

Policy Brief

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

Researcher Günther Fink, Kelsey Jack, Felix Masiye
Project Number 209

Abstract

Small-scale farming remains the primary source of income for a majority of the population in developing countries. In rainfed agricultural settings, income typically arrives only once a year. To meet consumption and investment needs over the subsequent months in the absence of formal financial markets, households adopt a range of coping strategies. Two common strategies are reducing food consumption and selling labor to other farms, both of which improve short term liquidity, but may harm subsequent harvest outcomes. To investigate whether seasonal coping strategies lower farm output, we conducted a randomized controlled trial.

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

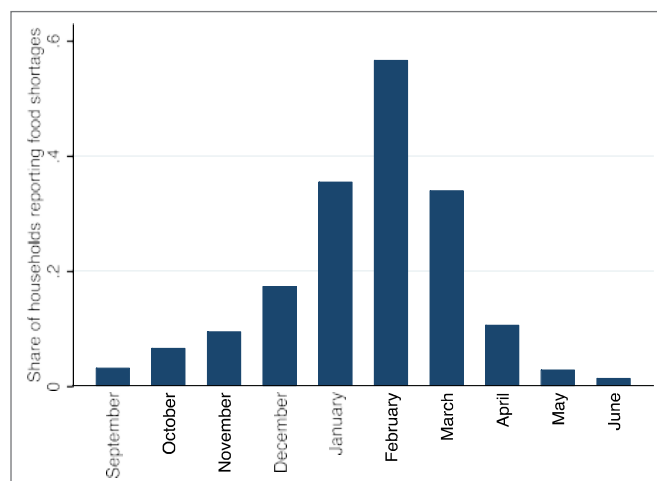
high food prices and widespread hunger. As farmers run out of resources, they engage in a variety of coping strategies to cover basic needs. One of the most common coping mechanisms in the study setting is doing short-term (“ganyu”) labor for other better-off farms. Completing field work tasks for other 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.

In rural Zambia, borrowing cash at reasonable in-

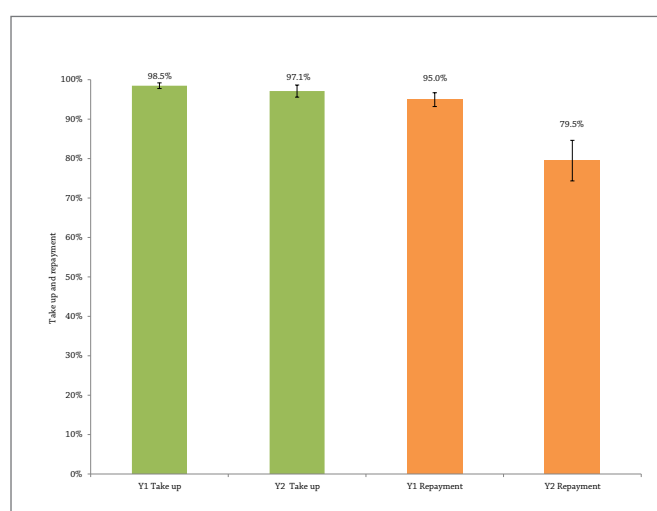
terest rates is difficult; even farmers who have access to the banking sector cannot borrow without suitable collateral. Expanding access to credit during the lean season may alleviate financial pressure on farms during the growing season. Access to lean season credit may reduce the need to sell labor 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.

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

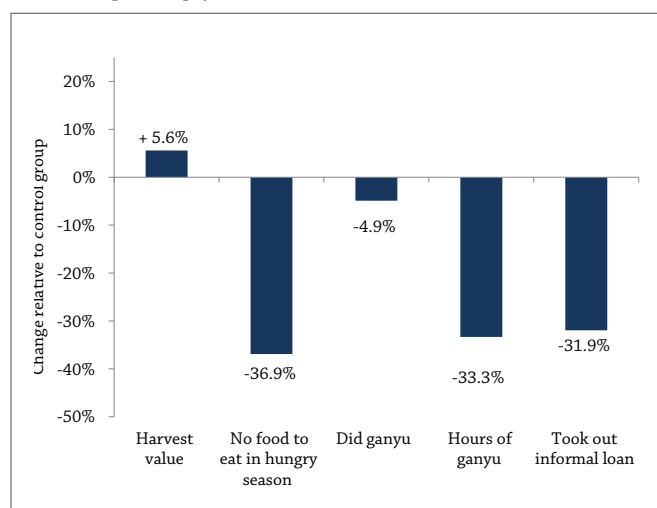
- **Increased harvest output and value.** Eligible farms experienced a statistically significant 5.6 percent increase in total output (Figure 3). Output impact was substantially larger in the first year of the program when rains were good.
- **Increased household food consumption.** Farms in both treatment 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 highinterest 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.



Share of small-scale farms reporting.



Loan take up and repayment.



Loan impact on harvest hunger, ganyu and borrowing.

Policy Implications

- Access to resources during the lean season can help farming households allocate labor more efficiently, leading to improvements in productiv-

- ity 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.



This document is an output funded by the UK Department for International Development (DFID) and the Institute for the Study of Labor (IZA) for the benefit of developing countries. The views expressed are not necessarily those of DFID or IZA.

The Growth and Labour Markets in Low Income Countries Programme (GLM | LIC) is a joint collaboration between IZA and DFID which aims to improve worldwide knowledge on labor market issues in low-income countries and provide a solid basis for capacity building and development of future labor market policies.

Based in Bonn, Germany, IZA is a local and virtual international research center and a place of communication between science, politics and society. IZA is an independent non-profit organization supported by the Deutsche Post Foundation.

The IZA research network is committed to the IZA Guiding Principles of Research Integrity. Research published in this series may include views on policy, but IZA itself takes no institutional policy positions.