Executive Summary

- Following the 2017/2018 maize harvest Zambia remains food secure. The past harvest saw Zambia’s maize production drop from the record levels of 2016/2017 but Zambia still recorded a maize surplus of 341,313 MT - over 10% of the total yield. The reduction in the overall size of the harvest was primarily driven by the prolonged dry spell that characterised the production season. Other factors, including the army worm infestation, had limited impact on the size of the harvest.

- Domestically, the maize marketing season has been shaped by the private sector. The 2018/2019 marketing season has seen the private sector outbidding FRA announced buying price in most areas. Increased private sector participation has heightened competition such that the FRA maize purchases have been exceptionally low, purchasing only 34% of their target. Farmers have responded to this offer of better prices and on-time payment, highlighting the role the private sector can play in Zambia.

- The net result of this is that Zambia is now sitting on over 950,000 MT of maize stocks of which approximately 500,000 MT are held by the SGR and the remainder held by Traders and Millers. These figures exclude maize held directly by farmers. The known stocks are more than enough to keep Zambia eating until the next harvest becomes available.

- The level of private sector purchases relative to the FRA is a positive development and should not be a matter of concern for the government. It clearly demonstrates that the private sector is capable of providing a market for farmers, especially in accessible areas, and can be used to purchase and store grain for the Strategic Grain Reserve (SGR). Moreover, a bigger role for the private sector saves the government significant financial resources, which can be channelled to other developmental projects.

- Despite this domestic oversupply, Zambia has failed to export significant amount of maize. As of October only 44,000 MT had been exported, representing less than 3% of the total harvest and around 7% of the surplus. One explanation for this has been the relatively good regional harvests, which have reduced regional demand. However, another is clearly the ongoing implementation of export restrictions by the government (despite the SGR being at target levels). Our analysis shows once again that Zambia’s
maize is price competitive in the region; thus, to promote investment in maize growth and boost yields in future years, Zambian farmers need consistent government export policies.

- However, despite the many positives from this year’s harvest, the reduced supply of maize led to prices rising much earlier than usual (around June), an indication of a low supply of the commodity. As of October 2018, typical maize prices were at 115 kwacha per 50kg bag in Lusaka, up from 70 kwacha in October 2017. Some of this may reflect inflationary pressures and the rising cost of fuel for transport over 2018.

- Looking ahead, Zambia is likely to produce surplus maize in the 2018/2019 agricultural season and will potentially exceed the 2017/2018 production. Holding other factors constant, the predicted weather pattern would imply average or above average production in the Northern and Central parts of the country, including parts of Eastern Province, which are likely to receive normal to above normal rainfall. High maize prices in 2018 and the projected El Nino in the 2018/2019 production season are likely going to entice or encourage farmers to plant more area to maize.

- Our analysis of the 2018/2019 maize season suggests the government could do more to support the development of the flourishing maize market in Zambia. In particular:

  i. The government should scale back FRA purchases to fit the requirement of a smaller SGR. As mentioned earlier, the FRA struggled to fulfill its SGR purchase target of 500,000 MT. This is because the private traders in most areas offered the same or a higher price than FRA and were paying cash on the spot, as well as not requiring the farmers to bring cleaned maize. Limited purchases this year saved the treasury 466 million ZMW.

  ii. The government needs to do more to promote private sector participation. This starts with the FRA buying and selling maize at market prices, but should extend to the FRA pioneering mass use of ZAMACE, which would encourage private sector usage and create a transparent market for maize in Zambia.

  iii. Trade restrictions and export bans should be lifted. Zambia is food secure and is expected to remain food secure. Blocking trade through legislative or administrative bans is counter productive and damages farmer confidence. Encouraging commercial farmers to grow maize for export will not only help develop farming in Zambia but also improve productivity and support domestic food security in the long-term.
INTRODUCTION

In the 2017/2018 maize production season, Zambia’s maize production significantly dropped compared to the previous season. The prolonged dry spell that characterised the production season largely accounted for this reduction while army worm infestation only had a mild effect.

Across Southern Africa the prolonged dry spell led to an overall decline in maize production. South Africa produced 6,801,560 MT of white maize - a surplus of 720,000 MT\(^1\). At the same time Zambia had a major decline in exportable surplus from 1,178,516 MT in 2016/2017 to 341,313 MT in 2017/2018 agricultural season. However, it should be remembered that this fall in surplus is from a bumper harvest in 2016/2017 and the surplus is over 10% of the total harvest (Ministry of Agriculture, 2017; Ministry of Agriculture, 2018). Structurally deficit countries such as DRC and to a lesser extent Malawi have deficits; and therefore, will continue to demand maize from South Africa, Tanzania, Zambia, and Mozambique, which produced surpluses.

In contrast to the previous season, the 2018/2019 marketing season has been characterised by active participation by the private sector. Falling supply driven by the limited marketable surplus in the country raised maize prices and the private sector proved willing to pay above the FRA price. This has fed through to market prices and resulted in sharp increases in average maize prices by as much as 65% in Lusaka (though less in other areas). The high local prices relative to the regional market are an incentive for the private sector traders to direct most of the commodity to the domestic market rather than to export markets.

However, the country’s lean surplus position has seen the Ministry of Agriculture restricting maize exports by limiting the number of maize export permits issued. Nevertheless, these restrictions have been more administrative, as there has not been a Statutory Instrument (SI) to ban exports. In general Zambia’s exports to the region have been low both formally and informally except maize bran, whose demand has been particularly high this year given demand from livestock sectors in the region. South Africa, being the largest surplus country this year, is expected to be the leading maize supplier to the region with Zambia, Tanzania, and Mozambique contributing a smaller share of total exports. Demand for maize from East Africa is expected to be low, as their production was higher than the previous season. Meanwhile, Tanzania has imposed import restrictions further slowing down maize movements to the Nakonde border.

Increased private sector participation has heightened competition such that the FRA purchases have been exceptionally low despite raising its buying price from K65 per 50 kg bag to K70. By mid-October 2018, FRA had only purchased 166,831 MT of maize or 33% of targeted purchases. Despite the low purchases FRA is currently holding nearly 500,000 MT including the carry-over stocks from the previous season. Based on reports by GTAZ and MAZ, their members had purchased over 400,000 MT by the end of October, suggesting Zambia has more than adequate stock for food security. However, private sector participation in Muchinga and Northern Provinces had been very limited hence farmers were relying more on FRA as a major buyer.

High private sector participation should not be viewed in the negative light, as this has saved the national treasury colossal sums of money that would have been spent to procure the anticipated 500,000 MT. Second, the nation’s food security is not threatened because maize is in the country, though in the hands of the private sector; in addition the FRA as of end of October was holding nearly 500,000 MT, which is the desired SGR. Third, most of the maize in the hands of the private sector is earmarked to be sold within the domestic market; hence, the threat of experiencing maize shortages is minimal.

Against this backdrop this maize market outlook sought to review the 2018/2019 maize marketing season to provide deeper insights into the domestic and regional factors affecting market performance and their major outcomes. The analysis herein is based on the analysis of the 2018/2019 total maize production by South Africa was 12,931,210 MT of which white maize was 6,801,560 MT and yellow maize was 6,129,650 MT. Surplus white maize is what is exported in the region while most of the surplus yellow maize is exported overseas.
marketing season (current season) and the immediate past season (2017/2018). Data is drawn from various sources, including the Ministry of Agriculture (MoA) crop forecast survey, Central Statistical Office (CSO), FAO, Famine Early Warning Network (FEWSNET) among others. Data from these sources were used to generate the key trends and make assumptions about likely outcomes in the 2018/2019 marketing season. A snap survey carried out in selected districts and border posts across the country to ascertain farm-gate prices, private sector participation, border prices, and trade flows (formal and informal) among other issues, complemented these data. Key informant interviews with industry players and government officials were also conducted to augment the above data sources.

MAIZE STOCKS POSITION

As of end of October 2018, the country’s maize stocks were reported to be approximately 957,090 MT. This was known total stock held by registered members of GTAZ, MAZ and ZNFU as well as FRA. Excluding stocks held by non GTAZ and MAZ members and maize stored by farmers, this stock is more than enough to last the country until at least the beginning of the new harvest in May 2019.

Figure 1 shows the maize stocks held by various players in the industry between January and November 2018. The net maize stock position during the 2018/2019 marketing season has so far remained stable despite the low grain supply because of the large carryover stock from the previous season. At the beginning of this marketing season, Zambia had total carryover maize stocks amounting to 846,710 MT, which was sufficient to offset the reduction in maize supply from the 2017/2018 harvest. The FRA entered this season, with 600,000 MT of maize - more than the required Strategic Grain Reserves (SGR). Since then the FRA’s stocks position has come down to nearly 500,000 MT after selling some of the carryover stock to millers and having purchased about 166,831 MT additional grains this year.

Figure 1: Maize Stocks held by various players between January and November 2018

![Figure 1: Maize Stocks held by various players between January and November 2018](image)

Source: Stocks Monitoring Committee, 2018
Millers, particularly in the Copperbelt Province, have been reported to be critically low on maize supplies, as they could not secure enough grains due to stiff competition from other market players. By the end of September, the Millers Association of Zambia (MAZ) reported holding about 149,000 MT of maize in stock, which is equivalent to one month requirement. Millers have since requested the FRA to offload some of the grains held as SGR, but they could also opt to procure this from stocks held by the private sector.

**MAIZE PRODUCTION**

Maize production in 2017/2018 agricultural season was forecasted to drop by 33.6% to 2,394,907 MT from the record harvest of 3,606,549 MT in the previous year. This was in part due to a reduction in area under maize, a 15% drop from the previous season. In addition maize yields were projected to decline from 2.19 MT/Ha to 1.72 MT/Ha as well as area planted (Ministry of Agriculture, 2018). In general, the reduction in maize yields and overall production was largely due to the prolonged dry spells experienced between November 2017 and January 2018, while the reduction attributable to the fall army worm was minimal because of early warning and preparedness by the government and farmers.

Districts located in the southern parts of the country experienced the largest decline in maize production. These include districts in the Southern, Eastern, Lusaka, Western, and parts of Central Provinces, where maize wilting was highest, as a result of the prolonged dry spell. The reduction was subdued in the northern parts of the country as the region received normal to above normal rainfall. Some districts in the north experienced excessive rainfall leading to some crop losses towards the end of the rainy season.

**MAIZE MARKET PRICES**

In contrast to the previous marketing year, maize market prices have been high in the 2018/2019 marketing season owing to the much-reduced maize surplus on the market. Figure 2 shows Lusaka wholesale maize grain and retail breakfast mealie meal prices between May 2017 and October 2018. Maize grain prices, which had been declining between March and May 2018 as the new harvest appeared, began escalating from June onwards. Between May and October maize prices had risen by 32%.

In comparison to last year, October 2018 maize grain prices were 65% higher during the same period. One peculiarity of the current marketing season is that maize market prices began rising much earlier in the season - around June instead of the hunger season beginning December through end of March. While this is a reflection of limited grain supply on the market, it may also be driven by speculative behaviour by some traders and farmers with access to storage facilities waiting for the prices to rise before they can offload the grain on the market. Surprisingly, mealie meal prices have remained stable after they declined temporarily in May 2018. As expected mealie meal prices may start to rise as the hungry season approaches due to a tightening maize supply.

Figure 3 provides insight on prices received by farmers from the private sector benchmarked against the FRA price in selected districts in September 2018. In Lusaka, Copperbelt, and Central Provinces, farmers received the highest prices, as these constitute the country’s main maize consumption market. Kasumbalesa, the border town between Zambia and DRC, had the highest prices due to the rampant daily informal exports to DRC. Prices in the Copperbelt are expected to be higher and to increase during the November to April period. In Southern Province, all the districts assessed had higher prices than the FRA except Kalomo, whose prices averaged around the FRA price. In Eastern Province farmers’ prices were close to the FRA price, except Mambwe District where prices were much higher.

In Northern and Muchinga Provinces, the average market price for maize was below the FRA buying price. This was attributed to the huge massive amount of maize available on the market and limited private sector participation. Limited export demand from East Africa further played a role in dampening the prices. Lower private sector prices combined with larger surplus production by farmers in these two provinces are the main factors explaining why the FRA purchased the most maize from them rather than anywhere else in the country.
Figure 2: Lusaka Grain Wholesale and Breakfast Mealie Meal Prices, May - October 2018

Source: IAPRI Market Information Price System; GTAZ Reference Prices

Figure 3: Private sector and FRA maize buying prices in selected districts: Mid- September 2018

Source: IAPRI, MoA, DMMU Rapid Market, and Food Security Assessment, September 2018
FRA MAIZE PURCHASES AND PRICING

As mentioned earlier, the FRA struggled to fulfil its SGR purchase target of 500,000 MT. This is because the private traders in most areas offered the same or a higher price than FRA and were paying cash on the spot as well as they did not require the farmers to bring cleaned maize\(^2\). By October 2018, the FRA had purchased a total of 166,831 MT (33% of target) bringing the total maize in stock to 481,484 MT. About 60% of the FRA’s purchases came from Muchinga and Northern Provinces.

Is Food Security at Risk?

The low FRA purchase should not alarm the nation because the combined available stocks with FRA are close to the 500,000 MT SGR target and as IAPRI have argued, this target is unnecessarily high (see Kutey and Samboko, 2018). In addition the bulk of the stocks are in the country but held by the private sector. The prices in the region are not competitive; hence, most private traders would prefer to offload their stored grain on the domestic market. The limited purchases by FRA in 2018 actually saved the national treasury of the resources (approximately ZMW 466 million) that would have been used to purchase the additional 333,169 MT - a cost which has been borne by the private sector. This money if available can be channelled to other development projects and is a welcome savings given Zambia’s challenging fiscal position.

In July the FRA announced a buying price for maize of K65 per 50 kg bag, a price they indicated came out of wide consultation. As always some stakeholders expressed concern that the price was well below the cost of producing a 50kg of maize. However, cost of production benchmarked pricing is not the most efficient method to use, as it ignores many factors that need to be taken into account (Chapoto and Chisanga, 2018).

PRIVATE SECTOR PARTICIPATION IN GRAIN MARKETING

The 2018/2019 maize marketing season has been characterised by active private sector participation. These included large corporate grain wholesalers such as NWK Agri services, Afgrï Corporation, Zdenakie, CHC Commodities; other large traders such as Aliboo, Shifa and Kavulamungu in Eastern Province; and medium-scale traders and myriad informal small-scale traders (also referred to as aggregators).

As the season opened, private grain traders went into the market early, buying maize at relatively low prices. At the time a good number of the farmers were holding on to the maize in anticipation for the announcement of the FRA price - normally used as a yardstick during price bargaining. Hence, maize supply to the market was initially muted until after the announcement of the ZMW65 per 50kg bag FRA price and the subsequent upward adjustment to ZMW70. Upon realising that there was generally low maize supply in the market, private traders aggressively started outbidding each other resulting in market prices rising above FRA announced price.

Moreover, the spot cash attracted farmers to sell to the private traders rather than the FRA, demonstrating the value placed by farmers on on-time cash payment. By the end of September 2018, the private sector had purchased more than 390,000 MT of maize, a figure which does not include informal grain traders and non-members of the GTAZ and MAZ. In reality the figure is likely to be much higher. At the end of October, grain traders were holding 335,000 MT of maize, while millers had 149,000 MT.

A good number of large commercial millers with financial capacity were able to mobilise maize purchasing through agents distributed across the maize surplus regions of the country to secure grains for their operations. However, a few millers spoken to during the study in the Copperbelt Province indicated that they had no capacity to purchase from very distant places such as Northern and Muchinga Provinces. A number of such millers indicated that they were operating below their usual capacity and would require government assistance.

THE REAL PROBLEM IS LOW PRODUCTIVITY

\(^2\) To compensate for the uncleaned grain and possible shrinkage, traders ask farmers to deliver 52 kilograms instead of 50 kilograms.
GOVERNMENT’S INTERVENTIONS IN THE MAIZE SUBSECTOR

The main intervention in the maize subsector during the 2018/2019 marketing season has been the administrative restriction of maize exports by the Ministry of Agriculture. Although there has not been an SI to formalise the restrictions of maize and its products, there have been few permits issued this season. For example, there are reports that no maize export permits were issued between June and July. In addition, the government has been restricting and closely monitoring the exportation of maize bran destined for Namibia and Botswana. The demand for Zambia’s maize bran has been exceptionally high as the livestock sectors in Namibia and Botswana continue to grow and rely heavily on imported bran from neighbouring countries including Zambia.

On 17th October 2018, the Honourable Minister of Agriculture announced to Parliament that the government had put an administrative measure on the export of maize. He also clarified that while the restrictive measure did not constitute an export ban, it was a temporal measure to ensure food security in the nation. This measure is attributed to the fact that the FRA has not reached the intended SGR of 500,000 metric tonnes of maize (Lusaka Times, 2018). The current restrictions are reminiscent of the temporal export restrictions applied under similar circumstances during the 2017/2018 marketing season, which later contributed to a market crash during the bumper harvest the following year (see Chisanga, Chapoto, and Subakanya, 2017).

Experiences from previous seasons have shown that restrictive trade policies have often resulted in farmers losing the opportunity to benefit from high prices and the country losing export revenue. It is therefore important to enhance Zambia’s capacity to supply the region with maize. One sure way is to ensure that Zambia raises its productivity and becomes a competitive regional grain supplier, but ad-hoc government export bans and a lack of policy certainty inhibit investment in commercial maize production and act as a barrier to this.

REGIONAL MAIZE PRODUCTION AND TRADE

The Southern and Eastern Africa region is generally in a surplus situation despite most countries experiencing a prolonged dry spell during the 2017/2018 production season. Table 1 shows maize production, prices, and Zambia’s export parity prices in selected countries in Eastern and Southern Africa. Figure 4 shows the deficit or surplus situation in the region. South Africa produced a major surplus amounting to 720,000 MT of white maize (Department of Agriculture, Forestry and Fisheries South Africa, 2018).
Table 1: Regional Prices and Export Parity Prices for different markets for Zambia: September/October, 2018.

<table>
<thead>
<tr>
<th>Country</th>
<th>Production (MT)</th>
<th>Maize price in (per MT?)</th>
<th>Transport and handling costs in---</th>
<th>Export Parity Prices in---</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zambia</td>
<td>2,394,907</td>
<td>$190</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Zimbabwe</td>
<td>1,700,702</td>
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<td>$75</td>
<td>$315</td>
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<td>$150</td>
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<td>$369</td>
<td>$200</td>
<td>$109</td>
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</table>

Source: FEWSNET, 2018; FAO, 2018a; FAO, 2018b; MoA and CSO, 2018; Ministry of Lands, Agriculture and Rural Resettlement, Zimbabwe, 2018; Department of Agriculture Food and Agriculture Food and Forestry (DAFF), South Africa; Grain Traders Association of Zambia (GTAZ), Various Years.*Artificially high price, government supported price under Command Agriculture

Figure 4: Maize surplus/deficit positions in selected Eastern and Southern Africa in the 2017/2018 agricultural season and trade flows

Source: FAO, 2018a; MoA and CSO, 2018; Department of Agriculture Food and Agriculture Food and Forestry (DAFF), 2018; FEWSNET, 2018

*Note: No data for Angola
Zimbabwe, which is Zambia’s main market for maize, had a harvest of 1.7 Million MT of maize. This is below their requirement; however, due to a large carryover stock from last year, the country only has a minimal deficit. Malawi also has a small deficit, while Tanzania has a significant surplus, only second to South Africa. Mozambique had a surplus mostly coming from the highest producing areas in the northern parts of the country. In the East, Uganda produced a major surplus and is a major exporter to deficit countries such as Kenya, which is a structurally deficit country in that region. All in all, the region is generally in a surplus position owing to large surpluses mostly coming from South Africa, Tanzania, Zambian and Uganda.

Maize prices in the region are relatively low and much more stable. Zimbabwe has the highest price but this is an administered price artificially kept above the market by the Grain Marketing Board (GMB), which is the main buyer under the Command Agriculture Initiative. Malawi’s prices are at par with Zambia, while Tanzania surprisingly has higher prices despite its surplus, while Mozambique also has high prices. Uganda has the lowest prices in the East Africa region, while Kenya’s prices are at par with Tanzania, while Burundi’s prices are significantly higher than the rest of the East African countries.

To have a better understanding of where Zambia’s maize is likely to go, we computed the export parity prices, which analyses the regional price but incorporates the transportation and handling required. Comparing Zambia’s domestic prices to the regional export prices reveals that Zimbabwe is the only viable market for Zambia as the export parity price is higher than Zambia’s domestic prices. Elsewhere in the region, the export parity prices are lower than the domestic maize price in Zambia. This partially helps to explain why maize exports have been significantly lower this year. Hence, traders in Zambia would rather sell maize within the domestic market rather than export.

Table 2 shows Zambia’s maize exports to the region since March 2018. Generally, there have been very limited formal exports to date with most of the exports in the form of maize bran destined for South Africa, Botswana, and Namibia. By the end of September, Zambia had only managed to export a total of 44,586 MT of maize and related products. To put this in context, this is less than 5% of Zambia’s current maize stocks and less than 3% of the total harvest, this is despite the harvest resulting in a surplus of over 10%.

There have been significantly lower exports to Tanzania, Kenya, and Zimbabwe compared to past years. As mentioned earlier, the lower regional exports during the 2018/2019 marketing season are largely due to the lower export parity prices as well as the export restrictions currently in place. Likewise, Tanzania has put in place import restrictions reducing the ability for traders to explore markets in East Africa. Nevertheless, the demand from East Africa is low due to a good harvest as well.

By mid-October South Africa had managed to export 152,261 MT of white maize within Africa, which is still low considering its surplus. Most countries in the region do not accept GMO maize, which constitutes 85% of South Africa’s maize production (SAGIS, 2018). With generally improved harvests in the region, South Africa is

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3 Command Agriculture – a special import substitution programme initially targeting production of maize and now including wheat, soybeans, cotton, livestock, fisheries, forestry – is an intended private-sector-backed input and price support programme implemented by the Government of Zimbabwe through joint command structure. Under the programme, all beneficiaries (including all farm sectors – communal, old resettlement, A1, small-scale and A2, irrigation schemes and institutions such as Mission and Church farms, Universities, Colleges, Schools, Police and Prison Services and Zimbabwe Defense Forces) are contracted to deliver a specified quantity to a specified government agency (Grain Marketing Board, GMB) after harvest as a repayment for support rendered. In turn the recipients who sign up receive fertilisers, seed, agro-chemicals and irrigation and mechanised equipment on a cost-recovery basis.
mainly exporting to its immediate neighbors i.e., Botswana, Namibia, Lesotho, Eswatini, and Mozambique. During critical maize deficits countries such as Zimbabwe and Kenya with strict GMO policies tend to relax their GMO policies to facilitate imports from South Africa. This has not been the case so far.

The situation is quite different with regard to informal exports, which have been escalating since the start of the maize marketing season. Since March of this year, approximately 17,000 MT of maize and mealie meal have been informally exported mostly to the DRC, Malawi, and Tanzania. There has been a rise in informal maize and mealie meal exports to the DRC precipitated by the large price difference at the border post. An increase in informal exports has also been observed involving maize grain destined to Malawi but with smaller volumes of mealie meal. Despite the increase in exports, the volumes are not large enough to significantly absorb Zambia’s maize production.

**SHORT TO MEDIUM-TERM OUTLOOK**

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<tr>
<th>Partner</th>
<th>May</th>
<th>June</th>
<th>July</th>
<th>August</th>
<th>September</th>
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<td>Total</td>
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<td>9,108</td>
<td>6,908</td>
<td>8,525</td>
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*Source: Authors computation from CSO, 2018*

Image Source: IAPRI
According to the Zambia Meteorological Department, Zambia is likely to receive normal to below normal rainfall during the 2018/2019 rain season. They have further predicted that the season will be characterized by an early start of rains over the north-eastern, extreme western, and southern parts of the country.

A detailed forecast revealed that there is a likelihood of normal to above normal rainfall in Luapula, Copperbelt, and parts of North-Western, Central, Northern, Muchinga, and Eastern Provinces between November and January.

The northern half of the country is expected to continue receiving normal to above normal rainfall, while the southern half is expected to receive normal rainfall between December and February. Around March, the bulk of the Zambia is likely to receive normal to below normal rainfall except for the extreme northern portions, which are likely to record normal to above normal rainfall (Zambia Meteorological Department, 2018). Forecast for the SADC region predicts that the bulk of the region will receive normal to below-normal rainfall between October 2018 and March 2019 (SADC, 2018).

With this forecast, Zambia is likely to produce surplus maize in the 2018/2019 agricultural season and will potentially exceed the 2017/18 production. Holding other factors constant, the predicted weather pattern would imply average or above average production in the northern and central parts of the country including parts of Eastern Province, as they are likely to receive normal to above normal rainfall. The high maize market prices during the 2018/2019 marketing season will likely trigger a positive supply response through area expansion and crop substitution.

As in other years, maize and mealie meal prices are expected to increase slightly between December 2018 and April 2019. This is not a misnomer or an indication of food insecurity but normal trend for staple grain in Sub-Saharan Africa, Zambia included. By December 2018 prices in Lusaka and Copperbelt may average ZMW 2 per kg (ZMW100 per 50 bag) while in border towns they will probably be much higher. This will have an upward effect on the pricing of mealie meal. However, as noted earlier, the country has sufficient maize stocks to last until the next harvest and the demand for Zambia's maize in the region is low. This should help moderate market price increases.

Regional demand for maize may rise as the season progresses but mainly through informal exports, in which case the volumes are not that significant. Formal exports will still remain low because the incentives to export are much lower than selling locally.

CONCLUSIONS AND RECOMMENDATIONS

This year Zambia produced a smaller but still significant maize surplus that culminated in a marketing season that significantly differs from the previous one, in that maize supply was reduced substantially leading to higher maize prices. This season has also been unique because maize prices rose much earlier than usual, especially in the urban maize consumption markets and the production areas that experienced significant reduction in output. The reduced maize supply has been a catalyst for the unprecedented rise in private sector-led maize trading and stiff competition among the traders. The 2018/2019 marketing season was essentially a sellers’ market due to limited stocks, increased competition, and high price. The private sector out-competed FRA to the extent that the agency only managed to procure 33% of its target.

The imposition of export restrictions by the government undermines Zambia’s ability to be a consistent supplier of maize to the region. Even without restrictions, the volumes of maize grain exported this season have been substantially lower than average.
SHORT TERM RECOMMENDATIONS

Private sector led agricultural marketing should continue to be promoted: This will significantly save government resources used to purchase and store the SGR. This should be accompanied by market-based pricing by FRA in line with demand and supply conditions, as well as pricing that reflects regional factors such as transportation costs and seasonal variations. One way to efficiently do this is for the agency to take the lead and utilize the ZAMACE platform to procure and sell SGR stocks.

A stable marketing policy environment stands paramount to encourage investment in storage infrastructure and enhanced private sector participation. Also, producers will be incentivized to produce more by increasing the area under production. Ad hoc trade restrictions curtail market development and dampen supply response by farmers. Zambia has grain in the hands of the private sector who out-competed FRA, so there is no need for the country to panic. The country has to find market solutions to unlock the supply from the private sector rather than release strategic reserve stocks to selected large scale millers at this time of the year.

Trade restriction and export bans on maize should be avoided: Efforts to safeguard national food security should not undermine Zambia’s ability to export its surplus maize to neighboring countries. Instead of restricting maize exports, the government should ensure exporters are issued permits and allowed to export, especially when the regional demand is low. A consistent trade policy will encourage the private sector to invest in the production and marketing of the staple crop.

Production of early maize: Zambia should revisit the strategy of harnessing large-scale farmers potential to produce early maize under irrigation. However, for it to be successful, the government needs to provide a policy guarantee allowing for exports of maize in case the maize is not required in the country. Without policy guarantees large-scale farmers will continue to shun maize production.

Reduce the size of the SGR: The government of Zambia should seriously consider reducing the size of SGR to no more than 350,000 MT (as set out in research Kuteya and Samboko, 2018). Reducing the size of the SGR offers Zambia the opportunity to meet strategic objectives around food security, whilst also making significant reductions in public spending used to purchase and store 500,000 MT of maize. Reducing the size of the SGR can crowd-in the investment necessary for increasing productivity. GRZ can achieve a win-win by promoting private sector-led growth and reducing fiscal spending without compromising the core objective of the SGR, thus, ensuring food security for Zambia’s poorest.

MEDIUM TO LONG Term RECOMMENDATIONS

Increasing maize productivity: When it comes to maize pricing by the government, the real problem is low farm productivity not pricing. But the above market prices introduce and entrench inefficiencies in the market, as the government supports very unproductive farmers. The only sustainable way to deal with fears of food insecurity is to invest in productivity-enhancing solutions so that the country could produce more maize surpluses. Increasing productivity will lower prices for consumers and has the potential to create an export market, which would generate foreign exchange reserves.

Build local trade associations: Traders who do not belong to GTAZ may could form associations at the district level to help enhance/expand-improve their access to credit as well as working to develop marketing strategies and increase bargaining power. More importantly, these associations can be incorporated into the stocks reporting system. This will ensure that the true stock position is known by the Stocks Committee. Empowering local traders in this way will increase the opportunities for farmers to enter into commercial market chains and reduce dependence on the FRA.
Improve SGR release schedule: To enable effective private sector participation and ensure maize market stability, the grain reserves stocks rotation should be predictable and done completed, preferably, before harvest in April-May. Currently, releases often undercut producers and their unpredictability damages private sector confidence and reduces their involvement in the market.

Establishment of the Zambia Grain Information System (ZAGIS): Government decisions on agricultural marketing tend to be affected by lack of access to updated market information such as stock levels in the country while the stocks monitoring committee is meant to fulfil this role, it lacks the legal mandate; therefore, some stakeholders are not compelled to declare the correct stocks. Investing in a national grain information system would provide real time information on national stocks and would help the government and key agricultural stakeholders including private sector and farmers to make the right policy decisions in a timely manner.

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Grain Marketing Innovations and Investments in Zambia:

What are the main innovations shaping the relationship between traders and farmers?

**Structured Grain Markets**

Large grain investments facilitate movement away from spot markets to structured markets for smallholder farmers through models such as pre-financing, contract farming and forward contracts. For instance, Mt Menzi under its pre financing scheme, provide about 500 farmers with an input pack of soya beans to grow up to 0.25 hectare and is expending to reach 2000 farmers.

**Credit Finance**

Seasonal credit is being provided for production and capital credit for tractors and implements through partnerships such as ZNFU’s Lima Credit Scheme which links farmers to large grain traders. Large grain traders such as AFGRI provide forward supply contracts in Kabwe, Mukushi and Mumbwa districts and purchased 15,000 metric tonnes of maize on forward contracts in the 2016/17 marketing season.

**Private Sector Extension Services**

These services are aimed at increasing farmers’ productivity. Farmers are trained in smart agricultural practices such as Conservation Agriculture (CA) and business skills. These services also complement public sector extension efforts. For instance, during the 2016/17 season, NWK reached 18,000 maize farmers, 4,000 Soya bean farmers and 70,000 cotton farmers with extension services.

**Weather Index Insurance**

Due to increased weather related risks, large grain traders facilitate smallholder farmers’ access to crop insurance for contracted farmers. For instance, NWK provides insurance to its contracted farmers on behalf of insurance companies. The scheme has been accessed by 18,690 farmers. NWK insured about 3000 farmers in Choma district during the 2016/17 production period alone.

**Information Communications Technologies (ICTs)**

ICTs for agriculture are increasingly being used to provide market intelligence such as SMS based price information systems. Other services include e-extension and mobile payments as an alternative to cash. For instance, the ZNFU 4485 mobile based application provides grain price information in all districts to farmers and traders on a daily basis.

**Warehouse Receipts System**

Farmers can deposit grain into ZAMACE certified warehouses and receive a warehouse receipt which can be used to obtain credit from banks. Five warehouse operators with a total storage capacity of 425,000 metric tonnes have been certified.

Access the full infographic on www.iapri.org.zm
ABOUT IAPRI

Our Vision

“A Zambia free of hunger, malnutrition and poverty through sustainable agricultural transformation”

Our Mission

“To provide evidence-based policy solutions through high quality research and outreach services for the transformation of Zambia’s agricultural sector to achieve sustainable broad-based pro-poor growth”.

In achieving the stated Vision and Mission, our Core Values captured in the acronym; “IDEAS” will guide the conduct of the Board, Management, and Staff of IAPRI:

**OUR CORE VALUES**

**INTEGRITY** in how the Institute conducts itself

**DEDICATION** to achieving the Vision and Mission

**EXCELLENCE** in the quality of work

**ACCOUNTABILITY** in the actions and results delivered

**SENSITIVITY** to the needs of the poor in the agricultural sector

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