Food Security Status Report

Summary

- The rainfall performance across the country was mixed with some parts having good rains, while other areas experienced drought to near-drought conditions. A large part of the Northern and some parts of Eastern Zambia have received well-distributed rains since November 2018. As a result, the crop conditions and prospects for a good harvest in these areas are high. The consumption of a variety of seasonal foodstuffs will further improve as the main harvest commences in May 2019. The improved availability of food will enable most households go through the peak marketing period (May – October 2019) into the beginning of the lean period in November 2019.

- Most parts of the southern half of the country have experienced dry spells since the third dekad of January 2019, resulting in the permanent wilting of the staple crop maize as well as other field crops in several areas. The effects of the dry spell on the maize crop have raised some concerns over this year’s harvest and the overall food availability in the country, and particularly in the southern parts of the country.

- Considering that surplus producing districts such as Kalomo, Choma, Monze have been adversely affected by the dry spells, agricultural commodity supplies to the deficit areas such as Gwembe and Sinazongwe will be drastically reduced. Reduction in agricultural commodity supplies in these chronic food insecure areas will likely worsen food availability. Consequently, there might be calls for larger volumes of relief food sooner than is usual, in this season.

- Typically, rural farm households will sell some of the assets such as livestock to help them cope with livelihood shocks and smoothen consumption. However, the outbreak of Foot and Mouth Disease (FMD) in the Southern Province may inhibit the sale of livestock among rural farm households as the inter-district movement of livestock is restricted. Furthermore, livestock conditions in the southern half of the country are most likely to deteriorate due to reduced water supply and pasture owing to the high temperatures and prolonged dry spells.

- Maize grain prices in provincial centers have risen in both nominal and real terms due to reduced supply and the anticipated shortfall. However, the country still has reasonable stocks of maize, with the new harvest expected in two months. In response to the reduced amount of maize grain in some areas, the Food Reserve Agency (FRA) has started community maize grain sales for ZMW 110 per 50 kg bag.

- Given the continued demand for maize grain and mealie meal on the domestic and regional market, especially from the Democratic Republic of Congo (DRC), prices for maize grain and maize meal are expected to remain above average, especially in deficit markets. The inflow of the early green maize on the market is expected to reduce the reliance on the market for the staples particularly in areas where the season has performed relatively well.

- Continued export restrictions of agricultural commodities such as maize grain and maize meal have the potential to reduce private sector participation as well as the supply response by farmers. Market solutions are urgently needed to unlock the supply of maize grain from the private sector and farmers. The export ban on maize grain and maize meal was reimposed on the 13th of April 2019.

- Repeated occurrences of El Niño episodes especially in the southern part of the country re-echoe the need for irrigation development and market innovations to produce the staple crop outside the normal growing season. Enhanced irrigation development will contribute towards helping mitigate the effects of reduced rainfall in rain-fed surplus producing areas of the country. With predictable and consistent grain marketing policies, commercial farmers can be incentivized to produce the staple crop off-season, under irrigation, thereby reducing the chances of reduced supply of maize grain on the market.
Introduction

The good agricultural output prices during the 2018/2019 marketing season, triggered by the reduced market supply of agricultural commodities, provided an incentive for farmers to increase production especially for maize and soybeans in the current 2018/2019 production season. Some of the farmers interviewed in Kalomo, and Chongwe indicated that the timely roll-out of the Farmer Input Support Programme (FISP) made it possible to access inputs on time, prompting them to increase the area planted in several districts.

Generally, the 2018/2019 rainfall performance has been below normal in the southern parts of the country, with most areas experiencing a late onset of rains. While many areas received rains in December, extended dry spells characterized the January to March period for the southern half of the country. The occurrence of dry spells coupled with high temperatures had resulted in crops reaching a permanent wilting point in many areas raising food security concerns, especially when the government lifted the export restriction on mealie meal. However, as at 1st April 2019, the country had adequate maize grain stocks estimated at 579,198.2 MT, of which 367,059.2 MT is with the Food Reserve Agency (FRA) and the remainder with the private sector. This stock excludes any grain that some rural household may be holding from the previous season. The reported official stocks alone are enough to meet more than four months of the grain demand, while the country is expecting a new harvest in the next two months. Moreover, Zambia has the capability to produce early maize.

Progression of the 2018/2019 Agricultural Production Season

Rainfall

The seasonal forecast released by the Zambia Meteorological Department (ZMD) in September 2018 indicated that the country was likely to receive normal to below normal rainfall, while rains were expected to be established by late November over most parts of the country. The early onset of rains was forecasted for the northeast, extreme western and southern parts of the country. The season was expected to be characterized by intervals of dry spells and the early cessation of rains especially over the southern half of the country.

Almost all areas except the north western parts experienced late (one to two dekads) start of the rainy season as depicted by Figure 1. The extreme parts of the North-Western, Luapula and Northern Province experienced an early onset of rains. Most of the crop planting occurred in December 2018, which was within the optimal planting window. However, from January 2019 to March 2019, the southern half of the country has been receiving below normal rainfall (Figures 2- 4).

The below-normal rainfall and few rain days have resulted in extended dry spells in the Western, Lusaka, parts of Central, Eastern Provinces, and more severely Southern Province. The dry spells have led to the partial and permanent wilting of most crops including maize, beans and soya beans, especially in Southern Province. In Luapula, Northern, Copperbelt, North-Western, Muchinga and the northern parts of Eastern and Central Provinces, which have received good rains, the crop condition remained good at the time of writing this report.

Agricultural Input Supply

At the beginning of the season, primary inputs (e.g., maize seed and fertilizer) were generally adequately available on the market for purchase. Therefore, financially sound farmers had the opportunity to acquire the inputs and plant the desired field crops on time. Field findings indicated that the Direct Input Support (DIS) and e-voucher under the FISP were implemented earlier than usual compared to previous seasons allowing timely redemption of inputs by beneficiary farmers. The timely access to the inputs is reported to have partly contributed to the increase in the area planted in several districts as it was within the optimal planting period for most crops under the programme.

Crop performance

A look at maize production during seasons with and without the El Niño effects shows that the main staple crop is predominantly produced in the Central, Southern, and Eastern Provinces (Figures 5a and 5b). During the 2015/2016 season which was characterized by El Niño episodes, the Central Province contributed about 23 percent of the total production (2,873,052 MT) followed by the Eastern (17 percent) and Southern (16 percent) Provinces, respectively. In the 2016/2017 bumper harvest season, the Eastern Province contributed the highest (24 percent) out of the total production of about 3,606,549 MT. The Central Province came in second with 19 percent and Southern Province third with 18 percent contribution to the total production.
Figure 1: Start of the Season Anomaly
Period: 1st July to 10th December 2018

Figure 2: Rainfall Departure from the Normal
Period: 1st July to 31st January 2019

Figure 3: Rainfall Departure from the Normal
Period: 1st July to 28th February 2019

Figure 4: Rainfall Departure from the Normal
Period: 1st July to 31st March 2019

Source: ZMD (2019)
Among the high producing districts, rainfall performance in the 2018/2019 agricultural production season has been most favorable in Lundazi District, which experienced an early onset of rains. Besides, the district has so far received more rainfall compared to the last four seasons (but within the normal range). For instance, in the third dekad of the March 2019, the Lundazi ZMD weather station recorded an increase in rainfall amounting to 953 mm, which was 16% above the normal amount of 818 mm (ZMD, 2019). Despite the heavy rains experienced in the district in December 2018, there was minimal damage to the maize crop. The heavy rains received caused damage to infrastructure like bridges and flash floods in valley areas sparing those on the plateau. Information gathered from field visits established that there is likely to be an increase in the estimated area planted under maize, soya beans and groundnuts compared to the previous season and the district’s five-year average. Generally, the maize stand in the district for the 2018/2019 season is fair to good with production expected to be slightly better than the 2017/2018 harvest, which was below average.

In Chipata, the rainfall performance was classified as good in terms of amounts and distribution between the third week of November 2018 and February 2019. By the third dekad of February, the amount of rainfall received (1126 mm) increased by 28% compared to the normal rainfall level averaging 878 mm (ZMD, 2019). The district experienced a dry spell from mid-February to early March 2019. For the farmers that planted the maize crop early (in November), it has done well with minimal impact of the dry spell on crop conditions. Compared to the last season when production was below average, the district is likely to record a higher production figure for maize. Tobacco is equally doing well with an increase in output expected. In the neighboring district of Katete, the maize production outlook is positive despite experiencing an extended dry spell in February. The production is expected to be above that of last season, which was below the district’s five-year average, as the area planted is reported to have increased. For the few farmers that planted the crop late, yields are likely to reduce. Petauke District also saw a slight increase in the area planted for maize. The crop stand was re-
ported to be fair due to the negative impact of the extended dry spell during the grain filling stage. Maize production is likely to be below the previous season and the five-year average in Petauke District.

The northern parts of the Central Province experienced an early onset of rains with well-distributed rainfall conducive to good crop development while the southern parts were affected by prolonged dry spells. A visit to Mkushi district confirmed the good crop condition in that district, which had received good rains while the hailstorm experienced did, to some extent, damage some maize leaves. However, the area planted under maize was reported to have slightly reduced, hence the total production is expected to be lower compared to the 2018/2019 harvest for smallholder farmers.

Among the areas that have experienced the prolonged dry spells, Southern Province districts have been the worst hit. The Province has seen the high maize producing districts (i.e., Mazabuka, Monze, Choma, and Kalomo) severely affected by a combination of the late onset, poor distribution of rainfall, and prolonged dry spells. A field visit to Kalomo District revealed the severity of the situation. Most fields visited had maize crops that had reached permanent wilting point during early grain filling stage due to severe water stress. The average rainfall is between 800-1000 mm, but as at the 18th of March 2019, the total cumulative rainfall received was approximately 348 mm and was poorly distributed. A farmer interviewed, compared the situation to that of 1992, a year when the country experienced the worst drought in years. The situation was found to be similar in Choma, Monze, and Mazabuka as well as in Chongwe district—a high producing district in Lusaka Province. By the end of the third dekad in March 2019, Choma recorded the lowest amount of rainfall at 273 mm, and Southern Province as a whole, recorded less than 450 mm. This cumulative amount of rainfall received is the lowest since the 1972/1973 season when the district received 351.9mm (ZMD, 2019). Overall, production prospects have been significantly reduced due to the severe dry spells that have hit the southern half of the country.

Field reports suggest that the impact of the FAW on the maize crop has been minimal with very little replanting required. A combination of good field crop management practices by farmers, chemical control and heavy rainfall in areas that received above average rainfall helped to reduce the pest activity.

**Livestock Conditions**

Some parts of the country have reported the outbreak of the Foot and Mouth Disease (FMD). In January 2019, the first reported case of FMD was at a commercial farm in Chisamba district of the Central Province. Monze district and parts of Gwembe, Pemba and Mazabuka districts of the Southern Province also reported cases of FMD in February. More FMD cases were confirmed, in March, in Lundazi and Vubwi districts of the Eastern Province. As a result, livestock movement has been restricted with ring vaccinations on-going to contain the spread of the disease. The movement restriction means that livestock farmers cannot sell their animals outside the affected districts. This development is likely to have a significant impact on farmers’ income in the Southern Province where the prolonged dry spell has already resulted in crop loss and therefore affecting their ability to cope with the effects of the shock on their livelihood.

With the dry spells experienced, the availability of water has been affected as some dams and streams are reported to have already dried up. Consequently, the pasture condition is poor in livestock rearing areas such as the Southern Province. Livestock farmers were being forced to walk long distances in search of water and pasture for their animals. For those with boreholes, they were fetching water for both human and animal consumption, which is atypical.

**Markets**

The supply of the maize grain on the market, in the southern half of the country, has reduced and is not stable. This status quo has resulted in unusually high levels of maize grain prices compared to the same time last season and the five-year average both for nominal and real prices. The high demand and attractive prices in the early part of the 2018/2019 marketing season led to farmers selling more maize grain than usual. In addition, the anticipated production reduction in the 2018/2019 harvest also supports higher prices. Typically, under the dire situation when maize grain is scarce, farmers in
districts like Kalomo would harvest and sun-dry the new crop at this time of the year, but this has not happened due to the poor crop performance. The inability to harvest and dry the new maize grain has led farmers to purchase mealie meal from the town centers more than usual, an indication of limited maize grain stocks at the household level. Figure 6 shows the highest price recorded in March 2019 in the assessed districts. Kalomo recorded the highest price for maize grain of about 162 ZMW/50 kg bag, followed by 150 ZMW/50 kg bag in Lundazi and Mazabuka. To cushion reduced maize supplies on the market, the Food Reserve Agency (FRA) has been conducting community maize grain sales. The average price per 50 kg bag is 110 ZMW which is lower than the market prices for maize grain in the assessed districts, save for Monze and Petauke districts (Figure 6).

**Conclusion**

The rainfall performance in the southern half of the country has been poor compared to the northern half. For the most part, rainfall in these areas drastically reduced resulting in a dry spell at the critical stages of crop growth (vegetative and grain filling). Some of the effects of the dry spells have been permanent wilting of the maize crop, negatively affecting the expected output. Water and pasture availability for livestock have also been affected as some dams and streams have dried earlier than usual. Moreover, the outbreak of the FMD in the areas like the Southern Province will affect the coping strategies of farmers as they will be unable to sell their animals outside the affected districts, to earn some income. The 2018/2019 agricultural season Crop Forecast Survey (CFS) will provide the full extent and impact of the dry spells on the production and output of the staple food and other crops, especially in the southern parts of the country.

The response to the fall armyworm infestation has been good owing to improved preparedness in terms of chemical distribution and application. Heavy rainfall in the northern half of the country has also played a key role in reducing crop loss through restricting flight of adult moths and washing away of eggs. Therefore, the negative impact of the fall armyworm on crop conditions has been minimal.

The supply of maize grain has generally been lower than usual during this time of the year and has resulted in exceptionally high maize grain prices possibly affecting the purchasing power of consumers. As a result, the FRA has started to conduct community sales in selected districts. The supply of maize grain is most likely to stabilize by June when the new harvest comes on the market, especially in areas where the crop has performed fairly well.

**Recommendations**

The food security situation in areas such as the Southern
January-March, 2019

and Western Provinces will need continuous monitoring following the poor rainfall performance, which has negatively affected crop production as well as livestock conditions in terms of water, and pasture availability. The community sales by FRA should continue and be extended as demand for maize grain arises to increase access to the staple crop. Making the commodity available in affected districts will allow those with adequate purchasing power to access the staple crop from the market. Further, farmers and/or consumers who may be adversely affected by market prices and have no other coping mechanisms can be assisted by targeting them through social safety nets programmes such as social cash transfers and school feeding programmes. These programmes, if carefully implemented, would help broaden the market for maize and other foods, as well as deal with issues of affordability and access without disrupting the market and private sector investments into the sector.

The country needs to continue increasing funding towards irrigation development to facilitate the production of the staple crop outside the normal growing season to counter the effects of El Niño conditions. With predictable and consistent grain marketing policies, commercial farmers can be incentivized to produce early maize to cushion any shortfalls during the hunger season (November 2019—March 2020). Nevertheless, without policy guarantee allowing exports of maize produced under such a programme, large-scale farmers will continue to shun maize production.

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 Government make the right policy decisions in a timely manner.

The Department of Veterinary, as well as livestock farmers within and outside areas affected by the FMD outbreak, should be urged to conduct regular disease surveillance and inspection. Moreover, there is a need to develop climate-sensitive livestock early warning systems for disease outbreaks.

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Main Author

Alefa Banda, IAPRI Research Associate

References


Indaba Agricultural Policy Research Institute
26A Middle way Road | Post Net Box 99 | Kabulonga, Lusaka
Phone: +260 977 771079/81 | Email: info@iapri.org.zm | Website: www.iapri.org.zm