Household Risk Strategies and Conditional Cash Transfers in Nicaragua

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Sector(s): Agriculture, Labor Markets, Social Protection

Location: Nicaragua

Sample: 4,021 poor households in 6 municipalities

Target group: Farmers Rural population

Outcome of interest: Earnings and income Self-employment Consumption smoothing

Intervention type: Cash transfers Training Scholarships Conditional cash transfers

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Partner organization(s): Bank Netherlands Partnership Program (BNPP), BASIS Research Program on Poverty, Inequality and Development, Centro de Investigación de Estudios Rurales y Urbanos de Nicaragua (CIERUNIC), Government of Nicaragua, Ministry of Family, Spanish Impact Evaluation Fund, United States Agency for International Development (USAID), World Bank

Researchers conducted a randomized evaluation to test the effect of a basic CCT program, as well as two complementary interventions, on households' vulnerability to irregular weather patterns. Providing households with vocational training or capital grants to generate non-agricultural income helps improve consumption and resilience to weather shocks.

Policy issue

Low-income households in rural areas are often very exposed to risks, such as crop failure, natural disaster, or illness, and often have limited opportunities to prevent or insure against such risks, which can lead to large dips in consumption. Climate change is likely to further increase agricultural households' risk exposure through changes in weather patterns and higher weather variability. One way to minimize the risk of consumption shocks is by engaging in multiple income-generating activities, so that even if agricultural income fails, there are other ways to get by. Many farmers, however, have little or no source of income outside of their crops and may lack the skills or materials necessary to engage in other income-generating activities, leaving them extremely vulnerable to droughts or severe weather. Is it possible to encourage people to find diverse sources of income by providing them with skills or capital?

Context of the evaluation

This study took place in six municipalities in northwest Nicaragua, where there is a strong dependence on self-employment agriculture. In recent years, temperature has increased, rainfall has become increasingly irregular, and the time window for the two annual crop cycles has shortened. Households in this area are conscious of the fact that farming is a risky occupation, with 77

percent reporting it to be riskier than non-agricultural activities. However, in comparison areas of this study, only 38 percent of households engaged in any non-agricultural self-employment.

The government of Nicaragua ran a conditional cash transfer (CCT) program, which provides families with cash grants conditional upon their children's attendance at school and health check-ups. Past evaluations have shown that many families invest some of the money from cash transfers to increase their non-agricultural investments. However, in this sample, researchers observed very little diversification into non-agricultural activities at baseline.



A man uses money.

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Details of the intervention

Researchers tested the effect of a basic CCT program, as well as two complementary interventions, on households' vulnerability to irregular weather patterns. Villages were placed into groups, and from each group one village was randomly selected to receive the intervention, while another was randomly selected to be in the comparison group. In intervention villages, households were randomly allocated to one of three groups:

1. *Basic CCT:* All households received a transfer of US$145, even if they did not have children. Households with children between 7 and 15 who were enrolled and attending primary school received an additional US$90 per household, and an additional US$25 per child.
2. *CCT and Vocational Training:* In addition to the basic CCT, households in this intervention group received a scholarship that allowed one adult family member to attend a vocational training course offered in the municipal headquarters. These

courses were aimed at building new skills for income diversification.

3. *CCT and Productive Grant:* In addition to the basic CCT, households in this intervention group received a US$200 grant for productive investments, which was intended to encourage recipients to start a small non-agricultural business to diversify their income sources. This grant was conditional upon development of an approved business plan.

Baseline data was collected in 2005, and follow-ups were conducted in 2006 and 2008. Surveys focused on take-up of the interventions, as well as income, consumption, and household welfare.

Results and policy lessons

Impacts of the Basic CCT: On its own, the basic CCT package does not appear to have significantly affected household consumption two years after the end of the intervention. This suggests that any visible impacts for the two other intervention groups were caused by the complementary interventions, not the basic CCT.

Impacts of Vocational Training: At average levels of weather variability, the vocational training package did not significantly impact people's consumption. However, when weather shocks occurred, households in the vocational training group were protected against the negative impact of drought shocks on consumption. The same result was found for household income.

Impacts on the Productive Grant: At average levels of weather variability, the productive grant increased household consumption by 8 percent relative to comparison households. This effect was even higher as the intensity of the drought increased. In fact, the productive grant seemed to provide full protection against the negative impact of drought on consumption. Very similar results are found for household income – household income was both higher and less variable for households that received productive grants than for comparison households. Relative to households in the comparison group, households that were eligible for the productive grant were 13 percentage points more likely to engage in non-agricultural self-employment, and were more likely to have higher profits from nonagricultural self-employment.

Macours, Karen, Patrick Premand, and Renos Vakis. "Transfers, Diversification and Household Risk Strategies: Experimental Evidence with Lessons for Climate Change Adaptation." Working Paper, Paris School of Economics, July 2012.