Published on *Jobs and Development* (http://blogs.worldbank.org/jobs)

Home > Juggling Labor, Credit, and Crops in Zambia

Juggling Labor, Credit, and Crops in Zambia

Submitted by Kelsey Jack On Mon, 07/21/2014

Kelsey Jack is an Assistant Professor of Economics at Tufts University.

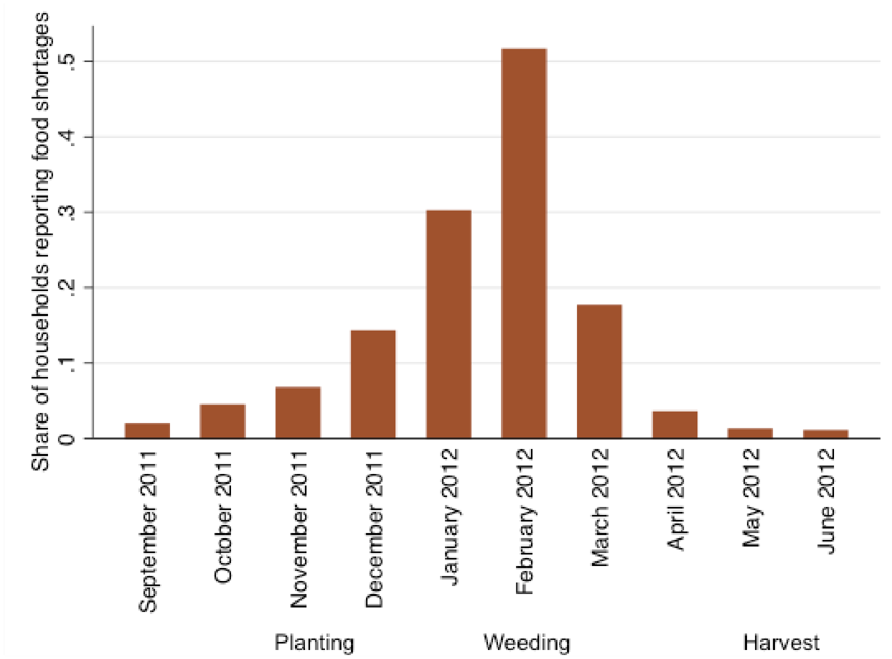
When one part of the local economy fails, it spills over into other parts of the economy. Maybe this isn't so surprising. However, recent research in Zambia highlights a less obvious link: farmers who can't get access to credit during the hungry season (January to March) increase their off-farm labor supply, drive down wages, and maybe even undermine their own agricultural yields. This matters greatly given that small-scale farming remains the primary source of income for the vast majority of the rural population in Zambia, with typically low levels of productivity and farming income. Fortunately, there is new evidence that providing consumption loans can help farmers invest in their own fields, and — we hope — boost their productivity.

Coping with not enough credit for food

A few years ago, two colleagues (Günther Fink of the Harvard School of Public Health and Felix

Masiye of the University of Zambia) and I began working in rural Zambia on projects ranging from health and the environment to agriculture. As we spoke to rural smallholder farmers around the country, we kept hearing the same story. Farmers described how they ran out of food in the "hungry season" (the months leading up to harvest time) (see figure), which forced them to cope by resorting to working ganyu, a term for casual day labor typically done on nearby farms. But this meant neglecting their own fields, which hurt their own harvests. Thus, farmers were essentially borrowing against their future harvest, lending out their most available asset — their own labor.

Seasonal patterns in rural Zambia



Source: Midline survey data, Chipata Food Loan Project.

We wondered if other ways of accessing food were available — such as through a loan with reasonable interest — would farmers prefer to take that option. To try to answer this question, we used a randomized control trial that offered short-run food loans to farmers in randomly selected villages in Chipata District in the eastern part of Zambia. We offered farmers in selected villages up to three bags of maize flour during the hungry season (enough to cover the consumption needs of an average household over a three-month period) and asked them to repay in maize after the harvest.

The outcome was extremely positive. First, farmers wanted the loans: 95 percent of those offered the loan took it up. Second, farmers were able and willing to repay: among those who took out a loan, over 95 percent repaid in full. But most important, there were positive effects on consumption, the labor supply, and wages. Specifically, when compared to a randomly assigned control group, the farmers with loans missed almost 50 percent fewer meals and were forced to look for ganyu 25 percent less often. Most remarkably, local wages increased substantially. (See our paper, "Seasonal Credit Constraints and Agricultural Labor Supply: Evidence from Zambia" [1] for more details on the study and a summary of related literature).

Our findings contribute to a growing literature, mostly coming out of anthropology, that documents the consumption-smoothing role that ganyu plays for small farmers in Southern Africa. This, in turn, relates to the larger economic literature that documents how households cope with periods of shortage or urgent need when they don't have access to credit. While other studies have shown that labor supply does adjust to help families cope, its role in helping to address seasonal shortages has only been addressed through one previous study on seasonal migration in Bangladesh (Bryan, Chowdhury and Mobarak 2013 [2]). The bottom line is that together these studies point to poorly functioning credit markets that distort the off-farm labor supply decisions of poor farmers and hurt other laborers by lowering wages.

Weighing loans to finance consumption

So what can be done to help poor farmers gain access to credit? Traditionally, loans to finance consumption, especially for the poor, haven't been seen as viable, largely because the spillover from the credit market to the labor market in rural developing countries hasn't been well understood. But if we can document effects on agricultural yields from higher consumption and less off-farm labor, that may change. Indeed, if higher yields in one year translate into less ganyu in the next year, then a loan intervention may help farmers escape from a regular cycle of low yields, hunger, and off-farm labor. To test this assertion, we are in the middle of scaling up the project to learn more about the effects on agricultural yields. More findings to come!

This post was first published on the Jobs Knowledge Platform.

- Tags:
- Labor and Social Protection [3]
- Agriculture and Rural Development [4]
- Africa [5]
- Zambia [6]

Source URL (retrieved on *07/07/2016 - 17:04*): http://blogs.worldbank.org/jobs/juggling-labor-credit-and-crops-zambia

Links:
[1] http://sites.tufts.edu/kjack/?attachment_id=143
[2] http://faculty.som.yale.edu/mushfiqmobarak/papers/migration.pdf
[3] http://blogs.worldbank.org/jobs/category/topics/labor-and-social-protection
[4] http://blogs.worldbank.org/jobs/category/topics/agriculture-and-rural-development
[5] http://blogs.worldbank.org/jobs/category/regions/africa
[6] http://blogs.worldbank.org/jobs/category/countries/zambia