

The Impact of Agricultural Diversification on Child Education: Evidence from a Longitudinal Survey in Bangladesh

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This research analyzes the impact of agricultural diversification on household child education outcomes by using a nationally representative Mahabub Hossain 62 village Panel survey dataset (1988-2014) from Bangladesh. The child education outcomes used in the analysis are a household expense on child education and the enrollment of boys and girls. This research estimates the impact of agricultural diversification on the investment in education by using a Panel Fixed Effect Model with rainfall as the instrumental variable. While the impact of agricultural diversification on the enrollment rate of boys and girls at the household level is estimated using a pooled cross-section analysis with rainfall as the instrumental variable.

Further, this research analyses the impact channel through which agricultural diversification impacts household child education outcomes. The first stage of the impact channel found that agricultural diversification has an impact agricultural income: crop diversification has a positive and significant impact on crop income; farm (non-crop) diversification has a positive and significant impact farm (non-crop) income, and both crop & farm (non-crop) diversification have a positive an significant impact on agriculture income. In analyzing the second stage of the impact channel, it was found that for rural households, agriculture income has a more significant impact on investment in child education. Moreover, the results of the third stage of the impact channel indicate that education expense has a positive and significant impact on the enrollment rate of children, and interestingly shows that the magnitude of the impact is higher for the enrollment rate of boys.

The positive and significant results from the analysis of the impact channel suggest that agricultural diversification should have an impact on child education outcomes. However, despite the impact of agricultural diversification on income, the results showed that agriculture diversification has no impact on household education expenses and the enrollment rate for children. The impact of the female stipend program in Bangladesh that encourages school attendance of rural girls, which is not captured in this research, is possibly one reason why agriculture diversification has no impact on education outcomes.