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Report Highlights:

MY 2020/21 wheat production is forecast to reach a record five million metric tons, while corn is projected to reach 8.6 million metric tons due to government in supplied inputs, good weather and rainfall distribution in grain producing areas. The desert locust invasion remains a potential challenge and we will not know the effects of mitigation measures on production until next year.

Executive Summary

All grains increased yields in MY 2019/20 due to improved government extension work, increased mechanization, favorable weather conditions, timely and adequate rainfall in the western and central highlands. In contrast, rains in the lowlands, especially in the eastern half and southeastern parts of the country were insufficient, resulting in lower than expected production in these areas. The effect of the desert locust infestation on cereals were negligible except in some pocket areas. This is due to eradication efforts made by government, farmers and other local and international partners.

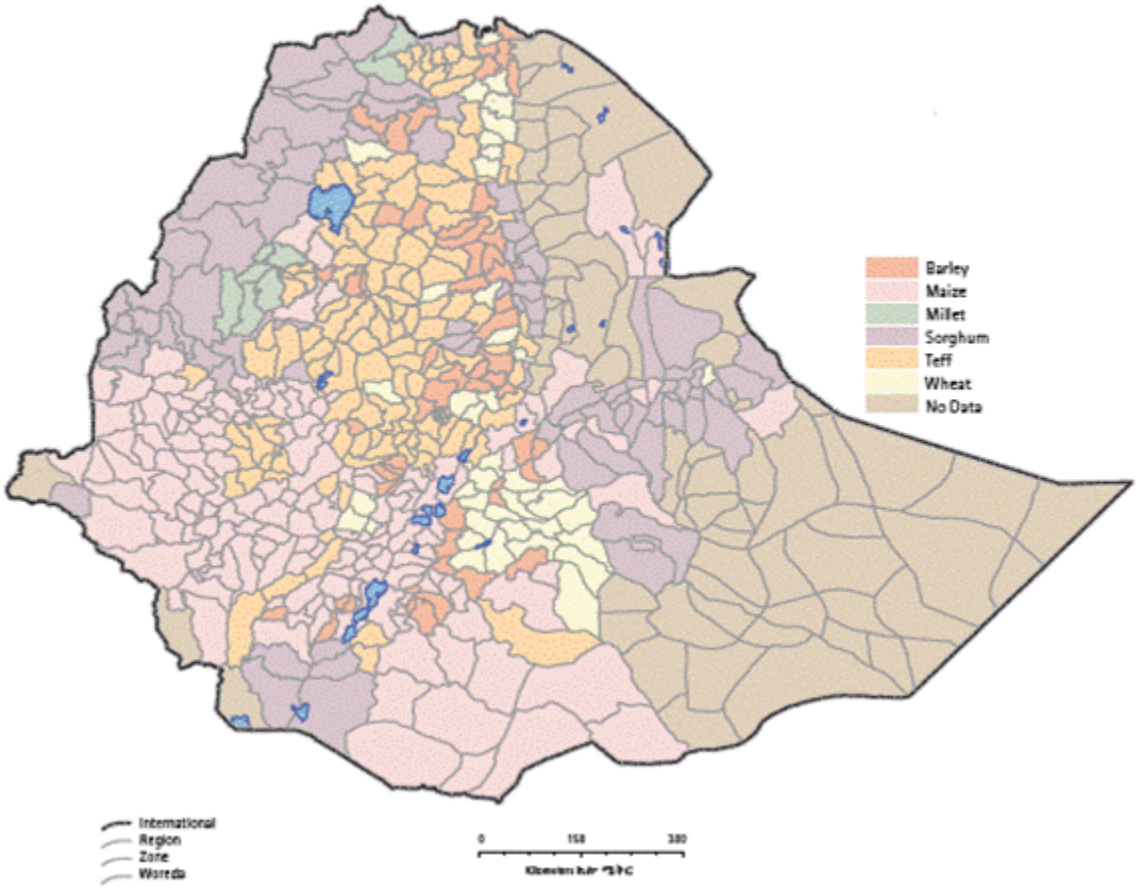
If Ethiopian grain farmers can enjoy the aforementioned conditions they will maintain record production levels into MY2020/21. There is continued governmental investment in improved seeds, fertilizers supply and mechanization support. In addition, after several dry years, the short rainy season in March-April, known as the *Belg*, returned last year and this year. The main factor that will influence agricultural production is the long rainy season June through September, called the *Meher*.

Ethiopia's grain production is complex with many different types of crops grown across the country's different regions and eco-systems. Ethiopian grain crops are categorized as cool weather: *teff* (local small grain); wheat; barley; and warm weather: corn; sorghum; and millet. Most farmers depend on rainfall with a few irrigated plots in the main grain producing areas of the northern and central parts of the country.

The Government of Ethiopia is encouraging local and foreign investors to invest in and cultivate large land plots in pastoralist and semi-pastoralist areas of the country. Nearly all commercial farms, most of which have been in operation for less than six years, are producing crops for industrial and export purposes e.g. soybeans, rice, and cotton. The government has provided low lease prices for land as well as other incentives to local and foreign investors to encourage them to develop commercial farms; however, the performance of most commercial farms has not been satisfactory due to security, infrastructure, and financial challenges.

Please refer to the below map for the distribution of cereal production in Ethiopia.

Map showing the dominant cereal crop growing area in Ethiopia



Source: International Food Policy Research Institute (IFPRI)

The GOE imposed a ban on cereal exports in February 2008. However, it is impossible to enforce and we still see informal cross border trade with neighboring countries. For example, corn is exported to Kenya through the border town of Moyale. Uncertainty about government intervention in grain markets causes risk for private traders so many are reluctant to invest in grain trading. GOE policy reforms such as the devaluation of the domestic currency, development of market institutions, infrastructure and other modernization projects resulted in major changes to the structure of Ethiopian cereal markets over the past few years.

Table: 1 Area and production of Common Cereals in Ethiopia in MY 2019/20

Crop	Area (1000 hectares)	Production (1000MT)
Teff	3200	5800
Corn	2320	8500
Sorghum	1850	5200
Wheat	1800	4925
Barley	1205	2300
Millet	415	1080
Total	10790	27805

Commodities:

Wheat

Production:

Ethiopia wheat production for 2020/21 is projected to come in at a record five million tons, up by two percent over the 2019/20 production estimate. The 2020/21 harvested area is forecasted at 1.85 million hectares. An increase over last year due to rotating irrigated cotton land with wheat and replanting old sugarcane farms in the northern and southern lowlands with wheat. Yield is estimated at a record of 2.76 tons/hectare if we see favorable rainfall throughout the growing season in the wheat belt. Government initiatives that encourage farmers to adopt improved seed varieties, and increase fertilizer distribution have bolstered yields. In Ethiopia, progressive farmers supported by extension agents and enjoying near optimum conditions hope to harvest up to 6.5 t/ha, while the national average yield remains about 2.6 t/ha, showing a 150 per cent yield gap between commercial and subsistence farmers. This situation shows that there is potential to increase wheat production with proper extension support and adequate inputs.

In the marketing year 2019/20 wheat production is estimated to be 4.93 million tons--more than 100,000 MT above the USDA estimate. This achievement is due to minimum disease, few pest challenges, better extension support and good weather condition and enough rain in most parts of the wheat growing belt. Unseasonal heavy rains at harvest time in October and November, coupled with desert locust infestations in eastern Amhara, eastern Oromia and Tigray regions resulted in localized small quantity and quality losses. The Government worked with other partners to control the outbreak and movement of locust in most of the grain producing areas.

Table: 2 wheat area, yield and production (2016/17-2020/21)			
Year	Area (1000ha)	Production(1000MT)	Yield(ton/ha)
2016/17	1600	3900	2.44
2017/18	1600	4200	2.63
2018/19	1750	4700	2.69
2019/20	1800	4925	2.73
2020/21®	1850	5025	2.76

® estimate
Source: FAS/Addis

Production increased steadily between 2016/17-2019/20, while the area remained relatively stable, indicating increased yields due to improved practices, introduction of irrigation and increased support to wheat farmers. Wheat makes up about 18% of the country's total cereal production and is a key crop for food security.

Ethiopia wheat is a cool-weather grain grown at elevations ranging from 1,500 to 3,200 meters above sea level in the southern (i.e., Arsi and Bale) and central (i.e., Shewa and Gojam) highlands. The crop is planted during the main *(meher*) rainy season from June to September and harvested from October through January.

The GOE has an ambitious plan for wheat self-sufficiency by 2023 by tapping into the huge production potential due to its various favorable agro-ecologies and through expansion of wheat production area under irrigation to achieve self-sufficiency and reduce wheat imports. The government has allocated US$5.98 million to establish agricultural machinery rental service centers in grain producing regions to capacitate and increase efficiency of farmers.

Consumption:

FAS/Addis Ababa forecasts wheat consumption in MY 2020/21 to reach to 6.7 million MT, a slight increase over 2019/20 which shows that the upsurge in wheat demand we saw in years past is starting to flatten out. Rapid urbanization and high population growth coupled with a shift in food habits away from traditional foods has resulted in a surge in demand for wheat. Ten to fifteen years ago wheat was not a staple crop in Ethiopia, recently it is becoming important grain especially in the urban and peri-urban areas.

Table: 3 Estimate of wheat consumption (in 1000 MT)

Year	Estimated amount (1000MT)
2016/17	5,697
2017/18	5,950
2018/19	6,557
2019/20	6,670
2020/21®	6,705

®forecast
Source: FAS/Addis

Trade:

Ethiopia grain imports are almost exclusively limited to wheat. Nearly all wheat imports, except wheat donated for food and development aid, is done through the Public Procurement and Property Disposal Service (PPPDS) under Ministry of Finance and includes officials from Ministry of Trade and the Ethiopian Trading and Business Corporation. At this time the GOE is looking to partially liberalize the wheat import market so local millers are beginning to explore opportunities to import wheat directly. For this to happen, the government will need to guarantee enough foreign currency exchange for wheat purchase.

Millers could source wheat from the ETBC (subsidized imported wheat) or from the domestic market, therefore there is a vast disparity in the price of wheat flour. The unsubsidized price is obviously higher and is reported to have increased by about 35 percent over the past three years. Flour supplied to bakeries at the subsidized price has only increased by about 4 percent during the same time. The difference between these flour prices shows the impact of government subsidies on imported wheat. Over the past three years (2016/17-2019/20), Ethiopia imported on average 1.2 million metric tons of wheat commercially (excluding the informal import of significant wheat product) which accounted about 30 percent of the domestic consumption. The wheat imported by the government is to stabilize food prices.

Table: 4 Wheat and wheat product imports by country of origin 2018/19

(1000 MT)

Country of Origin	Quantity (MT)	Value (USD)
Ukraine	304,786	76,215,481
United States ®	286,780	108,182,790
Russia	278,368	79,171,540
Romania	131,027	42,179,115
Bulgaria	91,543	27,675
Turkey	41,009	21,323,819
Egypt	35,986	10,474,089
Serbia	7,710	2,575,622
China	7,434	6,209,410
Other (including the informal import estimate)	315,357	91,453,530
Total	1,500,000	437,813,071

® Food aid only

Policy:

All wheat imports except for food aid are purchased by the Ethiopian Government. Only designated flour mills, mostly in and around Addis Ababa can purchase the subsidized wheat at a discounted rate, then mill the wheat and sell flour at a fixed price to select bakeries in Addis Ababa and surrounding towns. Recently the Government start examining partially liberalizing the wheat import market. To do so would require allocating scarce foreign exchange to private companies.

Stocks

MY2019/20 stocks are estimated at 300,000 metric tons. This estimate is based on late procurement of commercial import of wheat for the subsidy program and for internally displaced people.

Production, Supply, and Demand:

Wheat	2018/2019		2019/2020		2020/2021	
Market Begin Year	Oct 2018		Oct 2019		Oct 2020	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1840	1750	1850	1800	0	1850
Beginning Stocks	737	737	587	380	0	300
Production	4800	4700	4800	4925	0	5025
MY Imports	1300	1500	1700	1665	0	1600
TY Imports	1100	1500	1700	1665	0	1600
TY Imp. from U.S.	252	340	0	300	0	300
Total Supply	6837	6937	7087	6970	0	6925
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	350	375	350	350	0	350
FSI Consumption	5900	6182	6050	6320	0	6355
Total Consumption	6250	6557	6400	6670	0	6705
Ending Stocks	587	380	687	300	0	220
Total Distribution	6837	6937	7087	6970	0	6925
Yield	2.6087	2.6857	2.5946	2.7361	0	2.7162
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Corn

Production:

Corn production for MY 2020/21 is projected to come in at 8.6 million metric tons harvested from 2.34 million hectares.

MY 2019/20 corn production is estimated at 8.5 million metric tons, up by 100,000 metric tons from official USDA estimate. The strong estimate is due to increased inputs good rainfall and minimum pests and diseases.

The expansion and productivity change in Ethiopian corn production can be traced to multiple factors: improved seed; increased demand for food and feed with the expansion of poultry farms, livestock fattening and dairy development and better access to markets for producers.

Corn area and yields in Ethiopia have doubled since the early 1990s, with yields reaching more than 3.5 MT/ha, significantly higher than the East Africa average. This change happened due to improved varieties from research, hybrids seeds especially from Corteva- Pioneer and increased investment in extension systems. This has clearly shown that corn production can be a model for scaling up agricultural production through improved agricultural innovations to achieve food security.

Corn is a strategic food crop grown in 13 agro-ecological zones covering 90% of Ethiopian arable land. Smallholder farmers produce over 95% of total corn and the remaining from commercial farms. Corn

alone constitutes more than 60% of the caloric intake of a typical household. This indicates the clear significance of the crop in the livelihood of most Ethiopians. There is much room for improved yields caused by: shortage of improved seeds, poor agronomic practices, low grain prices, and climate variability. There is a huge potential to increase the existing national average yield level from 3.5 t/ha to 7 t/ha under well-managed farm conditions, improved extension and marketing system.

Corn is the largest cereal commodity in terms of total production and yield and second in terms of area. During the 2019/20 main cropping season, cereal crops accounted for 10.8 million hectares of the total area under crops, of which Corn ranked second to *teff*. Corn is also the most important crop in terms of number of farmers engaged in cultivation.

Consumption:

Corn consumption for MY 2020/21is projected at 8.6 million metric tons due to growing demand for food and feed. MY 2019/20 consumption is estimated at 8.48 million metric tons which is close to USDA official estimate. Corn is the most affordable grain for rural communities and poor urban consumers compared to other cereals. Since food security is the major development challenge in Ethiopia and corn is one of the major food sources for most of the Ethiopian population, it is one of the strategic crops in the national agricultural development plan of the country. Despite the crucial role of corn for feeding the people, it is not yet well exploited at industrial levels. Recently processing industries have emerged to start producing corn oil, snacks, and breakfast cereals. Green corn is cash crop for the farmers before the main harvest.

Trade:

The Government of Ethiopia banned corn exports but still there is informal cross border trade with Kenya. Most farmers sell immediately after the harvest to meet financial obligation like land taxes, to pay for fertilizer bought on credit and other social obligation in the community. Green corn marketing has become a lucrative business to major towns where there are two main types of consumers. The first category is low-income consumers, who often meet their daily food consumption requirements from cheap and ready to eat. This group constitutes the largest portion of the consumers of green corn. The second category of consumers include middle to high income urban dwellers, who often consume green corn as a snack.

Production, Supply, and Demand Data Statistics:

Corn	2018/2019		2019/2020		2020/2021	
Market Begin Year	Oct 2018		Oct 2019		Oct 2020	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	2300	2300	2300	2320	0	2340
Beginning Stocks	970	970	893	750	0	780
Production	8350	8250	8400	8500	0	8600
MY Imports	23	12	3	10	0	5
TY Imports	23	12	3	10	0	5
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	9343	9232	9296	9260	0	9385
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	750	762	800	780	0	825
FSI Consumption	7700	7720	7700	7700	0	7790
Total Consumption	8450	8482	8500	8480	0	8615
Ending Stocks	893	750	796	780	0	770
Total Distribution	9343	9232	9296	9260	0	9385
Yield	3.6304	3.587	3.6522	3.6638	0	3.6752
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities

Sorghum

Production:

Sorghum production for MY 2019/20 is estimated to 5.2 million metric tons, consistent with USDA estimates. This was due to favorable weather condition and proper follow-up of extension agents in sorghum growing areas. Desert locust infestations in eastern Amhara, eastern Oromia and Tigray regions had a relatively small impact on sorghum production according to official figures.

Post predicts MY 2020/21 sorghum production at 5.2 million metric tons which is similar to 19/20 assuming similar weather and agronomic condition in the coming year.

Parasitic and endemic weed called *striga* is still one of the major production constraints for sorghum. The Ethiopia Institute of Agricultural Research (EIAR), under the Ministry of Agriculture, released two *striga*-resistant dwarf varieties of sorghum. However, to date there has been low adoption rate because farmers prefer the longer stalked varieties because of more biomass to use it for fuel, for animal feed and construction. Farmers use fewer inputs like fertilizer, improved seed and pesticides for sorghum compared to other cereals.

Consumption:

Sorghum consumption is estimated at 5.3 million metric tons in MY 2019/20, up by 200,000 million metric tons from the USDA official estimate. The higher consumption is driven by consumers

substituting sorghum for *teff* in *injera* as *teff* is increasingly expensive. Almost 75 percent of the country's sorghum production is consumed at the household level in the form of *injera*, homemade alcohol, and animal feed.

Trade:

Sorghum imports in MY 2019/20 were 18,000 metric tons for internally displaced people and feeding programs. There is some informal trade with Somalia, and in production areas that share a border with Sudan. Farmers along the border prefer to export sorghum to avoid transport cost to the central part of the country as the export price is higher than the Addis Ababa price.

Stocks:

Sorghum stocks in MY 2019/20 are estimated at 510,000 metric tons down slightly from USDA estimate. Most farmers sell in order to minimize post-harvest loses and storage challenges.

Production, Supply, and Demand:

Sorghum	2018/2019		2019/2020		2020/2021	
Market Begin Year	Oct 2018		Oct 2019		Oct 2020	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1900	1840	1900	1850	0	1850
Beginning Stocks	670	670	665	645	0	555
Production	5150	5132	5200	5200	0	5200
MY Imports	20	65	20	20	0	10
TY Imports	20	65	20	20	0	10
TY Imp. from U.S.	6	10	0	10	0	0
Total Supply	5840	5867	5885	5865	0	5765
MY Exports	75	22	75	10	0	10
TY Exports	75	22	75	10	0	10
Feed and Residual	200	200	200	200	0	200
FSI Consumption	4900	5000	4900	5100	0	5110
Total Consumption	5100	5200	5100	5300	0	5310
Ending Stocks	665	645	710	555	0	445
Total Distribution	5840	5867	5885	5865	0	5765
Yield	2.7105	2.7891	2.7368	2.8108	0	2.8108
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Barley

Production:

Post projected barley production in 2020/21 to be 2.35 million metric tons, based on malt barley requirement for newly constructed breweries. In MY 2019/20 barley production is estimated to be 2.3 million metric tons in line with the USDA estimate. Ethiopians use barely for food, malting and feed. Ethiopia produces 85-90 percent of barley for food and 10-15 percent for malting.

Recently, there has been an increase in demand for malt barley with the construction several new malt factories. Most farmers often don't use modern agronomic practices when growing barley. The Agricultural Transformation Agency (ATA) together with Ministry of Agriculture are trying to support malt barley production through improved seed supply sourced from the Ethiopia Institute of Agricultural Research.

Total production has been increasing steadily over the past decade driven by increased yields. Barley production consistently falls far behind other major cereals. The average annual production of barley over the last decade is estimated at 2 million tons, which is less than half of other major cereals.

Consumption:

Barley consumption for MY 2020/21 is projected to be 2.35 million metric tons due to better production and availability on the market both for food and for malt. In MY 2019/20 barley consumption came in at 2.3 million metric tons which similar to official USDA estimate.

Traditionally barley is used for making local recipes and drinks and other types of food. Its straw is a good source of animal feed, and it is also used for roof thatch. There are two types of barley that farmers grow in Ethiopia: food barley and malt barley. Most of the barley that farmers grow is food barley and it is the main ingredient for several staple dishes such as *injera*, porridge, and bread. Roasted barley is a popular snack.

Trade:

MY 2020/21 barley imports forecasted at 20,000 metric tons due to high demand for malt barley. MY 2019/20 barley import is estimated to be 18,000 metric tons malt barley from Europe. The Ethiopian beer industry will import malt barley until the local production satisfies demand.

Stocks:

In MY 2019/20 stocks are estimated at 116,000 metric tons out of which 45 percent are malt barley. The remaining 55 percent of the barley stocks are destined for the food market.

Production, Supply, and Demand:

Barley	2018/2019		2019/2020		2020/2021	
Market Begin Year	Oct 2018		Oct 2019		Oct 2020	
Ethiopia	USDA	New Post	USDA	New Post	USDA	New Post

	Official		Official		Official	
Area Harvested	1000	1205	1000	1205	0	1210
Beginning Stocks	116	116	104	106	0	116
Production	2200	2200	2300	2300	0	2350
MY Imports	13	10	20	18	0	20
TY Imports	13	10	20	18	0	20
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	2329	2326	2424	2424	0	2486
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	125	120	125	100	0	50
FSI Consumption	2100	2100	2200	2208	0	2300
Total Consumption	2225	2220	2325	2308	0	2350
Ending Stocks	104	106	99	116	0	136
Total Distribution	2329	2326	2424	2424	0	2486
Yield	2.2	1.8257	2.3	1.9087	0	1.9421
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodity

Millet/Finger Millet:

Production:

Millet production for MY 2020/21 is projected to one million metric tons which is close to newly revised production estimate of MY 2019/20 with the assumption that we will see similar rainfall in the coming season. The MY 2019/20 production estimated to be 1.08 million metrics tons, just under the USDA official estimate of 1.1 million metric tons. The increase in production is due to optimal rainfall distribution in the past two years and minimal pest and disease infestation. Farmers tend to use relatively fewer inputs and plant the millet on marginal land.

Consumption:

MY 2019/20 millet consumption is revised to 1.08 million metric tons due to lower price compared to other cereals in the local market. Consumption for 2020/21 is projected to be 1.05 million metric tons, close to 2019/20 consumption. In the rural low-income households, most families substitute less expensive millet for *teff* and wheat to make local bread and *injera*. Millet is also used in homemade drinks and for animal feed.

Trade:

There is no formal export and import of millet in Ethiopia. There is, however, negligible amount of informal trade along the Sudanese boarder.

Stocks: stocks are negligible.

Production, Supply, and Demand:

Millet	2018/2019		2019/2020		2020/2021	
Market Begin Year	Oct 2018		Oct 2019		Oct 2020	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	450	420	450	410	0	415
Beginning Stocks	0	0	0	25	0	25
Production	1000	810	1100	1080	0	1050
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	1000	810	1100	1105	0	1075
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	25	25	25	30	0	30
FSI Consumption	975	760	1075	1050	0	1020
Total Consumption	1000	785	1100	1080	0	1050
Ending Stocks	0	25	0	25	0	25
Total Distribution	1000	810	1100	1105	0	1075
Yield	2.2222	1.9286	2.4444	2.6341	0	2.5301
(1000 HA) ,(1000 MT) ,(MT/HA)						

Attachments:

No Attachments