

Learning from Tanzania's agricultural input voucher scheme

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Highlights

Evidence impact

- The researchers found mixed impacts for the input vouchers and suggested improvements in input subsidy design, drawing on evaluation findings that were included in a government public expenditure review.
- The Tanzanian government and the World Bank let the input subsidy scheme end as planned, and the bank applied evaluation lessons to design the input subsidy component of the Expanding Rice Production Programme (ERPP), which was being implemented in the Morogoro region of Tanzania.

Factors that contributed to impact

- The input vouchers scheme had a high profile, and a senior ministry official was part of the study team from the beginning.
- The study team included researchers affiliated with the World Bank, which was financing the scheme.
- The public expenditure review facilitated the use of the evidence by the local World Bank team that worked on the ERPP's design.

Impact evaluation details

Title: [Enhancing food production and food security through improved inputs: an evaluat...](#)

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Context

Agriculture in Tanzania accounts for 27% of GDP, 80% of employment, and 75% of household income and is a key component of the country strategy for poverty reduction. Food insecurity caused by the volatile international food prices in 2008 and 2009, and the need to raise agricultural productivity in step with technological advances, pushed Tanzania and other African governments to support input subsidy vouchers.

The National Agriculture Input Voucher Scheme (NAIVS), implemented in 2008 by the Tanzanian Ministry of Agriculture, Food Security and Cooperatives (MAFC), provided a 50 per cent subsidy through vouchers for the purchase of chemical fertilisers and improved seed to maize and rice farmers. The scheme prioritised relatively poor smallholder farmers, first-time fertiliser users and female-headed households in 65 districts.

The MAFC, half of whose budget was devoted to NAIVS, and the World Bank, the scheme's main funder, planned it as a temporary programme with farmers graduating to other programmes, such as credit subsidies, after three years. However, it was not clear whether the three-year cut-off was realistic, whether the NAIVS worked for women or how it could be made to function better.

Using data from a household survey designed for the impact evaluation, the 3ie-supported mixed-method impact evaluation explored the impacts of different delivery models for the voucher scheme on agricultural productivity; health and nutrition; and overall welfare of farming households, particularly female farmers across Tanzania. The evaluation, led by

Innovations for Poverty Action, was conducted between 2010 and 2014. It involved the World Bank and MAFC working closely together, with researchers from the World Bank and one senior MAFC official represented on the study team.

Evidence

The evaluation showed that the NAIVS had mixed impacts. Input use and yields were higher where farmers had been selected by decentralised village voucher committees, but there seemed to be a tension between efficiency and equity. There were no impacts on incomes, food security or educational attainment in the short term. Those targeted by the scheme, including women-headed households, were not able to benefit the most.

Although input use, yields and output sold did increase amongst female-headed households in all villages except those where voucher assignment was fully randomised, findings highlighted the strong disadvantage they faced. Although female farmers felt positive about the programme and its ability to help boost yields, many could not afford the additional payment required with the vouchers. As a result, many did not participate.

Targeting criteria were not enforced, and there appeared to be sharing or selling of vouchers. The evaluation provided lessons on scheme duration, awareness amongst farmer participants, targeting and cost-effectiveness.

Evidence impacts

Informing the World Bank's input subsidy programming

Although the MAFC and World Bank let the NAIVS end as planned in 2015, the local World Bank team cited the findings in the design of a temporary input subsidy component within the ERPP.

Publicly available programme documents for the ERPP state that it includes an explicit graduation strategy that has been informed by the lessons from implementing and evaluating the NAIVS. The programme's temporary input subsidy component planned to have an explicit graduation strategy, with an extended duration of commercially channelled subsidies (from three years in the NAIVS to five years) and increased focus on farmer awareness.

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