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## Impact of Improved Beehive on Income of Rural Households: Evidence from Bugina District of Northern Ethiopia

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**Abstract :** Increased adoption of modern beehives improves the livelihood of smallholder farmers whose income largely depends on mixed crop-livestock farming. Improved beehives have been disseminated to farmers in many parts of Ethiopia. However, its impact on income is less investigated. Thus, this study estimates how adopting improved beehives impacts rural households' income. Survey data were collected from 350 randomly selected households' and analyzed using an endogenous switching regression model. The result revealed that the adoption of improved beehives is associated with a higher annual income. On average, improved beehive adopters earned about 6,077 (ETB) more money than their counterparts. However, the impact of adoption would have been larger for actual non-adopters, as reflected in the negative transitional heterogeneity effect of 1792 (ETB). The result also indicated that the decision to adopt or not to adopt improved beehives was subjected to individual self-selection. Improved beehive adoption can increase farmers' income and can be used as an alternative poverty reduction strategy.

**Keywords:** impact, adoption, endogenous switching regression, income, improved

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