

Agricultural Microfinance in Mali



Well-timed cash grants and loans increased agricultural output in rural Mali

Agricultural productivity in Africa is low despite the existence of improved seeds, fertilizers, and pesticides. As much of the population works in agriculture, encouraging use of these improved technologies could raise productivity and in turn reduce poverty and encourage economic growth. But why do farmers fail to invest in potentially profitable technologies? One reason may be that they do not have enough cash on hand when they need to purchase them and lack access to credit. Microcredit organizations have attempted to address this problem, but the typical microcredit

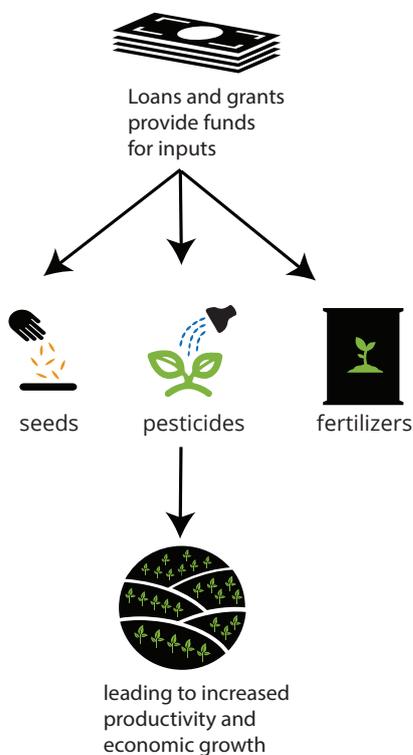
loan contract—where clients must start repayment after a few weeks—is ill-suited for agriculture. Providing farmers with loans at the beginning of the planting season, to be repaid in a lump sum at the time of harvest, could facilitate investment and increased profitability.

Soro Yiriwaso, a partner of Save the Children in Mali, offers a loan product designed specifically for farmers called *Prêt de Campagne*, or “countryside loan,” to women who join local community associations. The loans are dispersed at the beginning of the agricultural cycle and must be repaid in one lump sum immediately after the harvest.

The evaluation of this program studied whether agricultural microfinance can help relax constraints to technology investment among smallholder farmers in rural Mali through offering credit, either in loan or grant form. The results show that giving some farmers unrestricted cash grants led to significantly higher productivity and profits, suggesting farmers would invest more in their farms if they had more capital. Providing farmers with an innovative loan product also led to a significant increase in farm investments and expenditures, suggesting agricultural loans tailored to farmers’ seasonal cash flow may be an effective way to increase investments in agriculture.

In addition, this research suggests farmers vary in the returns they are able to generate from inputs, and agricultural loans attract clients with a better-than-average ability to grow their farms.

This evaluation is a prime example of the effective use of microcredit models, and these findings are especially important given that access to microcredit is often low in rural areas when compared to urban areas.



RESEARCHERS

Lori Beaman (Northwestern University), Dean Karlan (Yale University), Bram Thuysbaert (Ghent University), Christopher Udry (Yale University)

PARTNERS

Save the Children, Soro Yiriwaso



TOPICS

Credit Access, Financial Inclusion, Agriculture

COUNTRY

Mali

SAMPLE & TIMELINE

198 villages, 2010-2013

Evaluation Design

A randomized evaluation was conducted in 198 villages in Bougouni and Yanfolila, in the Sikasso region of rural Mali.

In 88 randomly selected villages, Soro Yiriwaso offered their standard agricultural loan product. Women who joined a local community association were eligible to receive loans. In the remaining 110 villages, no loans were offered. On average, loan sizes were about 32,000 FCFA (US\$110).

In the 110 no-loan villages, cash grants worth 40,000 FCFA (US\$140) were randomly distributed to approximately 800 women. The grants were roughly the size of the average loan provided by Soro Yiriwaso and equivalent to around 70 percent of what average households spent on agricultural

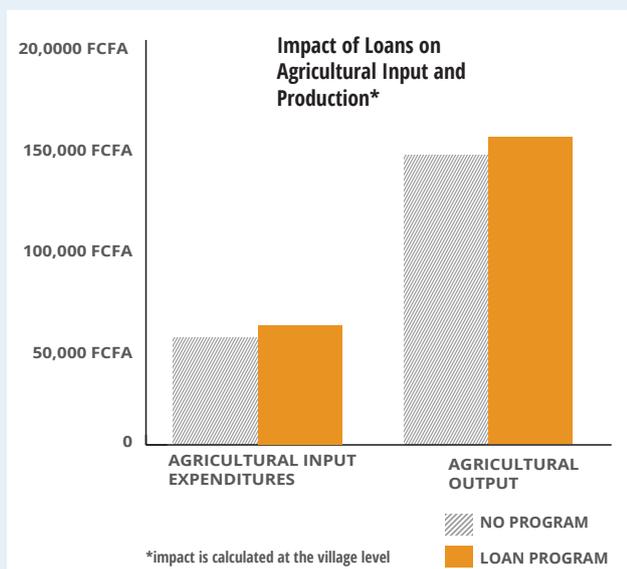
inputs. Grant recipients are compared to control households in no-loan villages to estimate the impact of the grant.

In a second stage of randomization, researchers offered grants in the 88 loan villages to a random subset of the households who did not receive loans through Soro Yiriwaso in order to assess whether farmers who get loans have a better-than-average ability to grow their farms.

Over a two-year period, researchers measured changes in farmers' cultivated area, input use, and production output. They also collected data on food and non-food expenses of the household as well as on financial activities (formal and informal loans and savings) and livestock holdings.

Results

- » About **22 percent of the women chose to accept the loan in treatment villages**, which is a take-up rate similar to other microcredit products. Households in villages which were offered loans spent on average US\$10.35 more on fertilizer and US\$5.08 more on insecticides and herbicides than the households in villages that did not get loans.
- » **Offering loans led to an increase in the value of agricultural output by US\$32, and an increase in the value of livestock by US\$168.**



- » **Providing grants to women in households led to an increase in agricultural investments and, ultimately, profits.** Households randomly selected to receive grants cultivated 8 percent more land and invested US\$28 more on inputs than households that did not receive grants. Output and farm profits among women who received grants also increased 13 percent (US\$66) and 12 percent (US\$40), respectively.
- » **Households that invested more in agriculture, had above-average agricultural output, or had more agricultural assets and livestock than average before the program, were more likely to borrow and demonstrated higher returns to investment.** Moreover, in the villages where loans were offered, households who did not take out a loan and instead received a grant did not generate the same returns as those in no-loan villages who were offered grants, suggesting that households that applied for loans were those with the highest returns to capital.
- » **The repayment rate among women who elected to take out loans was perfect and 60 percent of clients chose to borrow money again**, which is on par with typical client retention rates for similar programs.

Conclusions

In rural Mali, providing farmers with an innovative loan product led to a significant increase in farm investments, suggesting agricultural loans tailored to farmers' seasonal cash flow may be an effective way to increase investments in agriculture. Furthermore, the evidence that productive farmers are more likely both to apply for agricultural loans and to generate higher returns on the agricultural investments they make has important implications for credit markets.

Additional investments in agriculture could increase income for subsistence farmers, potentially improving the livelihoods of millions of people.

In rural Mali, giving some farmers unrestricted cash grants led to significantly higher productivity and profits, suggesting farmers would invest more in their farms if they had more capital. Agricultural loans are one way to get this capital into the hands of farmers who will use it well.

The full study is available at: <http://bit.ly/AgricultureinMali>

Contact info-mali@poverty-action.org Visit www.poverty-action.org/mali