IGC Policy Brief

***Title**:* Food Constraints, Yield Uncertainty and "Ganyu" Labour: A Pilot Investigation

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Short Summary Paragraphs:

Policy Motivation for Research

Small-scale farming remains the most common livelihood strategy and primary source of income in rural Zambia. With limited savings and access to credit, small scale farms frequently resort to short-term piece work at larger farms to cover basic needs prior during the planting and growing season. Working off-farm generally implies that small-scale farmers neglect their own fields, and will achieve lower harvest yields. Low yields imply limited reserves for the subsequent farming season, and thus further increases in the dependence of small scale farmers on piece rate labour, a vicious cycle frequently referred to as "poverty trap" in the literature. This project aims at quantifying the magnitude of the poverty trap and test possible interventions to break out of this poverty cycle.

Policy Impact:

The primary policy investigated is the provision of food loans. Key outcome variables analyzed to evaluate the desirability and cost-effectiveness of such a policy are the take-up of such loans, as well as the impact of the loans on farm labour input and final farm production. Of particular interest is also the effect on subsequent seasons, and the potential of program to generate yields high enough to permanently lower farm's dependence on short-term labour provision.

If the treatments are successful, the study provides a scalable and cost effective tool for generating sustained welfare gains that may also improve the overall productivity of the farming sector, increase wages and lower poverty beyond the farms directly benefitting from the project.

Audience: *the audience or key decision makers targeted by this brief*

Study findings will be relevant for Zambian policy-makers interested in rural development and agriculture. The implications will extend to other countries sub-Saharan where off-farm labour is the primary coping strategy during the hungry season.

Main sections:

Policy Implications:

- Most Zambian farmers are credit constrained and face clear seasonal patterns in income and consumption.

Small-scale farming remains the most common livelihood strategy and primary source of income in rural Zambia. Limited access to credit and insurance mechanisms leave farmers vulnerable to varying weather and environmental conditions. These yield risks can severely limit farmer's ability to purchase farming inputs for subsequent seasons and to cover basic food needs for the entire year.

- Off-farm labour as a coping strategy for seasonal food shortages may lower agricultural productivity.

In the absence of savings and credit, the only way through which money for food and other basic needs can be raised prior to the harvest is to engage in short-term piece work at larger farms. Working off-farm generally implies that small-scale farmers neglect their own fields and their yields deteriorate as a result. This further increases the dependence of small scale farmers on piece rate labour in the subsequent season – a phenomenon that resembles a classic poverty trap.

- Short-term alleviation of credit constraints may break the poverty trap.

The aim of the study interventions is to provide farmers with the opportunity to invest their time and efforts in their own crops and increase agricultural productivity in the presence of cyclical food shortages, thus breaking the poverty trap.

Implementation:

The intervention seeks to mitigate the impact of cyclical food shortages on labour allocation and thus improve agricultural productivity.

450 small scale farmers in the Chipata district of Zambia's Eastern Province are randomly selected and assigned to a treatment group and a control group at the village level.

The Food Credit Intervention aims to provide farmers with access to additional food during the cropping season. Farmers selected for this intervention will be eligible to obtain one bag (50kg) of maize per month on a credit basis. All maize will be repaid in kind and without interest at the end of the harvesting season.

The Food Credit Intervention is further divided into two sub-treatments. The first offers all eligible farmers in the village the opportunity to take up the loan. The second offers the loan to half of the eligible farmers, drawn at random in a public lottery. Variation in the availability of food credit in the village allows for the investigation of spillover effects between households.

A baseline survey was conducted prior to roll-out of the loans. Midline and endline surveys will be conducted to measure the loan take-up's impact on consumption, labour allocation, and yields, as well as the intervention's impact on future investment choices. Take up of the loan was 94%.

Dissemination:

To be determined based on final study results available in late 2013.

***Further Readings**:*

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