



How can Kenya better manage maize prices? Effects of import tariffs, regional trade and producer price support

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Government intervenes in the maize market in various ways either to increase domestic production or to increase/reduce maize imports. While such actions have the potential to influence maize prices positively or negatively, they also change the dynamics in the maize market. Maize prices are also greatly influenced by government actions in neighbouring countries and by the behaviour (conduct) of players along the maize value chain. Although effective in cushioning farmers against low producer prices, some of these interventions curtail/limit the benefits that would otherwise accrue to consumers in form of lower and more stable maize prices.

BACKGROUND

High food prices remain the greatest challenge in Kenya today. While it is well known that most urban consumers rely on the market for their food, research has shown that most rural households in Kenya are also net buyers of food (Jayne et al. 2001). A consumption and expenditure survey conducted by Tegemeo Institute between June and July 2009, showed that low income groups in Nairobi were spending a high and increasing proportion of their income on food (Kamau et al. 2010a) and that 44% of households are undernourished, i.e. their caloric intake was below the recommended minimum daily caloric intake of 1600 kcal/person per day (Kamau et al. 2010b). These findings can be directly linked to high food prices in Kenya. A direct link also exists between high food prices and poverty. An increase in maize market price was found to increase rural poverty rates and to transfer income from most small-scale maize buying farmers to a small number of larger maize surplus farmers (Mghenyi and Jayne 2006).

Maize prices in Kenya have been steadily increasing and have not receded to the levels preceding the 2008 food crisis (Figure 1). Between January 2008 and August 2012, the wholesale price of maize grain increased by 19%, while the retail price for maize grain and flour increased by 114% and 127% respectively.

Such increases in the price of maize, the main staple in Kenyan households, are bound to have a direct impact on the

welfare of Kenyans in terms of increased hunger and poverty. The important question is whether government and other players can take action to mitigate against such damaging price escalations.

While various initiatives and instruments have been used in efforts to manage food prices in Kenya, the outcomes/results have not been as effective. This is evidenced by the high and rising food prices currently being experienced. In this brief, we analyse some of the policy interventions in maize marketing to provide evidence on their effects on maize prices and hence on food security. We do this by analysing trends in maize prices over time to identify their relationships (if any) with specific policy interventions.

DETERMINANTS OF MAIZE PRICES IN KENYA

In liberalized markets, commodity prices are determined by forces of supply and demand. In Kenya, maize prices are largely determined by supply from domestic production which is mainly from rainfed production systems. During harvest periods when supplies are high, prices fall to very low levels. However, they quickly rise within about three months, as the country's maize stocks diminish. Shortfalls in domestic production are met through trade (Sessional Paper No. 1 of 2012 on the National Food and Nutrition Security Policy). International and regional markets therefore, also play an important role in maize price determination because trade not only increases maize supply in the

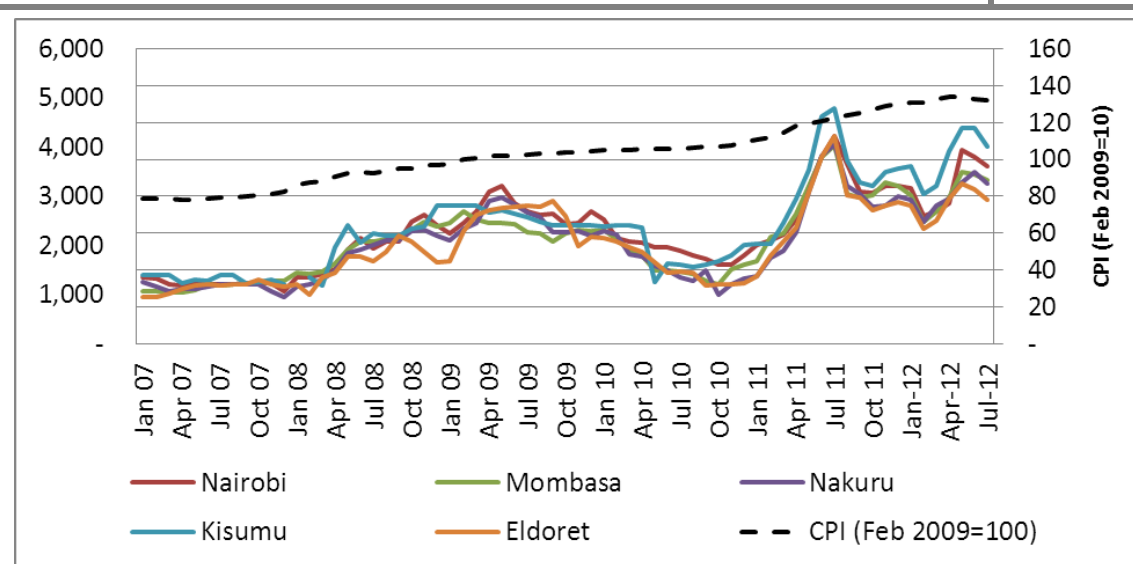


Figure 1: Maize prices (nominal) in selected wholesale markets in Kenya.

domestic market, but may also lower prices through price transmission.

Government intervenes in the maize market in various ways either to increase domestic production or to increase or reduce maize imports. Such actions influence maize prices by changing the dynamics in the maize market. Maize prices are also greatly influenced by actions of governments in neighbouring countries and by the behaviour (conduct) of players along the maize value chain.

Using time series maize price data (2007 to 2012), we discuss some of the interventions in the maize market and provide highlights of key findings/messages.

EFFECTS OF PRODUCER PRICE SUPPORT, IMPORT TARIFFS AND REGIONAL TRADE

Effect of producer price support

The government intervenes in the maize market through the National Cereals and Produce Board (NCPB) by setting producer prices of maize outside the market context (Figure 2). The effect of such an intervention is a general increase in maize prices in the country. For example, for the 2010 harvest NCPB increased its buying price from KES 1600 (in July), to 2300 (in August and September) and later reduced it to KES

1850 (October through December). During this period, US\$1 was equivalent to KES 80.75. These prices were much higher than market prices at the time (37%, 49%, 35%, 35% and 33% higher than wholesale prices in Eldoret during August, September, October, November and December 2010 respectively).

For the 2011 harvest, NCPB raised its buying price by 62%, from KES 1850 to KES 3000. The high NCPB price (effected from August to December 2011) seems to have stopped further reduction in wholesale prices that may have resulted from increased supply arising from, the duty waiver on maize imports (effected from June–December 2011) and from the 2011 harvest. However, wholesale prices decreased markedly after NCPB stopped buying maize in January 2012. The producer price support may therefore be effective in cushioning farmers against low prices during harvest. However, it also results in high prices for consumers, preventing them from benefitting from lower maize prices even during the harvest period.

Competitiveness of Kenyan maize

We compared maize prices in Kenya with import parity price of maize (CIF prices) to gauge how competitive Kenyan maize is compared to imports from the international

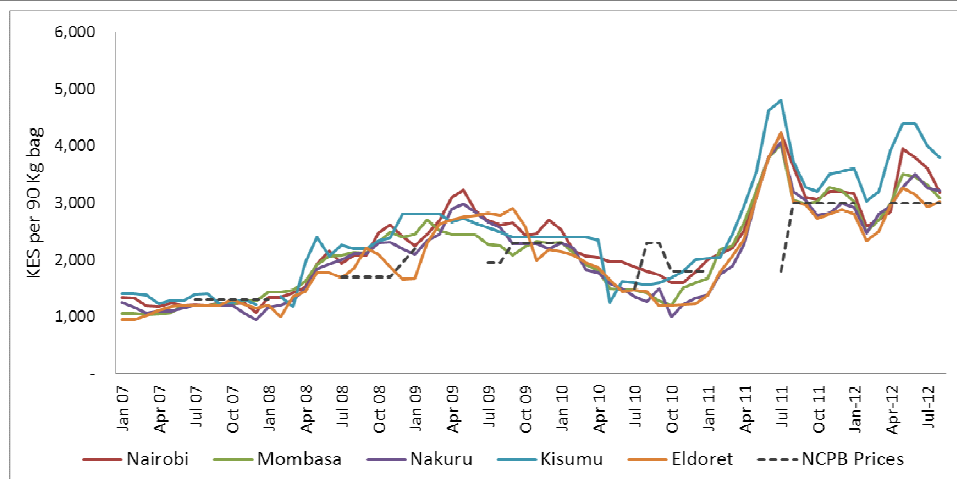
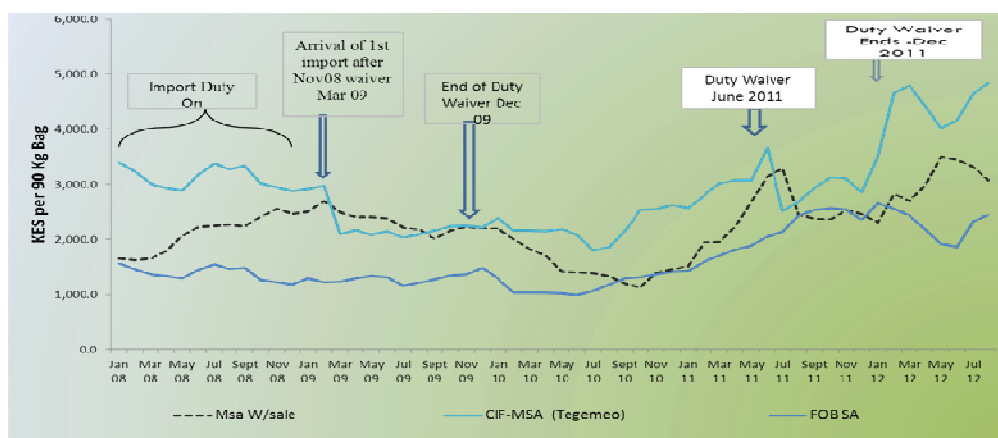


Figure 2: Comparison of NCPB buying price to wholesale prices in maize production and consumption areas.



Source: FOB spot prices in South Africa; Wholesale Price in Mombasa from Ministry of Agriculture; CIF is calculated by Tegemeo Institute.

Figure 3: Comparison of domestic price of maize to international prices (2008–2012).

market, mainly South Africa. The evidence (Figure 3) suggests that the Kenyan maize sub-sector is quite competitive compared with that in South Africa.

The wholesale price of maize in Kenya has over the last five years remained below the import parity price (CIF-Mombasa). In fact during harvest periods, in a good season wholesale prices in Kenya are at par with the FOB price in South Africa! Also, import parity price (CIF-Mombasa) is at par with Kenyan wholesale maize prices only when the import duty is removed. The tariff on imported maize seems therefore redundant and of no consequence because imported maize, (at least from South Africa) is uncompetitive,

mainly due to the high costs of importing maize.

Effect of import tariff

What are the effects of duty waiver/imposition during normal or shortfall periods? Wholesale (and retail) prices of maize in the domestic market are comparatively lower when an import duty waiver is in force than when it is not (Figures 2 and 3; Table 1). Moreover, maize prices are relatively more stable, i.e. no price escalation is observed during periods of low maize supply from domestic production. Therefore the tariff on maize imports increases uncertainty on maize supplies and speculation in the Kenyan maize market. This drives up prices. Apparently, even when the country

Table 1: Comparison of change in maize prices with and without import duty

Item	With Duty	Without Duty	With Duty	Overall Change
	<i>Dec 10-Jun 11</i>	<i>Jun 11-Jan 12</i>	<i>Jan 12-Aug 12</i>	<i>Overall</i>
FOB Price-South Africa	45	29	-8	72
CIF Price- Mombasa	40	-4	38	84
Wholesale Price-Mombasa	115	-27	33	111
Retail Price-Grain	100	-7	-1	84
Retail Price-Flour Loose	61	-4	-2	53
Retail Price-Sifted Flour	81	-14	1	58

Source: Authors' computation.

does not need to import maize, imposing duty creates an artificial environment which tends to increase domestic maize prices even without the accruing benefits in terms of revenue collection.

Effect of regional trade

Does regional trade have a role in the maize market? The relatively more stable maize price from January to July 2012, compared to same period in 2011 when maize prices sky rocketed (Figures 2 and 3), can be attributed to increased inflows from neighbouring countries. Maize imports in the first half of 2012 stood at approximately 4 million bags, with the bulk (3.2 million) coming from neighbouring countries and the rest (approximately 0.8 million bags) from the international market. The 2012 inflows (maize from neighbouring countries) were the highest in the last five years (Table 2). By July (2012), the volume of inflows was second only to maize imports in 2009. This contrasts highly with activities in the market during the same period, 2011. The volume of imported maize by July 2011 was much lower (1.5 million bags). The imports then were mainly from the international market (1.2 million bags), with only 0.4 million bags flowing in from neighbouring countries.

Maize inflows seem effective in curbing price escalations during deficits in domestic production (Figures 2 and 3; Table 1). The inflows from the region will be even more effective in stabilizing maize prices if such inflows are high enough right from the beginning of the year, i.e. January through to June. The situation

calls for a policy environment that allows market players to better plan.

Effect of oligoponistic behaviour among traders and millers in the maize value chain

The margin between maize wholesale and retail prices, particularly flour prices, is high and has been widening over time. Escalation of retail prices three to four months after the harvest season is an indication of uncertainties in the maize market regarding maize supplies and speculation among traders and millers. The widening margin may be promoted by uncertainties in the maize market and the sharp increases (escalation) in the wholesale prices of grain (Figure 4).

POLICY RECOMMENDATIONS

1. Consider removing tariffs on maize imports. Our study showed that the tariff on maize imports increases uncertainty in maize supplies and speculation in the Kenyan maize market, thereby driving up prices. The study also showed that the tariff on imported maize is redundant and of no consequence because imported maize (at least from South Africa) is uncompetitive.
2. Remove producer price support. Our study showed that such support results in high prices for consumers, preventing them from benefitting from lower maize prices even during the harvest period. Other ways to support farmers exist such as: reducing costs of production by improving rural infrastructure; and smart subsidies for inputs (fertilizer and seed). The

Table 2: Maize imports and inflows (January 2007–July 2012)

Month	2012		2011		2010		2009		2008		2007
	KRA	Inflows	KRA	Inflows	KRA	Inflows	KRA	Inflows	KRA	Inflows	KRA
January	116,970	73,089	60,967	50,000	1,087,855	63,909	150,900	861,152	2,194	110,433	90,810
February	105,587	148,865	25,409	18,915	536	247,550	834,289	145,585	-	101,101	3,498
March	121,934	148,865	44	31,137	160,504	112,193	2,304,791	86,401	-	62,216	23,028
April	153,944	339,323	104,000	12,792	1,558	108,775	1,910,888	86,401	2,652	61,532	16,273
May	242,639	1,527,770	43,511	26,732	126,469	75,972	2,322,879	86,401	671	66,478	8,267
June		417,550	422,942	64,936	336,069	63,670	2,088,048	19,000	533	223,402	71,028
July		548,020	500,028	202,751	3,901	59,188	2,118,918	27,537	25,185	78,408	135,220
Rest of the yr		354,631	2,168,283	1,300,561	83,984	327,370	3,932,132	341,001	162,967.722	678,528	182,372
Total Imports	741,074	3,558,113	3,325,185	1,707,824	1,800,875	1,058,627	15,662,845	1,653,478	1,660,905	1,382,097	530,496

Source of data: Imports from the Kenya Revenue Authority (KRA); Inflows from Ministry of Agriculture Food Security reports.

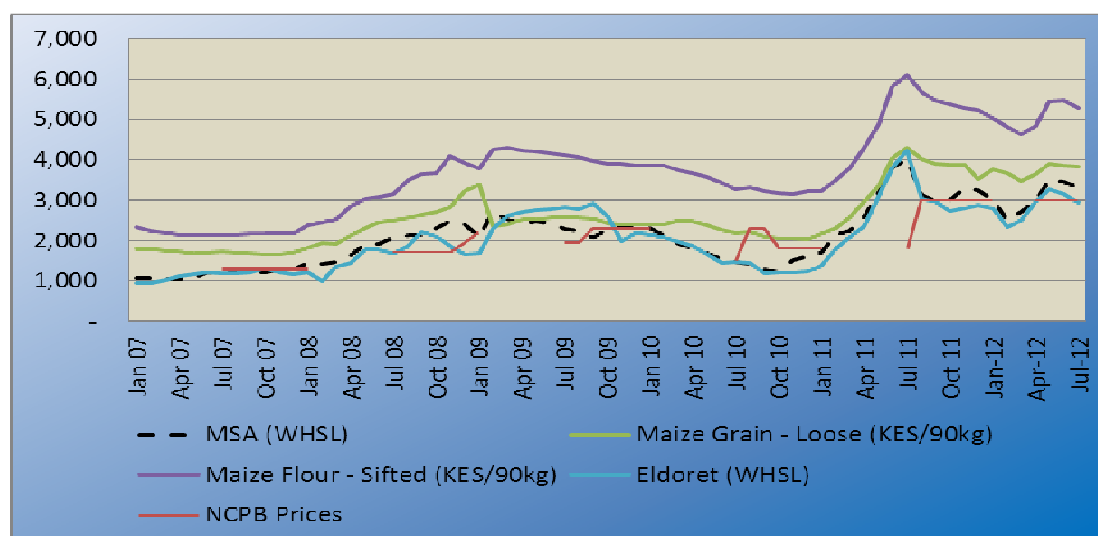


Figure 4: Wholesale and retail prices of maize grain, retail price of flour and NCPB buying price (2007–2012).

- government can also support farmers by not approving measures that threaten further increases of costs in food production, e.g. the VAT Bill, 2012.
- Encourage regional trade in grain because maize inflows from the region effectively curb price escalations during deficits in domestic production. Regional trade can be enhanced by removing all barriers to such trade and increasing access to information on surpluses and deficit areas and on prices. Regional trade requires a policy environment that allows market players to plan better.
- Provide a policy environment that reduces uncertainties in the maize market regarding maize supplies and speculation among traders and millers. Also, enforce laws that would encourage competitive behaviour in the maize market.

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