

SPECIAL REPORT: Market functioning in southern Somalia

December 15, 2011

Disclaimer: This paper addresses some of the issues related to the market feasibility of cash transfers and supply-side interventions. It does not consider issues related to the mechanism by which various forms of response could be provided nor does it explore other aspects of the local context, including security and conflict, which would affect the overall feasibility of continuing or expanding relief efforts. As with all information on southern Somalia, the situation is changing constantly and available information may not fully reflect current conditions. The paper examines staple food price conditions from July 2011 to October 2011 using FEWS NET and FSNAU price series, FSNAU import data, and FAO/WFP/FEWS NET cross-border trade data. It does not consider additional sources of data from other sources.

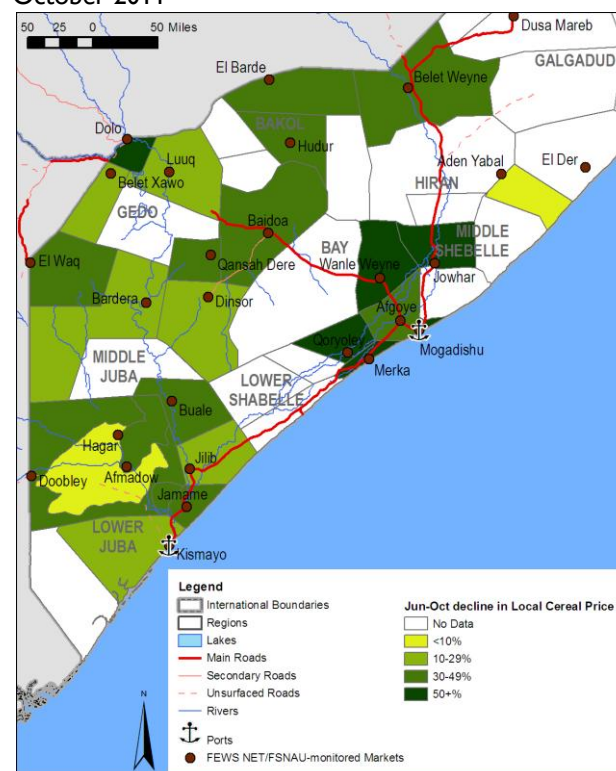
KEY MESSAGES

- Markets continue to move locally-produced, imported, and relief food both within and between trade basins in southern Somalia. As trade is moving food between markets, cash or voucher-based interventions or supply-side interventions that rely on functional trade flows may continue to be effective response options.
- Prices of local grains have decreased thanks to new supplies from the very small *Gu* harvest, some limited cross-border trade, the off-season harvest, and most importantly, the entry of relief food into the market.
- Not all areas of southern Somalia are equally connected to each other through trade, so some areas remain poorly served by the new sources of supply that have become available since July. Aden Yabal remains more connected to the Central trade basin than to southern Somalia, and prices remain very high; Belet Xowa in Gedo region remains more connected to markets in the Manderu triangle in Kenya, and supplies remain tight. In the Juba valley, while prices of white maize have come down some, prices indicate that white maize supplies in the Juba valley remain very thin.

SUMMARY

Recent trends. Prices of locally-produced cereals have fallen since June (Figure 1). In areas that typically produce a surplus of grain such as Bay and Lower Shabelle, prices of local cereals have fallen the most. Markets near borders with Ethiopia and Kenya have also had notable reductions in local cereal prices. Humanitarian assistance to typically surplus-producing areas which experienced production failures this year as well as assistance to Mogadishu have increased the overall cereal supply. The very small harvest from the *Gu*, the off-season harvest in Lower Shabelle, and very small cross-border trade flows have also increased supply. Prices of local cereals have not fallen as much in the Juba Valley as they have in areas bordering Ethiopia or in Bay or Lower Shabelle. Local grain prices in Aden Yabal in Middle Shabelle continued to increase from July to October, showing no signs of a local supply increase. Imported red rice continues to be available in most markets and prices in most areas, while rising slightly since June, are somewhat stable. Other imported foodstuffs

Figure 1: Decline in local cereal prices from June to October 2011



Sources: Food Security and Nutrition Analysis Unit-Somalia (FSNAU) and Famine Early Warning System Network (FEWS NET)

Note: Markets in Middle and Lower Juba, Lower Shabelle, and Hiran are using the price of a kilogram (kg) of white maize; all other markets are using the price of a kg of red sorghum. Districts are mapped based on a single reference market with the exception of Afmadow in Lower Juba where three different market sheds are mapped.

continue to flow to most major markets in southern Somalia.

Outlook. If relief food continues to flow to markets, prices may continue to decrease or remain stable through the *Deyr* harvest. However, in areas these supplies have not reached or that these supplies cease to reach, prices will seasonally rise before the *Deyr* harvest. The maize harvest is likely to be average in Lower Shabelle, the key surplus-producing area, so white maize prices may decline in January as the harvest starts to enter the market. As the surplus-producing regions for sorghum for the *Deyr* are primarily in Bay region, and harvests in this region, even if average, may be delayed due to wet planting, the seasonal decline of prices may be delayed. As current supplies of red sorghum are drawn down, red sorghum prices may rise from harvest reach markets in February. If the *Deyr* is below average, prices will then start to rise sooner than in a normal year. Rice prices are likely to remain relatively stable or decrease slightly as additional supplies from South and Southeast Asia enter the international market early next year.

Implications. Cash, vouchers, and supply-side interventions remain viable response options in most areas in southern Somalia. Disruption of trade flows due to military actions in the Juba valley and Gedo region may interrupt both imported and local grain supplies in these cereal-deficit areas. If these disruptions occur, in-kind distribution may become more preferred by the local population as supplies tighten and prices rise while trade is restricted. Local grain prices remain quite high compared to historical levels, but inflationary pressure from cash-based responses had had little noticeable inflationary impact by October.

WHITE MAIZE

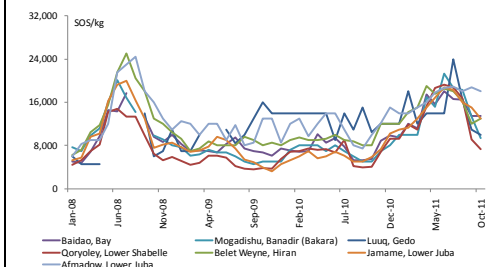
Recent trends. Of major staple foods in southern Somalia, white maize prices fell by the largest percentage and to the lowest overall price of any staple between June and October (Figure 2). The white maize harvest was around 28,500 metric tons (MT) for the *Gu* harvest and the off-season harvest. While the off-season harvest in Lower Shabelle was larger than expected this year which helped increase supply, significant gaps in local maize production remain. In addition to local supplies, there are some very small inflows through cross-border trade from Ethiopia and Kenya. For example, through Belet Weyne in Hiran region, small flows of maize from Ethiopia have been recorded every month since April. By far, the most significant new source of supply has been food distributions to households and the subsequent entry of relief maize into the market. This new source of supply has played the key role in reducing maize prices.

Much of the relief maize that has entered the market in places like Baidoa or Lower Shabelle may be from non-traditional donors. These donors have been able to deliver in-kind food aid to areas where Al Shabaab restricts humanitarian access in Lower Shabelle, Middle Shabelle, and Bay regions. The southern part of Middle Shabelle, Mogadishu, Lower Shabelle, and parts of Bay and Gedo appear to have benefitted from access to the new sources of supply that have reached the market since July. The sorghum belt other than Bay and the Juba valley have had relatively higher white maize prices though supplies may have reached markets connected to major trade routes such as Belet Weyne in Hiran region.

In the Juba valley, the harvest was not nearly as good as in the Shabelle valley, and there was no off-season harvest. Also, flooding and irrigation issues have caused a very late planting which has caused the outlook for the *Deyr* to be for very little production though followed by a relatively better off-season harvest in March and April. In both Lower Juba and Middle Juba, prices for white maize are higher, in nominal terms, than they are in other regions of southern Somalia and have not declined as significantly. Transportation limitations during the current *Deyr* rainy season in these regions are typical, but this year, by cutting off maize supplies that could have flowed in from Mogadishu and the Shabelle Valley, prices remain especially high. Of all white maize markets in southern Somalia, only in Afmadow in October had (kg) of white maize not substantially declined.

Belet Xowa, like Mandera town in Kenya across the river, continues to have very high prices for white maize and to be more isolated from other regions due to transportation and security issues. Like in Mandera town, there has been a slight reduction in nominal prices which may indicate simply a slow transmission of price from surplus-producing areas. However, this may also indicate that the Mandera triangle and Belet Xowa continue to be relatively isolated markets. Other markets in northern Gedo region like Dolo and Luuq historically are not well integrated with the rest of the sorghum belt, but cross-border trade and assistance flows have had a greater impact on white prices in Dolo and Luuq.

Figure 2: White maize prices in southern Somalia



Sources: FSNAU and FEWS NET
Note: Gaps in data are not graphed.

Prices for white maize markets are historically well correlated even between trade basins. These correlations show that market integration is especially strong within the Juba valley trade basin, but important markets are well correlated with most markets in southern Somalia. For maize markets, northern Gedo remains the most isolated area of southern Somalia as prices in Dolo, Belet Xowa, and Luuq tend not to co-move with other sorghum belt prices or prices in the rest of southern Somalia.

Outlook. Maize prices will probably increase slightly before the *Deyr* harvest. Conditions in maize-producing areas of Lower and Middle Shabelle indicate that the harvest may be on time. If the harvest is near average, prices will likely fall towards their early 2010 levels following the harvest, but they are unlikely to reach prices quite as low as they were before the failure of the *Deyr* rains in 2010. If the maize harvest were to be below average, prices would likely not fall as much following the harvest. As floods affected standing maize and planting ability in the Juba valley, the maize prices in the Juba valley will fall but with a lag several months. These prices may remain higher until the local off-season maize harvest starts in March. If there are significant trade disruptions due to military activity in the Juba valley or Gedo region, white maize prices could spike again as local supplies are drawn down and not replenished through trade.

RED SORGHUM

Recent trends. Red sorghum prices peaked from June to August in various markets, and since August, they have declined (Figure 3). For the most part, they remain above prices from last year with some exceptions in northern Gedo region where prices in October were actually lower than a year ago. However, these markets had unusually high prices last year unlike most other areas of southern Somalia.

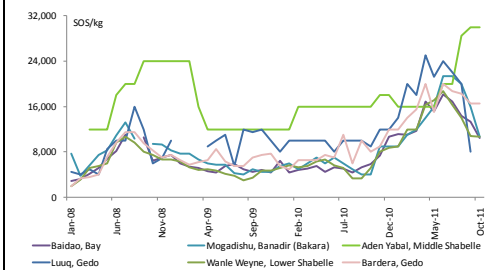
As sorghum production from the *Gu* harvest was only estimated to be a little over 13,000 metric tons (MT) and there was negligible off-season production of sorghum, the supply situation has improved since July but not to an extent to erase the substantial red sorghum deficit. While cross-border trade has benefited some border areas, flows are very small. For example, into Belet Xowa, less than 30 MT of sorghum were imported and recorded in October by the Food and Agriculture Organization of the United Nations (FAO)-World Food Program (WFP)-FEWS NET joint cross-border trade monitoring system.

The primary driver of lower red sorghum prices is the ability to substitute cheaper white maize. In riverine areas of Somalia, most households prefer white maize to red sorghum. Households that typically consume red sorghum in Mogadishu, the sorghum belt, and non-riverine areas of the Shabelle valley are often willing to substitute white maize, especially if it is available at a lower price. On November 14, the price of relief maize in Baidoa in Bay region was SOS 7,500 per kilogram, far less than either locally-produced white maize or locally-produced red sorghum. The presence of relief maize on the market has been a key driver of downward pressure on prices. The availability of this low cost substitute has driven down the price of red sorghum across much of southern Somalia. Also, some non-traditional donors may also have imported some relief sorghum such as donations of Sudanese sorghum reported by the Organization of Islamic Cooperation (OIC).

The ability to substitute low-price, relief maize which has entered markets in Mogadishu, Lower Shabelle, parts of Bay, the southern part of Middle Shabelle, and even possibly areas of Gedo, has brought lower prices for red sorghum. Areas that are less well connected to these markets, though not entirely isolated from them, such as Bardera in Gedo and Dinsor in southern Bay, have red sorghum prices that are still relatively high. However, these prices are all well below their peaks. Most markets continued to show downward pressure between September and October, but some markets in southern Bay such as Qansah Dhere and Dinsor may have already reached an inflection point and marginally increased between September and October. This reflects the usual seasonal trend as red sorghum supplies from the *Gu* are drawn down. The price increases also indicates that substantial red sorghum deficits continue to exist both for southern Somalia as a whole and for all southern market basins.

Using historical data to examine market integration through price series correlation shows that sorghum prices are relatively well correlated across most of the sorghum belt. Markets in Bay, northern Lower Shabelle, southern Middle Shabelle, and Bakol show strong correlation with each other indicating that prices move in similar patterns across these markets. However, markets in Gedo and Hiran are less well integrated though not fully isolated from the rest of the sorghum belt as prices did decrease between September and October. Aden Yabal in northern Middle Shabelle remains

Figure 3: Red sorghum prices in southern Somalia



Sources: FSNAU and FEWS NET

more closely tied to the sorghum-deficit markets in central Somalia. In Aden Yabal in recent months, sorghum prices have not decreased at all.

Outlook. Red sorghum prices are expected to marginally increase by the end of December as supplies dwindle before the *Deyr* harvest despite continued relief efforts. Since the *Deyr* harvest in the higher productivity areas of Bay is likely to be delayed due to late, wet planting, prices may increase through February. Once the *Deyr* harvest is completed and available to the market, supplies should increase and prices decrease slightly. If the harvest is average, prices should follow usual seasonal trends of rising sharply from May to July. If the harvest is below average, the sharp rise in price before the *Gu* harvest comes to market would likely start as early as March. In either case, prices will likely not rise to as high as they were in June through August, but they may remain higher than early 2010 levels for quite some time due to limited sorghum supplies. The continued availability of relief maize and less expensive locally-produced maize may help maintain some downward pressure on red sorghum prices in many markets if assistance flows remain or increase.

IMPORTED RED RICE

Recent trends. Imported red rice markets remain quite well integrated. Price trends indicate that trade from ports to major markets in southern Somalia continued with only minor interruptions from July to October. Since July, price patterns remain broadly similar across southern Somalia. In nominal terms, imported red rice prices across much of southern Somalia increased slightly from June to August in reaction to changes in international prices. Most recently imported red rice prices decreased between September and October (Figure 4). The slight decrease may have been driven primarily by the slight appreciation of the Somali shilling against the U.S. dollar.

Earlier this year, markets in northern Gedo region such as Luuq, Dolo, and Belet Xowa had higher nominal red rice prices, possibly reflecting isolation of the market due to ongoing military operations and high transportation costs. However, since then, these markets converged with other southern markets in nominal terms. While converging for several months, imported red rice prices increased again in Luuq between October and November, possibly reflecting continued supply problems, abnormally high demand conditions, or unexpected transportation difficulties due to heavy *Deyr* rains.

Using price series correlations to examine market integration reveals strong correlations between imported red rice prices across monitored reference markets in southern Somalia. The port cities of Mogadishu, Kismayo, and Bossasso are not as well correlated with each other as they are with inland markets. Of markets in southern Somalia, Aden Yabal in Middle Shabelle and El Waq in Gedo are somewhat isolated and tend to have prices that co-move less often, but all markets are at least somewhat connected with each other.

Since July, an unusual anomaly was observed in the Baidoa market in Bay region as implementing agencies bought imported rice. While Baidoa is a major market that is typically well supplied with imported foodstuffs, traders had not expected this particular spike in demand. The concentration of institutional buyer purchases in August led to a short-lived spike in prices before traders were able to adjust to the increased demand for imported red rice. With the exceptions of Baidoa and Luuq, no other unusual price movements were observed in imported red rice from July to October.

Outlook. Imported red rice prices are expected to be mostly stable next year. International rice prices may have some downward pressure from new supplies as harvests in Southeast Asia finish in January. Rice price movements in Somalia are relatively well correlated with those in international export markets, so there is a possibility of slightly lower prices over the coming months. While Mogadishu is a much larger port, if military operations by Kenyan forces were to disrupt imports through Kismayo, even briefly, imported red rice prices would likely rise, especially in the Juba valley and in Gedo region.

OTHER IMPORTED COMMODITIES

Recent trends. Sugar, vegetable oil, and wheat flour are consumed in small quantities by most households in southern Somalia. While these commodities are not nearly as important as either locally-produced cereals or rice in terms of calories consumed, they provide an additional avenue to examine the functioning of import markets. These products remain

Figure 4: Imported red rice prices in southern Somalia

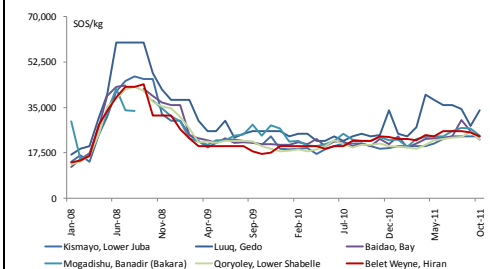
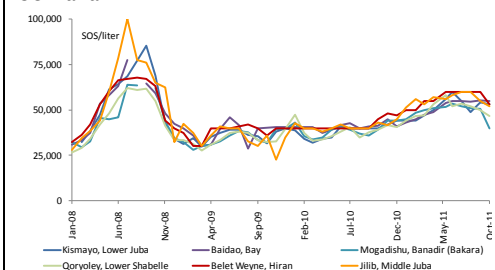


Figure 5: Vegetable oil prices in southern Somalia



Sources: FSNAU and FEWS NET

available in reference markets, and their price trends indicate that imported commodities are well distributed to most markets (Figure 5). Most prices have decreased over the past several months, but prices in the Juba valley remain higher, despite the reopening of the port in Kismayo following the end of the monsoon winds in October. While prices of pasta are not tracked as this product is primarily consumed by better-off households, import volumes indicate continued high demand in southern Somalia. Import volume of pasta through Mogadishu was the second highest monthly volume on record in October and was 625 percent of the five-year average. Imports through Mogadishu, in general, remain robust and are above typical levels (Figure 6).

COWPEA

Recent trends. Cowpea prices remain very high across southern Somalia (Figure 7). The *Gu* harvest this year was far below average due to pests and drought. Prices are relatively lower in the Juba valley, but the relatively lower prices likely reflect both the result of comparatively better local production and the result of low demand. Prices in major markets have continued to increase even between September and October in markets in the cowpea belt. While cross-border trade does bring in some beans from Ethiopia, the volumes remain limited. Imports by sea of lentils and beans do occur, but they are not common. In many years, the supply of beans and legumes has been heavily supplemented through food aid. Substantial deficits of legumes remain, and cowpea prices indicate very high demand relative to a very tight supply.

Outlook. The cowpea belt is expected to have near average production for the *Deyr* though there are some continuing pest issues. When these supplies reach markets, prices of cowpea may decline, but prices are likely to remain relatively high.

EXCHANGE RATES

Recent trends. From September to October, demand for the Somali shilling (SOS) may have slightly increased. This is likely to be the result of increasing demand for Somali shillings to conduct relief operations, provide cash transfers, and for remittances. While this trend was common across the majority of Somali shilling markets, the appreciation of the Somali shilling against the U.S. dollar was highest in Mogadishu. Areas of northern Gedo such as Luuq had the opposite trend, depreciating slightly against the U.S. dollar. Overall, exchange rates remain relatively stable.

IMPLICATIONS OF CURRENT MARKET CONDITIONS FOR RESPONSE

Import markets continue to be an important source of supply for southern Somalia. Recent import trends indicate that they have responded in a limited way to increased demand for food. Of course, this has not filled the overall deficits in the cereal supply or legume supply for southern Somalia. Cross-border markets have also responded by increasing inflows of some commodities, but these markets are limited by the tight supply situation in regions of Ethiopia and Kenya that border southern Somalia. While import markets on their own have been unable to cover supply gaps, they indicate that markets are functioning and food continues to be delivered from ports to inland markets. Continued functioning of markets indicates that cash and voucher programs, especially if they target the purchase of imported food, can continue to play a role in humanitarian relief efforts.

Prices of local staples demonstrate that supplies of locally-produced grain and relief food moves between and within the trade basins of southern Somalia. The substantial reductions in prices of white maize and red sorghum, while not down to 2010 levels, have helped improve food security conditions and outcomes in many areas of southern Somalia. These indicate that new sources of supply, such as relief maize, do make it to markets in deficit areas and that prices across different commodities are affected. The ability to move food indicates that supply-side interventions such as monetization, trade assistance, or targeted sales could help lower consumer prices across much of southern Somalia. The overall cereal deficit

Figure 6: Import volumes through Mogadishu (El Ma'an)

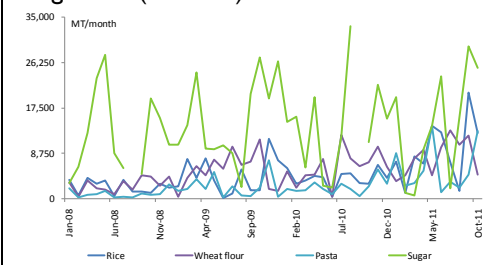


Figure 7: Cowpea prices in southern Somalia

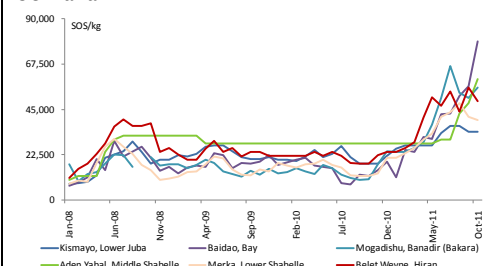
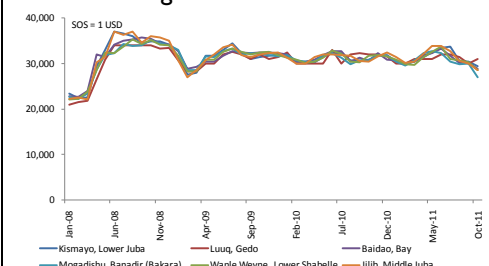


Figure 8: Retail Somali shilling to U.S. dollar exchange rates



Sources: FSNAU and FEWS NET

in Somalia remains large and both supply-side interventions and an increase in flows of relief supplies may be necessary to return prices of locally-produced cereals back to the levels they were before the failure of the 2010/11 *Deyr* season.

Aden Yabal in Middle Juba remains relatively isolated from trade flows of imported food, relief commodities, or locally-produced grain. Also, there are concerns about supplies of imported food reaching northern Gedo region. In these areas, supplemental supplies are very important and interventions that help traders access new sources of supply or provide additional supplies to markets could play a significant role in moving these markets towards convergence with the rest of southern Somalia.

While limited in scope, on-going cash and voucher programs have not noticeably led to any difference in large difference in staple food price trends in major FSNAU/FEWS NET reference markets in southern Somalia.

The Juba valley has had improving nutrition indicators and other indications of an improvement in food security conditions. However, prices in both Lower Juba and Middle Juba remain very high though they are not completely isolated from trends in the rest of southern Somalia. If prices do not improve with better transportation following the end of the *Deyr* rains, increased efforts to reach populations in these areas with food aid or to increase supplies of staples on the market may be necessary. As even the small cross-border flows from Kenya are likely to be reduced if military actions in the region increase over the coming months, these areas have a higher risk of new price spikes. Any reduction of activity at the port in Kismayo due to civil insecurity could lead to higher prices for imported food in the Juba valley and in Gedo region.

SUMMARY TABLE—RECENT TRENDS IN STAPLE FOOD PRICES

Region	Red Sorghum Price Trends	White Maize Price Trends	Imported Red Rice Price Trends	Cowpea Price Trends	Cross-border Trade Conditions
Hiran	Not available in Belet Weyne	Falling	Relatively stable	High, but falling	Some access to cross-border trade with Ethiopia
Middle Shabelle	Prices remain high in Aden Yabal	Falling	Rising in Aden Yabal	High and rising	Aden Yabal poorly linked to sources of supply
Lower Shabelle	Falling	Falling	Relatively stable	High and rising	Good access to Mogadishu imports
Banadir	Falling	Falling	Relatively stable	High and rising	Good access to Mogadishu imports
Bakol	Falling	Falling	Relatively stable	High and rising	Some access to cross-border trade with Ethiopia
Bay	Falling	Falling	Relatively stable	High and rising	Good access to Mogadishu imports
Gedo	Falling	Falling	Rising in Luuq	High and rising	Some access to cross-border trade with Kenya and Ethiopia
Middle Juba	Not commonly consumed	Falling	Relatively stable	High, but relatively stable	Some access to Kismayo imports
Lower Juba	Not commonly consumed	High and stable in Afmadow, falling in other markets	Relatively stable	High, but relatively stable	Good access to Kismayo imports

Note: Anomalies of concern are highlighted in blue.

Note: The price data is from the FSNAU and FEWS NET price data system. All cross-border data is from the WFP/FAO/FEWS NET East Africa Cross-Border Trade Monitoring System. Without these excellent data sets, especially the long-term series of prices available in 80 markets in Somalia collected jointly by FSNAU and FEWS NET, this type of analysis would not have been possible.