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# POLICY BRIEF III

July, 2014.

## Understanding and Improving FISP Targeting

by

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### Policy Pointers

- 1) The original FISP objectives of increasing land and labor productivity need to be followed. Therefore, the guidelines of who can and should be targeted by the FISP must be clarified.
  - a) One option for improving targeting towards more productive farmers in order to increase maize productivity would be to direct the program through farmer clubs or cooperatives. These clubs could further be targeted with credit, so that farmers could eventually graduate from the FISP.
  - b) Increasing the required farmer contribution for obtaining FISP fertilizer can also improve targeting, by causing some farmers who would resell the subsidized fertilizer to self-select out of participating. The size of the farmer contribution should return to its original level of 30-35% of the cost of fertilizer.
  - c) Requiring better management practices to accompany participation in the FISP would also lead motivated farmers to self-select into the program, and cause farmers who are unwilling or unable to adopt these practices to self-select out. In practice this could mean that farmers who are willing to adopt soil fertility enhancing practices, such as legume intercropping, contour ridging and conservation agriculture could receive a FISP voucher.
- 2) In order to improve targeting, the FISP 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. 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 needs to clarify and follow its objectives of increasing maize productivity by targeting households with sufficient land and labor to use FISP fertilizer and seed effectively, but who do not purchase much fertilizer at commercial price. This may involve some scaling down of the FISP and scaling up a cash transfer program to meet the needs of poor and vulnerable households who cannot make use of FISP inputs.*

# Part 1: What We Already Know

## Community based targeting

There is a perceived wisdom that decentralization of government programs and services 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 productivity, 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). 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 inconsistency between targeting the "productive poor" 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 stated objectives of increasing maize productivity, 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". Empirical evidence indicates that the targeting of coupons to vulnerable households, such as those that are poor or female-headed has not occurred in many years of the subsidy program (Ricker-Gilbert et al. 2011; Holden and Lunduka, 2012; Chibwana et al. 2012; Killic et al., 2013). Killic et al. recently find that on average relatively well-off households, who are connected to community leadership, and reside in agro-ecologically favorable locations were more likely to be FISP beneficiaries. However, Fisher and Kandiwa (2013), find evidence that in 2010/11 female headed households are significantly more likely to be targeted by the FISP.

While the poor are often not targeted, the wealthy seem to be the major beneficiaries of the FISP. 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). 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 productivity. 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**

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#### **Clarify FISP's Objectives**

The targeting challenges that the FISP faces, likely reflect the program's simultaneous pursuit of multiple objectives (raising maize productivity and 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). 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 landholding of greater than 0.5ha but less than 2ha, adoption of soil and water conservation technologies e.g. contour ridging, vetiver grass strips, conservation agriculture and manure use 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**

There has been discussion of a universal (i.e., untargeted) subsidy for every resident rural household as an alternative to the current system. Universal subsidies have several potentially positive aspects: (1) they eliminate the cost and difficulty of targeting specific households; and (2) they dramatically increases transparency and accountability, as all rural households know that they are entitled to a set of subsidized inputs (Chirwa and Dorward, 2013).

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.

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. The other major drawback with universal subsidies is that giving every household 50 kgs may not be enough to help them significantly increase their maize productivity.

### **Targeting farmer clubs or cooperatives**

In order to improve targeting of FISP, there should be an explicit recognition that the program is primarily meant to enhance maize productivity. 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 investment 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).

In order to improve targeting, the FISP needs an auditing mechanism to ensure that official targeting guidelines are being met.

### **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 the program. 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 should return to its original level of 30-35% of the cost of fertilizer.

### **Conditional Subsidy: Linking Receipt of FISP to Better Management Practices**

It is worth considering the idea that 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 that 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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