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Report Name: Zambia Grain and Feed

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Report Highlights:

Zambia produced its largest corn crop on record in the 2021/22 MY. This bumper corn crop of 3.6 million tons follows on Zambia's third largest corn crop of 3.4 million tons produced in the 2020/21 MY. As a result, Zambia will have 1.5 million tons of surplus corn available for exports in the 2021/22 MY. However, the regional demand for corn is weaker than usual as most countries in Southern Africa produced above average crops in 2021 on favorable weather conditions. As a result, Post estimates that Zambia's corn exports will be limited to about 700,000 tons and consequently stock levels at the end of the 2021/22 MY will increase by 57 percent to 1.3 million tons.

Executive Summary

Corn is the single most important crop in Zambia. It is widely grown by smallholder farmers and is the national staple food. In the 2021/22 MY, Zambia produced its largest corn crop on record. This bumper corn crop of 3.6 million tons is seven percent larger than the 3.4 million tons of corn produced in 2020/21 MY. Over the past 20 years, Zambia more than doubled corn production through a combination of increased area and productivity, turning the country into a net exporter of corn. Post estimates that Zambia will consume about 2.4 million tons of corn in the 2021/22 MY, leaving excess supplies of corn available for exports to neighboring countries.

However, the regional demand in Southern Africa for corn is weaker than usual as Zimbabwe, Malawi, Tanzania, Mozambique and South Africa also produced above average corn crops in the 2021/22 MY. In fact, South Africa produced its second largest corn crop on record and Zimbabwe produced the largest corn crop since 1984. Hence, Post estimates that Zambia will be limited to about 700,000 tons of corn exports, or less than half of its surplus corn, in the 2021/22 MY. As a result, Zambia's corn ending stocks will increase by 57 percent to 1.3 million tons in the 2021/22 MY.

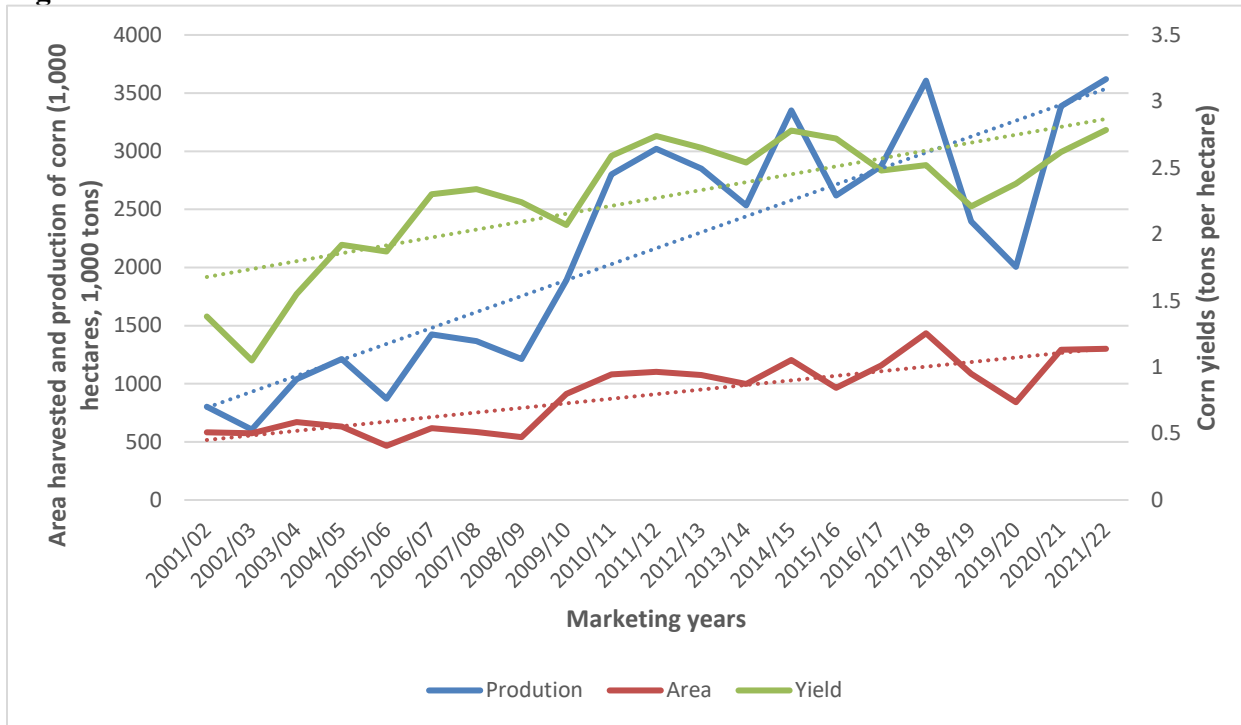
Corn

Production

In the 2021/22 MY, Zambia produced its largest corn crop on record. This bumper corn crop of 3.6 million tons follows on Zambia's third largest corn crop of 3.4 million tons produced in the previous marketing year. Zambia's second largest corn crop was produced in the 2017/18 MY. This means Zambia's three largest corn crops on record were produced in the past five years driven mainly through a combination of increased area and productivity (see Figure 1). Zambia's corn yields almost doubled the past 20 years, mainly due to the availability and adoption of improved production technologies like higher-potential hybrid seeds and fertilizer. However, the cultivation of genetically engineered corn is still prohibited in Zambia.

The government's Farmer Input Support Program (FISP) program also contributed to the increased productivity of smallholder farmers. This input support program was first introduced in 2001 as the Fertilizer Support Program, but was revised and renamed in 2009 to the FISP to reach more smallholder farmers. The FISP supplies government subsidized seed and fertilizer to smallholder farmers to increase efficiencies and food security. Small and medium scale farmers typically produce more than 90 percent of Zambia's total corn crop. The intention of the Zambian government is that the positive trend in corn production continues with farmers ultimately producing in excess of 5.0 million tons of corn annually.

Figure 1: Zambia’s Positive Trend in Corn Production the Past 20 Years



Sources: Zambia’s Ministry of Agriculture; USDA

The 2021/22 MY record crop can also be attributed to favorable weather conditions. Average to above-average rainfall between October and December 2020 resulted in adequate soil moisture levels and enhanced planting operations. Favorable weather conditions continued during the first quarter of 2021 over most of the summer rainfall production region of Zambia, providing conducive growing conditions that positively impacted yields. Although, African Migratory Locusts were reported in the southern and western areas of Zambia after the wet conditions, the outbreak did not have a significant impact on overall corn yields as the Zambian government mobilized resources to take adequate measures to prevent major crop damage.

Table 1 summarizes the area planted, area harvested, production and yield of corn in Zambia for the 2019/20 MY, 2020/21 MY and 2021/22 MY. Almost all of the corn planted in Zambia is white corn and is mainly used for human consumption.

Table 1: Area Planted and Production of Corn in Zambia

Marketing years (MY)	Area planted (1,000 ha)	Area harvested (1,000 ha)	Yield (t/ha)	Prod. (1,000 tons)
2019/20	1,557	842	2.4	2,004
2020/21	1,635	1,291	2.6	3,387
2021/22	1,691	1,300	2.8	3,620

Source: Zambia’s Ministry of Agriculture

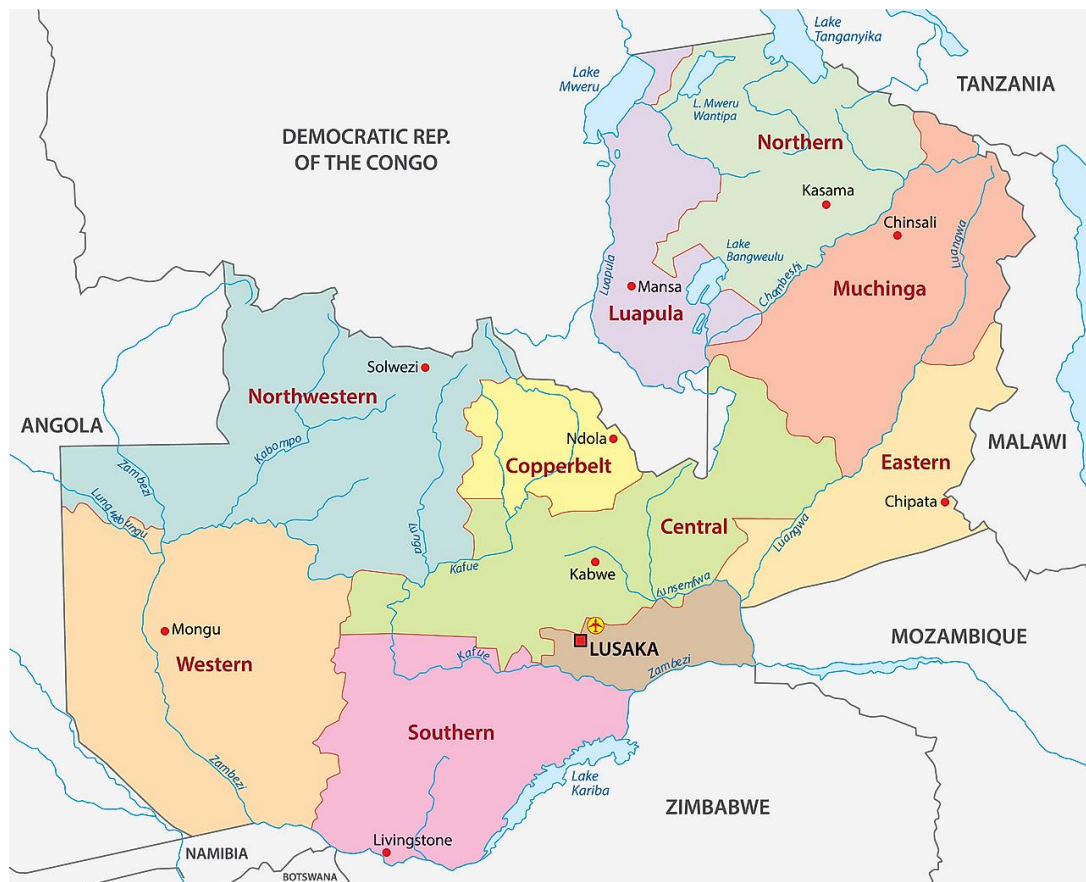
Table 2 specifies the contribution each of Zambia's 10 provinces have made to total area and corn production in the 2019/20 MY, 2020/21 MY and 2021/22 MY (see also Figure 2 for a map of Zambia). Zambia produces corn in all 10 provinces, with the Central, Eastern and Southern provinces contributing more than 50 percent of production. In the 2021/22 MY, the Eastern province was the major producer of corn with 724,000 tons or 20 percent of total corn production. The Southern province contributed more than 20 percent to the total area of corn planted in Zambia and produced the second largest corn crop at 616,000 tons in the 2021/22 MY.

Table 2: The Contribution of Zambia's Provinces to Total Area and Corn Production in the 2019/20 MY, 2020/21 MY and 2021/22 MY

Provinces	2019/20 MY			2020/21 MY			2021/22 MY		
	Area (1,000 ha)	Prod. (1,000 tons)	Yield (t/ha)	Area (1,000 ha)	Prod. (1,000 tons)	Yield (t/ha)	Area (1,000 ha)	Prod. (1,000 tons)	Yield (t/ha)
Central	258	362	1.4	295	664	2.3	272	579	2.1
Copperbelt	90	222	2.5	102	306	3.0	86	217	2.5
Eastern	290	500	1.7	294	614	2.1	318	724	2.3
Luapula	49	121	2.5	70	183	2.6	80	217	2.7
Lusaka	55	35	0.6	57	132	2.3	60	145	2.4
Muchinga	84	240	2.9	114	332	2.9	120	362	3.0
Northern	102	240	2.4	126	330	2.6	141	398	2.8
North Western	80	182	2.3	86	225	2.6	93	253	2.7
Southern	418	79	0.2	360	489	1.4	392	616	1.6
Western	132	23	0.2	131	112	0.9	129	109	0.8
Total	1,557	2,004	1.3	1,635	3,387	2.1	1,691	3,620	2.1

Source: Zambia Statistic Agency

Figure 2: Map of Zambia Indicating the 10 provinces



Source: Worldatlas

Consumption

Corn is the single most important crop in Zambia. It is widely grown by smallholder farmers and is the national staple food in the form of a porridge called “nshima.” Corn provides about 60 percent of the caloric requirements of Zambia’s population of 18.4 million. Other food crops include wheat, sorghum and cassava. Post estimates that Zambia will consume about 1.8 million tons of corn for human consumption in the 2021/22 MY (see also Table 3). Industrial requirements are estimated at about 130,000 tons, while corn for animal feed for the poultry and livestock industries is estimated at around 285,000 tons. Post-harvest losses are estimated at about five percent of production. Thus, Zambia’s total domestic demand for corn in the 2021/22 MY is estimated at 2.4 million tons, five percent higher than the previous season on increased production.

Table 3: The Usage of Corn in Zambia (1,000 tons)

Marketing years (MY)	Food	Animal feed	Industrial	Losses	Other	TOTAL
2019/20	1,655	280	130	100	70	2,235
2020/21	1,675	280	130	170	70	2,325
2021/22	1,760	285	130	180	85	2,440

Source: Post estimates based on information from the Zambia's Ministry of Agriculture

Trade

Zambia has 1.5 million of surplus corn available for export in the 2021/22 MY, after making provision for 500,000 tons of corn stocks as strategic food reserve. The Zambian Food Reserve Agency (FRA) has the mandate to buy at least 500,000 tons of corn annually to keep as a national strategic food reserve. This amount is equal to about three months of domestic consumption. The purpose of the national strategic food reserve is to ensure a reliable supply of designated agricultural commodities for Zambia during shortfalls in the supply as a result of drought, floods, or any other natural disaster.

Zambia, as a landlocked country, usually focuses on other Southern Africa countries for corn exports. However, the regional demand for corn is weaker than usual as Zimbabwe, Malawi, Tanzania, Mozambique and South Africa produced above average corn crops in the 2021/22 MY. In fact, South Africa produced its second largest corn crop on record and should be able to increase corn exports by almost 40 percent to 3.5 million tons. In addition, Zimbabwe produced the largest corn crop since 1984 and announced in May 2021 that it stopped issuing import permits for corn and corn meal to local grain millers. As a result, Zambia will have to explore new markets for its surplus corn. One such market is the Democratic Republic of Congo (DRC). In 2019, Zambia signed a memorandum of understanding with the DRC to export 600,000 tons of corn to that country annually. The agreement aims to deter informal trade flows and promote formalized corn exports to the DRC. Zambia could exploit this agreement in the 2021/22 MY to export surplus corn. The Zambian government also announced that it will export 80,000 tons of corn through the World Food Program in the 2021/22 MY. As a result, Post estimates that Zambia could export about 700,000 tons of its surplus corn in the 2021/22 MY.

Post estimates that Zambia exported about 400,000 tons of corn in the 2020/21 MY, mainly to Zimbabwe, Tanzania and Kenya. Following the onset and progression of the COVID-19 pandemic in 2020, the Zambian Food Reserve Agency (FRA) announced that it would purchase 1.0 million tons of corn in the 2020/21 MY that would have limited the amount of corn available for exports. In September 2020, the Zambia government temporarily banned the exports of corn and corn meal until the country secured 1.0 million tons corn. However, FRA only managed to purchase 350,000 tons of corn in the 2020/21 MY. The low purchases were attributed to the competitive prices, coupled with attractive payment term offered by the private sector. In addition, a relatively depreciated Zambian currency supported higher levels of corn exports. The Zambian kwacha steadily lost value against the United States dollar since early 2020 and depreciated by about 35 percent by the end of the 2020/21 MY (April 2021).

Post estimates that Zambia exported about 100,000 tons of corn in the 2019/20 MY on a drought restricted crop of 2.0 million tons. In March 2019, the Zambian government lifted the export ban of corn and corn products to neighboring countries after it was introduced in October 2018. The decision was met with mixed reactions. Some industry role-players welcomed the decision as it allowed Zambia to take advantage of demand in neighboring countries and earn foreign exchange, while others felt that it affected local food security.

Stocks

Post estimates Zambia's corn ending stocks will increase by 57 percent to 1.3 million tons in the 2021/22 MY on a record crop and limited export opportunities. The Zambian government estimated corn stocks at the end of the 2020/210 MY at 841,000 tons, almost five times larger than the 179,000 tons corn stocks at the end of the 2019/20 MY. Zambia has formal storage capacity in excess of two million tons.

Table 4: The Production, Supply and Demand for Corn in Zambia

Corn Market Begin Year Zambia	2019/2020		2020/2021		2021/2022	
	May-19		May-20		May-21	
	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	842	842	1291	1291	0	1300
Beginning Stocks	495	495	294	179	0	841
Production	2004	2004	3387	3387	0	3620
MY Imports	15	15	20	0	0	0
TY Imports	15	15	20	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	2514	2514	3701	3566	0	4461
MY Exports	100	100	400	400	0	700
TY Exports	100	100	400	400	0	700
Feed and Residual	370	380	450	450	0	465
FSI Consumption	1750	1855	2000	1875	0	1975
Total Consumption	2120	2235	2450	2325	0	2440
Ending Stocks	294	179	851	841	0	1321
Total Distribution	2514	2514	3701	3566	0	4461
Yield	2.38	2.38	2.62	2.62	-	2.78

(1000 HA) ,(1000 MT) ,(MT/HA)

Attachments:

No Attachments.