Examining the Impact of Rainfall Insurance and Family Networks in Burkina Faso

Researchers:

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Sector(s): Agriculture

Fieldwork: Innovations for Poverty Action (IPA)

Sample: 88 villages (1,770 household participants) in two regions of rural Burkina Faso, and 1037 migrants from those villages living in Ouagadougou

Target group: Farmers Urban population Families and households

Outcome of interest: Earnings and income Remittances Technology adoption Consumption smoothing Productivity Take-up of program/social service/healthy behavior

Intervention type: Insurance Social networks

AEA RCT registration number: AEARCTR-0005180

Partner organization(s): International Initiative for Impact Evaluation (3ie)

Rainfall index insurance can help small-holder farmers cope with risks to their livelihoods, but take-up of this insurance is often low. Since farmers often depend on urban relatives for financial support when adverse weather affects their livelihoods, and financial institutions can reach urban residents at low cost, marketing insurance products to urban migrants with relatives in rural areas, rather than marketing them directly to farmers, may be an effective way to increase rainfall insurance coverage. A previous pilot study suggested promising results for take-up of rainfall insurance from urban relatives. Researchers partnered with IPA and PlaNet Guarantee to conduct a large-scale randomized evaluation that will measure demand for rainfall insurance among both urban migrants and rural households and its impact on the economic outcomes of the latter group.

Policy issue

Farmers' livelihoods usually depend on crop yields that can be affected by unpredictable weather. When adverse weather strikes and results in a disappointing harvest, these farmers often rely on financial support from relatives in urban areas. As a result, rainfall index insurance—in which a payout is linked to an index of rainfall data in a region—has the potential to help reduce risk not only for farmers, but also for relatives working in urban settings. This insurance has been shown in other contexts to alleviate farmers' risks and spur increased agricultural investment. One estimate suggests that as many as 700 million people in Africa could benefit from formal insurance, but take-up among people who could benefit from it is often low at market prices, with less than 3 percent of these potential beneficiaries using insurance products.[1]

Context of the evaluation

This study took place in Ouagadougou, Burkina Faso, and two neighboring rural regions (Centre Sud and Centre Ouest). Approximately 80 percent of Burkina Faso's population lives in rural areas, where agriculture is the dominant economic activity. The evaluation built on a pilot study with promising results that explored marketing rainfall insurance to urban migrants with relatives in rural areas engaged in farming, rather than marketing it directly to the farmers.

In a previous pilot study, the number of urban dwellers reporting that a rural relative asked for money doubled during periods of low rainfall (from 30 to 60 percent). The pilot found that demand was high for the insurance product marketed this way: 22 percent of urban relatives who were offered the insurance purchased it, and they were more likely to purchase it if the insurance policy specified that compensation would be paid directly to the rural farmer rather than to the subscriber. Initial data from this evaluation suggested that a large majority of rural households (about 83 percent) have a migrant relative.

Details of the intervention

Researchers worked with IPA and PlaNet Guarantee to design, market, and evaluate the impact of rainfall insurance among rural households and urban migrants. The study measured the demand for rainfall insurance among both groups and the economic impacts of having insurance, including how it affects rural households' agricultural investments, production choices, and consumption of rural households, and how it affected urban migrants' economic decisions (including the financial support they provide to rural relatives).

In order to understand these impacts, 88 villages (comprising 1,760 participating households) and 1,037 migrants originating from those villages and currently living in Ouagadougou were assigned to one of four groups:

1. *Urban migrants*: Insurance was marketed to urban migrants but not to households of the village they migrated from.
2. *Rural households*: Insurance was marketed to village households but not to their urban relatives.
3. *Urban migrants and rural households*: Both urban migrants and rural households were having insurance marketed to them.
4. *Comparison group*: Neither urban nor rural participants in this group were receiving insurance marketing.

Researchers conducted two rounds of surveys with participants—an initial survey in 2019, and a concluding survey in 2022—and drew on administrative data on insurance subscription from the implementing partner PlaNet Guarantee.

Results and policy lessons

Study is ongoing; results forthcoming.

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1. Matul, M., McCord, J., Phily, C., and Harms, J. 2010. The Landscape of Microinsurance in Africa. International Labour Organization.