the purpose of accompanying research of an implementation project along local agricultural value chain (e.g. production, processing and marketing). The study uses the decomposition of income inequality to detect different types of income sources and their contribution to income distribution within rural villages. The difference-in-difference (DID) method and propensity score matching (PSM) is applied to estimate the impact of implemented pro-poor strategies on the source of income inequality in the study area. First findings from the decomposition of income inequality show that positive welfare effects from self-employment activities and livestock production increase the level of income inequality within the treated households while income from agricultural activities, off-farm activities, remittances and public transfer show equalising effects on the income distribution. The overall income level of the treated households (n=486) has a significant higher increase compared to the control households (n=334), the treatment households indicate a lower decline in income inequality compared to the control households. The DID combined with the PSM will provide further insights on the determinants of these results.

**Keywords:** Agricultural value chain, income inequality, rural communities, Tanzania, welfare