

The Malawi Agricultural Input Subsidy Programme: Lessons from Research Findings, 2005 – 2008

Background and Context

Maize, the main staple crop remains the dominant crop among smallholder farmers in Malawi. Smallholder farmers devote almost 70 percent of their land to maize cultivation, and maize availability in the country defines the food security situation of the country. Smallholder agriculture in Malawi has been characterized by low productivity, low technology and labour intensive, with maize mainly produced for subsistence consumption. The low productivity in smallholder agriculture has been attributed to loss in soil fertility, low application of inorganic fertilizers and traditional low technology rain-fed farming systems.

The Malawi Agricultural Input Subsidy Programme (MAISP) was first implemented in the 2005/06 agricultural season following a poor-harvest season and a high maize import bill to augment domestic supply in 2004/05 agricultural season. In 2008/09, the MAISP was in its fourth year of implementation, with changes in the scale, scope and ways of implementation. The MAISP is largely financed by the government, with donor support being in form

of overall budgetary support. The MAISP is designed as a targeted input subsidy programme, targeting smallholder farmers with land but who cannot afford to purchase inputs at market rates. The target is 2.8 million farming households out of an estimated 3.4 farming households. The size of the MAISP has increased from 132,000 tonnes in 2005/06 to 216,000 tonnes in 2007/08. This has also meant that the cost of the subsidy has escalated from MK5.1 billion (2.1 percent of GDP) in 2005/6 to MK16.3 billion (3.4 percent of GDP) in 2007/08 and to MK31 billion (5.5 percent of GDP) in 2008/09. The fertilizer subsidy per farmer increased from 64 percent to 79 percent of the commercial price in 2005/06 and 2007/08, respectively.

There have also been changes in the scope of the subsidy from targeting smallholder maize and tobacco farmers to inclusion of smallholder cotton, tea and coffee farmers, and to the focus on only maize farmers in 2008/09. The implementation has also varied with the inclusion and exclusion of the private sector in the redemption of fertilizer vouchers although private sector participation in seed voucher redemption has

continued over time. Targeting of beneficiaries has improved to a more open way of identifying beneficiaries although the allocations rules for supplementary coupons lack transparency and accountability. The subsidy has improved the food security situation in the country and official figures show that surplus maize as much as 600,000 tonnes has been produced in a single season. The qualitative evidence suggests that the food security situation for many households has improved since the implementation of the MAISP

The MAISP has attracted a lot of interest domestically and internationally with supporters and critics. Supporters hail the impact of the programme on the food security situation in the country while critics argue that it may not be the efficient way of using resources and question the sustainability of the programme in a country that relies on donor support for its budget. The MAISP has also generated interest from researchers and evaluators, and there have been several studies that have been undertaken which offer valuable lessons from experience. This policy brief summarizes the issues that have emerged from research findings on various aspects of the agricultural input subsidy programme.

Targeting of Beneficiaries and Scope of Subsidy

Targeting of beneficiaries is one of the determinants of the efficiency parameters of the subsidy programme. Ideally the subsidy should not replace commercial purchases of fertilizers and seeds by smallholder farmers. In other words, the subsidy should have minimal exclusion and inclusion errors for it to be effective. The studies find variations in the targeting criteria, with communities emphasizing one or two features of eligibility criteria in the selection of

beneficiaries. The research findings reveal that the targeting of beneficiaries in the base allocation has moved from identification of beneficiaries by the village committee to open meeting registration of beneficiaries. However, these improvements have not been witnessed in the allocation of supplementary coupons whose process is still not transparent. There is evidence from the studies that the use of a community-based identification of beneficiaries through open meetings was commended in 2008/09 process compared to the previous seasons. The open meetings in the identification and distribution of coupons provided opportunities for everyone to be involved and eliminated any suspicion and mistrust.

Nonetheless, concerns remain in the processes and identification of beneficiaries for the supplementary coupons. In 2008/09, voter registration cards were used as a pre-condition to receipt of coupons and the redemption of coupons, a process that alienated eligible beneficiaries without voter registration cards. Owing to the limited number of coupons available, the studies find that in some areas the households share the procured inputs, implying that some households receive less than the required number of coupons. For instance, in 2006/07 the average number of coupons received per household was 1.7 for both maize and tobacco fertilizers.

The scope of the subsidy has included maize and other cash crops grown by smallholder farmers. The subsidy has covered maize and tobacco, with cotton, tea and coffee covered in the 2008/09 season although the 2009/10 programme is only focusing on maize. There are debates on whether resources should be used to subsidize commercial crops that are commercially viable. The studies show that higher

displacement of commercial sales of fertilizers occurs due to subsidization of cash crops.

Tender and Coupon Management

Fertilizers for the subsidy programme have been procured using a competitive tendering system among private sector importers and state-owned companies. Over time improvements have been witnessed in the timing of tenders and award of seeds and fertilizer contracts. Except for 2005/06, disbursement targets had been more than met in 2006/07 and 2007/08, although this has also led to cost overruns. The improvements in tender management have also improved the timing of the distribution of inputs into different markets.

One of the difficult issues in voucher system is the security features of the vouchers. With time there has been increased incidents of fraud and use of fake coupons. This means that the security features of coupons has to be changing every year.

Logistics and Distribution of Inputs

Although, the distribution of inputs to various markets has improved, early procurement can enhance the efficiency of the programme. The studies reveal that timing of distribution of inputs still remains problematic. There are varied experiences in the distribution of inputs in different areas, with more remote markets experiencing shortages. This led to congestions at the markets and long queues. In areas where communities organized themselves, through establishment of market liaison committees there were better able to deal with problems of congestion, organized theft and corruption at the distribution centres as long as inputs were readily available. Other related issues at ADMARC markets was the shortage of receipt books, inadequate supply of some types of

fertilizers, inaccessible distribution centres due to impassable roads. The pressures on the supplies resulted in farmers paying ADMARC officials tips to get access to subsidized fertilizers, influences by local leaders and politicians and created opportunities for gangsters to exploit farmers. The congestion is exacerbated by the exclusion of the private sector in the redemption of fertilizer vouchers.

Coordination Issues

The implementation of the MAISP involves various stakeholders and coordination is important in improving the efficiency of the programme. Two layers of coordination are important in the subsidy programme: coordination of implementation activities and coordination of the MAISP with other complementary policies. The efficient flow of information to the stakeholders is a key element of effective coordination at both levels.

With respect to implementation, stakeholders need proper information on farm families, the number of farmers that are eligible in each area and the volume of inputs expected in each area. The studies find that there is information asymmetry in many respects. For example, without the precise information on the number of beneficiaries to be targeted in each area, the registration of farmers was construed as eligibility for the subsidy. The number of coupons allocated to the village was much less than the number of farmers registered and this raised suspicion of the whereabouts of the other coupons. This creates mistrust between farmers and officials involved in the distribution of the coupons.

There are strong complementarities between the AISP and other investments that support agricultural and rural development, notably roads, agricultural research and extension, and the greater stability of maize prices. The findings

from various studies on MAISP also reveal a lack of coordination between the subsidy programme and other complementary policies such as research and extension services, produce pricing and marketing, international trade policy, infrastructure, private sector development and social protection.

There is a weak link between MAISP and extension due mainly to the supply of extension staff. Studies reveal that most farmers do not have access to extension services, and this does affect the efficient use of fertilizers by smallholder farmers as evident in the inappropriate timing of application of basal fertilizers or the mixing of basal and top dressing fertilizers. Only 13 percent of smallholder farmers have access to extension services. Similarly, there is very little coordination of maize outputs and the maize pricing and marketing policies. In periods when Malawi has produced excess maize international trade on maize is highly restricted. In addition, infrastructure development in terms of all weather roads is critical in the distribution of inputs and the movement of farm produce to markets. Similarly, the timing of social protection programmes such as cash for work can greatly facilitate the affordability of poor households in redeeming fertilizer coupons.

Management Information System

The targeted nature on the MAISP requires a good management information system on various aspects of the programme in order to keep track of the outputs. Such management information system includes the number of farming households, target beneficiaries, tracking of programme expenditures and reliable production estimates. This information has to be consistent and shared with stakeholders. The studies identify several issues that relate to the management information system. First,

there are differences in the number of farming households estimated by the Ministry of Agriculture and Food Security and those estimated by the National Statistical Office, with the former estimating more farming households than the latter. The differences in the number of farming households between two government agencies lead to different estimations of the use of coupons in that when MoAFS figures are used the actual use of vouchers is consistent while use of NSO data suggest that some of the coupons do not reach the households.

Second, it is important to track expenditure in the MAISP from different implementation units and the need to reconcile figures from the MoAFS and the Ministry of Finance. The MAISP involve multiple stakeholders playing different roles in the implementation but the cost of their involvement is not documented or included in the overall cost of the subsidy. For example, the cost of implementing the subsidy by the ADMARC, SFFRFM as well as the MoAFS are not known, but the resources devoted to these activities are not apportioned to the subsidy. In addition, it is not know how the government uses smallholder farmers' redemption values and whether ADMARC and SFFRFM remit receipts from farmers to Treasury.

Post-Production Issues

Several post-production issues have emerged in the subsidy programme. These post-production issues include marketing of the maize surplus including export opportunities, the pricing of maize and post-harvest losses. There is evidence that Malawi has produced surplus maize as a result of the input subsidy programme, yet the country has not taken advantage of the food security situation to promote export trade in maize. The maize export ban has been maintained for most of the years of the subsidy. In

2007/08, some of the surplus was exported, but the export order was not satisfied because of supply constraints although the government had estimated a huge surplus production. There has also been concern that a significant proportion of the production is lost after harvest due to storage pests. However, the extent of the post-harvest losses is not known and it is important to establish the extent of this problem in order to implement complementary measures.

Natural Resource Management

There is increasing need to augment efforts to restore soil fertility in different ways including use of organic fertilizers, nitrogen fixing crops and inorganic fertilizers. The studies note that although legumes have been included in the subsidy programme, the availability of legume seeds has been problematic. Most flexi vouchers that would have been used to purchase legume seeds have been used to procure improved maize seeds.

Impact of the Subsidy

The studies evaluate the impact of subsidy programme at household level, national level and meso level. The subsidy programme, blessed with good rains, has been largely successful in reducing household insecurity and this has also improved the national food security. The qualitative evidence from rural households reveals improvements in number of meals and incidence of malnutrition have improved. Apart from the increase in the production of maize, the studies also point to the positive effects of the subsidy on increasing real 'ganyu' wages in the rural areas. However, in spite of the estimated surpluses in maize production, maize prices have not been stable suggesting the need for improving quality of production estimates

or implementation of complementary price policies. What is also not known is the extent to which some of the farmers are graduating from the input subsidy.

Studies also show that the subsidy programme has contributed to the high economic growth rate since 2005/06, low inflation due to lower maize prices in 2005/06 and 2006/07 and growth in exports - with maize exports in 2007. The involvement of the private sector in the importation and distribution of subsidized fertilizer in 2006/07 and seeds resulted in a boom in shop outlets for agricultural inputs in the rural areas.

The subsidy has also led to increased use of improved maize seeds by smallholder farmers. The flexible nature of the seed coupons has enabled farmers to adopt more hybrid maize seeds. In addition, since the maize seed subsidy has largely been implemented through the private sector, this has resulted in the growth of the seed market as well as the growth of agro-dealer sector in the rural areas.

On the cost implications, the studies find that the subsidy programme has been associated with cost overruns - actual expenditures being much higher than budgeted expenditures. These reflect difficulties in the cost control of the programme. The subsidy to farmers has been increasing with farmers paying a smaller proportion of the market price of fertilizers. The redemption price for fertilizer coupons has either been reduced or kept constant while fertilizer prices have increased in some years. Although there is no evidence that the macro-economic performance has been negatively affected by the rising subsidy expenditures, there are concerns of rising subsidy expenditures as a share of gross domestic product which raise questions about the sustainability of the programme and its failure to contain costs.

Moving Forward: Some Action Points

There is no doubt that with the subsidy household and national food security has improved in the country. The subsidy programme will have to be implemented in the medium to long term, but there is need for strategic rethink on what the country want to achieve with the subsidy in the long run. These strategic rethinking have to be embedded in the objectives and operational principles of the subsidy programme and getting national consensus on the future and sustainability of the programme. Apart from addressing issues of food security, some of the strategic changes we can achieve with subsidization include change in the mind-set of subsistence maize farming to commercial maize farming or farming as a business in general and diversification of the agricultural incomes and trade. The studies that have been carried out between 2006 and 2008 provide many lessons that need to be considered to improve the efficiency and effectiveness of the agricultural subsidy programme. Some of the critical issues include the following:

- There is need for clarity in the main objective of the project distinguishing short-term and medium to long term goals of the subsidy and the strategic choice of implementation modalities that achieve these objectives in different timeframes. One aspect that needs clarity is whether the subsidy is more of a safety net or it is a productivity enhancing programme. These issues may require a national debate on what the subsidy should be achieving strategically and what incentives are required for smallholder farmers to graduate from subsidization.
- There should be increased use of community-based open process of identification of beneficiaries and allocation of coupons and

the number of coupons that will be made available in the community should be known at the time of identification of beneficiaries. This will facilitate empowerment of the community and reduce the suspicion between farmers and local leaders and government officials.

- There is need to improve the targeting of the subsidy programme by defining clearly the key indicators of eligibility. Targeting is a function of the objective of the programme. If the primary objective is national food security, then targeting the more productive smallholder farmers makes sense. However, if the primary objective is household food security, then the target should be food insecure households that have land equivalent to productive use of the subsidy package. The subsidy should only focus on subsidizing inputs for maize production.
- The participation of the private sector in the retailing of subsidized fertilizers should be encouraged as it improves the efficiency but also promotes private sector development in input markets. However, this should also be accompanied with confidence building activities that demonstrate positive partnership in development.
- There is need to enhance the coordination of the agricultural input subsidy and other complementary policies that can enhance the effectiveness of the programme. Particular attention has to be paid to how surplus production relates to maize prices and international trade, how the implementation of the subsidy is linked to delivery of extension, how infrastructure services can improve the delivery of inputs and the development of private markets.
- A wide range of conservation practices should be used to prevent soil erosion and

degradation, and improve soil qualities, that would increase crop response to chemical fertilizer in the longer term.

- The MAISP involve substantial resources that could have been used for alternative development activities. Monitoring and evaluation is critical in determining whether the subsidy is value for money and whether it is helping in reducing poverty over time. Monitoring indicators should include yield, proportion of smallholder farmers graduating from the subsidy, process indicators such as targeting errors, cost effectiveness, nutrition indicators and post-harvest indicators such as prices and post-harvest loss.

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Acknowledgements:

This Policy Brief was written by **Ephraim W. Chirwa, Victor Mhoni, Richard Kachule, Blessings Chinsinga, Edson Musopole, Beatrice Makwenda, Connex Masankhidwe, Willie Kalumula** and **Chrispin Kankangadza** of the **Future Agricultures Consortium**. The series editor is David Hughes. Further information about this series of Policy Briefs at: **www.future-agricultures.org**

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FAC appreciates the support of the
UK Department for International Development (DfID)

