



ESRF 1st Quarter Report – for ASARECA Project

Food Price Trends, Analysis and Policy Options for Enhancing Food Security in Eastern Africa

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Executive summary

The report covers activities on Output 1 of the project, that is :- Enhanced Standardization of data for generating analytical reports on food and input prices in Tanzania. Generally, prices for maize and rice shows a steadily decline in the first quarter gradual increase during the second quarter of 2012. Also, domestic markets for beans show limited linkages and transactions, thus threatening market dependants and low income consumers access to affordable beans. As prices continue to behave abnormally the government has to correct for the trade off between producers and consumers to sustain food security

1. About the project

Food Price Trend Analysis and Policy implication project was launched in February 2012 to monitor food price trend in Tanzania, Uganda, Kenya, Rwanda and Ethiopia. The food crisis which happened in 2007 within the region awakens the need to periodically monitor food price movement across markets within the region to promote trade between surplus and deficit areas. This is inline within the Common Framework for East African Food Security Strategy which was ratified by the member states. This project therefore intends to provide information to stakeholders in the region about the food market situation in Tanzania.

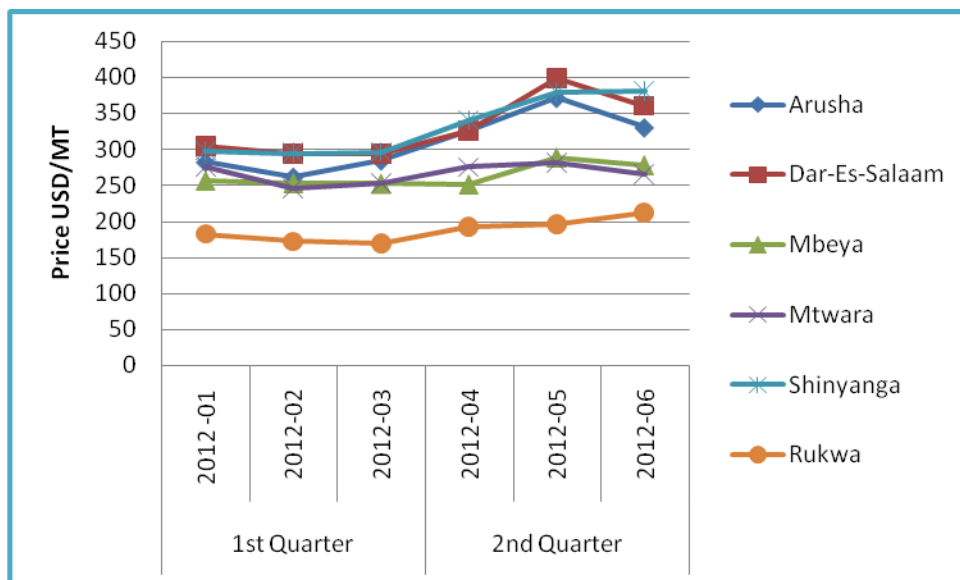
2. Food price trend in food markets

This report presents price trend analysis for selected major food crops produced and consumed in Tanzania for the first and second quarters which runs from January to June. The analysis has two fold objectives first is to analyze food price changes across the markets and second is to filter out food security policy implications.

2.1. Maize

Maize prices in Tanzania in the first quarter declined after the uplift of maize export ban by the government and allowed quota exports and licensed few exports companies (see fig 1). As a result, in the second quarter maize prices in all market increased by 0.10 percent with Arusha recording the highest increased by 0.16 percent because it linked with Kenya in the northern part of the country. High demand in Kenya and other countries in the region diverted maize supplies from the local market to export market where prices are higher. Higher prices were also recorded in Shinyanga and Dar es Salaam where each region recorded 0.16 percent and 0.14 percent price increase respectively although the government released about 8,000 MT from its strategic reserve. However, in Rukwa prices were low than any other region at USD 175/MT and 200/MT in the first and second quarter respectively. Highest price in the first quarter was USD 296/MT in Dar es Salaam while in the second quarter Shinyanga region recorded highest prices at USD 366/MT.

Fig 1: Maize markets price trend



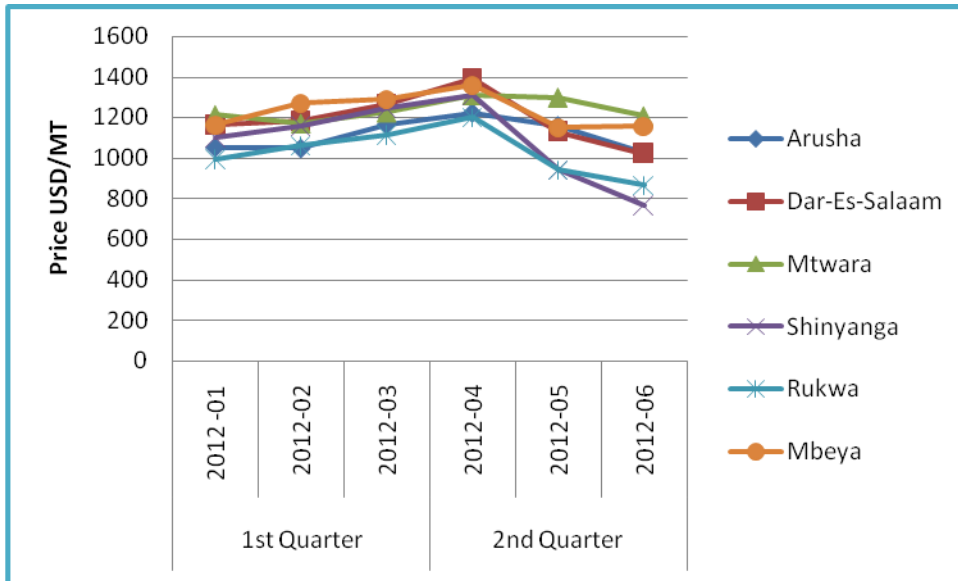
Source: Ministry of Industries and Trade, 2012

As prices shows an increasing trend there is possibility for traders to keep their stock in anticipation for even higher prices in the third quarter. This trend could also be further fueled by high demand of available stock from last year's harvest by the milling companies due to low moisture content than recently harvested maize entering the market.

2.2. Rice

In general rice prices increased steadily toward the end of the first quarter and retarded from the beginning of second quarter as shown in fig 2 due to ongoing harvests. The overall price decline in both quarters is -0.013 Percent and the highest decline was -0.08 percent in Shinyanga region. In the first quarter the highest price was USD 1,238/MT in Mbeya and the lowest price was USD 1,057/MT in Rukwa. In the second quarter the highest price was USD 1,270/MT in Mtwara while the lowest price was USD 1,002/MT in Rukwa.

Fig 2: Rice markets price trend

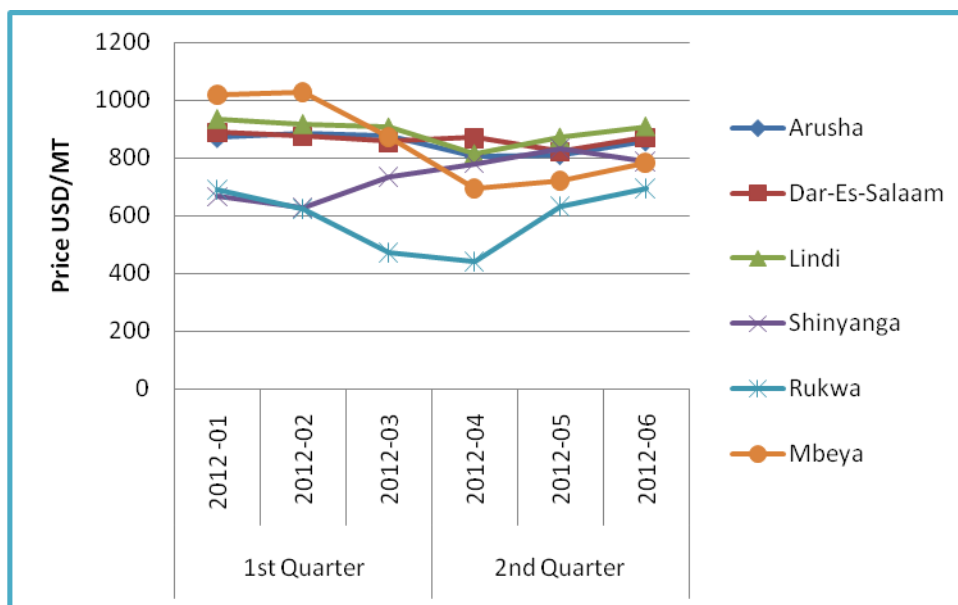


Source: Ministry of Industries and Trade, 2012

2.3. Beans

Beans prices have been declining gradually since the first quarter. Average percentage decline between the two quarters is -0.022 (fig 3). Mbeya region which is among the major beans producing area recorded -0.16 percent decline which is the highest than other region. However while other regions recorded similar unprecedented percentage decline, Shinyanga prices increased by 0.12 percent in the second quarter. In Rukwa, beans have been fetching low prices than other markets at an average price of USD 590/MT. The highest price was USD 862/MT in Lindi region due to low production capacity.

Fig 3: Beans markets price trend



Source: Ministry of Industries and Trade, 2012

3. Analysis of price relation across 6 markets

The analysis of price relation considers Dar es Salaam as larger consumption market and other markets as main source of supplies to Dar es Salaam market. Correlation analysis was used to determine the price relation between Dar es Salaam and other markets.

3.1. Maize markets

Table 1 shows strong price correlation between Dar es Salaam markets with Arusha, Mbeya, Shinyanga and relatively weak correlation with Mtwara market.

Table 1: Maize markets price correlation

Markets		Arusha	Dar-Es-Salaam	Mbeya	Mtwara	Shinyanga	Rukwa
Arusha	Coefficient	1	0.95	0.81	0.74	0.92	0.76
Dar-Es-Salaam		0.95	1	0.94	0.65	0.94	0.78
Mbeya		0.80	0.94	1	0.48	0.85	0.71
Mtwara		0.74	0.65	0.48	1	0.56	0.58
Shinyanga		0.92	0.94	0.85	0.56	1	0.92
Rukwa		0.76	0.78	0.71	0.58	0.92	1

Source: ESRF using MIT data

Very weak market correlation was found between Mtwara and Mbeya, Mtwara and Shinyanga, Rukwa and Mtwara markets. This is explained by poor infrastructure which connects those markets.

3.2. Rice markets

Generally correlation coefficient in the first and second quarters indicates rice markets are well linked and flow of price information between markets is not a problem. Table 2 shows Dar es Salaam rice market is strongly correlates with Rukwa, Mbeya, and Lindi markets prices. This implies most of the rice supplies in Dar es Salaam originate from those markets. However Mbeya and Shinyanga regions are largest rice producing areas in the country. This is clearly shown in correlation coefficient values with other markets.

Table 2: Rice markets price correlation

Markets		Arusha	Dar-Es-Salaam	Mtwara	Shinyanga	Rukwa	Mbeya
Arusha	Coefficient	1	0.79	0.84	0.60	0.69	0.62
Dar-Es-Salaam		0.79	1	0.98	0.93	0.98	0.90
Mtwara		0.84	0.98	1	0.18	0.29	0.22
Shinyanga		0.60	0.93	0.18	1	0.97	0.85
Rukwa		0.69	0.98	0.29	0.97	1	0.94
Mbeya		0.62	0.90	0.22	0.85	0.94	1

Source: ESRF using MIT data

3.3. Beans Markets

Table 3 indicates in the first and second quarter beans markets price correlation values. It shows that Shinyanga region has strong negative correlation with Mbeya (-0.95), Arusha (-0.79), Dar es Salaam (-0.72), Lindi (-0.61) and a weak negative correlation of -0.18 with Rukwa. It implies that during 1st and 2nd quarter beans was not traded between them. Also Rukwa and Dar es Salaam didn't trade beans with each other.

Table 3: Beans markets price correlation

Market		Arusha	Dar-Es-Salaam	Lindi	Shinyanga	Rukwa	Mbeya
Arusha	Coefficient	1	0.55	0.87	-0.79	0.30	0.86
Dar-Es-Salaam		0.55	1	0.37	-0.72	0.16	0.62
Lindi		0.87	0.37	1	-0.61	0.68	0.81
Shinyanga		-0.79	-0.72	-0.61	1	-0.18	-0.95
Rukwa		0.30	0.16	0.68	-0.18	1	0.38
Mbeya		0.86	0.62	0.81	-0.95	0.38	1

Source: ESRF using MIT data, 2012

4. Policy implications and suggestions

Based on the price trend and price correlation analysis the following are key policy recommendations to enhance regional food security toward the third quarter;

- 4.1. There is need to encourage beans export market particularly to the regions which bordered with other country than encouraging local trade.
- 4.2. Rice prices shows decline which is good for consumers but it hurts producers. It's important for the government to deploy market instruments to balance trade off such as allowing cheap rice imports and promoting exports of local rice to lucrative markets.
- 4.3. Strategic Grain release by the government should target regions with high prices to increase access and affordability of market dependent and low income consumers. For example Lindi.
- 4.4. Maize prices show an increasing trend after removal of export ban and availability of new harvests in the market. There is need to control Strategic Grain release and also controlling of food aid to flood in the local markets to ensure both producers and consumers are not affected. This will sustain food availability in the economy.