Promoting Peru’s Smallholder Farmer’s Access to Profitable Markets: The Effects of Social Networks and Farmer Training

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Introduction

Since 2005, the share of agriculture in Peru's GDP has shown a steady annual growth rate of 5% on average (INEI, 2014). Nevertheless, the poverty rate in the rural area remains above 50% during the period 2005-2011 (INEI, 2014), which suggests that the increase in the agricultural production has not significantly reduced poverty especially for low-income farmers. Smallholder farmers in Peru could improve their family income by selling their products in profitable markets rather than self-consuming. Therefore, gaining access to national and foreign markets is important to enhance smallholder farmer’s income and promote their economic mobility.

Objectives

This study will focus on explaining the factors that favor the integration of the rural economy to profitable markets. Specifically this study seeks to assess: 1. The impact of farmer training provided by the Peruvian government, and
2. The impact of social networks separating the effect of nearby and distant social contacts.

Methodological Approach

1. All the variables are constructed at the district level using only information of smallholder producers who own less than 5 hectares of agricultural land.
2. The farmer training variable is constructed based on 15 questions related to training programs provided by the Peruvian government.
3. The social network is constructed based on the migration flow to capture the effect of interaction with those districts that participate in the commercial markets.
4. Nearby contacts are those districts within a distance below the average distance.
5. The estimations are based on a conditional mixed process estimator that allows estimating seemingly unrelated equations with a Tobit approach.
6. There are two main dependent variables: selling only to national markets, and selling to foreign markets.

Discussion and Conclusion

Government intervention through farmer training programs may cause an endogeneity problem but after using “% of constituency producers” as IV, the results show that there is not an endogeneity problem. Thus, Tables 1 - 3 present the results without correcting for endogeneity.

Three different models are estimated based on the market participation of neighboring districts, and controlling for socio-economic and physical characteristics. The results show that “% producers with farmer training” does not have a significant effect on the decision of selling products regardless the model estimated. On the other hand, the social interaction captured by migration flow among distant districts, i.e., social contacts with distant neighbors, does have a positive and significant impact on the decision to sell to the more profitable market, i.e., the foreign market. Meanwhile, social interactions with nearby neighbors only has a positive and significant effect for selling to national markets. These results shed some light for government intervention in rural areas to delineate a strategy that involves building social networks as a tool to integrate smallholder farmers to more profitable markets.