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# Ethiopia

# **Grain and Feed Annual**

# **Drought Could Impact Corn, Sorghum and Millet Production**

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# **Report Highlights:**

Given the uncertainty over the latest drought's impact in certain parts of the country, production estimates for corn, sorghum, and millet for MY17/18 (Oct-Sep) are being held steady. In contrast, production of wheat and barley, which is largely grown in areas unaffected by the drought, is forecast to increase. Meantime, wheat demand continues to outpace local production, making imports necessary in MY17/18 and beyond.

#### Wheat

#### **Production:**

Post is predicting that wheat production for MY17/18 (Oct-Sep) will increase 200,000 metric tons from the previous year's newly-revised estimate to reach 4.1 million metric tons, which is comparable to predrought production levels. This production estimate assumes, among other things, that there will be adequate rainfall, as is being predicted, in the highlands. Sufficient rainfall is the primary factor influencing the country's production of wheat and other cereals.

Post estimates MY16/17 wheat production at 3.9 million metric tons, which is slightly above USDA's current official estimate for this period and 400,000 metric tons higher than Post's updated production figure for MY15/16. This year-over-year increase was largely attributed to more favorable growing conditions in the main wheat-growing areas of the country.

MY15/16 production is adjusted upward to 3.5 million metric tons, which is slightly above the current official USDA estimate. By comparison, the Ethiopian government reported production for this same period at 4.2 million metric tons, which is nearly the same as the figure they reported in MY14/15 when growing conditions were much better. Taking this into consideration, these production numbers suggest, at least from the Ethiopian government's perspective, that the 15/16 drought had a relatively small impact on the country's wheat production. Post, however, feels the impact was far greater based on our own crop survey assessment and the reported humanitarian food needs that existed in the country at that time.

#### **Consumption:**

Wheat consumption is forecast at 5.3 million metric tons in MY17/18, which is down from the past two years in large part because wheat imports are expected to return to more normal levels as the volume of humanitarian food needs are lower than what they were during the 15/16 drought.

Wheat demand continues to outpace domestic production capacity as evidenced by the need to import. However, consumption is partially held in check in large part because of the government's current import controls and its bread subsidy scheme. Nonetheless, wheat consumption is expected to continue growing. This growth is fueled by rising consumer income, urbanization, and changing diets.

#### **Trade:**

Wheat imports are forecast at 1.2 million metric tons in MY17/18, which is lower than the MY16/17 estimate of 1.5 million metric tons. For MY16/17, Post is currently tracking a little less than 1 million metric tons of contracted and/or delivered wheat cargoes, with more expected in the coming months. This amount includes the government's recent purchase of 400,000 metric tons of imported wheat. The price paid for this imported wheat was about \$225/MT, which is about half the price of locally-grown wheat. See table 1 at the end of this report for major grain prices.

Government-purchased wheat is used for price stabilization (i.e. bread subsidy for urban poor), food assistance, and the replenishment of the country's strategic grain reserve. Historically, nearly all of this wheat has come from the Black Sea region because it is relatively less expensive compared to wheat from other major foreign suppliers.

## Stocks:

Post is forecasting ending stocks at 190,000 metric tons in both MY17/18 and MY16/17, which is about half of the newly-revised estimate for MY15/16. This reduction in stocks is anticipated because of lower import volumes.

The government holds about 60 percent of the country's wheat stocks. The state-run entities holding wheat are the Ethiopia Trading Business Corporation (ETBC), which is the former Ethiopian Grain Trade Enterprise (EGTE), as well as the Strategic Food Reserve Agency (SFRA) and the National Disaster Risk Management Commission (NDRMC). The remainder is held by private mills, farmers, and traders, as well as NGOs.

## **Policy:**

Wheat is considered a strategic grain that is vital to ensure the country's food security. As a consequence, the government seeks to increase national production, with the intent of reducing its dependence on wheat imports. However, from Post's perspective, the demand for wheat is growing faster than the country's production capacity, which for the foreseeable future will make wheat imports a necessity.

The government currently controls wheat imports, with the exception of donor-provided wheat, and also subsidizes a certain portion of the wheat being used to make bread in the major city centers. In the future, the government is expected to gradually withdraw from this subsidy scheme given its growing cost, and gradually open the import market to private players. However, the local millers' ability to secure adequate foreign exchange in a timely fashion will, to a large extent, determine the success of such liberalization.

Wheat	2015/2016 Oct 2015		2016/2	017	2017/20	2017/2018	
Market Begin Year			Oct 20	Oct 2016		Oct 2017	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	1600	1595	1600	1600	0	1610	
Beginning Stocks	491	491	581	391	0	191	
Production	3340	3500	3800	3900	0	4100	
MY Imports	2600	2500	1500	1500	0	1200	
TY Imports	2450	2400	1500	1200	0	1200	
TY Imp. from U.S.	458	458	0	0	0	0	
Total Supply	6431	6491	5881	5791	0	5491	
MY Exports	0	0	0	0	0	0	
TY Exports	0	0	0	0	0	0	
Feed and Residual	250	300	300	300	0	300	
FSI Consumption	5600	5800	5300	5300	0	5000	
Total Consumption	5850	6100	5600	5600	0	5300	
Ending Stocks	581	391	281	191	0	191	
Total Distribution	6431	6491	5881	5791	0	5491	
(1000 HA),(1000 MT)							

#### Corn

#### **Production:**

Post is predicting MY17/18 corn production at 6.5 million metric tons, which is left unchanged from the previous year because the effect of maize lethal necrosis disease (MLND) and the impact of latest drought are unknown at this time. With that said, the drought's impact on the country's overall corn production is expected to be limited since the majority of the country's corn is grown in the western half of Ethiopia, which remains largely unaffected by the current drought.

MY16/17 corn production is expected to reach 6.5 million metric tons, up 200,000 metric tons from the official USDA estimate and about 1.5 million metric tons higher than the previous year. While production is up, it still remains below the pre-drought record of 7.2 million set in MY14/15 in large part because of the residual impact of the 15/16 drought. Meantime, the Ethiopian government has insinuated that the MY16/17 corn crop was a bumper harvest and that an exportable "surplus" exists.

MY15/16 production is kept at a little more than 5 million metric tons. By comparison, the Ethiopian government reported production for this same period at nearly 7.2 million metric tons, which is slightly more than the figure they reported in MY14/15. These production numbers suggest, at least from the Ethiopian government's perspective, that the 15/16 drought had a negligible impact on the country's corn production. Post, however, feels the impact was far greater based on our own crop survey assessment and the reported humanitarian food needs that existed in the country at that time.

In the future, corn production is expected to continue growing, especially with the introduction of improved seed varieties, fertilizer, and irrigation. (Note: other grains would likewise benefit from these technological enhancements.) At some point, as domestic demand increases for other crops, such as soybeans to make cooking oil and livestock feed, these commodities are likely to compete for some of the same acreage that is currently being cultivated in corn.

#### **Consumption:**

Corn consumption in MY16/17 is forecast at about 6.5 million metric tons, up marginally from the previous year in response to growing demand. MY16/17 consumption is raised to 6.3 million metric tons, an increase of 200,000 metric tons over the current USDA official estimate.

Corn has traditionally been used as an important staple food. It is the cheapest of all the major grains produced in the country at roughly half the cost. In recent years with the gradual emergence of cattle fattening and poultry operations, corn has started to be used in greater quantities in livestock feed. More recently, because *teff* is the most expensive grain in the marketplace, consumers have started substituting some of it for corn and rice when making *injera*. Injera is the traditional flatbread consumed at mealtimes in Ethiopia and is commonly made from teff.

## Trade:

The Ethiopian government is exploring the possibility of exporting what they consider to be a "surplus" of corn. Post disagrees that such a surplus exists considering Ethiopia's current humanitarian needs.

Nonetheless, it is possible that some limited volume of exports could occur. For the time being, though, post is holding export figures for MY16/17 and MY17/18 at zero, but will re-visit if exports do in fact materialize. In the meantime, informal exports are common in corn-growing areas near borders with Sudan and South Sudan.

Corn	2015/2016		2016/2017		2017/2018		
Market Begin Year	Oct 2015		Oct 2016		Oct 2017		
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	2150	2150	2200	2200	0	2220	
Beginning Stocks	1150	1150	205	200	0	400	
Production	5050	5050	6300	6500	0	6500	
MY Imports	5	0	0	0	0	0	
TY Imports	5	0	0	0	0	0	
TY Imp. from U.S.	0	0	0	0	0	0	
Total Supply	6205	6200	6505	6700	0	6900	
MY Exports	0	0	0	0	0	0	
TY Exports	0	0	0	0	0	0	
Feed and Residual	400	500	500	600	0	650	
FSI Consumption	5600	5500	5600	5700	0	5800	
Total Consumption	6000	6000	6100	6300	0	6450	
Ending Stocks	205	200	405	400	0	450	
Total Distribution	6205	6200	6505	6700	0	6900	
(1000 HA),(1000 MT)							

#### Sorghum

## **Production:**

Sorghum production is estimated at nearly 3.7 million metric tons in MY17/18, which is left unchanged from the last year's estimate because the impact of the current drought on production is unknown at this time. A sizeable portion of the country's sorghum is grown in drought-affected areas of the country, especially in the lowlands.

For MY16/17, production is held at 3.7 million metric tons, which is unchanged from the current official USDA estimate. Post does not believe additional growth is warranted because of the residual effects from the 15/16 drought.

Sorghum production for MY15/16 remains unchanged at 2.6 million metric tons. In comparison, the Ethiopian government reported production for this same period at 4.3 million metric tons, which nearly matches the figure they reported in MY14/15. These production numbers suggest, at least from the Ethiopian government's perspective, that the 15/16 drought had a negligible impact on the country's sorghum production. Post, however, feels the impact was far greater based on our own crop survey assessment and the reported humanitarian food needs that existed in the country at that time.

Sorghum growers still prefer longer-stocked sorghum varieties since it is more suitable for village home construction, fuel and animal feed. However, these longer varieties require more water than shorter-stocked sorghum and are, therefore, more susceptible to drought damage.

# **Consumption:**

Sorghum consumption is estimated at nearly 3.8 million metric tons in MY17/18, which is up from a little more than 3.6 million metric tons from the previous year. This anticipated increase in consumption is largely driven by consumer substituting *teff* for sorghum in making injera.

About three-quarters of the country's sorghum production is consumed at the household level in the form of injera, homemade beer, as well as animal feed.

## Trade:

Sorghum imports in MY17/18 are estimated at 20,000 metric tons, down from last year by more than half. This anticipated reduction is based on the assumption that international humanitarian resources could run thin in responding to other crises around the world.

Post has previously included informal cross border sorghum trade in our sorghum import estimates. However, owing to the difficulty of accurately calculating this number, Post will now use Ethiopian government trade statistics and trading partner trade data. Meantime, for the last several years, the government has imposed a ban on cereal exports to ensure sufficient domestic supplies were available. As a consequence, formal exports are relatively insignificant.

Taking the above into consideration, Post does not expect sorghum exports in MY17/18. For MY16/17, based on Ethiopia's official trade data, post anticipates a small volume of sorghum exports, totaling 5,000 metric tons, which is lower than the current USDA official estimate of 25,000 metric tons. MY15/16 exports are lowered to zero.

#### Stocks:

Stocks are forecast at 145,000 metric tons in MY17/18, down slightly from Post's newly-revised estimate for MY16/17.

Sorghum	Jhum 2015/2016   et Begin Year Oct 2015		2016/2	017	2017/20	2017/2018	
Market Begin Year			Oct 20	Oct 2016		Oct 2017	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post	
Area Harvested	1500	1500	1800	1800	0	1820	
Beginning Stocks	537	537	52	40	0	175	
Production	2600	2600	3700	3700	0	3700	
MY Imports	40	40	50	50	0	20	
TY Imports	40	40	50	50	0	20	
TY Imp. from U.S.	30	30	0	0	0	0	
Total Supply	3177	3177	3802	3790	0	3895	
MY Exports	25	0	25	5	0	0	
TY Exports	25	0	25	5	0	0	
Feed and Residual	100	137	150	110	0	200	
FSI Consumption	3000	3000	3500	3500	0	3550	
Total Consumption	3100	3137	3650	3610	0	3750	
Ending Stocks	52	40	127	175	0	145	
Total Distribution	3177	3177	3802	3790	0	3895	
(1000 HA),(1000 MT)							

## Barley

#### **Production:**

Post is projecting barley production levels for MY17/18 to stay relatively unchanged from the previous year at a little more than 2 million metric tons. Normal rainfall amounts are expected in barley-growing regions, which is largely isolated mainly the upper highlands of the country.

Meantime, Post is making a slight downward revision to MY15/16 production to 1.9 million metric tons. This figure nearly matches the current Ethiopian government number.

In recent years, barley productivity has improved with the introduction of better seed varieties, a sizeable portion of which is used to grow malting barley to supply the rapidly-expanding brewing industry. Looking ahead, the production of malting barley is expected to increase as beer demand in the country grows.

## **Consumption:**

Barley consumption is expected to grow incrementally over the previous year to just over 2.1 million metric tons in MY17/18. As mentioned, some of this growth is attributed to the brewing industry, as well as rising demand for barley as a snack food and as a feed ingredient for cattle fattening.

About 2 percent of domestic barley production, which is about 35,000 metric tons, is used for making beer at the country's nine breweries. As local malting barley is insufficient to meet brewers' demands, the industry imports sizeable volumes of malt.

## Trade:

Barley imports for MY17/18 are held at 20,000 metric tons, unchanged from Post's updated estimate for the previous year. The MY15/16 import figure is revised upward to 37,000 metric tons based on new trade information.

Meantime, sizeable imports of barley malt (HTS 1107) are required to meet the growing demands of the brewing industry. According to Ethiopian statistics, imports of barley malt reached nearly 300,000 metric tons in CY16, up from 180,000 metric tons the previous year. (Note: barley malt is not included in our import or consumption estimates.)

## Stocks:

Ending barley stocks in MY17/18 are forecast at 125,000 metric tons, down marginally from Post's newly-revised estimate for the previous year. Stocks are primarily held by two malt factories, traders, and smallholder farmers.

Barley	2015/2016 Oct 2015		2016/2	017	2017/2018	
Market Begin Year			Oct 20	Oct 2016		7
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1200	1200	1200	1200	0	1200
Beginning Stocks	210	210	173	170	0	190
Production	1950	1857	2050	2050	0	2070
MY Imports	3	37	25	20	0	20
TY Imports	3	37	25	20	0	20
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	2163	2104	2248	2240	0	2280
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	125	125	125	130	0	135
FSI Consumption	1865	1809	1900	1920	0	2020
Total Consumption	1990	1934	2025	2050	0	2155
Ending Stocks	173	170	223	190	0	125
Total Distribution	2163	2104	2248	2240	0	2280
(1000 HA),(1000 MT)						

#### Millet

#### **Production:**

Millet production for MY17/18 is forecast at 800,000 metric tons, nearly unchanged from the previous year's newly-revised estimate because the impact of the current drought is unknown at this time. The MY16/17 production figure was adjusted upward from the current USDA official estimate to 800,000 metric tons because of better growing conditions during this period.

#### **Consumption:**

Millet consumption for MY17/18 is forecast at 800,000 metric tons in light of the anticipated harvest. Post has made minor revisions to millet consumption figures for MY16/17 to reflect increased production.

Since millet is generally cheaper than teff, some poor families substitute it for millet when making injera. Millet is also used to make traditional homemade alcohol.

#### **Trade:**

There is no formal trade of millet, though informal transactions may occur in border regions.

#### **Stocks:**

Millet ending stocks are insignificant and are nearly all held by farmers.

Millet	2015/2016 Oct 2015		2016/2017 Oct 2016		2017/2018 Oct 2017	
Market Begin Year						
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	360	360	440	440	0	440
Beginning Stocks	89	89	0	15	0	15
Production	385	385	700	800	0	800
MY Imports	0	0	0	0	0	0
TY Imports	0	0	0	0	0	0
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	474	474	700	815	0	815
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	15	15	25	50	0	50
FSI Consumption	459	444	675	750	0	750
Total Consumption	474	459	700	800	0	800
Ending Stocks	0	15	0	15	0	15
Total Distribution	474	474	700	815	0	815
(1000 HA),(1000 MT)						

Table 1: National Average Wholesale Cereal Prices for 2016 (USD/MT) (USD=23ETB)								
Commodities	Teff	Wheat	Barley	Maize	Sorghum	Millet		
Month								
January	715	554	478	327	550	581		
February	718	550	562	322	551	580		
March	716	544	549	315	556	575		
April	715	548	562	316	557	577		
May	832	542	581	320	550	584		
June	871	543	589	318	553	591		
July	771	542	577	320	550	596		
August	780	549	511	263	574	374		
September	801	557	521	257	594	353		
October	863	552	546	257	603	374		
November	847	553	559	272	593	361		
December	730	540	521	265	573	586		
Average Yearly Price	780	548	546	296	567	511		