

We study how rural households in developing countries use non-farm entrepreneurship to smooth consumption following shocks to farm income. Using survey panel data from rural India, we show that farm households respond to transitory shocks in agricultural productivity by reducing farm labor hours, increasing non-farm labor hours, and becoming more likely to engage in non-farm entrepreneurship and temporary migration. Unlike temporary migration, the effect of these shocks on non-farm entrepreneurship is persistent, as engaging in non-farm activities enables households to accumulate skills that enhance their non-farm productivity. We then structurally estimate a dynamic model of household labor supply decisions across farming, non-farm activities, and temporary migration. Counterfactual exercises reveal that over 30% of non-farm output in rural India comes from activities that households engage in to protect their consumption in response to agricultural productivity shocks. In terms of policy, improving the functioning of insurance markets can substantially promote the modernization of village economies. Specifically, providing weather insurance contracts and minimum income guarantees increases non-farm output by about 70% and 40%, respectively. As a potential implication of climate change, we find that a negative shift in the rainfall distribution leads to more than a 30% increase in non-farm output, underscoring the role of climate-driven structural transformation.