



AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
<http://ageconsearch.umn.edu>
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Market Outlook

Number 1 | Lusaka, Zambia | September 2015

(Downloadable at <http://www.iapri.org.zm> and
<http://www.aec.msu.edu/fs2/zambia/index.htm>)

2015/16 Zambian Maize Market Outlook and Regional Analysis

Summary

- Despite experiencing a decline in maize production in the 2014/15 farming season from the previous year's harvest of 3,350,671 metric tonnes (Mt) year, Zambia has nevertheless emerged as the largest surplus country in the region, eclipsing South Africa, traditionally the region's dominant maize exporter.
- Poor and erratic rains across the region means that Zambia's maize is in high demand from deficit countries—and those who have been serviced by South Africa.
- These regional conditions suggest that Zambia has an opportunity to become the leading exporter in the SADC region this marketing season.
- However, while exports are up from previous seasons, Zambia is unable to take full advantage of the regional situation. Uncompetitive parity prices, high transport costs, and a range of non-tariff barriers undermine Zambia's ability to be competitive. This is a missed opportunity for Zambia.
- This season has witnessed stronger private sector participation in maize marketing. This is due to the Minister of Agriculture and Livestock providing clear policy and in particular for delaying FRA entry into the market by two months, and for maintaining an open borders policy.
- This stable policy environment was undermined by the decision by the President to overrule the FRA price (increasing it from K70 to K75) and to mandate FRA to increase purchases from 500,000 to 800,000 Mt. Despite such developments the overall view of the private sector is positive this season.
- On average, private sector prices (of K50-K80 per 50 kg bag) compare favorably with the FRA price (K75 per kg bag) given (i) farmers selling to FRA incur an average cost of K10 per bag for transport to the point of storage or sale and (ii) farmers selling to private sector traders have the obvious benefit of getting paid at the point of sale and not having to wait months to be paid by FRA.
- Maize buying by FRA is likely to remain a highly politicised enterprise, with limited benefits to smallholder farmers and urban poor consumers both in the short- and long term.
- Keeping Zambian borders open would not risk the country's food security status, instead it would help the country expand its market for the benefits of both farmers and consumers. The current export formalities and infrastructure do not allow more than 100,000 Mt of maize to be exported from Zambia each month. Meaning with all factors constant, it would take almost eight months to export the maize surplus as of May 2015.

INTRODUCTION

The 2014/15 agricultural season has been characterized by two distinct features in the maize sector. Firstly, despite experiencing a fall in maize production on the previous year's bumper harvest, Zambia has emerged as the largest surplus country in the region. Indeed, due to the late onset of rains and poor rainfall distribution across the region, most countries have maize deficits, providing Zambia with an opportunity to boost its exports at a time when the rest of the economy is struggling on the back of falling copper prices and China's economic slowdown. Unfortunately, however, the opportunities for Zambia to exploit its regional position are limited due to a series of constraints undermining the country's competitiveness in regional maize trade. These are discussed in the next section of this paper.

The second notable feature is that due to the delay in the announcement of the Food Reserve Agency (FRA) maize procurement modalities, the private sector has been very active, buying maize from farmers at competitive prices, ranging between K50-K80 depending on location. The private sector has initially benefited from a clear, transparent, and consistent message from the Minister of Agriculture and Livestock who announced (i) that the borders were going to remain open, (ii) FRA will restrict its purchases to 500,000 Mt and (iii) that he was not going to announce a floor price as this was the preserve of the agency. So despite the mounting pressure from various quarters for the government to announce the FRA buying price for the 2015/16, the Minister remained steadfast, while continuing to encourage private sector to be active. The Minister's position has been that of creating a conducive environment that would make Zambia a sustainable food bread basket for east and southern Africa.

The situation finally changed on August 12, 2015, when FRA announced the price of K70 per 50 kg bag (FRA 2015), a price that the head of state overruled and increased to K75 a week after it was announcement. Further, on September 14, 2015 it was reported that the President had mandated the FRA to exceed the 500,000 Mt target and buy 800,000 Mt (Kalombe 2015; Chongo 2015). Despite these developments, the private sec-

tor has commended the government for maintaining an open border maize policy since 2014, a policy that has enhanced their market participation. The Grain Traders Association of Zambia (GTAZ) indicated that if this policy is sustained, it will hasten the setting up of the commodity exchange in Zambia and enhance the operationalization of the warehouse receipt system, as well as render available a ready, predictable, and reliable market for smallholder farmers' produce in line with the Zambia CAADP compact.

Against this backdrop, this outlook seeks to review the current maize marketing season in order to provide deeper insights into the domestic and regional factors affecting maize market performance and their major outcomes. We base this maize outlook on the analysis of the current situation as well as scenarios for the rest of the 2015/16 marketing season. Several data sources were used, including Ministry of Agriculture and Cooperatives (MAL), Central Statistical Office (CSO), and Famine Early Warning Network (FEWSNet). Data from these sources were used to generate the key trends

“The private sector has been very active, buying maize from farmers at competitive prices, ranging between K50-K80 depending on location...”

and make assumptions about likely outcomes in the 2015/16 marketing season. To complement these data, key informant interviews with industry players were also conducted.

REGIONAL MAIZE SITUATION

Regional Maize Production and Regional Maize Exports: In the 2014/15 agricultural season Zambia's maize production was estimated to decline by 22% from the previous year's historical bumper harvest of 3,350,671 Mt. The main factors contributing to low production were



poor and erratic rains, which adversely affected not only Zambia, but the region as a whole. Generally in 2014/15 agricultural season, countries in east and southern Africa (ESA) experienced a sub optimal rainfall season and as such, most countries in the region had poor maize harvest. Figure 1 shows the surplus and deficit countries in the ESA region. Zambia, Tanzania, South Africa, and Uganda stand out as the countries with exportable maize surpluses. Within this group, Zambia has the largest surplus of 876,738¹ Mt, compared with 487,000 Mt and 300,000 Mt in Tanzania and South Africa respectively (CSO/MAL 2015)².

The combination of producing the largest surplus in the region, eclipsing South Africa, which has been the dominant regional maize exporter for the past decade or so, and the growing demand for Zambia's surplus maize stocks in deficit countries such as Zimbabwe, Democratic Republic of Congo (DRC) and Malawi, suggest that Zambia has an opportunity to become the leading exporter in the SADC region this marketing season. But will it be able to take advantage of these favorable circumstances? Structurally deficit countries such as DRC, Zimbabwe, and Kenya continue to experience maize shortfalls and these are countries in the region that could potentially be serviced by Zambia. Malawi, which is usually a self-sufficient country, had a deficit due to flooding, and is currently relying on formal and informal imports from its neighbors including Zambia. Botswana and Namibia also recorded deficits.

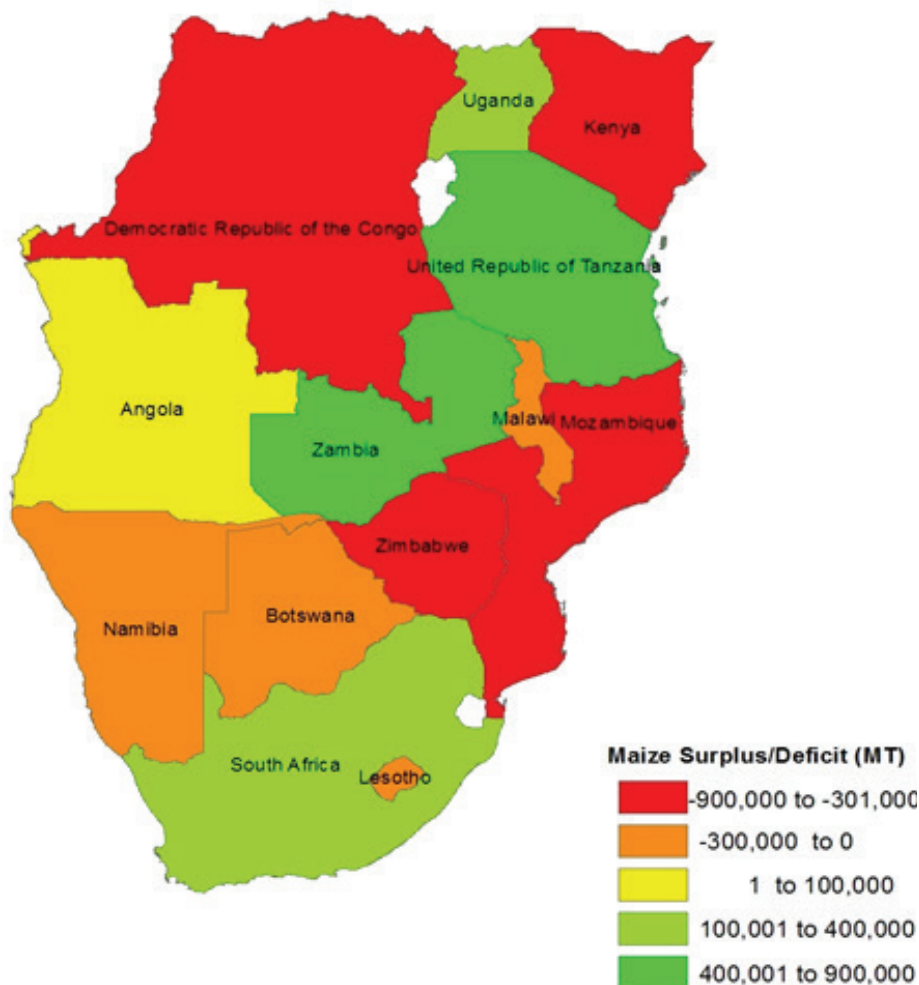
¹. The surplus is calculated by combining the forecast harvest for this year with the carryover stock from last year, then subtracting from it various domestic requirements, including the amount of maize required for self-sufficiency and for a national reserve of 500,000 Mt.

². The surplus is calculated by combining the forecast harvest for this year with the carryover stock from last year and then subtracting from it various domestic requirements, including the amount of maize required for self-sufficiency and for a national reserve of 500,000 Mt.

In general, the pattern of trade in the region has been disrupted due to the shortfalls in production. Of particular significance is the situation in South Africa. Previously it has dwarfed Zambia as a maize exporter in the region. Figure 2 shows that Zambia has exported on average 240,000 Mt of maize in the last five years, while South Africa has exported on average 2,000,000 Mt per year in the same period (FEWS-Net 2015a). For this marketing season at least, the reduced maize surplus in South Africa opens the door for Zambia. Zimbabwe, Malawi, and DRC will be the main markets for Zambian maize. Additionally, Zambia should also be able to tap into markets that have been traditionally been supplied by South Africa such as Mozambique, Botswana, and Namibia.

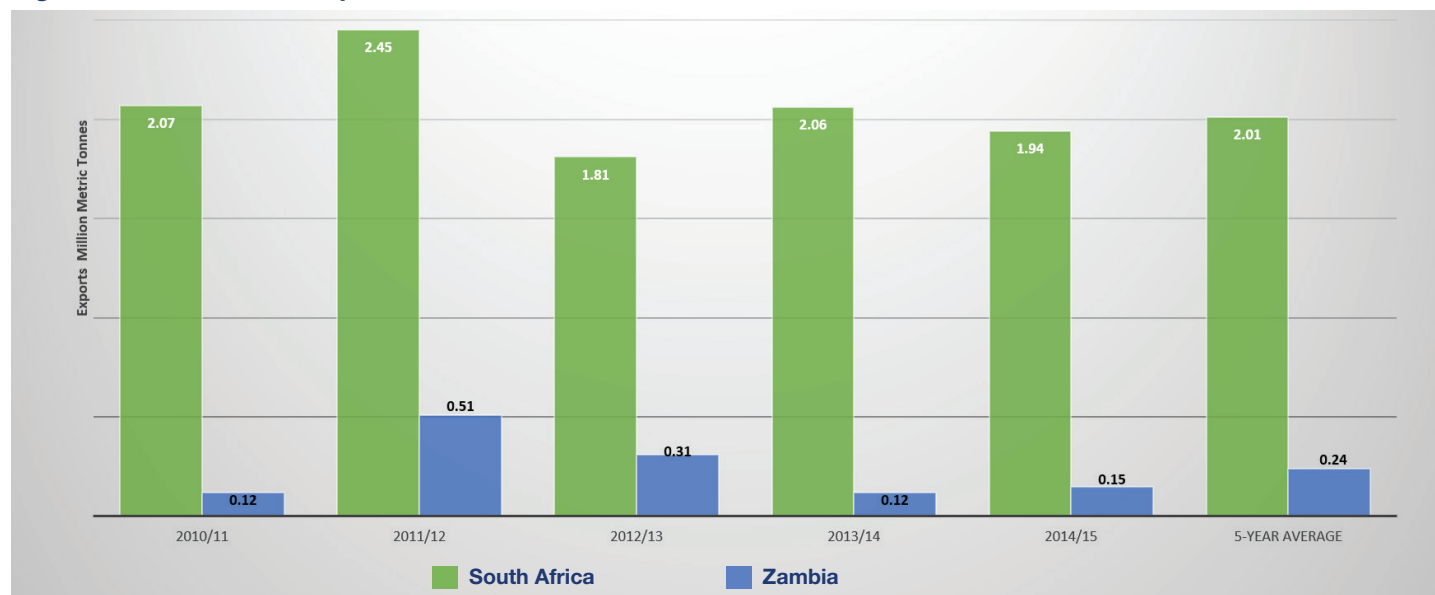
Indeed, Zambia has, so far, witnessed a higher rate of exports compared to previous years; by the end of July 2015 Zambia had exported 199,176 Mt (191,538 Mt formally and 7,638 Mt informally) between May and August 2015 (CSO 2015; ACTESA 2015). Table 1 shows that Zimbabwe is by far the biggest market for Zambian maize accounting for 82% of exports, followed by Malawi with 17%. At the current level of exports, this means that Zambia has been exporting an average of 63,846 Mt of maize per month since May 2015 with 49.5% of the exports happening in July. With this trend we may see increased exports as we move further away from the harvest season. In addition, Zambia is a non-genetically modified organisms (GMO) maize producer, unlike South Africa, making it easier to comply with GMO restrictions in countries such as Zimbabwe and Malawi.

Figure 1. Maize Situation in Eastern and Southern Africa, 2014/15 Agricultural Season



Source: Authors illustration with data obtained from FEWSNet 2015b; FAO 2015; Nyasa Times 2015

Figure 2. Formal Maize Exports for Zambia and South Africa: 2010/11-2014/15



Source: FEWSNet 2015b.

However, as things stand a number of factors stand in the way of Zambia taking full advantage of the regional situation. Most importantly, Zambian maize is insufficiently price competitive (particularly FRA purchased maize).

At the moment, the recently announced FRA maize buying price of K75/50 kg translates to US\$125 (at K12/US\$) per Mt and is higher than the export parity prices (i.e., the price needed to be competitive in regional deficit markets) for most of the countries except for DRC, Angola, and Zimbabwe. Table 2 shows

the indicative regional prices as of July 2015. Zambia doesn't export to Angola due to infrastructural constraints, which means that it's most commercially viable export markets are Zimbabwe and DRC. Also, exports to Zimbabwe and DRC may be hampered due to liquidity problems in these countries, raising questions about their reliability as core export markets. For example, the decline in copper prices is likely to significantly undermine the market in DRC, which has to be considered for short and medium-term planning. Also, DRC is considered as a maize meal market rather than a grain market (GTAZ per-

sonal communication).

Of course with the current depreciation of the Kwacha, Zambia's maize exports may become more competitive in the region. But note that the big problem for a number of traders is that they bought maize when the kwacha was around 7.21 to a dollar and now with the exchange rate close to K12 it means the value of a 50 kilogram bag they bought a month or two ago was worth \$10.4 and now it is worth \$6.25.

Table 1. Zambia's Formal Maize Exports (MT) in the 2015/16 Marketing Season by Country and Month

Country	March	April	May	June	July	Total (May-July)
Zimbabwe	26,389	29,366	38,863	49,243	68,897	157,003
Malawi	0	0	20	7,996	23,696	31,712
DRC	545	0	0	0	0	0
South Africa	0	0	30	195	1,077	1,302
Botswana	0	0	0	0	30	30
Namibia	56	911	28	0	143	171
Tanzania	0	0	0	0	0	0
Angola	0	0	0	0	0	0
Mozambique	0+	0	300	0	1,020	1,320
Total	26,990	30,277	39,241	57,435	94,863	191,538

Table 1. Zambia's Formal Maize Exports (MT) in the 2015/16 Marketing Season by Country and Month

Table 2. Regional Prices per MT and Zambia Export Parity Prices

Country	Maize price in	Transport from Zambia to (country)	Duties and Fees	Handling Costs	Export parity price from Zambia to
Zimbabwe (Harare) ^a	280	65	0	10	205
South Africa (Randfontein) ^a	224	140	0	10	74
Malawi (Lilongwe) ^a	215	65	0	10	140
Tanzania (Dar es Salaam) ^b	338	150	0	10	178
Mozambique (Beira) ^a	289	120	0	15	154
DRC (Lubumbashi) ^c	580	90	0	10	480
Kenya (Nairobi) ^b	383	230	0	10	143
Angola ^d	422	120	0	10	292

Sources: ^a AFGRI 2015; ^b <http://ratin.net/index.php/kenya>; ^c <http://www.fao.org/giews/pricetool/>;

^d <http://www.fews.net/southern-africa/angola/remote-monitoring-report/january-2015>.

And of course the exchange rate works both ways: if the kwacha was to appreciate then Zambia would struggle to remain competitive later in the season. At current exchange rate of 12.0 Kwacha to 1 US Dollar, the value of a bag of maize ex-Lusaka is \$6.25 but if the Kwacha appreciates back to 7.21 Kwacha, the price would rise to \$10.4. So one major issue affecting Zambia at the moment is the inability to hedge exchange rate risk, something that would be feasible if a derivatives market is functioning.

There are also huge non-tariff import and export barriers which include: unnecessary multiple police roadblocks; cumbersome export formalities in both Zambia and importing country; centralized application for various certificates including phyto-sanitary, non-GMO; and fumigation and high council levies. The ministry of agriculture and livestock has since decentralized permit application and insurance from Lusaka. Permits can now be obtained in all the 10 provinces of Zambia (MAL 2015a). This will contribute to the reduction in the cost of trade.



Part of Zambia's difficulty can be explained by high transport costs involved in moving maize out of the country, which undermines competitiveness. For example Kenya is on the surface, a potential export market for Zambia, but unfortunately due to high transport costs of about US\$230 per Mt, Zambia cannot competitively service this market (GTAZ personal communication). With Lusaka delivered maize prices of around K1,459/Mt (\$148)³, Zambia can competitively supply two major deficit markets: Zimbabwe and DRC (see Table 2). To target other markets such as Lilongwe, maize should not be transported only out from Lusaka; instead maize should come from areas closer to Malawi such as Chipata or Lundazi to cut down on transport costs. Nevertheless, due to FRA pan territorial pricing (same price throughout the country), the K75 per 50 bag plus transport, handling, and storage costs could make Zambia's maize uncompetitive even from these areas.

2015/16 LOCAL MAIZE MARKETING SEASON

FRA Market Participation in 2015/16 Marketing Season: This season the FRA delayed its intervention into the maize market until mid-August, which is two months later than it usually starts its maize buying activities. In the 2014/15 marketing season, the FRA started buying in June 2014 and by September 2014, it had bought double the 500,000 Mt target. There are two main reasons why FRA

has delayed its entry this season. First, the FRA carried over a huge stock from last season which meant it did not have the storage capacity to enter the market early. Second, the government has a huge budget deficit and the fiscal space is tight for the government to enter into the market.

Also important in explaining the shift in policy is the role of the Minister of Agriculture and Livestock who was aware of the regional deficit and was confident that the farm gate price would be high, and hence, resisted political pressure to announce FRA buying price early and instead urged farmers to find the best prices for their maize. He also consistently promised to keep the borders open and affirmed his commitment that FRA should restrict its purchases to the stipulated strategic reserves (i.e., 500,000 Mt at a cost of K992 million). However, with mounting pressure, the FRA on 12 August 2015 announced a price of K70 per 50 kg bag and a target purchase quantity of 500,000 Mt. A week later, upon a presidential directive, the FRA buying price was raised to 75 Kwacha per 50 kg bag (Daily Mail 2015a). Also, on 14 September 2015, the President mandated that FRA increase its purchases to 800,000 Mt in order to shore up the Zambian currency through increased maize exports (Daily Mail 2015b).

However, while the private sector was taken aback by these events, overall the view of GTAZ has been positive this season. They acknowledge that the consistent policy message from the Minister regarding FRA behavior and keeping the borders open has crowded in private sector participation in the 2015/16 marketing season. This demonstrates the positive impact of consistent policy. Going forward Zambia has to find ways to sustain these policies.

“ One major issue affecting Zambia is the inability to hedge exchange rate risk by traders, something that would be feasible if a derivatives market is functioning...”

Private Sector Participation: The current maize marketing season unfolded with vibrant private sector activity in contrast to the 2014/15 season which was characterized by lower private sector participation (Chapoto et al. 2015). At the back of the current marketing season, the country was sitting on huge surplus stocks of maize from the previous season (1,345,401Mt), which both the private sector and government have been eager to sell both in local and export markets (CSO/MAL 2015).

3. Assuming an exchange rate of K9.8/\$US.

Figure 3. Private Traders Purchasing Maize and Soya Beans



Table 1. Zambia's Formal Maize Exports (MT) in the 2015/16 Marketing Season by Country and Month

As mentioned above, some of the industry players interviewed during the study pointed out that the government policy in maize marketing in the current season has been to a large extent transparent and helped propel private sector participation in the sector. Regular consultation by the government with stakeholders, for example, through the stock monitoring committee meetings has also been seen to be a positive development this season and stakeholders have urged the government to continue with this policy.

In addition, private grain traders have been motivated by the opportunity to export surplus maize, given that they export roughly 40% of their maize stocks to the region. Open borders and the maize food deficits in the region have helped them to remain active in the maize market.

Private traders were very active from the beginning of the marketing season (Figure 3) with evidence that they were buying maize at competitive prices. As you would expect prices vary across the country reflecting the dictates of supply and demand mechanisms. MAL Agribusiness Department in July 2015 did a snap survey to assess private sector buying activities in the country. From this survey, small-scale private traders' prices ranged from as low as K47 per 50 kg bag in Eastern Province, where there is a large surplus of maize, to as high as K79 per 50 kg bag in Copperbelt Province (see Figure 4).

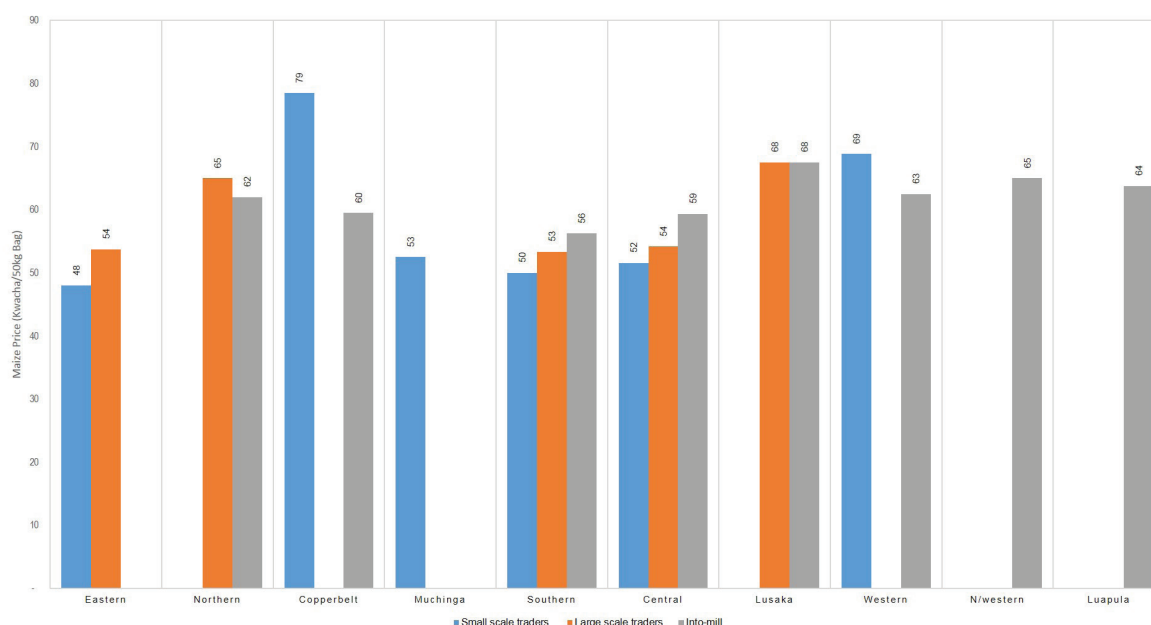
The high price in the Copperbelt Province was mainly attributed to small-scale traders who were agents of foreign buyers from DRC. The large scale traders' prices (into-warehouse prices), ranged from an

average of K53 per 50 kg bag in Eastern and Southern Provinces to K68 per 50 kg in Lusaka Province. IAPRI teams who were in the field during the implementation of the Rural Livelihood Agricultural Survey (RALS) reported average prices ranging between K55 and K65 per 50 kg bag.

The most active large-scale maize buyers included NWK (formerly Dunavant), Cargill, COMACO, Kessons, Aliboo, and Export Trading Group (ETG) in Eastern Province; AFGRI in Southern and Central Provinces; Amatheon, Parrogate, and Nyiombo in Central Province and ETG in Northern Province.

In terms of large scale commercial millers, their maize buying prices ranged from K59 per 50 kg bag in Central Province to K79 per 50 kg bag in North Western Province. Large-scale millers were more active in Lusaka, Copperbelt, Central, and Southern Provinces with minimal commercial millers' participation in Luapula and Northern Provinces. Eastern and Muchinga Provinces were mainly dominated by small-scale millers buying maize from farmers. By mid July 2015, GTAZ members reported that they had purchased 46,715 Mt of maize from farmers and exported 58,824 Mt in the 2015/16 marketing season (GTAZ 2015). Data on the quantities purchased by other grain traders not affiliated to GTAZ, millers, breweries, and others maize buyers could not be ascertained during this study. Therefore the total maize purchases by private sector could not be estimated.

Figure 4. Indicative Private Sector Buying Prices by Province, July 2015



Source: MAL 2015b.

If we assume that the private sector is buying maize between K50-K65 per 50 kg bag (depending on location), then this compares reasonably well with the FRA price of K75 per 50 kg bag when you consider (i) that farmers selling to FRA incur an average cost of K10 per bag for transport to the point of storage or sale, and (ii) farmers selling to private sector traders have the obvious benefit of receiving payment at the point of sale and not having to wait months to be paid by FRA.

Our interviews with private traders reveal that while some farmers have been holding onto their maize in anticipation of a higher price from the FRA price, and doubtless there will be examples of unscrupulous traders seeking to exploit some farmers, the majority have been taking advantage of the relatively competitive price and instant cash payment offered by private buyers. Note also that maize prices are expected to rise later in the season and a pan-territorial and pan seasonal price (same price throughout the country and marketing season respectively) by FRA takes away the opportunity from those farmers or storage operators who otherwise would store to take advantage of the high prices.

FRA Maize Prices and Possible Effects on Maize Prices and Mealie Meal Prices: The private sector was set back by the overruling of the FRA price by the President, because it introduced uncertainty into what was shaping up to be a considerably more predictable marketing season. However, the major question is what effect does this have on maize trade and mealie meal prices? Firstly, the FRA is not the only buyer of maize on the market, but since it is the largest single buyer the price it announces has a tendency to be viewed as the minimum price and usually becomes the reference price in most discussions.

The GTAZ reported in an interview with IAPRI that this increase in price should have no effect on their trading operations because most traders were buying a bag of maize at farm gate at K50-K65 per bag and, as mentioned above, incurring an average cost of K10 per bag for transport to the point of storage or sale. So farmers selling to FRA needed to incur this cost themselves before getting the announced K75, as they have to transport their maize to FRA central collection depot. Also, GTAZ indicated that even at this price,



with the kwacha depreciating, maize price in dollar terms have declined from about US\$188 to US\$158 per Mt. At this price, Zambia maize is still slightly cheaper than the current freight on board price of maize in South Africa, which is currently sitting at US\$200 per Mt. However, the decision to raise the price to K75 per 50 kg bag means that the government has to incur an additional K5 bag excluding transportation to main depots and storage costs. This is approximately K50 million (or US\$5.3 million) if the government buys the 500,000 Mt announced target plus another K450 million (or US\$45 million) if government manages to buy an additional 300,000 Mt.

“One price for the whole country throughout the marketing season by FRA takes away the opportunity from those farmers or storage operators who otherwise would store to take advantage of the high prices later in the season...”

Although, there may not be major effects on the traders operations because maize price in dollar terms has dropped, the ef-

fects are likely to be felt more by the consumers through prices of mealie meal as they are expressed in Zambian Kwacha. Increasing maize grain prices would attract calls from millers for subsidized maize from FRA in order not to pass the cost to consumers. Unfortunately, evidence from past experiences has shown that consumer subsidies administered through selected large scale millers were ineffective at bringing down consumer mealie meal prices. Instead, they simply acted as a drain on the treasury. Therefore, raising maize grain prices above market level will have negative ripple effects in the whole economy, a venture that may plunge the country into further fiscal deficits.

Private Sector Benefits of Clear and Consistent Policies: The apparent shift in government policy in the current maize marketing season has had a number of positive effects on the market and has been lauded by many agricultural stakeholders.

First, the delay in announcing the FRA price allowed farmers to discover a price for their produce in line with the tenets of a liberalized economy. The FRA price, which is normally referred to as the maize floor price, had a tendency to distort the market, stifle private sector participation, and make Zambia's maize less competitive in the region. To some extent, what happened during the first quarter of the maize marketing season has demonstrated that when the market is allowed to work, private sector competition results in farmers getting a good price for their maize, and importantly they are paid at the point of sale, unlike with FRA.



The country experienced a similar situation in the 2013/14 marketing season when private sector competition in the market pushed maize prices higher than FRA price. These higher prices made it impossible for FRA to buy its targeted maize quantity.

Second, the delay in announcing the FRA price has resulted in the resurgence of active private sector participation in maize marketing. We have discussed that on average the market price offered by traders compares favorably with the FRA and of course they are paid at the point of purchase. In general, there has been varied reaction among farmers to this shift in the policy as some were lamenting the absence of FRA in the market whilst others welcomed the change and urged government to invest these resources in public infrastructure which produce more broad based market enhancing effects.

Third, private traders have commended the government for the consultative and collaborative approach this season as it helped create a predictable policy environment conducive for private sector investment. With no indications of an export ban, maize exports have been trickling out of the country and it is projected that more exports will take place between October and February.

SHORT-TERM AND LONG-TERM OUTLOOK FOR ZAMBIA'S MAIZE MARKET:

Short-term Outlook: Zambia is likely to export more maize compared to the previous season, but for reasons discussed above we are unlikely to see a major transformation in Zambia's regional position. Demand for Zambia's maize will likely come from Zimbabwe, DRC, and Malawi which have maize deficits this season.

“ High fertilizer prices, due to a weak kwacha, could make it more difficult for farmers to respond to higher anticipated prices through intensification...”

With the reduced surplus maize in South Africa, it means that Zambia can target the usual markets that South Africa supplies such as Botswana and Namibia. At the current export parity prices, Zambia is competitively supplying the deficit markets only in DRC and Zimbabwe. The question that remains is whether, given the shift this season in regional markets and increasing regional prices, (an effect which is also multiplied by the recent declines in the

value of the Kwacha) Zambian maize will become more competitive. If, on the other hand, Zambia's Kwacha appreciates from current levels, the increased FRA buying price may make it less competitive to export the maize later in the season as it would be more expensive than the neighboring countries.

According to FEWSNet, the maize price outlook for Zambia shows that the Lusaka maize prices are expected to rise from the July prices to reach \$300 per tonne by December and January but will drop to about \$270/tonne by March 2015. These prices are still within the 5-year seasonal average prices for Zambia. But these prices are above South Africa and Tanzania which are the only other surplus countries in the region (FEWSNet 2015a). However, Kwacha depreciation will help Zambia if there are still stocks at that time to be exported. Another major concern to consider in the upcoming season would be the high maize to fertilizer price ratio. High fertilizer prices, due to a weak kwacha, could make it more difficult for farmers to respond to higher anticipated prices through intensification. This would act as a disincentive to farmers who would like to produce maize.

In addition, the cost to FISP is likely to substantially go up. However, these effects could be lowered if the low world petroleum prices can be transmitted into the country.



Long-term Outlook: Figure 5 shows the outlook for Zambia's maize production, consumption, and trade. Maize production is likely to increase steadily from the current production of 2.6 million Mt in 2015 to reach almost 4.8 million Mt by 2024. The growth in production will mainly be driven by yield increases compared to increase in area under maize.

Under the assumption of favorable weather conditions, maize productivity is expected to increase as a result of improved technology uses by farmers including improved seed and fertilizers.

Consumption is likely to rise and will be driven mainly by growth in the population and rise in per capita income. Given the projected increase in population and per capita income, maize demand both for food use and livestock is going to increase as protein diets become more demanded by affluent communities. However it is worth noting that from the ReNAPRI model⁴, the largest proportion of the growth in maize demand will come from food use.

Regional trade in maize will play a significant role in Zambia's maize outlook. However, this requires investments in infrastructure and other trade facilitation measures that will enhance the movement of commodities. Compared to the period from 2000 to 2014, Zambia is likely to export more maize in absolute terms mainly to growing demand from the structurally maize deficit countries such as DRC and Zimbabwe. However, the growth in exports is likely to be lower

than production growth. This is because countries like Malawi, Mozambique, and Tanzania are likely to be self-sufficient in maize production, meaning that Zambia's main market for maize will be DRC and Zimbabwe (ReNAPRI 2014). Also, export restrictions that we frequently see in the region if continued, may reduce the amount of maize that can be exported to the region. Also, the operationalization of the ZAMACE⁵ if successful would bring stability and predictability to commodity prices. However, to sustain the commodity exchange, agricultural policies need to be stable and the role of FRA in the maize sector needs to be capped. Otherwise, FRA could take the lead and buy the strategic reserves requirements through the exchange, an innovation that does not distort the market.

CONCLUSION

Despite the reduction in maize production in 2015, Zambia has sufficient maize stocks for local consumption and surplus for export. The apparent shift in policy by the FRA of not interfering in market prices early in the season had some positive benefit with regards to private sector participation in the maize market. Private traders were very active in the beginning of the marketing season buying maize at competitive prices.

With most countries having a deficit, Zambia's current maize surplus can be used to benefit the farmers without burdening the treasury. Maize prices are expected to rise later in the season and a pan territorial price (same price throughout the country)

by FRA takes away the opportunity from those farmers or storage operators who otherwise would store to take advantage of the high prices.

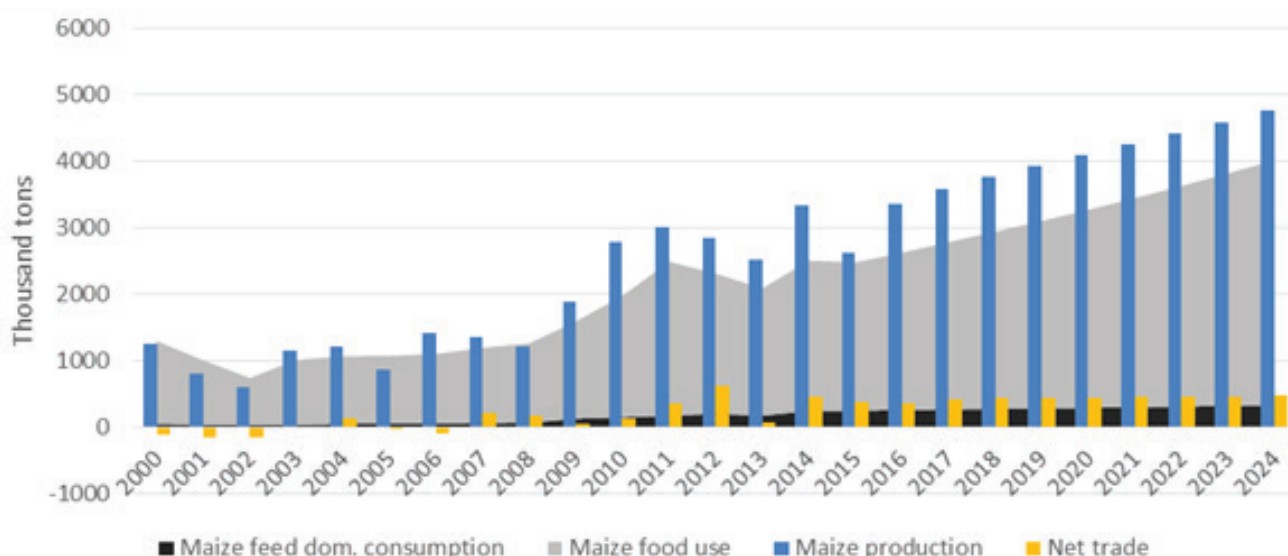
To fulfil its target of 500,000 Mt, the likelihood that FRA will buy maize from aggregators and slightly larger farmers is very high because such market participants are able make a delivery without anticipating cash up front. Unfortunately, the FRA's high price like in most agricultural season would likely not benefit the majority of the smallholder farmers. As of 3 September 2015, FRA reported to have bought about 366,384 Mt (73.3% of its target quantity), barely a month after starting its buying activities. This translates to over 250,000 bags purchased every day and there is no way such volume would be coming from small-scale producers with 5-10 bags to sell

FRA participation is likely to continue being highly politicized with notable limited benefits to the majority of the smallholder farmers and urban poor consumers both in the short- and long term. This is because research evidence has shown that the production of a surplus is highly concentrated in the country with the majority of smallholder farmers not able to produce enough to sell (see Chapoto et al. 2015; Mason and Myers 2011). Larger farmers who constitute a very small proportion of the farming sector in Zambia and maize aggregators are likely to be the biggest beneficiaries of the recently announced above the market price. Unfortunately, the opposition political parties have not helped the situation as they have also been pushing for above market prices disregarding the empirical evidence on who benefits from such prices, regional market situation, and effects on the general economy. It was not surprising that the response from the government was also political as we saw the head of state overruled the price announced by a government agency and instructed it to buy at a higher price. Apart from plunging the country into further budget deficit, the current situation only goes to reinforce the political nature of the maize sector, as everyone in the political arena wants to be seen to be working for smallholder farmers. However, past and present policies have failed to raise the standards of living of farmers with poverty rates remaining above 70%.

4. Regional Network of Agricultural Policy Research Institutes (ReNAPRI), a network of national public agriculture policy research institutes from Eastern and Southern Africa (ESA) countries. ReNAPRI has developed a 10 year outlook on maize for selected countries in the ESA region.

5. On November 4, 2014, the government through the Ministry of Agriculture and Livestock signed a Statutory Instrument (SI 59) authorizing ZAMACE to perform the functions of the Warehouse Licensing Authority. Among various functions, ZAMACE is envisioned to provide a trading platform for agricultural crops such as maize, soybeans and wheat.

Figure 5. Zambia's Long-term Outlook for Maize: 2015-2024



Source: ReNAPRI 2014.

The answer to smallholder farmers' problems in Zambia lies in agricultural policies that can sustainably raise farmers agricultural productivity and not production cost or politically driven policies. The solution also lies in having policies and public funding that promote agricultural diversification and not the current maize centric policies.

Government operations in markets have continued to stifle agricultural diversification and very costly to the treasury. It remains unclear whether the incurred costs provide any tangible improvements in price stability and food security. Indeed, if Zambia is to be sustainably food secure and also be the food bread basket of the region, the Government of Zambia should endeavor to have its policies and actions consistent and predictable. It would help attract private sector investment into the maize sector if the government sets clearly defined and transparent rules for triggering government intervention and with regard to changes in FRA purchase and sale prices, import and export decisions, and tariff changes and stock release triggers. In a nutshell, government actions should facilitate regional trade, not provide disincentives because regional trade has the potential to raise farm-gate prices in areas of surplus and reduce consumer prices in areas of deficit.

REFERENCES

ACTESA. 2015. Eastern and Southern Africa Agricultural Trade Information Portal: Cross Border Trade Volumes. Lusaka: ACTESA. Accessed 12 August 2015 at:

<http://www.esatrade.net/>.

AFGRI. 2015. Zambia Grain Market Indicators. Lusaka, Zambia: AFGRI.

Chapoto A, B. Chisanga, A.K. Kuteya, and S. Kabwe. 2015. Bumper Harvests a Curse or a Blessing for Zambia: Lessons from the 2014/15 Maize Marketing Season. Indaba Agricultural Policy Research Institute Working Paper No. 93. Lusaka, Zambia: IAPRI.

CSO. 2015. Imports and Exports of Maize Products. Lusaka: CSO.

CSO/MAL. 2015. Crop Forecast Survey. Lusaka, Zambia: CSO/MAL.

Chongo, K. 2015. President Lungu Rewards Farmers. Zambia Daily Mail, 19 August 2015. Accessed 24 September 2015 at: <https://www.daily-mail.co.zm/?p=40739&page=126>.

FAO. 2015. Global Information Systems and Early Warning Systems (GIEWS). GIEWS Country Briefs. Rome: FAO. Accessed 25 August 2015 at: <http://www.fao.org/giews/english/index.htm>.

FEWSNet. 2015a. Regional Trade Analysis. Presented at a Symposium on How to Make Zambia the Region's Food Basket through Trade, 30 July 2015. Lusaka: Zambia.

FEWSNet 2015b. Regional Supply and Market Outlook, Southern Africa, 7 August, 2015. Lusaka, Zambia: FEWSNet. Accessed 25 August 2015 at: <http://www.fews.net/southern-africa/regional-market-report/august-2015>.

FRA. 2015. 2015 FRA Maize and Paddy. Lusaka: FRA. Accessed 20 August 2015 at:

<http://fra.org.zm/2015/08/12/2015-fra-maize-and-paddy-rice-price/>.

GTAZ. 2015. Stock Position as of 14 July 2015. Lusaka: GTAZ.

Kalombe, C. 2015. FRA to Now Buy 800,000 MT of Maize. Zambia Daily Mail, 14 September 2015. Accessed 17 September 2015 at: <https://www.daily-mail.co.zm/?p=43625>.

MAL. 2015a. Tools Available to Promote and Regulate Agricultural Trade. Presented at a Symposium on How to Make Zambia the Region's Food Basket through Trade, 30 July 2015. Lusaka: Zambia.

MAL. 2015b. Maize Market Prices for 2015 Marketing Season, as at 24 July 2015. Department of Agribusiness and Marketing. Lusaka: MAL.

Mason, N. and R.J. Myers. 2011. The Effects of the Food Reserve Agency on Maize Market Prices in Zambia. Food Security Research Project Policy Synthesis No. 60. Lusaka, Zambia: FSRP.

Nyasa Times. 2015. Minister Says Malawi Expects Substantial Reduction in Maize Crop, 1 April 2015. Lilongwe, Malawi. Accessed 21 August 2015 at: <http://www.nyasatimes.com/2015/04/01/minister-says-malawi-expects-substantial-reduction-in-maize-crop/>.

ReNAPRI. 2014. ReNAPRI Baseline 2014-2023. Lusaka: ReNAPRI.



MAIN AUTHORS

Brian Chisanga and Antony Chapoto

Chisanga is a Research Associate and Chapoto is Research Director at the Indaba Agricultural Policy Research Institute.

ACKNOWLEDGEMENTS

The Indaba Agricultural Policy Research Institute (IAPRI) is a non-profit company limited by guarantee and collaboratively works with public and private stakeholders. IAPRI exists to carry out agricultural policy research and outreach, serving the agricultural sector in Zambia so as to contribute to sustainable pro-poor agricultural development. The Institute is grateful for the substantial financial support of the Swedish International Development Agency (Sida) and the United States Agency for International Development (USAID) in Lusaka. We also appreciate the technical and capacity building support from Michigan State University (MSU) and Zambia Economic Advocacy Programme (ZEAP). IAPRI also recognizes the editing assistance of Patricia Johannes.

The views expressed or remaining errors and omissions are solely the responsibility of the authors.

Comments and questions should be directed to:

The Executive Director
Indaba Agricultural Policy Research Institute
26A Middleway, Kabulonga,
Lusaka, Zambia
Telephone: +260 211 261194;
Telefax +260 211 261199;
Email: chance.kabaghe@iapri.org.zm



26A Middleway Road, Kabulonga
PostNet Box 99, Lusaka, Zambia
Phone: +260 211 261 194/97 Fax : +260 211 261 199
Email : info@iapri.org.zm
Website: www.iapri.org.zm