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# The Evaluation of the 2008/09 Malawi Agricultural Input Subsidy Programme: Lessons from Implementation

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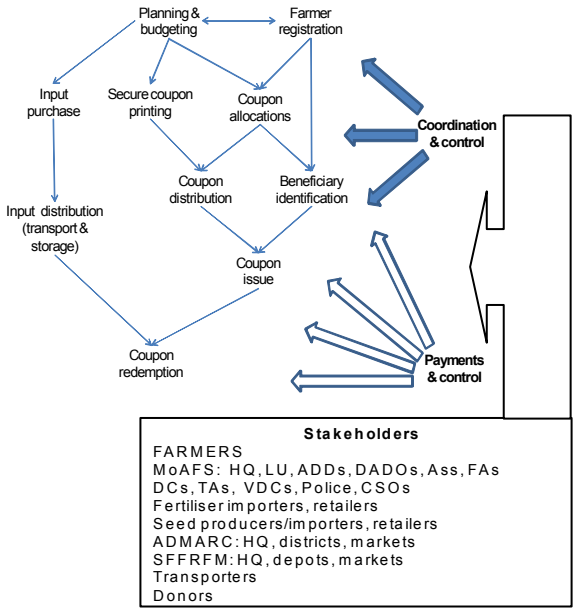
## Background and Context

The implementation of the Malawi Agricultural Input Subsidy Programme (MAISP) involves a large number of complex logistical and organisational tasks with critical seasonal deadlines. Accomplishing these tasks requires the interaction of various state and non-state stakeholders at central and local levels at different stages of implementation. Figure 1 presents the summary of major tasks and stakeholders involved in the implementation of the subsidy programme in 2008/09.

**Figure 1 Major Tasks and Stakeholders**




The 2008/9 MAISP involved selection of about 2.8 million farming households from a total of up to 3.5 million registered farming households. Nearly 6 million coupons were printed and distributed, over 3.4 million bags of fertilizers and 2.6 million bags of seeds were distributed to the selected beneficiaries. This is a major achievement.

## Procurement of Inputs

The procurement of all fertilizers was done by the Government through a tendering process as a late decision was made to exclude the private sector from retail sales of subsidised fertilisers. This resulted in official imports and sales through ADMARC and SFFRFM being the only channels through which farmers could obtain subsidised fertilisers.

Although tendering was done in April, awards for the procurement of 137,831 metric tonnes of fertilizers were made towards the end of July to supplement 32,847 metric tonnes available under the 'buy back' scheme. Tenders were awarded to the state-owned SFFRFM and private companies, with the latter accounting for 88% of the new procurement. Procurement was characterized by failure or delays in delivery by some suppliers, leading to cancellation and extension of contracts. Deliveries started in August 2009 and continued up to January 2009. Delays in the award of contracts raise subsidy costs by increasing risks of rises in international prices for fertilizers.

These delays consequently affected the uplifting of the fertilizers to markets, such that by end of November 2008 only 77% of basal fertilizer was available in markets in the Southern region, after many farmers had planted maize. Other factors that affected delays in uplifting fertilizers to markets included limited storage capacity at markets, delays in contracting transporters and late coupon distribution.

The procurement of seeds was entirely the responsibility of private seed companies and seed companies were responsible for stocking retail shops including agro-dealers, input supply shops, SFFRFM and ADMARC. There were no major hiccups in the supply of seeds to the retail outlets.

## Coupon Allocation and Distribution

The process of coupon allocation involved updating the register of farm households, local processes of selecting beneficiaries, allocation of coupons by districts and by EPAs and issue of coupons to beneficiaries. The update of the register of farmers was done from May to August, and beneficiary identification began in late September. The identification of beneficiaries was conducted in public meetings facilitated by multi-stakeholder teams including MoAFS staff, religious leaders, VDC members, District Assembly, Police and civil society organisations.

As in previous years, coupons were allocated in initial and supplementary allocation rounds. The initial allocation of coupons were for redemption of maize and tobacco fertilizers, maize seeds, cotton seeds, flexi coupons for redemption of legume and maize seeds. It was later decided to issue coupons smallholder tea and coffee growers. For each selected beneficiary, the subsidy package was one 50 kg bag of NPK and one 50 kg bag of Urea and a maize seed coupon for maize farmers, while tobacco farmers received one 50 kg bag of D Compound and one 50 kg bag of CAN. For most inputs total allocations were highest in the southern region, followed by the central and then the northern regions, but on a per household basis were highest in the northern and lowest in the central regions. Fertilizer coupons were redeemed at ADMARC or SFFRFM markets with the payment of MK800, but seed coupons could be redeemed without any payment at ADMARC, SFFRFM, agro-dealers and other input seller markets. About 200,000 metric tonnes of fertilizers and 1.6 million maize coupons and 1.0 million flexi seeds vouchers were redeemed.

Substantial differences in NSO and MoAFS estimates of the farming population, led to widely differing estimates of the total receipt of coupons by farmers. Use of NSO estimates (2.5 million households) suggests that a significant proportion (28%) of coupons did not reach rural households, while use of MoAFS estimates (3.7 million households) indicates that the survey marginally overstated total coupon allocations. Analysis of subsidised fertiliser purchases and sales suggests that the number of farming households lies between NSO and MoAFS estimates, and consequently up to 30% of subsidised fertiliser sales may benefit non-smallholders through diversion of coupons, with very substantial financial benefits to those receiving and trading in coupons and subsidised fertiliser, and equivalent losses to the government and smallholder farmers. These estimates depend upon the number of farm households. Resolution of differences between NSO and MoAFS estimates is very important, and is the subject of an imminent study by the NSO and MoAFS.

## Targeting of Beneficiaries

The household survey estimated that nationally 65% of farming households received one or more fertilizer coupons, with about 36% sharing fertiliser packages to receive one coupon per household. This was particularly common in the south and centre. In some communities, redistribution by traditional leaders is reported to have led to the diversion of coupons. The number of coupons received per household was lower for female-headed households and for households with lower food security and subjective welfare. These results demonstrate considerable difficulties in the targeting of vulnerable households. Targeting difficulties arise from ambiguities, tensions and contradictions among the different stipulated criteria; from difficulties in applying indicators of these criteria; and from the large number of households deserving coupons relative to the number of available coupons. Nonetheless, most communities noted that the use of open meetings in the identification of beneficiaries and allocation of coupons were helpful in ensuring transparency and accountability, and improved the perceptions of a fair process among the beneficiaries. However, 'supplementary' coupons lacked transparency as they seem not to have been allocated in open meetings.

There are perceptions that the number of coupons is falling over time but that the timing of coupon distribution has been improving. Most households support targeting poor households, with substantial but lower support for smaller packages to allow coverage of more households.

## Access and Use of Coupons

Difficulties with coupon security were encountered with initial printing, requiring a second printing of more secure coupons. Most fertilizer coupons, about 95%, were obtained without any payments. Where payments were made for coupons, the main coupon sources were fellow farmers, traditional leaders, traders and agriculture staff. The prices of coupons ranged from MK100 to MK5,000. Most households indicated that the distribution of the coupons was timely as they had coupons before or as the rains began.

The vast majority of fertilizer coupons were reportedly used to buy fertilizers – 97% for maize and 94% for tobacco fertilizers. In addition, 94% of the seed coupons were used to buy maize and cotton seeds (80% of the flexi coupons to obtain maize seeds), but only 12% of the cotton chemical coupons were used. Reasons for failure to redeem coupons included products being out of stock (particularly chemicals), lack of money and coupons being stolen. In 14% of cases it was reported tips were required above the MK800 redemption price in order to procure fertilizers, with extra payments ranging from MK100 to MK1000 with a median of MK200. Incidences of 'tips' were associated with long queues and limited availability of some inputs which were exacerbated by the exclusion of private sector retailers from sales of subsidised fertilisers.

Most households receiving coupons used their cash savings to redeem the coupons (77%), followed by 11% who engaged in *ganyu* employment to get cash to redeem coupons. Among households that were poor and those whose maize ran out within three months of harvest, 19% and 21% engaged in *ganyu* to redeem the coupons, respectively.

There have been concerns that fertilizers meant for maize production may be diverted to use on cash crops, increasing fears of displacement. Table 1 shows that almost all maize fertilizers were used on maize plots, but there were significant diversions of tobacco fertilizers to maize plots. Almost half of 'tobacco fertilizers' were applied to maize.

**Table 1 Use of Fertilizer by Crop and Coupon Type**

| Crop | 23.21.0 +4S | Urea | CAN | D Compound |
|---|---|---|---|---|
| Local maize | 46% | 41% | 29% | 13% |
| Hybrid maize | 51% | 57% | 37% | 24% |
| Burley tobacco | 2% | 1% | 34% | 63% |

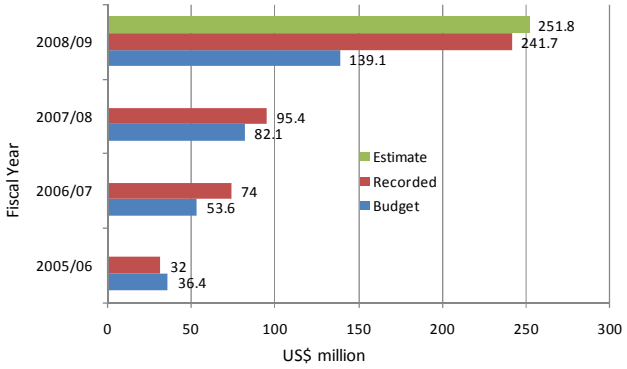
A problem in the use of subsidized inputs is the lack of technical advice from extension workers, with only 14% of households having received extension advice. Female-headed, food insecure and poor households were more likely to receive less advice. However, the majority of those that received extension advice rated the advice as useful and satisfactory.

## Cost of the Subsidy Programme

Overall costs of the subsidy programme are difficult to estimate due to lack of documentation of administrative costs borne by the MoAFS and other government and non-state agencies. Documented costs show that the programme cost has been increasing since 2005/06. Figure 2 shows the trends in estimated, recorded and budgeted expenses of the subsidy programme between 2005/06 and 2008/09. In 2007/08, the budget for the subsidy programme was US$82.1 million (6.7% of the national budget), but actual expenditure was estimated at US$115 million (8.9% of the national budget). The initial budget for the subsidy programme in the 2008/09 budget was US$139.1 million and this was revised upwards in the fiscal year to US$210 due to increased cost of fertilizers. These budgetary allocations represented 60% and 70% of the MoAFS budget. It must be emphasised, however, that the very high costs in 2008/9 are largely due to a near doubling of fertilizer prices leading up to the 2008/09 season, and Government also decided to include smallholder tea and coffee farmers after the budget.

The expenditure patterns are characterized by substantial cost over-runs between the initial budget and the recorded actual expenditures. The extent of over-expenditure in the subsidy programme is apparent from 38% above budget in 2006/07 to more than 87% above budget in 2008/09, although high fertiliser prices were a major contributor to this.

**Figure 2 Agricultural Subsidy Costs, 2005 - 2009**




Donors have contributed to the subsidy directly and through budget support. The direct support constituted 14.1% of the estimated total costs in 2008/9 and covered costs of seeds, the logistics unit operating costs, and computer equipment support to ADMARC. Donors have also supported the subsidy indirectly through budget support. According to the GOM 2009 Budget Statement, the increased cost of fertilizers in 2008/09 'was mostly financed by increased budget support from donors notably DFID, European Union, and the African Development Bank'.

## Conclusions and Lessons

The implementation of the subsidy programme in 2008/9 as in other years represents a significant achievement in view of its scale and logisitical demands. In many ways it followed the approaches of previous years, but with significant changes in the exclusion of the private sector in retailing subsidized fertilizers and in the introduction of open meetings for coupon allocation in villages. The following lessons emerge from the experience of implementing the 2008/9 subsidy:

- Although there was greater reliance on the private sector in importation of fertilizers, there is need to improve the timeliness of tender awards and to impose penalties on companies that do not comply with tender agreements.
- There were difficulties in holding stocks due to late opening of markets, limited secure storage capacity in markets and late distribution of coupons. The inclusion of the private sector in retail marketing of subsidized fertilizers may have significantly eased these difficulties.
- The use of open meetings in the identification of beneficiaries and allocation of coupons significantly improved the transparency of the process, with various stakeholders applauding the system. The open meeting approach should be used in both initial and supplementary coupon allocation.
- Targeting of coupons continues to be an important and difficult issue, and the targeting criteria still lack clarity and consistency in their application leading to biases against the vulnerable groups. If effective targeting is difficult to achieve then universal access to coupons for 50kg fertilizer per household could reduce exclusion errors, targeting costs and displacement, and promote accountability and transparency.
- Most recipients of subsidized inputs use their coupons to buy inputs and use inputs on their own crops, with reported sale of coupons being rare. Substantial numbers experience difficulties in procuring inputs due to long queues, long distances to markets, and stock-outs situations that exacerbated payments of 'tips' to gain access in 2008/9 compared with 2006/7. These are most damaging to the poor. Again, the involvement of the private sector in retailing may have lessened these difficulties.
- Most households used their cash savings to redeem coupons, but poor households face cash constraints and rely on ganyu, safety net programmes and gifts to obtain cash to to redeem inputs. Provision of income earning opportunities, such as public works programme during October/November could help enable poor households to obtain cash for coupon redemption. This would also require access to coupons and availability of subsidized fertilizers around September/ October.
- There is evidence that while 'maize fertilizers' are applied on maize a substantial proportion of 'tobacco fertilizers' are also applied on maize. Focusing the subsidy programme on 'maize fertilizer' (as implemented in 2009/10) may be more efficient.
- The limited reach of extension services, with only 14% of rural household receiving extension advice, is worrying. Increased investment in extension services could increase the efficiency of fertilizer use and programme effectiveness.
- Lack of reliable information on the number of farm families in the country has serious implications. If the MoAFS substantially overestimates farm households, survey results suggest very significant diversion of coupons. Current plans to resolve differences in estimates of the number of farm families and intensification of controls and auditing procedures are very important for reducing and, where they happen, identifying and punishing irregularities.
- The subsidy programme is costly and in 2008/9 took more than 6% of the national budget and more than 60% of the MoAFS budget. There is also evidence that, even allowing for high fertiliser prices, control of subsidised sales has been difficult, with both costs and sales volumes exceeding budgeted amounts. Increasing fertilizer prices in recent years coupled with reduction in coupon redemption prices mean that the level of the subsidy to the farmers has continued to increase. It is important to demonstrate clear controls on subsidy costs in the medium and long term.

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