

The Impact of Seasonal Food and Cash Loans on Small-scale Farmers in Zambia



Photo: Stephen Morrison/Africa Practice

Project Summary

COUNTRY
Zambia

TIMELINE
2013 – 2015

INNOVATION

Offer food and cash loans to small-scale farmers during the lean (“hungry”) season to reduce farmer’s reliance on costly coping strategies and to increase agricultural output.

EVALUATION

3,141 small-scale farming households from 175 villages in Zambia’s Chipata District were enrolled in a cluster-randomized trial and closely monitored between November 2013 and September 2015.

INTERVENTION

Farmers in randomly selected treatment villages were either offered a loan of ZMW 200 (~ US\$ 35) or three 50kg bags of maize in January 2014 and January 2015. Farmers had to repay ZMW 260 in cash or four bags of maize after harvest in each year.

RESULTS

Loans were highly popular among farmers with more than 95 percent of eligible farmers taking out a loan, and 90 percent of farmers fully repaying their loans on average. Access to loans increased agricultural output on average by ZMW 200. Access to loans also increased consumption for both children and adults. Farmers with access to loans were less likely to sell their labor as casual day labor (ganyu) and spent more time on their own fields.

The Context

Like in much of Sub-Saharan Africa, agriculture is the largest source of employment in Zambia, where most production occurs on small-scale farms. Most farmers continue to live well below the national poverty line, with average household incomes of less than US\$500/year. Given the long dry season and lack of irrigation, most small-scale farmers exclusively rely on the food and income generated by a single annual harvest which happens between May and July each year. Starting in late September, an increasing share of farmers runs out of food and cash savings (Figure 1). Resources are most scarce in the January-March period, which is generally referred to as the “lean” or “hungry” season, and is marked by high food prices and widespread hunger. As farmers run out of resources, they engage in a variety of coping strategies to cover basic needs. One of the most common coping mechanisms in the study setting is

doing short-term (“ganyu”) labor for other better-off farms. Completing field work tasks for other farms provides families with cash to meet their immediate financial needs in the short run, but reduces the time farmers can spend on their own fields, which may reduce subsequent harvest outcomes. Less agricultural output implies fewer resources for the next season, making it increasingly difficult for farmers to escape a perennial cycle of hunger and poverty.

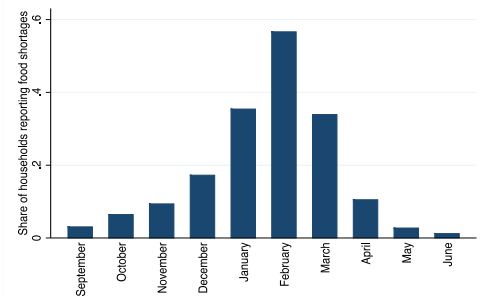


Figure 1: Share of small-scale farms reporting insufficient food by month.

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POLICY GOALS

Improve agricultural output and decrease hunger among small-scale farmers

The Intervention

In rural Zambia, borrowing cash at reasonable interest rates is difficult; even farmers who have access to the banking sector cannot borrow without suitable collateral. Expanding access to credit during the lean season may alleviate financial pressure on farms during the growing season. Access to lean season credit may reduce the need to sell labor locally, and increase the time farmers can spend on their own fields; this increased investment in on-farm labor may in turn increase farm output and break the cycle of poverty and dependency. The project tested two types of loans: a cash loan of KR 200 and a food loan of 150kg of maize. Both loans were made available to farmers in January, with repayment due in July.



Main Findings

Demand from study households for both cash and maize loans was high. The take up rate among eligible farmers was 98.5 percent in year 1, and 97.1 percent in year 2. Repayment rate was 95 percent for both types of loans in year 1, and 80 percent in year 2 (Figure 2).

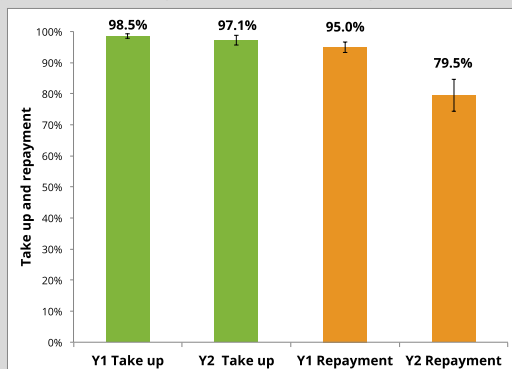


Figure 2: Loan take up and repayment.

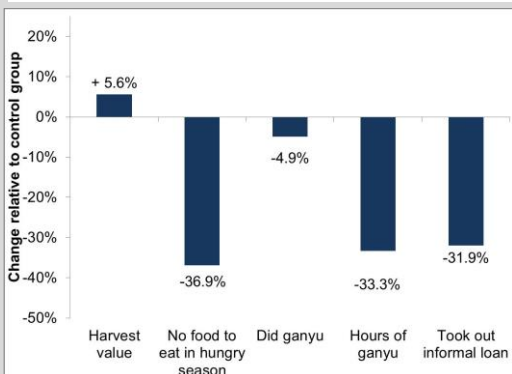


Figure 3: Loan impact on harvest, hunger, ganyu and borrowing.

The overall impact of the loan program was positive. In villages with access to the loans, the evaluation found:

- **Increased harvest output and value.** Eligible farms experienced a statistically significant 5.6 percent increase in total output (Figure 3). Output impact was substantially larger in the first year of the program when rains were good.
- **Increased household food consumption.** Farms in both treatment arms were almost 40 percent less likely to experience food insecurity during the lean season and consumed significantly more protein as well as a more diverse diet (Figure 3).
- **Reduced ganyu work and increased work time on farm.** Farms eligible for a loan were 4.9 percent less likely to do ganyu (Figure 3), and spent on average more time on their own fields. As a result of these changes, ganyu wages rose in treated villages in year 1.
- **Reduced high-interest borrowing.** Rates of reported high-interest borrowing from informal moneylenders fell by 32 percent (Figure 3). Borrowing from friends and family also declined.
- **High levels of loan satisfaction and repeated borrowing.** Even after repaying their loans in year 1 with interest, 98 percent of eligible households chose to borrow again in year 2. This indicates that, overall, the program was considered beneficial and attractive by participating farmers.

Policy Implications

- Access to resources during the lean season can help farming households allocate labor more efficiently, leading to improvements in productivity and wellbeing.
- High take up and repayment rates suggest that farmers are not only interested in seasonal loans, but are also willing and generally able to repay loans with interest.
- The results of this study suggest that even relatively small loans can increase well-being and agricultural output; larger loans would be needed to finance fertilizer or other more expensive agricultural inputs.
- Access to credit is only one way of smoothing lean season shortages: similar improvements might be achieved with improved saving mechanisms.



For more information:

<http://www.poverty-action.org/study/impact-food-and-cash-loans-smallholder-farmers-zambia> | info-zambia@poverty-action.org

