



Nutrition Insecurity: Farm Input Subsidy and Integrated Soil Fertility Technologies Solution Divide in Malawi

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Key Messages

Evidence shows that:

1. Smallholder farmers have been accessing input subsidy and best practices on extension services. Yet, the persistence levels of nutrition insecurity remains in most of their households.

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2. Educative health care lessons are key to improved household nutrition security.
3. Infrastructure in communities determines nutrition outcomes.

The context

Many African countries rely on agriculture for their socio-economic development and the health of their people, and Malawi is no exception. In recent years, the Government of Malawi has invested around K200 billion Kwacha (US\$ 250 million) in input subsidies programmes (IISP) to ensure food security among smallholder farmers (NAP, 2016). At the same time, the Government has also promoted programmes to improve extension services (Raggasa et al., 2020; Babu and Sanyal, 2007). Furthermore, over the same years, the Government has also invested in community infrastructure such as roads, health care facilities, and health and nutrition support programmes such as school feeding programmes.

The problem

In spite of these efforts, food and nutrition insecurity remain a challenge among 90% of smallholder Malawian farmers' households (World Bank, 2020). Particularly affected are under five years children (NSO and ICF Macro, 2015-16): stunting conditions increased from 37.4% in 2014 to about 39.0% in 2019; wasting slightly moved from 2.8% in 2015 to 1.3% in 2018; and underweight remained at an average of 11.8% between 2015 and 2019 (World Bank, 2020). The persistent condition of nutrition insecurity is largely attributed to inconsistent agricultural productivity. The factors determining this situation include: recurrences of dry spells; over-dependencies on rain-fed agriculture; lack of farmers' technical know-how to implement appropriate agronomic practices for enhanced household nutritive statuses.

“Despite huge investment in agriculture and extension services, the persistence of smallholder farmers on nutrition insecurity, still remains”

In Malawi, food and nutrition insecurity remain a challenge among 90% of smallholder farmers households (World Bank, 2020). This is efforts by Malawi government through input subsidy programmes aimed at ensuring food security among smallholder farmers (NAP, 2016) and requisite skills in extension services on farming improvement programmes (Raggasa et al., 2020; Babu and Sanyal, 2007). The persistence of nutritive insecurity still remains among the smallholder farmers' under five children (NSO and ICF Macro, 2015-16). More notably, under five year children's stunting conditions increased from 37.4% in 2014 to about 39% in 2019, wasting slightly moved from 2.8 % in 2015 to about 3.9% in 2016 and back to 1.3% in 2018, and underweight remained at an average of 11.8% between 2015 and 2019 (World Bank, 2020). This is amidst

several initiatives aimed at promoting quality of life among the farmers and household members. However, little has been flagged to direct policies aimed at improving nutrition statuses and security among the smallholder farmers amidst acquisition of farm input subsidy and proper use of integrated soil fertility technologies for their enhanced socio-economic statuses, thereby improve nutrition security.

Background

This research attempts to shed light on why nutrition insecurity still affects many smallholder farmers, despite the investments made by the Malawian government. In particular, the research highlights the significance of food production input systems, such as fertilizer input subsidy, coupled with best practices in integrated soil fertility management (ISFM) techniques and their effect on nutrition outcomes. Why are such linkages so critical to ensure an improved health status of the people in Malawi?

How?

In order to understand the existent imbalance between agricultural investment and nutritive insecurity among smallholder farmers, three waves of secondary data drawn from the Integrated Household Survey data (2010, 2013, and 2016) were used. The pooled multivariable logistic regression was used to estimate the determinants of nutrition insecurity among children under five among farmers in Malawi.

Who?

Our report used 4,170 households that were drawn from across Northern, Central and Southern regions of Malawi. From these households, the study focused on children aged between 0 and 59 months and were 5,419.

What?

In order to measure the nutrition insecurity, three outcome variables were used: under-weight, stunting, and wasting.

Findings, results and conclusions

Inadequate balances between ISP and ISFM have proved to create a dire effect on the nutrition statuses of the under-five rural children. The use of fertilizer subsidy and individual ISFM technologies has a relative impact on both maize productivity and subsequent nutrition security when separately implemented and worsen the household's nutrition outcomes. While individual ISFM technologies reported

insignificant correlation with maize yield, they have positive and significant effects in increasing maize productivity with a ripple effect of corresponding improved nutrition statuses.

Additionally, the research on which this policy brief is based shows that in terms of the community infrastructure, a good road network improved the quality of life of the children and subsequently reduced wasting conditions among them significantly. On the same note, availability of the clinics was associated with little impact but increased wasting conditions among the children under five in the country. In terms of the community feeding interventions aimed at improving the quality of life among the under-five, the school feeding programmes practiced in rural Malawi had little impact in reducing underweight and stunting conditions among the children under-five years.

The policy options

Deliberate policies to ensure that access to fertilizer subsidies is concurrently supported with access to best farming technologies is paramount to reduce public health challenges of under-weight, stunting and wasting among rural and under-served farmers.

In order to wholly attain this, skills and capacity of the extension workers need to be expanded. This way, extension workers can train the rural farmers and ensure they acquire robust knowledge on precise inputs for management and best farming practices. This is fundamental for farming activities to be correlated with improved nutrition and health outcomes among rural households in Malawi.

Further, development initiatives aimed at improving rural infrastructure remain fundamental to support nutrition security in rural Malawi.

Additionally, the performance of healthcare services has been unexpectedly noted to influence the reduction of public health challenges that emanate from nutrition insecurity. Consequently, there is need for healthcare institutional audit to assess the depth of integrated knowledge among healthcare service providers on the significance of production of food at the household levels and its impact on the nutrition outcome among the community members patronizing the health care facilities. The establishment of multisectoral strategies that would be rendered to the farmers when they are visiting the health facilities should be looked into. This would be significant as the farmers would have no choice but acquire food production and good farming principles even from the health facility levels and take it seriously to win the persistent public health war of underweight, stunting and wasting.

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