Smallholder farmers in southern Africa use low purchased-input technologies and as a result, produce low yields and face chronic food insecurity for two to five months of the year. The problems such households face are compounded by natural calamities such as droughts and floods. These households therefore need programs to increase their agricultural productivity and improve their food security.

To enhance food security at household and national levels, governments in the region often implement programs such as input subsidies on fertilizers and seeds. In times of drought and floods, governments, Non-Governmental Organizations (NGOs) and relief agencies also distribute outright relief seed and fertilizer inputs to the smallholder farmers.

The distributed relief seeds and fertilizer lead to the creation of two parallel markets, one involving the non-commercial or relief market and the other the formal commercial market utilized by private companies. The problem with relief markets is that they crowd out private sector development, which is a serious deterrent to the long-term development of a country. Thus, it is imperative to determine feasible and practical ways of integrating the two distribution channels using a voucher-based system so that the private sector is a major player in all marketing and distribution activities.

Why use input vouchers?

Subsidies are known to distort the market and private sector development. Most business ventures view vouchers as less distorting because, unlike subsidies, vouchers are like real money. They are certificates through which smallholder farmers are given the ability to pay for inputs such as fertilizer and seeds at a registered shop of their choice. If designed correctly, vouchers can promote free market competition among sellers, providing the sellers an incentive to improve their services. Vouchers also allow for greater economic diversity by offering small farmers opportunities to purchase inputs which were previously unaffordable.

Using the voucher system, governments, relief agencies and NGOs can provide purchasing power to rural communities. Through an appropriate partnership with banks, private companies and small agrodealers in rural areas, the resources normally available to relief agencies, governments and NGOs for seed and fertilizer procurement can be distributed to smallholder farmers via vouchers and let the private companies chase after this purchasing power by expanding their retail distribution networks countrywide into the rural areas. This process would ensure that the non-commercial seed and fertilizer distribution resources are channeled to the development of the commercial seed and fertilizer marketing and distribution sectors (Simfukwe, 2006).

A properly designed voucher system would not only provide some immediate relief from agricultural emergencies, but it also could steadily move the region away from state intervention. We therefore hypothesized that vouchers can be used to enhance the purchasing power of the poor, and the commercial sector can redeem these vouchers and expand its distribution networks.

For these reasons, the input voucher study conducted in the case study countries of Malawi, Mozambique and Zambia aimed to seek answers to the following questions. What is the feasibility of using a voucher-based system as a means of
integrating the commercial and non-commercial input distribution channels? What would be the mode of implementing such a system? Can a full cycle of policy research, analysis and engagement be successfully implemented in southern Africa using the case of fertilizer and seed input vouchers?

Field evidence on the impacts of the voucher system

Research has shown that input vouchers have the potential to integrate the commercial and non-commercial input distribution systems. The benefits accrue to smallholder farmers in the form of increased and timely access to inputs and improved agricultural production and food security at household level. For example, in Malawi, smallholder average maize yields have increased from less than 1.0 MT per hectare in 2005/2006 to 2.03 MT/ha in 2006/2007 and the country has achieved an increase in maize surplus from 0.5 million MT to 1.3 million MT, respectively. A 2007 Monitoring Survey revealed that between 2005 and 2006 the number of people below the poverty line in Malawi declined from 50% to 45%. This is attributed to the increase in fertilizer application from 17% in 2005 to 30% of rural households in 2006. Removing the impact of good rainfall, it is estimated that the fertilizer subsidy led to an increase in maize production of about 25% (Whitworth, 2007). The private sector has benefited in terms of increased input sales and enhanced profits. Again in Malawi, private sector seed sales have risen from 4000 MT in 2005/2006 to 6700 MT in 2006/2007.

The program has provided an assured market and brought a substantial number of poor smallholder farmers into the cash economy. The input voucher program has also strengthened the operational base of input dealers and created employment through reopening of additional markets that were previously closed to business. There is also considerable involvement of the private sector and less involvement of relief agencies. This has led to an improvement in the monetization of the input distribution economy. The program has also created competition among players in the private sector, which has helped to improve efficiency of services and delivery of inputs to the smallholder farmers. Involvement of the private sector is credited for the timely distribution of inputs (Luhanga and Sungani, 2007).

In Zambia stakeholders noted that the voucher approach would improve the operation of the overall input market, as it would allow more input sellers to reach outlying markets now seldom reached and this would expand the size of their markets. In areas where input vouchers have been implemented in Zambia, farmers had more interaction with stockists or agrodealers, who offered the farmers some advice on the use of the inputs, than they had in a government program. On the basis of the analysis, there is therefore room for a voucher program in Zambia. In Mozambique, results from a logit model showed that emergency seed distribution is associated with a 3-22 percent decrease in producers’ probability of buying commercial seed.

The strong negative association between emergency seed and the chance of buying maize was consistent across all ten provinces and increased from north to south of Mozambique. The results suggest that emergency seed programs may be reducing demand for commercial seed, which precludes the development of seed markets in Mozambique. Thus, in all countries where input vouchers have been implemented, sellers have expanded their network into the rural areas, saving government, NGOs and donors the cost of distributing inputs.

Prepackaged input packs are extremely expensive. They stifle private sector development, do not offer options/choices to smallholder farmers, and have serious problems of targeting. For example, the Fertilizer Support Program in Zambia has benefited high-income groups at the expense of the intended beneficiaries. Only a few private companies that are contracting with govern-
The main recommendation is that donors, NGOs, and governments in southern Africa should consider using input vouchers for all their relief and targeted support programs.

Field research has shown that in countries where vouchers are being used, a number of challenges have been experienced. These include less transparent and non-systematic beneficiary registration processes; poor coordination between government; input companies and other stakeholders leading to too few or too many vouchers being distributed; companies distributing poor quality inputs; and fraud and corrupt practices.

Some smallholder farmers expressed the desire for flexi-vouchers to extend their choices. The farmers suggested that the range of inputs covered should include groundnuts, beans, and vegetables.

Policy recommendations
The main recommendation is that donors, NGOs, and governments in southern Africa should consider using input vouchers for all their relief and targeted support programs. This will help build a vibrant private sector that creates employment, extends its distribution network into the rural areas and improves time-line in input delivery for the benefit of smallholder farmers in the rural areas. It will also be more responsive to real as opposed to assumed needs.

Several operational recommendations emerge. First, to make the vouchers more effective, governments can consider percentile coupons. Such coupons can indicate, for example, that 75% of the value is for fertilizer, 10% for seed, 5% for chemicals, and 10% for labor. The coupons can be valued using the prevailing prices of the recommended inputs and recommended quantities per hectare. The coupon can be divided into portions matching the recommended inputs. If for example, a farmer has purchased fertilizer from retailer B, the retailer would remove the fertilizer portion of the coupon and redeem it for cash. In this way vouchers can help a government to achieve social objectives through commercial means.

Alternatively, if the voucher value is less than the cost of the inputs, farmers should be allowed to redeem the difference for cash or for other necessities. Flexi-vouchers can be redeemed for inputs or for other basic household needs from shops. Coupons or vouchers are less costly to government than dealing with prepackaged packs of inputs. Because of the high cost of government machinery involved in the marketing and distribution of the packs, administration of a voucher system will have far lower...
overhead costs. Finally and perhaps most important, a coupon or voucher system is more likely to contribute to long term development of input markets and therefore agricultural growth while providing support to resource-poor farmers.

Second, to reduce corrupt practices and to ease the registration hiccup of beneficiaries, countries should follow the Zambian Community Teams Model where all stakeholders at the local level are involved in the identification and registration of beneficiaries. Countries must define clear criteria for the selection of the beneficiaries, i.e., households, and crops for the voucher program. Targeting of the program should also extend to the small dealers so that they also benefit. Further, linking up with the European Union and NGOs to experiment with “smart cards” may be a way of identifying the beneficiaries. The smart card would have an electronic scan of the beneficiary’s finger print for identification. The card has the possibility of having multiple uses including purchase of specific inputs as well as savings which can be partitioned (referred to as pockets) on the card to which money value would be attached, such that one can neither exceed the printed amount nor use a particular allocation for a different purpose.

Third, although timeliness of input delivery has improved over time in countries such as Malawi, it is important that all inputs are at the farmers’ doorstep a month or two before the beginning of the rainy season. This is about September/October in the case study countries. This can be achieved through proper planning and collaboration between government, the private sector and other stakeholders. For instance, identification and registration of beneficiaries and tendering processes can be done by April every year.

Fourth, current tendering processes crowd out small dealers. There is therefore a need to reform the tendering process, for example by requiring partnership with small rural dealers, rather like a lot of institutions do in research tenders. In addition, a program can be developed where the input companies link up with agrodealers in rural areas to help with the distribution of the inputs as retailers under the input voucher program.

Finally, there is need for a study to quantify and assess the sustainability of the input voucher program. Since the input voucher program is a subsidy-based program supported by governments, it is most likely that the governments may not support the program forever. Further research can help identify an ‘exit strategy’.

References


The Food, Agriculture and Natural Resources Policy Analysis Network (FANRPAN) is an autonomous regional stakeholder driven policy research, analysis and implementation network that was formally established in the Southern Africa Development Community (SADC) in 1997. FANRPAN was borne out of the need by SADC governments who felt that comprehensive policies and strategies were required to resuscitate agriculture. FANRPAN is mandated to work in all SADC countries and currently has activities in 12 SADC countries namely Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, South Africa, Swaziland, Tanzania, Zambia and Zimbabwe.

Vision:
A food secure southern Africa free from hunger and poverty.

Mission:
To promote effective Food, Agriculture and Natural Resources (FANR) policies by facilitating linkages and partnerships between governments, Regional Economic Communities and civil society, building capacity and implementing effective, targeted and demand-driven policy analysis and dialogue at national and regional levels.

Disclaimer: The work reported in this publication was made possible through support provided by the Regional Center for Southern Africa, U.S. Agency for International Development. The opinions expressed in this publication are those of the author(s) and do not necessarily reflect the views of the U.S. Agency for International Development.

This document has been produced with the financial assistance of CTA. The views expressed herein are those of the author(s) and can therefore in no way be taken to reflect the official opinion of CTA, representative of FANRPAN or of the cosponsoring or supporting organizations.