

POLICY BRIEF III

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Understanding and Improving FISP Targeting

by Rodney Lunduka, Jacob Ricker-Gilbert, Jerry Shively & Thom Jayne

Policy Pointers

- 1) Recent evidence suggests that the current FISP's decentralized targeting system is not much more effective than a random or universal distribution of coupons. More than half all of households have obtained some subsidized fertilizer in recent years, indicating that many rural communities in Malawi seem to be moving to a sort of universal subsidy on their own.
- 2) Two options could be available for the Government:
 - a) Implement a universal subsidy where each household gets 50 kilograms of subsidized fertilizer. Administration costs of the FISP would be reduced under a universal subsidy, but it may be easier for wealthier and better connected farmers to obtain larger quantities of fertilizer, than their poorer counterparts.
 - b) Alternative to universal subsidy, farmer clubs or cooperatives could be used to target the inputs to relatively more productive farmers. These clubs could further be targeted with credits. This may involve some scaling down of the FISP and re-focusing it towards more productive farmers. However, any targeted system needs an auditing mechanism to ensure that official targeting guidelines are being met.

Policy summary

Evidence suggests that FISP's decentralized targeting system is not much more effective than a random or universal distribution of coupons. There is little evidence to suggest that the program has successfully distributed inputs to poor and vulnerable households. The current system also suffers from high administrative costs. Part of the challenge is that it is not entirely clear who the FISP should target, as subsidized fertilizer and hybrid seed in its current formulation under FISP may not be the best intervention for the very poor. Therefore, the government should either clarify the targeting criteria and improve targeting effectiveness or consider moving to a universal subsidy. Under universal subsidies administration costs of the FISP would reduce, however, it may be easier for wealthier and better connected farmers to obtain fertilizer, and larger quantities of fertilizer, than their poorer cohorts. If government wants to continue with a targeted input system, farmer clubs or cooperatives could be used to target the inputs to more productive farmers. This may involve some scaling down of the FISP and re-focusing it towards farmers who can make use of the inputs. At the same time FISP is scaled down, a cash transfer program could be scaled up to meet the needs of poor and vulnerable households who cannot make use of subsidized fertilizer and seed.

Part 1: What we already know

Community based targeting

There is a perceived wisdom that decentralization of government services and programs offers several information and cost advantages compared to more centrally run alternatives. Reaching specific subpopulations via targeting mechanisms can improve program performance while reducing costs (Killic et al., 2013). With the potential benefits of decentralized targeting in mind, the Government of Malawi has been implementing a large-scale targeted Farm Input Subsidy Program (FISP) since 2005/06. The FISP aims to increase maize production, promote household food security, and reduce poverty. The program officially targets approximately 50% of farmers in the country. The intent is for these farmers to receive subsidized fertilizer for maize production, and in some instances additional vouchers for tobacco fertilizers (in some years) and modern maize seeds (Dorward and Chirwa, 2011). Through decentralized targeting of input vouchers, the FISP aims to more effectively reach program objectives and target productive members of the poor and vulnerable population of the country. Decentralized targeting systems are attractive because they lower the cost of targeting by tapping into local knowledge. Yet, they have also been reported to suffer from elite capture, where those with social connections and resources obtain a disproportionate share of the benefits (Pan and Christiansen, 2012). Malawi's FISP has not escaped the shortfalls associated with decentralized targeting. This brief evaluates the targeting challenges associated with the FISP in Malawi, and suggests potential steps that could be taken to improve the program.

Targeting criteria in Malawi's FISP

As stated in earlier briefs, the FISP in Malawi is intended to target the "productive poor." In broad terms, targeting has shifted from an early emphasis on allocating coupons in proportion to maize and tobacco area (in the first two years of the program) to a more recent emphasis on allocating them in proportion to the number of farm households operating in an area (Dorward and Chirwa, 2013). Vouchers are allocated to districts by the central government. However, at lower levels (i.e. within

villages), input subsidy program committees, made up of village leaders, are expected to identify and target the "productive poor." These individuals are defined as "full time smallholder farmers who cannot afford to purchase one or two bags of fertilizer at prevailing commercial prices" (Dorward et al., 2008). Since 2007/2008, the productive poor have been defined as farm households with the necessary land, labor and skills to use the subsidized inputs, but without the financial capital to purchase inputs at commercial prices (MoAFS, 2008). These definitions of the productive poor can be compared to the official targeting criteria for beneficiary selection under FISP as of 2007/2008: (1) households headed by a Malawian who owns and currently cultivates land; (2) vulnerable households, including guardians of physically challenged persons, and households headed by females, orphans, or children; and (3) only one beneficiary per household, the household head (MoAFS, 2008). There is some inconsistency between the "productive poor" targeting and the official targeting criteria, since vulnerable households often do not have the land, labor and skills necessary to use inputs effectively. This inconsistency complicates both the evaluation of how well FISP targets the intended beneficiaries, and how effectively the FISP meets its objectives of increasing maize production, promoting household food security, and reducing poverty.

How effective is the FISP at targeting poor households?

Due in part to the inconsistencies in targeting guidelines, it is difficult to conclusively determine whether the FISP has successfully targeted "the productive poor". However, empirical evidence indicates that the targeting of coupons to vulnerable households, such as those that are poor or female-headed has not been successful in many years of the subsidy program. For 2005/2006 and 2006/2007, Holden and Lunduka (2012) found for their sample of 450 households in six districts of Malawi that poor households were frequently excluded, while better-off households were more likely to have received coupons. Chibwana et al. (2012) found that for 380 households sampled in

Kasungu and Machinga districts in 2008/2009, female headed households were less likely than male-headed households to receive coupons and that asset-poor households were also less likely than better-off households to receive coupons. Ricker-Gilbert et al. (2011), using a nationally representative sample of 2,406 households in 2003/2004 and 2006/2007 also found that coupons were disproportionately targeted to male headed households, and those owning relatively more physical assets, including land. Fisher and Kandiwa (2013), using the nationally representative Malawi Integrated Household Survey 3 (IHS3) for 2010/2011, similarly found that household wealth and agricultural landholding were positively correlated with FISP coupon receipt. However, contrary to the research cited based on data from earlier years, they found that female headed households were more likely than male headed households to receive FISP coupons. This may indicate improved targeting of female headed households in recent years. Killic et al. (2013) also recently concluded that the FISP does not exclusively target the poor in Malawi, but rather concentrates primarily on the middle of the income distribution. According to the authors, failure to target the poor is apparent in decision-making at all levels: national, district, and community. They showed that, on average, households that are relatively well-off, connected to community leadership, and residing in agro-ecologically favorable locations were more likely to be FISP beneficiaries. If targeting poor households is to be a goal of the FISP, then research indicates that government needs to ensure that poor households are key beneficiaries of the program, because at the moment it appears that the community based system is not effectively distributing inputs to this group.

The observed problems associated with targeting the poor are thought to emanate from several sources. First, due to the diversion of coupons and subsidized fertilizer out of the system by corrupt individuals involved in coupon distribution, too few coupons reached villages. With inadequate supply at the village level, village leaders have responded by reducing the number of coupons per beneficiary household from two to

one or none (Holden and Lunduka, 2010). Second, within villages targeting criteria have often been ignored due to a culture of egalitarianism that prevails in rural Malawi. As a result, fertilizer and maize seed coupons have been divided among households of various socioeconomic status, rather than given preferentially to the poor (Holden and Lunduka, 2012). This is supported by figures 1 in brief #2, which demonstrate that between 75-85% of household acquire some positive quantity of subsidized fertilizer in recent years. Though not nationally representative, this finding is roughly consistent with the nationally representative IHS3 survey. It indicates that in 2009/10 roughly 47% of households acquired a subsidized fertilizer voucher, and 18% of them admit to giving away some quantity of subsidized fertilizer to others. The average amount given away is 47 kilograms, almost half of the official 100kg allocation per beneficiary (Killic et al. 2013).

Elite capture of coupons is a third plausible explanation for why targeting of FISP coupons to vulnerable households has not worked well (Holden and Lunduka, 2010). A study of an agricultural input subsidy program in Tanzania found that elected village officials were more likely to receive subsidized input coupons and that these officials also tended to be less poor than the general population (Pan and Christiansen, 2012).

Implications of inaccurate targeting based on FISP objectives

A question raised in Brief #4 is whether the FISP should even be targeting poor households? Since the FISP distributes seed and fertilizer to households, it works best for households that have sufficient land and labor to use those inputs effectively. Poorer households who lack those complementary inputs may be better served by cash transfer programs that help them meet their basic needs. Conversely, better off households may be better positioned to use subsidized inputs to increase maize production. However as mentioned in previous briefs, there is evidence to suggest that better off households are more likely to purchase fertilizer at commercial prices, and may use some of the subsidized fertilizer in place of their commercial purchases. This is the crowding

out effect, and it combines with diversion of coupons by corrupt officials to reduce the total amount of new fertilizer that enters the system and finds its way onto farmers' fields (Lunduka et al., 2013).

Another implication of targeting specific types of farmers has been an increase in the workload and a drain on the resources of the Ministry of Agriculture and Food Security (MoAFS). For several months each year the Ministry must mobilize human and financial resources to monitor a targeting process that eventually proves ineffective. During this period these human and

financial resources are not available for other equally important activities such as extension services. Since its introduction in 2005/06, the FISP has mobilized 69% of the MoAFS budget, on average. Over the 2000/01-2011/12 period, the non-capital element in development actual expenditures has been estimated at 63% (of which 4% represents salaries and 59% represents other recurrent expenditures). This leaves only 37% for real capital expenditure (World Bank and GOM, 2013). Such high spending due to the targeting has been inefficient and undermined other important agricultural investments.

Part 2: The Way forward

Clarify FISP's Objectives

FISP's relatively poor targeting performance likely reflects the program's simultaneous pursuit of multiple objectives (raising aggregate output versus reducing poverty), each of which may yield different targeting rules (targeting farmers who can make use of subsidized inputs, versus targeting poor farmers). Policy makers must consider these trade-offs when determining the best approach to distributing subsidized input coupons to achieve program objectives. Targeting the poor with subsidized input coupons, as FISP aims to do, may in fact preclude increasing maize productivity if poor farmers are unable to use modern seed and fertilizer effectively because they lack complementary resources of labor, land, and managerial skills. There is some evidence in support of this hypothesis in Malawi (Ricker-Gilbert and Jayne, 2012) and elsewhere in Africa (Marenja and Barrett, 2009).

A clearer focus in terms of objectives could further help enhance the targeting performance of input voucher programs. This would also require the development of better proxies to target households who can get the most maize out of a kilogram of fertilizer, but who do not purchase much fertilizer at commercial prices to minimize crowding out of the commercial market (Pan and Christiansen, 2012). Some key proxies such as level

of assets, or landholding could be used to identify appropriate beneficiaries, and an audit system could be setup to ensure that communities are targeting subsidized inputs to household who meet these criteria.

Universal subsidy for smallholder farmers

It is worth considering the fact that the administrative costs of a targeted system might be better spent directly on the subsidized inputs themselves. Therefore, a universal (i.e., untargeted) subsidy for every resident rural household could be an attractive alternative to the current system. Universal subsidies have several advantages over the current system: (1) it eliminates the costs and difficulties of targeting specific households; and (2) it dramatically increases transparency and accountability, as all rural households know that they are entitled to a set of subsidized inputs (School of Oriental and African Studies et al., 2008).

The universal distribution could be based on a publicly displayed list of resident households for open validation in every village, and on the recent population census. Universal provision of 50 kg of fertilizer is effectively legitimizing and extending the widespread practice of egalitarian redistribution (Dorward and Chirwa, 2013). As mentioned earlier, evidence suggests that 75-85%

of households are receiving some subsidized fertilizer; so many rural communities in Malawi seem to be moving to a universal subsidy on their own.

In terms of cost, if half the households receive 100 kilograms of subsidized fertilizer under the current system, then giving all households 50 kilograms would have roughly the same cost in terms of the amount of fertilizer procured. However, production costs may be higher under a universal system because fertilizer would have to be broken into smaller bags to distribute to everyone.

It is important to note that there are obvious concerns with universal subsidies, such as well-off and big commercial farmers acquiring more inputs. Additionally, with the universal subsidy, the price of fertilizer in Malawi will be relatively cheaper than in neighboring countries. This may create unintended incentives for re-exports of fertilizer, or draw farmers from bordering countries who will queue for cheap fertilizer in Malawi. This may require the Government to begin coordinating and collaborating with neighboring countries on fertilizer and maize pricing policies. An advantage of regional collaboration would be that importation of fertilizer could be done together, hence reducing further the cost of fertilizer when imported in bulk for the region.

Targeting farmer clubs or cooperatives

If the government wants to continue with a targeted input subsidy program, then there should be an explicit recognition that the program is primarily meant to enhance maize production. In this way farmers with sufficient land and labor to utilize fertilizer would be targeted. Targeting farmer clubs is one way to get fertilizer and seed into the hands of farmers who can potentially use it most effectively. The Zambian FISP currently distributes inputs through farmer clubs and the process there could be further studied and tailored to Malawi's needs. Farmer clubs or cooperatives could also upgrade into credit groups that can get more fertilizer on credit and repay after harvest when they sell their produce. In addition to the above, efficient clubs can register as cooperatives

and link up with commercial banks, allowing them to invest in capital, part from purchasing fertilizer. This could possibly facilitate a process by which farmers graduate out of the FISP.

Targeting farmer co-op may involve some scaling down of the FISP and re-focusing it towards more productive farmers. At the same time FISP is scaled down, a cash transfer program could be scaled up to meet the needs of poor and vulnerable households who cannot make use of subsidized fertilizer and seed (discussed further in brief #4).

Increasing Required Farmer Contribution

Increasing the required farmer contribution for obtaining FISP fertilizer is another way to both lower the cost of the program to government and cause some farmers to self-select out of participating in either a universal or targeted system. For example, people who can make little use of the fertilizer and plan to resell it would have to bear a greater cost of acquiring the input. As a result it will be less profitable for them engage in acquisition and resale of subsidized fertilizer. The size of the farmer contribution could be increased gradually (perhaps increase by 10% annually).

Conditional Subsidy: Linking Receipt of FISP to Better Management Practices

It is worth considering the idea that in either a targeted or universal subsidy program the receipt of FISP should be linked to adoption of best management practices. This may require the government to invest some resources in training farmers and providing other complimentary inputs such as soil fertility management that help households maximize the potential of their seed and fertilizer. Requiring better management practices to go along with participation in the FISP would also cause motivated farmers to self-select into participating in the program, and cause farmers who are unwilling or unable to adopt these practices to self-select out. Households who are unable to adopt best management practices due to land and/or labor constraints may be better served by safety net programs such as cash transfers rather than by FISP.

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