Title
Improving Fertilizer Supply through Zoning and E-Procurement

Authors
Joyce Makau

Key Messages
Zoning of blended fertilizer coupled with improved management of the distribution system involving the private sector can increase access to subsidized fertilizer by resource poor farmers in Kenya. The use of fertilizer is generally expected to increase crop productivity among cereal growing farmers. Majority of the small holder farmers who produce about 64% of maize in Kenya are resource poor. Land which is their main factor of production is suffering from declining soil health due to continuous use in maize and wheat production. To ameliorate this situation, the government has introduced a fertilizer subsidy program in an effort to enhance food security through increased cereal production and productivity in Kenya. Fertilizer accounts for about 30% of the cost of production and has the potential to increase yields by 50%-75%. In order to increase access at a lower cost, the government has been supplying subsidized fertilizer to motivate its use. However, the approach used in supplying the fertilizer has not been effective in reaching needy farmers who do not have access to the input. This has raised concerns whether the national subsidy programs achieve the intended purpose. Fertilizer use or the lack thereof by Kenyan farmers is an issue that has received varied attention from practitioners in the agricultural sector.

The program intended to encourage fertilizer use, support local fertilizer manufacturers and strengthen fertilizer distribution. The private sector imports about 600,000 tonnes of fertilizer annually and can only sell if the government imports of about 500,000 tonnes delays. While the government alone can meet the annual national fertilizer demand, its resource base is limited, therefore, the need for private sector involvement. Its partnership with the Toyota Tsusho company will further reduce the cost of fertilizer by 40%. Supplying the right fertilizer will be incumbent on the firm producing the appropriate fertilizer for specific soils. The expansion of the subsidy program to cover other crops such as tea, coffee and sugarcane will impact negatively on the private sector’s share in the fertilizer market. The significant reduction of their returns due to decreasing sales margins will drive out from the fertilizer market those actors who cannot breakeven. In a research study focusing on farmer
participation in the fertilizer market, Joyce Makau a Research Associate at Tegemeo Institute found that the national fertilizer subsidy has a potential of displacing commercial sales from the market and this reduces farmers’ likelihood to participate in the commercial market by 30 percent. On average, every ton of subsidized fertilizer distributed by the government displaces 200 kilograms from the commercial market. The situation may worsen due to the deepening of budgetary allocation to the fertilizer subsidy program in Kenya. In essence, the government will end up being the sole actor supplying fertilizer in the market and this has potential risks.

The major risk include the existence of elite capture in the fertilizer subsidy program where those benefitting are the educated, wealthy, male-headed households and those with large land sizes and high non-farm incomes rather than the worse off. This implies that the current distribution system of subsidized fertilizer is benefiting households who can afford commercial fertilizer. Earlier studies by Tegemeo had previously shown that only 9% of farmers receive subsidized fertilizer. Of these, 60% are from the high income group. The poor and the middle income households received 4.2 kg and 3.5 kg disproportionately less subsidized fertilizer, respectively. This is an indication that Kenya’s national fertilizer subsidy does not favor resource-poor households. This raises questions as to whether the program beneficiaries are households who truly need the fertilizer rather than those who are well connected. Other risks are fertilizer adulteration and weak infrastructure in terms of roads and credit access received significantly less subsidized and commercial fertilizer.

Therefore, redesigning the current national fertilizer subsidy program becomes an important option. One strategy that will enhance access of subsidized fertilizer might be the zoning of the required fertilizer based on soil maps in the country that shows the distribution of soil nutrient demand. This alongside the use of the redeemable e-Voucher system which is more transparent subsidy management that will enable the Ministry of Agriculture, Livestock Development and Fisheries to establish a network of dealers, reduce the cost of distribution of the product to farmers and create a database of stakeholders particularly the private sector. Moving forward, the use of e-procurement by farmer groups or at county level needs to be explored if farmers are to access the appropriate fertilizer for their soils.

For further assistance, more information or if you would like to conduct interviews with any of the authors, presenters or Tegemeo Institute staff, please contact: Judy Kimani, 0720 96 33 48, jkimani@tegemeo.org, www.tegemeo.org