Briefing Paper

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Why are Sugar Prices so High in Zambia?

What explains the high sugar prices in Zambia? This is an important question faced by the Zambian families who have to manage their household budget to cope with the rising cost of living. However, debates on sugar pricing are contentious. Any position taken on this topic would either receive substantial support and/or opposition from the relevant stakeholders like industry players, government, consumers etc.

CUTS International Lusaka felt the need to determine the cause of the high price of sugar and recently undertook a quick review to assess the pricing and structural dynamics in the sugar industry. The aim of this exercise was to identify the gaps in the available data and look at possible areas of intervention for CUTS. This Briefing Paper showcases some of emerging issues and proposes actions that CUTS intends to initiate.

Background

Sugar prices in Zambia are high. A quick review of studies undertaken by CUTS confirms that sugar prices in Zambia are relatively high despite the fact that production costs are comparatively low. A recent Africa Competition Forum (ACF) report (2014) establishes that the prices of sugar in Zambia do not reflect the cost advantages and high levels of productivity in that market.

It is important to identify main drivers for the high sugar prices to be able to map strategies that are needed to bring them down. It is also important to establish the impact that the high sugar prices have on consumers as well as downstream manufacturing businesses that use sugar.

Finally, it would be necessary to ascertain whether the high sugar prices have an impact on investment and employment. Understanding such issues would be critical in crafting policy recommendations to the government on how the problem could be solved.

Understanding the Problem

Many studies, stakeholders and market regulators agree that prices of sugar in Zambia are high.[1] Zambia's main market regulatory body, the Competition and Consumer Protection Commission (CCPC), agrees that prices of sugar in Zambia are high, relative to the domestic cost of production as well as retail prices in neighbouring countries. There is, however, no concrete evidence pointing to the cause of these high prices.

To contextualise Zambia's high sugar prices, data from the Jesuit Centre for Theological Reflection (JCTR) Basic Needs Basket, a monthly survey that shows the basic minimum cost of living for a family of six in Zambia, can be used. This shows that between June 2009 and June 2014 sugar prices in Zambia have increased by nearly 50 percent. This means that the price of a 1kg sugar increased from ZMW5.8 in 2009 to ZMW8.6 in 2014 – an increase of ZMW2.8. This trend of rising prices since 2009 is also confirmed by the ACF report (2014).

An important question that arises is why sugar prices are generally high in Zambia. Some studies, which include Kalinda and Chisanga (2014) and Ellis, Singh and Musonda (2010) highlight the fact that Zambia has one of the lowest unit cost of production for sugar at US$169/tonne, compared to a world average of US$263/tonne. The ACF report further notes that the ex-factory price per tonne for Zambia is US$910/tonne for 2010 based on data from millers. It concludes that ex-factory margins earned by millers on the basis of average factory costs and ex-factory prices in Zambia could be between 34 and 56 percent respectively. This could be high for millers with efficient levels of production.

1. See *inter alia* Ellis, Singh and Musonda (2010)

While there could be explanations in other countries for their prices to be lower than in Zambia, the fact that prices of sugar in Zambia are higher despite its relatively low cost of production poses a question that many have tried to answer. The review by CUTS was undertaken with the goal of ascertaining whether there is enough knowledge/ information about the sugar value chain to rationally conclude that sugar in Zambia is excessively priced.

It was evident that though sugar prices are high, none of the existing studies have provided reasons strong enough to substantiate the claim that it is due to excessive pricing. Establishing excessive pricing requires analysing the complete value chain critically. However, none of the existing studies have managed to present a comprehensive account of the value chain. There is a marked difference between *high* and *excessive prices*. The latter involves impulsively charging beyond the market costs to the detriment of end consumers' welfare. High prices on the other hand, could simply reflect high costs at the production and supply level.

CUTS will undertake a detailed research of the sugar value chain, in order to shed more light on the particular stage in the value chain where the prices of sugar might be increasing abruptly.

In the following sections, some of the issues emerging from CUTS' exercise are presented. In addition to giving an overview of the Zambian sugar market, it also provides valuable background information for the subsequent deeper analysis being planned by CUTS.

CUTS Scoping Study

Methodology

This exercise employed a simple methodological approach of literature review, basic data collection on wholesale and retail prices and in-depth interviews with key stakeholders. Stakeholders included farmers' association, sugarcane out-grower, wholesalers, retailers, one sugar milling company, three manufacturing firms using sugar as a key raw material in the production process and government ministries and departments, which included the Ministry of Commerce, Trade & Industry, the Ministry of Agriculture and Livestock and Zambia Development Agency. The CCPC was also interviewed for a detailed discussion on behavioural competition issues that could be the subject of a detailed research.

Findings

The paper discusses three potential reasons that might be the cause of high prices: There may be production costs that are not immediately apparent to the public and hence have not been explored in previous studies. There is possibly a significant mark up of sugar prices at the retail level that makes sugar more expensive. The sugar production market is characterised by a monopoly – Zambia Sugar.

The scoping phase could not identify which of these three is most responsible for high prices of sugar in Zambia, but it did point to certain gaps in knowledge/information which could inform future research.

Table 1: Sugar Retail Pricing Regime for Select Retailers in Mazabuka								
	White				**Brown**			
	MTN	**Go-on Ent.**	**Fine shop**	**Alpha Providence**	**MTN**	**Go-on Ent.**	**Fine shop**	**Alpha Providence**
Buying price (ZMW/kg)	7.4	7.8	6.8	7.3	6.6	6.8	6.8	6.5
Selling price (ZMW/kg)	7.5	8	9	8.5	7	7	8	8
Profit (ZMW/kg)	0.1	0.2	2.2	1.2	0.4	0.2	1.2	1.2
Profit margin (%)	1.3	2.5	32.3	16.4	6	2.9	17.6	18.5
Average volumes per month (tonnes)	1.8	0.5	0.8	0.1	1.8	0.5	0.8	0.1
Profit from sugar per month (ZMW)	180	100	1800	120	720	100	960	120
Source: Interview results								

A detailed analysis of each of these three (above) elements is presented.

Costs of Production

The scoping study was able to determine a basic picture of some of the costs faced by sugar producers. While the two smaller players in the industry, Kafue Sugar and Kasama Sugar grow 100 percent of their raw sugar needs, Zambia Sugar procures some of its sugar through Kaleya Smallholder Company Limited (KASCOL) and other small holder farmer associations. The price negotiation system between Zambia Sugar and its out growers is fairly transparent and all stakeholders are well represented. In the 2013-14 season, the price per cane paid by Zambia Sugar to all out growers was ZMW229.2 per tonne.

A number of factors are at play for sugar to be produced. Most studies have looked at these factors – with the recent study by ACF presenting some level of intensity. At the production level, some of the factors of production include high capital and maintenance costs for establishing a new mill; high fixed business costs requiring substantial economies of scale in crushed to break-even and non-tariff barriers (NTBs) in the sector, such as fortification requirements which serves to deter entry into the industry. On the supply side, transport costs generally contribute to the high prices.

The scoping study was not however able to gather actual figures from transporters and distributors. There were also some reports about instances where Zambia's sugar policy of refunding transporters is now allegedly subject to abuse. Some distributors (it is said) can claim to be delivering sugar to distant places like Ndola but can offload in Lusaka after claiming payment for a longer distance. It is not clear what impact this might have on sugar prices, but it is an issue that needs to be followed up through a more detailed research.

Retail, Wholesale and Regional Prices

Part of the scoping study involved preliminary research on retail and wholesale prices of household sugar in Zambia. This was done in Mazabuka, a key stakeholder location for sugar produced in Zambia. The following information was obtained:

Contrary to some reports which suggest that millers accuse wholesalers and distributors of forming cartels and hoarding sugar to artificially create shortages and inflate prices, the scoping study found that small scale retailers and

Table 2: Sugar Pricing for Select Wholesalers in Mazabuka				
	White		**Brown**	
	MTN	Go-on Enterprises	MTN	Go-on Enterprises
Buying price (ZMW/kg)	7.35	7.80	6.60	6.84
Selling price (ZMW/kg)	7.50	7.90	6.75	6.90
Profit (ZMW/kg)	0.15	0.10	0.15	0.06
Profit margin (%)	2	1.28	2.27	0.88
Average volumes per month (tonnes)	1.75	0.50	1.75	0.50
Profit from sugar per month (ZMW)	262.50	50	262.50	30
Source: Interview results				

wholesalers do not make much profit from sugar sales, as can be noted above. Interviewed retailers revealed that they use sugar more as a crowd puller than a profit making product. It is useful to note again that this information was gathered from one major sugar producing town and hence does not present a full picture of trends in sugar pricing at the retail level across the country. That said, this information still does provide a basis from which to conduct further investigation.

Another issue of note is the disparity in sugar prices in various regional hubs. For instance, the scoping study revealed that sugar is most expensive in Mazabuka, the location of one of the millers. This has caused some wholesalers to buy from other far-flung areas, such as Choma and Lusaka. This disparity has also gone unexplained by the existing literature on the sector. It is hence a subject that must be pursued in the detailed research by CUTS.

Market Structure and Protection

The Zambia sugar milling market is oligopolistic and dominated by one player, Zambia Sugar. Zambia Sugar has a market share of about 94 percent in terms of industrial sugar production while this drops to about 92 percent for household sugar. There are no significant changes for Kasama Sugar across all categories, as the company remains with a market share of about 0.8 percent, which drops to about 0.7 percent for industrial sugar.

Studies have tended to point to Zambia Sugar's monopolistic control over the market as the reason behind high sugar prices in Zambia. However, the current knowledge on the sugar sector is not sufficient to draw this conclusion. As previously mentioned, a study conducted by Ellis, Singh and Musonda (2010) reveals that Zambian sugar is relatively expensive when compared to other countries within the region of Africa and other continents. What the study does not reveal or probe is whether there may be factors at play in other countries making the price of household sugar lower in those places. These factors may be subsidies or other market-based incentives.

The study also purports that in its 2006 investigation, the CCPC had indicated that sugar in Zambia was indeed excessively priced. Interviews with CCPC authorities during the scoping study however brought to light that the CCPC has never established this as a fact. It is for this reason that CUTS International Lusaka seeks to embark on a rigorous review and analysis of the sugar value chain to possibly evaluate the effect of these prices on consumers and downstream users.

Most of the literature on the industry has touched on the fact that some government policies have contributed to the current market structure. The most cited policy is that of 'Vitamin A' fortification. This policy was instituted in part to address a Vitamin A deficiency in Zambia's population. Literature as well as interviews with key stakeholders also implied that the fortification requirement, which acted as an entry barrier, was also instituted for the purposes of protecting the local industry. When this policy was first introduced, the capital investment required to achieve fortification, represented a large single expenditure in excess of US$1mn (Serlemitsos and Fusco, 2001), which was a barrier to entry for others.

During the scoping study, interviews with some small-scale sugar producers were conducted. These interviews, while not offering decisive evidence, did point to the cost of fortification as a matter that needs further investigation. The interviews revealed that the fortification requirement could be a significant cost driver and possible barrier to entry for prospective market entrants. Another dimension that could add value to this study would be to look at what has been the impact of this Vitamin A fortification on the population. In other countries, impact reports are available on the internet.

Additionally, the study indicated that in situations where Zambia Sugar and other small-scale producers are unable to meet the market demand for industrial sugar, users are required to import their required quantities through Zambia Sugar. Whether this measure is true, and was also part of a protectionist strategy, is a question that has not as yet been addressed by previous studies. Hence this question, as well as the question of whether the current legislation governing the market is meant to protect current players, remains to be answered.

Further, Zambia also exports a big chunk of its sugar to the EU (138,000 tonnes in 2013-14) and the regime market (over 100,000 tonnes). This exerts

Table 3: Market Shares and Concentration in Zambia Sugar Industry

	Zambia Sugar	Kafue Sugar	Kasama Sugar	Concentration
Total sugar produced (tonnes)	404,000	30,000	3,500	Highly concentrated
Market share (%)	92.3	6.9	0.8	
Industrial sugar produced (tonnes)	96,960	6,000	700	Highly concentrated
Market share (%)	93.5	5.8	0.7	
Household sugar produced (tonnes)	307,040	24,000	2,800	Highly concentrated
Market share (%)	92.0	7.2	0.8	

Source: Interview results, Zambia Sugar Annual report and compilations based on Kalinda and Chisanga (2014) and Chisanga (2012) pressure on the availability of sugar for domestic consumption which could also influence prices. Going forward, however, the volume of exports to the EU is likely to go down due to EU sugar market reforms (standards) that are currently underway.

Gaps in Knowledge

The sugar industry employs well over 8000 permanent and seasonal workers. Zambia Sugar alone employs about 1900 permanent employees and about 4000 seasonal workers at peak periods. This makes it one of the nation's largest private sector employers. An assessment of policies governing the sugar market should thus also look at the policy implication with respect to job prospects and investment in the industry, especially given the large industry player, such as Zambia Sugar.

The scoping phase could not establish the extent to which the current pricing structure and key policies such as the fortification requirement serves to protect jobs and attract investment to the sector. The impact of opening the Zambian sugar industry to competition with regional imports on employment thus remains to be answered. This is another aspect that CUTS seeks to respond to in the research phase to follow.

Further, the existing literature of the sugar sector does not shed light on a number of other issues as listed below:

- How successful the fortification process has been and how much of a cost driver it is in the sugar value chain;
- How the existent policy environment governing the sugar industry has affected its development, the entry of new players and costing or pricing structures;
- The extent to which the current market structure contribute to high prices of sugar in Zambia;
- Impact of export on availability and price of sugar in domestic market;
- A thorough evaluation of the entire sugar value chain to decipher the true reason behind the high prices of sugar in Zambia;
- An evaluation of the pricing structure and incentives in other countries that may be making sugar prices lower;
- An evaluation of the effect of these high prices on the Zambian consumer at household level and as well as downstream end users; and
- Whether the high price of sugar are because of monopoly pricing at the producer level.

CUTS International has recognised the above mentioned as potential areas of further research and will consider them for its detailed investigation of the sector.

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Pictures taken from the Internet

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