

Adopting a new Development Technology – Testing the Rivalry Hypothesis*

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Preliminary – please do not circulate.

Abstract

The success of a new technology depends on its ability to reach as many potential adopters as possible. To maximize the impact of each dollar spent in development interventions we should be able to understand and affect the diffusion process of innovations. This paper tests the role of rivalry in the diffusion process of different development technologies in rural Mozambique. We see how real-life dissemination of information compares with sharing in a (semi)controlled environment using a lab-in-the field. We run two lab games that capture sharing of a pure rival good and of a non-rival good. To design the games we take advantage of information about the full network of the village. We find that the rate of non-sharing is higher when the information is rival: individuals are 26% more likely to not share in the rival than in the non-rival game. Also, we find that conditional on the number of neighbors (degree), individuals who are more central in the network are less likely to share in both games. The different diffusion processes we observe suggest that policymakers should take into account the nature of information when designing interventions that rely on mouth-to-mouth dissemination.

JEL codes: C93; D04; D62; D84.

Keywords: lab-in-the-field; social networks; technology adoption

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