

# Extension Services and Comparative Advantage in Technology Adoption in Uganda

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## **Abstract**

The low adoption rate of technologies like hybrid maize has been a great concern in Sub-Saharan African countries. However, there has been no consensus about why this phenomenon happens. Hence, I offer a simple model incorporating the current theories, that is, (i) the effect of comparative advantage, (ii) the effect of learning from others and (iii) the effect of extensive services and I examine which theory is the strongest by separately identifying these effects. For this purpose, I use the correlated random coefficient model developed by Chamberlain. The estimates indicate that (i) incomplete knowledge about the management prevents self selection process of farmers from working well; (ii) this barrier leads to greater inequality among farmers; (iii) the effect of extensive services has a positive effect on the farmers' productivities and this means that farmers have usually incomplete knowledge; (iv) overall learning from others does not exist but partial learning from others exists and (v) complete knowledge enables farmers to make agricultural decisions rationally and their decisions are well explained by variation in heterogeneous net benefits to the hybrid seeds. These results imply the importance of promotion of hybrid seeds such as the extensive services the government offers rather than that of providing subsidies or expanding the access to the market.

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