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“Development on the margin”

## Innovation Behaviour among Smallholders: Evidence from the Peach Value Chain in Cochabamba, Bolivia

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### Abstract

There is increasing empirical evidence that farmers not only decide to innovate on the basis of economic and personal considerations, but also on the context of the social interactions they maintain among themselves and with agents who promote change. The focus of this study was on how communication within the social networks of farmers influences their decision to innovate.

Three communities in the Valle Alto of Cochabamba, Bolivia, were studied with regard to their social interactions and the degree to which innovations in peach production and marketing were applied. All peach producers in the communities were interviewed. Variables denoting the embeddedness of farmers in the network were derived using social network analysis. Those variables together with variables on demographics and resource endowment were used in a multivariate regression analysis to determine if “embeddedness in social networks” significantly contributes to the innovativeness of farmers. The information exchange networks were also visualised using NetDraw software.

The results show that the connectivity of farmers in social networks allows for the exchange of information on improved practices and innovations in peach production and marketing. Though the effect on innovativeness is significant, its effect is marginal. Results also show that farmers do not communicate actively on such issues. A further analysis of the type of innovations available to the farmers reveals that many of them did not yet contribute to substantial increases in production and income. One may argue that the available innovations were simply not substantial enough to make diffusion through the network and application on farmers’ fields worthwhile.

The Program of Continuous Innovation (PIC) of the Swiss Agency for Development and Cooperation and similar programs may note that it is important to consider and improve social interactions when fostering innovation. PIC may be advised, for example, to strengthen producers associations in a way that they promote communication about innovation and marketing opportunities. This, however, may only be effective if ideas and solutions are present inside the farming community and among development agents in order to bring considerable benefits to the potential innovators. Assuming that farmers would develop their own solutions is not realistic.

**Keywords:** Bolivia, change agents, diffusion of innovations, peach value chain, social networks