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Guiding Principles of AIP Reform

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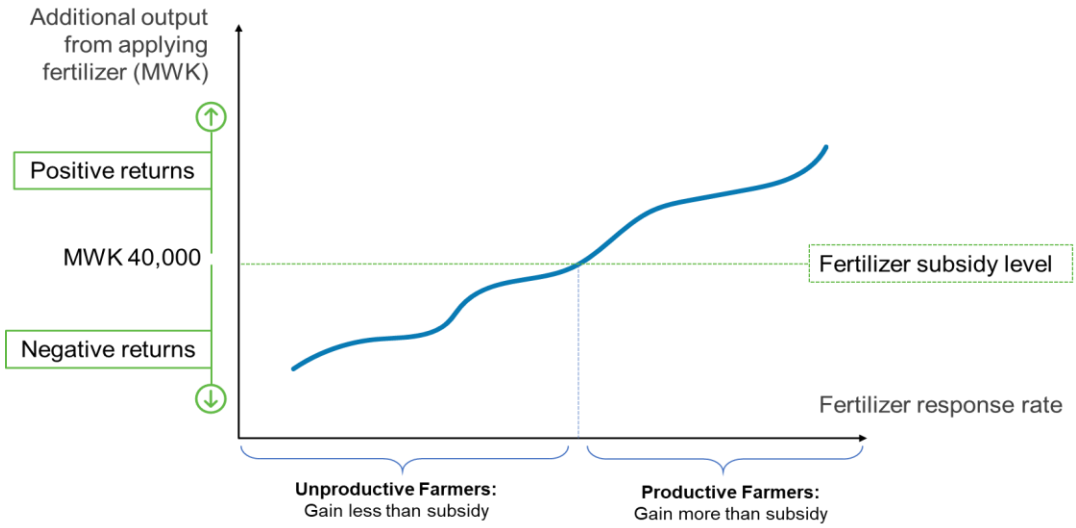
Malawi's Affordable Inputs Program (AIP) currently combines an economic and a social objective, respectively: (i) increasing agricultural production; and (ii) assisting poor farming households.

Goal 1: Increasing agricultural production

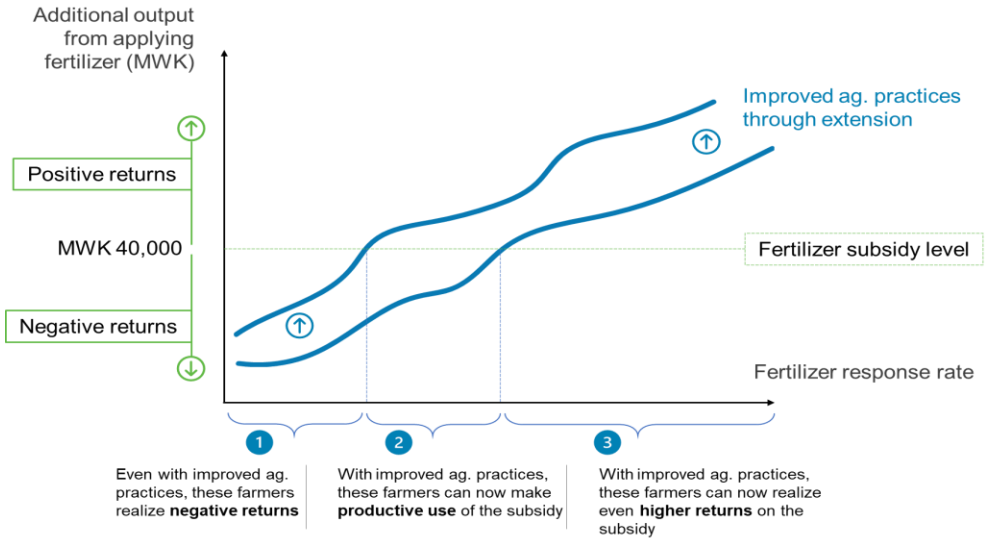
Imagine ranking farmers by their productivity levels, that is the extent to which they can turn inputs into outputs. Figures 1, 2 and 3 give the example of fertilizer. On the left are farmers who are not good at turning fertilizer into additional output, such as those with unhealthy soils or without able-bodied adults. On the right are productive farmers, such as those with sufficient labor and good farming practices, who have the means to turn fertilizer into increased output.

Figure 1. The economic return to fertilizer depends on a farmer's ability to transform it into output



In the 2021-22 agricultural season in Malawi the government spent about MWK 40,000 per participating household to subsidize 2 bags of fertilizer. **Figure 1** distinguishes between two types of farmers. A productive farmer receiving subsidized fertilizer can turn it into output worth more than MWK 40,000. Seen as an investment, there is a positive economic return. For the unproductive farmer the output is worth less than MWK 40,000, which means that there is a negative economic return.

Figure 2. A policy that improves agricultural practices will increase the economic return to the subsidy



Policy can influence the extent to which every Kwacha spent on fertilizer subsidy translates into additional output and the number of farmers who make a positive or negative return on the subsidy. **Figure 2** gives the example of a policy that invests in increasing fertilizer response rates, for example by promoting healthy soils, usage of nitrogen fixing plants, by providing knowledge on which inputs are best adapted to local circumstances and locally optimal timing of input application. There is no lack of knowledge available in Malawi on what needs to be done to improve farming techniques and there is widespread agreement that much will depend on extension work. Figure 2 shows how the introduction of such measures can raise the productivity of all farmers who adopt them, increasing the returns to the subsidy. The graph also shows that such efforts help some farmers to switch from a negative return to AIP investment to a positive one (2).

Figure 3. A policy without complementary investment in agricultural practices will lower the economic returns to the subsidy

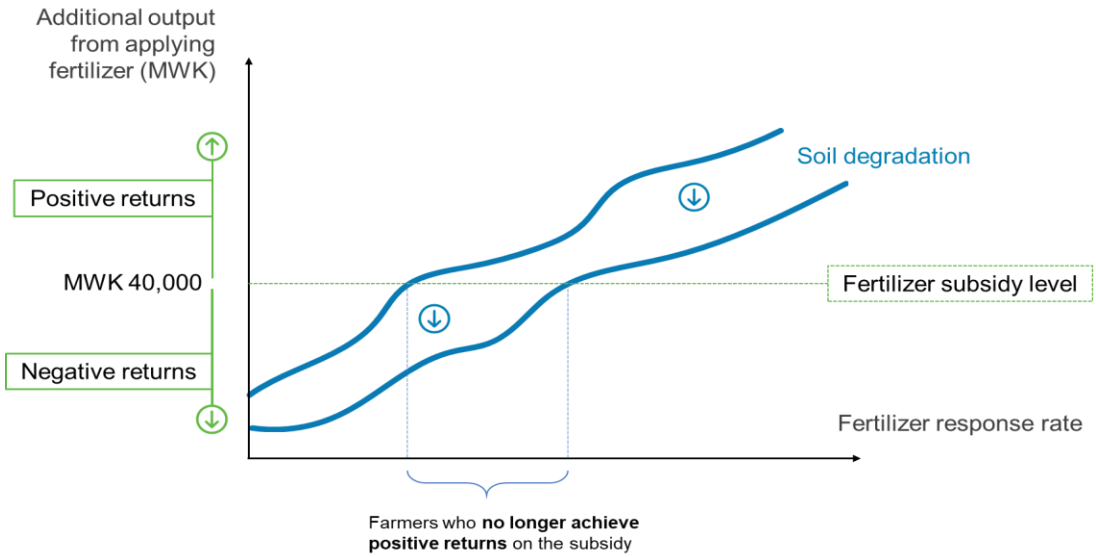


Figure 3 gives the example of a policy that stays focused on fertilizer subsidy, with little investment in improving agricultural practices. In such a scenario, fertilizer response rates will decline, lowering the returns to the subsidy and increasing the number of farmers who realize negative returns.

It is a fallacy to view subsidizing fertilizer and investing in extension as competing for resources in the agricultural budget. Of course, in an accounting sense every Kwacha spent on improving agricultural practices cannot be spent on subsidies. But that is at best a partial view: agricultural practices influence the return on the subsidy, as well as the number of farmers who can make productive use of it. A more holistic policy perspective views subsidies and extension as complements rather than substitutes.

Goal 2: Assisting the poor

However, even after raising the return to the AIP package, there will remain some farmers (1 in Figure 2) for whom the subsidy will be higher than the returns they could expect from it. Think of the elderly, those with very small plots or households without able-bodied members. We may give fertilizer subsidies worth MWK 40,000 to these households, but only raise their output by, say, MWK 10,000. That does not make sense from an economic point of view, but also not from a social protection viewpoint: we would help our example household more if we gave a cash transfer worth over MWK 10,000 than with a subsidy of MWK 40,000.

How can we identify these groups of farmers in practice? Real farmers don't line up nicely on a graph identifying themselves as belonging to the group with negative or positive returns on the subsidy. Furthermore, the government may want to exclude the richest farmers from the subsidy. After all, even if they can put fertilizer to good use, the subsidy will not entice them to use more fertilizer, it will simply replace some of the fertilizer they would have bought in any case. Several targeting mechanisms are possible.

Community-based targeting (**CBT**), proxy means testing (**PMT**) or combinations of the two are the most common targeting practices in developing countries. Despite the extensive experience with these methods, CBT remains vulnerable to capture by local elites, and while PMT can be accurate and objective in principle, it is hard to get right in practice, leading to many targeting errors. In any case both mechanisms are expensive to implement.

If the Unified Beneficiary Register was complete and up to date, targeting costs could at least be shared with other programs. However, the expense can be completely avoided in a **self-targeted system**, in which farmers are given a choice between, say, MWK 40,000 to spend freely at their local agrodealer on an agreed list of agricultural inputs, or, say, MWK 30,000 in cash. We would expect the most productive farmers to select the farm inputs, and the least productive farmers, those who expect less than MWK 30,000 return on the MWK 40,000 worth of inputs, to choose the cash transfer (the exact numbers are illustrative). This targeting approach would be much cheaper than CBT or PMT, but it also has its disadvantages: It is by definition regressive, providing less benefit to poor farmers than to rich ones. This is aggravated by its inability to exclude farmers who can use the subsidy productively but who are rich enough not to need it.

Malawi has extensive experience with cash transfers from successfully implementing the Social Cash Transfer Program as well as distributing lean season assistance in the form of cash. Such programs have shown that cash transfers can improve wellbeing and productivity without creating dependency. That solid foundation leads naturally to a final policy option, which is to replace the subsidized inputs with cash transfers that are explicitly labelled as support for purchasing agricultural inputs and are appropriately timed to coincide with the period when inputs are needed. Such **labeled cash transfers,** which nudge but do not force farmers to use cash for specific purposes, have been shown to work in other contexts. Whether they work in Malawi by stimulating input use among pro-

ductive farmers, while simultaneously providing cash support to farmers who expect negative returns on such input purchases, is a matter that rigorously executed empirical research, appropriately facilitated by the government, could shed light on within the space of a single agricultural season.

It will be important to carefully weigh the tradeoffs between the policy options before settling on one, but a successful reform of the AIP is possible in Malawi.

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FURTHER READING

Burke, W.J., S.S. Snapp, B.G. Peter, and T.S. Jayne. 2021. Sustainable Intensification in Jeopardy: Transdisciplinary Evidence from Malawi. Working Paper no. 21/07. Lilongwe, Malawi: MwAPATA Institute.

Chadza, W, and J. Duchoslav. 2022. Policy Options for Smart Subsidies in Malawi. Policy brief no. 13. Lilongwe, Malawi: MwAPATA Institute.

Hagen-Zanker, J., F. Bastagli, L.Harman, V. Barca, G. Sturge, and T. Schmidt. 2016. Understanding the Impact of Cash Transfers: The Evidence. ODI Policy Brief. London, U.K.: Overseas Development Institute.

Jayne, T.S., N.M. Mason, W.J. Burke, and J. Ariga. 2018. Taking Stock of Africa's Second-Generation Agricultural Input Subsidy Programs. *Food Policy* 75: 1-14.

Mills, B., C. del Ninno, and P. Leite. 2015. Effective Targeting Mechanisms in Africa: Existing and New Methods. In C. del Ninno and B. Mills (Eds.), *Safety nets in Africa: Effective mechanisms to reach the poor and vulnerable*, pp. 19–37. Washington, D.C.: World Bank.

Pauw, K., and J. Thurlow. 2014. Malawi's Farm Input Subsidy Program: Where Do We Go from Here? MaSSP Policy Note no. 18, Lilongwe, Malawi: International Food Policy Research Institute.

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