

Would These Programs Be as Effective as Food Aid in Stabilizing Grain Supplies?

Before answering whether these policy options may be as effective in stabilizing food supplies as food aid, another question needs to be asked first: has food aid been effective in stabilizing food supplies? To answer that question, table 6 shows the standard deviations of per capita grain supplies in each SADC nation with and without food aid. Hypothetically, if food aid imports had been eliminated in the historical period and not compensated in any way (for example, with more commercial imports), supply volatility would have increased in almost all countries.¹² But by how

¹² The exceptions are countries (mostly with higher incomes) that have not received food aid in the historical period: Botswana, Namibia, Mauritius, and South Africa.

Table 6—Effects of different policy scenarios on supply stabilization

Country	Status quo (food aid)	No food aid	Insurance	Stocks
<i>Standard deviation of per capita grain supplies</i>				
Angola	19.4	25.2	16.4	13.7
Botswana	35.1	35.1	28.0	19.1
Lesotho	44.2	47.8	35.2	31.7
Malawi	30.0	39.2	23.2	20.9
Mauritius	13.6	13.6	13.6	13.5
Mozambique	6.3	17.3	6.2	6.0
Namibia	9.6	9.6	8.9	8.8
South Africa	36.8	36.8	27.3	24.3
Swaziland	47.5	52.0	35.8	23.4
Tanzania	31.0	31.4	29.2	28.5
Zambia	40.1	44.0	33.8	32.0
Zimbabwe	61.2	69.9	50.3	39.9

Source: Authors' calculations based on insurance and stocking models.

much? Only a few countries show that food aid has had a relatively large impact on stabilizing supplies (measured by reductions in the standard deviations greater than 20 percent): Angola, Malawi, and Mozambique. For other food aid recipient countries, the impact has been generally negligible.

Compared with the status quo situation with food aid, both the stocking program and import insurance program would reduce supply variability. The stocking program reduces supply variability more than the insurance program since by design it controls both the upside and downside supply risks, whereas the particular insurance program under consideration protects against downside risks only. Both provide a safety net, however. These concepts are illustrated again for the case of Swaziland, where per capita grain supplies for each option were calculated and displayed (fig. 6). For most SADC countries, the differences between the stocks and insurance in terms of per capita supply reductions are relatively small (fig. 7). However, for a few countries like Botswana, Swaziland, and Zimbabwe, the supply reductions are quite significant (compare insurance and stocks data in table 6).

It is important to point out that the stocking and import insurance alternative programs are very different in nature and achieve slightly different goals. The stocking program literally would hold grain stocks in the region whereas the insurance program would make sure that countries could afford to purchase grain on the world market when necessary. The stocking program would hold and release stocks based primarily upon direct physical supply considerations whereas the import insurance program is more administrative and financial in nature, primarily addressing excessive import costs.

Figure 6
Swaziland per capita supply outcomes under different policy options

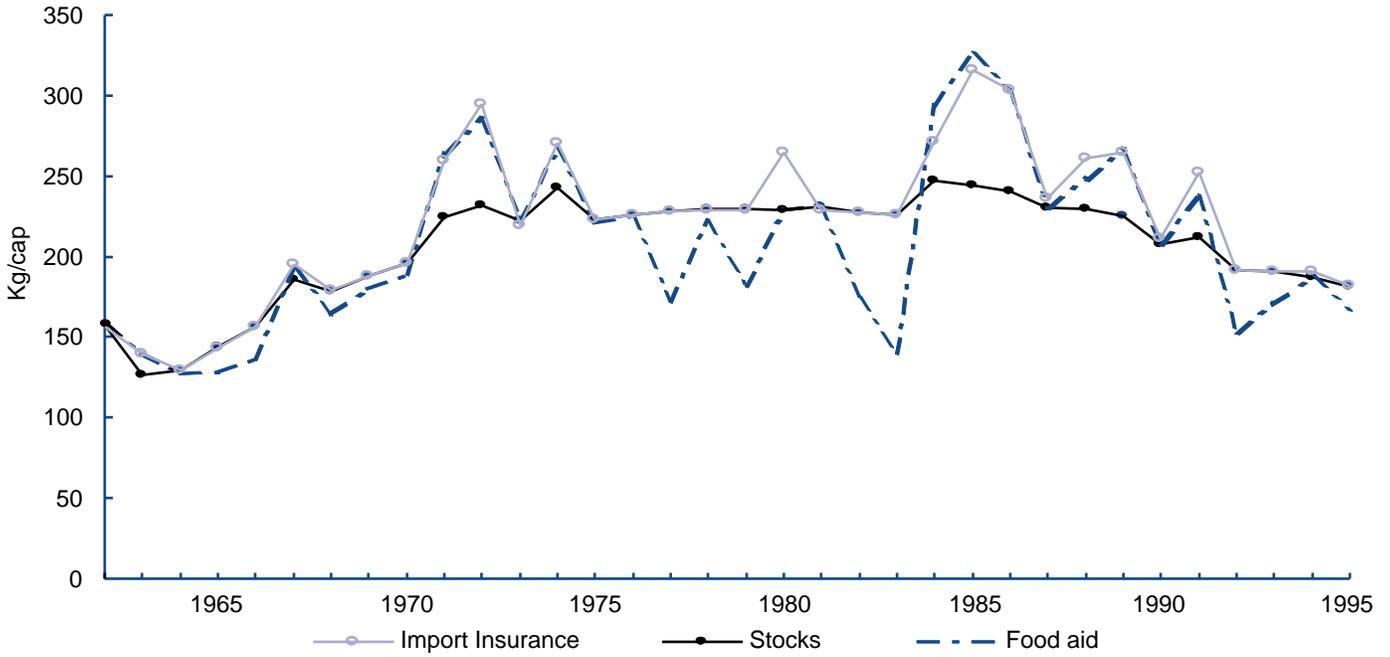


Figure 7
Comparison of policy option stabilization effectiveness 1970-95

