Investments in Agriculture but Trapped in Poverty: Evidence based on Panel Data Analysis from Vietnam

Abstract
Poverty remains a substantial problem in Vietnam. In rural areas, the headcount ratio was still well over 20% in 2012, with some areas – like in the Northern and Central Highland provinces – reported even higher poverty rates. Most of the poor households rely on agriculture as their main source of income. Increasing agricultural productivity through the adoption of new technologies and investments in agriculture is therefore a major policy concern.

In this paper, we empirically analyse investments of rural households, using a longitudinal data set from the Thailand Vietnam Socio Economic Panel (TVSEP). The analysis is based on data of about 1,800 identical households from three provinces of Central Vietnam, collected in the survey waves of 2010 and 2013. Using a matched difference-in-difference model, we evaluate the impact of investments in agriculture on changes in the poverty status of the panel households over time. We measure consumption poverty by applying the Foster-Greer-Thorbecke (FGT) poverty indices, based on the national basic needs poverty line for rural areas in Vietnam.

Results show that only 16% of households living below the poverty line undertook investments in agriculture in 2010. By comparing with similar poor households that did not invest, we find evidence that the investments in agriculture reduce the poverty headcount ratio. On the other hand, agricultural investments do not have any significant effect on diminishing the severity of poverty. Our findings suggest the existence of a poverty trap, where extreme poverty decreases the ability to invest in promising income-generating assets and consequently increases the likelihood of remaining poor. Based on our results, we conclude that unless measures are undertaken that enable poor households to invest (e.g. access to credit), the gap in welfare within rural areas is likely to widen.

Keywords: Agricultural Investments; Poverty; Rural Development; Matched Difference-in-Difference Analysis; Vietnam