Promoting Development of Agricultural Input Markets in Mozambique

By

Emílio Tostão

Mozambique needs to adopt more targeted and nuanced policies to encourage the development of effective agricultural input markets. This study makes four recommendations to achieve this. Experiences in other countries and limited Mozambique experience suggest that agricultural input vouchers may be an important tool as well.

Background

Poverty and food insecurity continue in Mozambique despite market reforms liberalizing agricultural markets. Investment in marketed inputs such as high yield commercial seed is critical to achieving higher agricultural yields and incomes. Investment in seeds is very important because seeds determine the maximum yield that can be produced. But Mozambique has under-invested in its national seed system. Recently, vouchers and fairs have been used with the twin objectives of providing seed to producers hit by natural disasters, and stimulating seed market development. However, even with seed vouchers, producers’ effective demand for commercial seed remains low in Mozambique. Producers’ low demand for seed makes investment in the seed sector unprofitable.

This study uses secondary data from a representative agricultural survey to determine smallholder’s probability of buying maize seed in markets with both emergency and commercial seed. Results summarized in Table 1 show that smallholder’s probability of purchasing maize seed remains very low, especially in north (0.12-0.22) and central Mozambique (0.19-0.38). Producers who receive emergency seed are relatively less likely to buy seed. These results are consistent with the view that continued distribution of emergency seed may prevent development of seed markets in emerging economies.

There is a growing international and regional literature analyzing experiences with agricultural input vouchers or coupons. Such vouchers have several advantages. First, they make it possible to target poor smallholders and increase their capacity to purchase inputs necessary for increasing production.
Second, because the coupons are redeemed through private agro-dealers, they contribute to strengthening the commercial agricultural input markets in rural areas. Mozambique has limited but mostly positive experience with vouchers redeemed at seed fairs. Some countries such as Malawi have gone further and use coupons as the main mechanism to target fertilizer and seed subsidies.

Table 1. Producer’s probability of buying maize seed and the marginal effect emergency seed on producers’ probabilities of buying maize seed by province

<table>
<thead>
<tr>
<th>Province</th>
<th>Probability of buying seed</th>
<th>Marginal effect of seed emergency on producers’ probability of buying seed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Niassa</td>
<td>0.124</td>
<td>-</td>
</tr>
<tr>
<td>Cabo Delgado</td>
<td>0.209</td>
<td>0.055</td>
</tr>
<tr>
<td>Nampula</td>
<td>0.216</td>
<td>-0.044</td>
</tr>
<tr>
<td>Zambezia</td>
<td>0.190</td>
<td>-0.126</td>
</tr>
<tr>
<td>Tete</td>
<td>0.380</td>
<td>-0.083</td>
</tr>
<tr>
<td>Manica</td>
<td>0.235</td>
<td>-0.051</td>
</tr>
<tr>
<td>Sofala</td>
<td>0.382</td>
<td>-0.192</td>
</tr>
<tr>
<td>Inhambane</td>
<td>0.568</td>
<td>-0.211</td>
</tr>
<tr>
<td>Gaza</td>
<td>0.583</td>
<td>-0.032</td>
</tr>
<tr>
<td>Maputo</td>
<td>0.578</td>
<td>-0.224</td>
</tr>
</tbody>
</table>


Policy Recommendations

Based on the results of the quantitative study and international experience, five recommendations are offered to policy makers.

First, policy makers should clearly define “emergency” and the objective of seed emergency programs. The voucher and fairs approach has the potential to accomplish both seed market development and seed aid objectives, but only if the definition of “emergency” is clear, the objective of the emergency intervention is specified, and the target population is clearly delimited. Otherwise emergency programs may continue to prevent development of commercial seed markets by keeping demand for marketed seed low.

Second, we recommend the government should review the certification process and enforce quality seed standards. Currently, production of surplus maize and participation in maize output markets do not seem related to the use of commercial seed. This raises questions about the quality of the seed sold by the commercial sector and the quality of enforcement by the responsible agency, the Serviço Nacional de Sementes. If the promised quality is not attained, then demand for commercial seed is likely to remain low due to farmers’ disappointment with seed from the formal sector.

Third, strategies to develop the commercial seed market should target younger producers, and create incentives for private investment in market development. Participation in seed markets is related to producers’ characteristics such as age, and access to markets for complementary inputs.
Long term measures include continued public investment in roads, and simplification and enforcement of quality standards to spur develop of both input and output markets. In the short run, incentives such as income tax breaks and/or petrol allowances could be considered for agricultural companies, small businesses or agricultural producers working in rural areas where transportation costs are high.

Fourth, if policy is to support regional comparative advantages and specialization effectively, it must carefully consider spatial constraints that define regions’ advantages. The usual “one size fits all” policy approach might not work in Mozambique. In other words, geography matters. For example, it was found that age is important in the decision to buy seed maize, and younger producers are concentrated in central in north Mozambique.

Finally, we recommend that the government assess the experiences of other countries with using agricultural input vouchers as a mechanism to support smallholder farmers participate in commercial markets, and based on this assessment, consider pilot testing such a program in collaboration with private and non-government partners in Mozambique.

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References


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