USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

Required Report - public distribution

Date: 3/29/2019
GAIN Report Number: ET1903

Ethiopia

Grain and Feed Annual

Grain and Feed Annual Report

Approved By:
Rachel Bickford

Prepared By:
FAS staff

Report Highlights:

Ethiopian wheat production for 2019/20 will reach a projected 4.6 million metric tons. This increase is in part due to a new governmental initiative to make the country wheat self-sufficient through supplying required inputs, development of irrigation schemes, promoting mechanization and extension support in semi-arid areas of the country. The wheat production estimate for 2018/19 reached 4.5 million metric tons which is similar to the official USDA estimate. This is mainly due to good weather conditions, improved input supply, few pests, and lower disease pressure. Most of the farmers in wheat growing belts started using mechanized farming systems, especially during harvest. In the past the country has usually imported 30-35 percent of the domestic wheat demand with no significant volumes of grain exports due to official export restriction on grains.

Executive Summary:

The MY 19/20 projection for grain production reflects that the estimated production volume is at a record level due to several factors. The Government of Ethiopia (GOE) focused more on food security programs; there was favorable rainfall distribution during the short *(belg)* and the long rainy seasons *(meher)*, better input supply, and availability of farm machines for rent for small scale farmers.

All grain production increased in MY 2018/19 due to sufficient rainfall distribution and low disease and pest infestation (including fall army warm) in main grain producing areas. Early rainfall cessation was observed in some semi-arid and arid parts of the grain producing areas resulting in a small reduction of production.

Grains are an essential part of the daily diet of Ethiopians. They provide an average of 50 percent of the daily caloric intake of the population. Most grains are for human consumption with a small portion going to livestock, especially the defective grains.

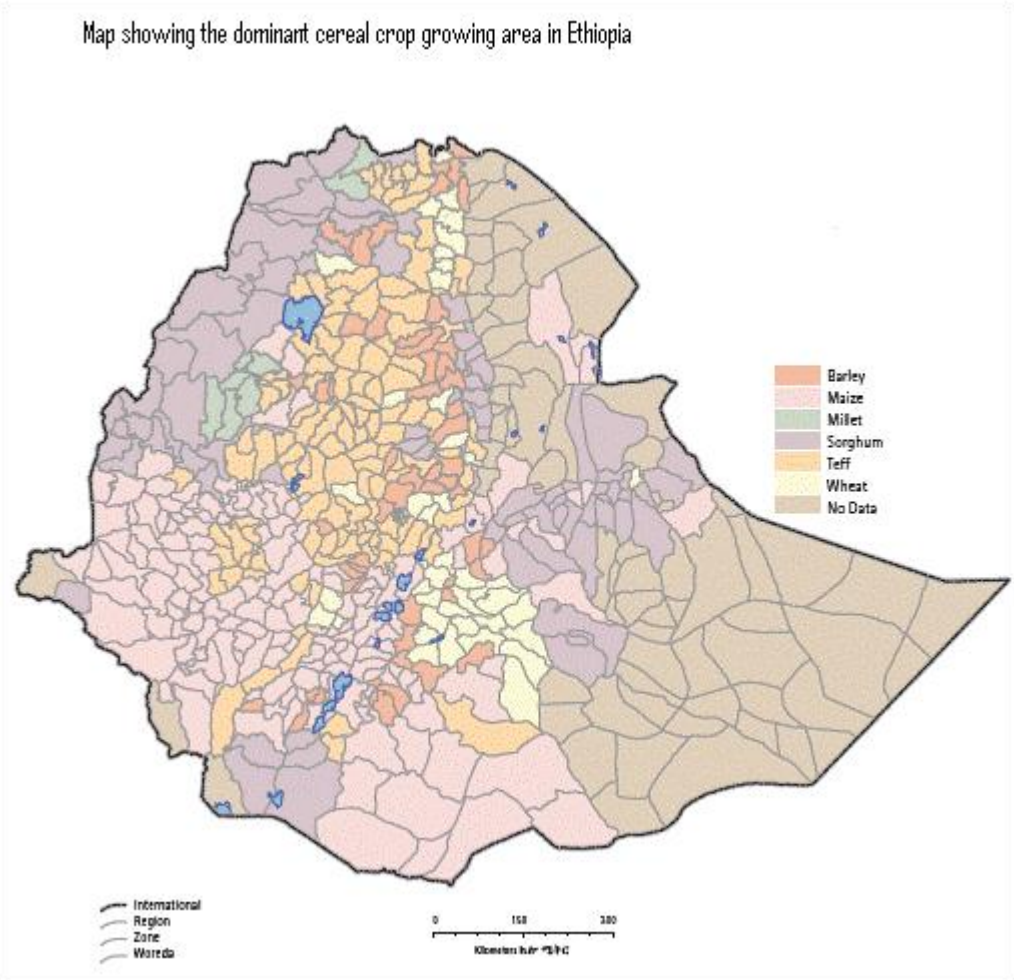
The GOE still maintains the grain export ban, though some informal trade is occurring in grain producing areas located along the borders, depending on the production situation of the neighboring countries. Grain imports are exclusively limited to wheat. The Ministry of Trade and industry, Ethiopian Trading and Business Corporation (ETBC) and Public Procurement and Property Disposal Service (PPPDS) controls wheat imports, except food aid, and oversees bread subsidy schemes. Only designated flour mills, mostly in and around the capital city can buy the subsidized wheat from the government at a discounted price, mill the wheat, and then sell flour at a fixed price to selected bakeries in Addis Ababa and surrounding towns.

Table: 1 Retail Prices of Cereals in Addis Ababa for CY 2018 (USD/MT)

Commodities / **Month**	***Teff***	**Wheat**	**Barley**	**Maize**	**Sorghum**	**Millet**
January	724	482	628	370	483	610
February	758	484	620	395	485	615
March	758	480	632	400	492	618
April	827	516	635	415	502	620
May	830	522	640	420	495	625
June	827	530	585	448	498	632
July	758	550	600	450	490	635
August	776	558	585	452	515	638
September	786	635	658	448	542	652
October	779	648	665	415	542	635
November	786	660	668	410	545	642
December	793	670	668	412	558	645

Table: 2 Area and production of common cereals in Ethiopia for MY18/19(Oct-Sep)

Crop	Area (1,000 Hectares)	Production (1,000 MT)
Corn	2320	7300
Teff	3500	5450
Sorghum	1840	4200
Wheat	1660	4600
Barley	1205	2200
Millet	420	810
Total	**10945**	**24560**



Source: International Food Police Research Institute (IFPRI)

Commodities:

Wheat

Production:

FAS Addis forecasts MY 2019/20 wheat production at 4.6 million metric tons. This increase can be attributed, in part, to new government initiatives to become wheat self-sufficient using improved farm inputs and mechanization in the years to come. The above estimate assumes good weather conditions, less pest and disease pressure, better availability of agricultural inputs, and more youth involvement in wheat production. Yield and total area planted projected in MY 2019/20 to be 2.77 tons/ha and 1.66 million hectares respectively. While an increase, this level of production still does not meet domestic needs.

In the MY 2018/19 optimal rainfall and reduced disease and pest pressures resulted in better yields with a production estimate of nearly 4.5 million tons. In 2018/19, almost 1.65 million hectares were dedicated to wheat cultivation. Yields are close to 2.7 tons per hectare.

Ethiopia is among the top three wheat producers in Africa. Wheat accounts for about 20 percent of the nation's total cereal production. More than 90 percent of Ethiopia's wheat production is grown on small farms without irrigation, most of which are in the highlands. Out of the total wheat production, 75-80 percent is hard red wheat used to make bread and durum makes up roughly 10-15 percent. There are approximately 4.7 million small-scale wheat farmers in Ethiopia, which accounts for about 95 percent of wheat production and large-scale commercial farms account for only 5 percent of the total production.

The Ministry of Agriculture and Livestock/Ethiopian Institute of Agricultural Research (EIAR), Agricultural Transformation Agency with other international partners like the International Maize and Wheat Improvement Center (CIMMYT) are working together to address wheat rust challenges through replacement of the existing seed with rust resistant wheat cultivars.

Given the importance of wheat for food security as well as its increasing import burden, the Government of Ethiopia gives high priority to increased wheat production and productivity. Most economist comments on the government's wheat subsidy program are on the marketing risks to the farmers during importing period. The wheat subsidy also does not target poor consumers only.

Consumption:

MY 2019/20 wheat consumption is estimated at 6.3 million metric tons up roughly due to food aid requirement for more than eight million people in the country. The demand for wheat increases as incomes rise and has grown significantly over the last decade. In order to close the gap between demand and supply of wheat, the government has been continuously importing wheat from the black sea region for the last several years.

There are more than 600 small and large flour mills in Ethiopia, with a total production capacity of about 4.2 million tons of wheat flour a year. One third of these mills are located in and around Addis

Ababa. Mills are able to obtain wheat through two channels: subsidized government wheat and domestic wheat on the open market, whose price is higher than the subsidized import price.

Wheat is used to make important traditional staple foods like local bread, porridge *(genfo)*, local beer *(tela)*, roasted grain *(Kolo)* boiled grain *(nifro)*, pasta, and different confectionary products.

The government subsidizes wheat imports and sells to contracted large flour millers who sell flour to bakeries at fixed prices. The goal is to make bread more affordable for the poor at a capped price. One of the limitations in the subsidy process is that all consumers, not just the poor, benefits from the system as anyone can buy the subsidized bread. Subsidized imported wheat meets the needs of 25-35 percent of the population. Most millers operate at 50 percent below designed capacity primarily because of reduced supply of subsidized wheat from the government and frequent electric power interruptions.

Trade:

One of the major challenges in wheat marketing is lack of transparency on wheat pricing among the value chain from the farmers up to processers. In addition, prices are not announced to wheat value chain actors. Farmers have very little market information on the central wheat market in Addis Ababa.

At the time of organizing this report, the price of wheat was USD 480 per ton on the open market of Addis Ababa, which is significantly higher than the subsidized wheat price of USD 252 per/ton.

Table: 3 Major wheat and wheat products imports by country of origin in MY 2017/18.

(1000 MT)

Country of Origin	**MY 2017/18**
Romania	404180
United States *	270089
Russian Federation	143695
Ukraine	173134
Bulgaria	45730
Others (including the informal import estimate)	558902
Total	1,550,000

* Food aid only

Stocks:

Ending stocks for MY 2019/20 are forecast at 200,000 metric tons. This forecast is based on the food aid wheat import requirement of the country including for internally displaced people, and the assumption for better production in the coming growing season. MY 2018/19 wheat stocks are estimated at 256,000 metric tons taking into consideration the late procurements and arrival of wheat imports at the end of this MY.

Out of the total stocks, the Emergency Food Security Reserve Administration (EFSRA) is estimated to have 50-60 percent of the total wheat stocks. During times of humanitarian crises due to manmade or natural disasters, relief agencies, government social programs, and price stabilization programs can borrow from EFSRA and replace the grain during pre-agreed time frame.

Policy:

The Government of Ethiopia (GOE) still controls all wheat imports which it distributes to large millers to sell subsidized flour to bakeries. It is argued that subsidized wheat has been creating disincentives to local traders due to lower price of subsidized wheat compared to the local wheat market price. The GOE has not published any policy regarding how much longer and to what extent it will continue the subsidy.

Production, Supply and Demand Data Statistics:

Wheat	2017/2018		2018/2019		2019/2020	
Market Begin Year	Oct 2017		Oct 2018		Oct 2019	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1700	1600	1700	1650	0	1660
Beginning Stocks	856	856	346	256	0	256
Production	4500	4300	4500	4500	0	4600
MY Imports	1190	1550	1600	1500	0	1600
TY Imports	1360	1600	1600	1500	0	1600
TY Imp. from U.S.	316	270	0	340	0	300
Total Supply	6546	6706	6446	6256	0	6456
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	400	500	400	300	0	306
FSI Consumption	5800	5950	5800	5700	0	5950
Total Consumption	6200	6450	6200	6000	0	6256
Ending Stocks	346	256	246	256	0	200
Total Distribution	6546	6706	6446	6256	0	6456
Yield	2.6471	2.6875	2.6471	2.7273	0	2.7711
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Corn

Production:

Corn plays a significant role in the overall economy and food security as approximately nine-million small land holders are involved in corn production.

Post forecasts MY 2019/20 corn production at 7.3 million metric tons harvested from 2.32 million hectares taking into consideration the timely onset of the *belg* rain and better availability of improved seed supply. Farmers have better access to hybrid corn seed than in the past compared to other grains. MY 2019/20 corn yields are projected to come in at 3.2 metric tons per hectare.

MY 2018/19 corn production is estimated at 7.25 million metric tons, up by 150,000 metric tons from both official USDA and post estimate. This increase is due to better use of inputs, good weather conditions and minimum infestation of fall army worm in MY 2018/19. Commercial farms (5-8% of the total corn farms) using hybrid seed varieties have experienced better yield than small landholder farmers below one hectare. However, yields gains for commercial farms contribute very little to boost the national average.

Corn demand for animal feed is also increasing, especially for poultry feed. This has demonstrated the need for further strengthening of the research, extension and input supply systems through increased investment in generating new technology like biotechnology, recognition of outstanding researchers, and increasing competitiveness in the delivery of quality seed, complementary inputs and services to farmers.

The government owned Ethiopia Seed Enterprise and regional owned companies are the major corn seed suppliers. The role of private seed companies has been limited due to limited technical capacity, lack of land and capital, inadequate access to breeder seed, and less competitive seed price fixed by the government.

Consumption:

MY 2019/20 corn consumption is projected at 7.3 million metric tons. Increased production drove the market price to a reasonable level and corn became more affordable for rural communities and poor urban consumers compared to other cereals. Millers used corn both separately as well as in mixed flour with other more expensive cereals like *teff* and wheat. Poultry producers are also demanding more corn compared to other cereals.

MY 2018/19 corn consumption is estimated at nearly 7.2 million metric tons which is more than both USDA and post estimate. The upward estimate is due to increased availability of corn, price rise of other crops on market and increased demand for animal feed especially for poultry production.

Approximately 90 percent of corn produced in Ethiopia goes for food, both as green and dry cereal. Corn for industrial use has also contributed to the growing demand. Very little corn is currently used as feed but this is changing gradually in order to support rapidly growing urbanization and livestock industry.

Trade:

The GOE banned corn exports in 2008, lifted the ban in 2010, re-imposed it in 2011 and lifted it for a short period in 2017 for one export company only. Based on official trade statistic this company exported 62,000 MT to Kenya and the governments re-imposed the ban, still in effect today. Despite the ban, there is still informal cross border trade. Most farmers sell immediately after the harvest to meet different financial obligations, which are usually due right after the harvest like property taxes and fertilizer bought on credit. This also helps to minimize postharvest losses, which account for more than 10 percent of the total production volume. In 2018/19 there is little corn import based on the data from Ethiopia Revenue and Custom Authority.

Production, Supply and Demand Data Statistics:

Corn	2017/2018		2018/2019		2019/2020	
Market Begin Year	Oct 2017		Oct 2018		Oct 2019	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	2230	2230	2250	2300	0	2320
Beginning Stocks	738	738	691	727	0	770
Production	7000	7000	7100	7250	0	7300
MY Imports	3	24	3	18	0	20
TY Imports	3	24	3	18	0	20
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	7741	7762	7794	7995	0	8090
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	550	750	550	725	0	780
FSI Consumption	6500	6285	6500	6500	0	6525
Total Consumption	7050	7035	7050	7225	0	7305
Ending Stocks	691	727	744	770	0	785
Total Distribution	7741	7762	7794	7995	0	8090
Yield	3.139	3.139	3.1556	3.1522	0	3.1466
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Sorghum

Production:

Post projected MY 19/20 sorghum production to be 4.3 million metric tons on 1,850 million hectare of land. Thanks to the timely start of *belg r*ain (short rainy season) which will be good for land preparation of long season crops like sorghum. It is also expected that there will be sufficient inputs including improved seed supply and increased rental tractor service.

Sorghum production in MY 18/19 is estimated to be 4.2 million metric tons which is 100,000 and 200,000 metric tons above USDA and post estimate respectively. This due to better input supply better tractor rental service in the eastern part of the country, favorable weather condition and minimum pest and diseases infestation.

One of the major challenges in sorghum production in Ethiopia is the endemic weed *striga*. The EIAR is struggling to address this challenge. EIAR released two dwarf *striga*-resistant varieties of sorghum.

Each year 4.8 million resource-poor smallholder farmers cultivate sorghum, typically under adverse conditions in the eastern and northwest parts of the country where the weather is dry with poor fertility and high soil degradation. Farmers normally use fewer inputs for sorghum compared to other crops. Despite the availability of some improved varieties, most farmers prefer to use the local varieties because the local varieties offer more biomass for fodder and fuel compared to the improved varieties.

Consumption:

Sorghum consumption for MY 2019/20 is projected to be 4.3 million metric tons due to better availability on the market and lower market price compared to wheat and *teff*.

In MY 2018/19 revised sorghum consumption came in at 4.2 million metric tons, an increase of roughly 100,000 metric tons above post and USDA official estimate. This increase is due to the relative increase of wheat price and better availability of sorghum on market.

Sorghum accounts for an average 10 percent of daily caloric intake of households living in the eastern and northwest areas of the country. About three-quarters of the sorghum grain in Ethiopia is used for making *injera* (the traditional bread). Another 20 percent goes to feed and local beer production, with the remainder held for seed. The entire plant is utilized; stalks for cooking (as firewood) and construction of houses while leaves are used as animal fodder.

Trade:

Sorghum imports in MY 2019/20 are forecasted to be 20,000 metric tons as the country will require more food for internally displaced people due to political unrest. MY18/19 imports are estimated at 20,000 MT.

Informal cross border trade occurs in eastern parts of the country with Somalia, and in the northwestern part of the country that shares a border with Sudan, depending on production between countries. Given the distance from these regions to Addis Ababa, local farmers along the border prefer to export sorghum to neighboring countries to avoid transport cost to the capital, especially when the border price is high compared to the domestic market.

Production, Supply and Demand Data Statistics:

Sorghum	2017/2018		2018/2019		2019/2020	
Market Begin Year	Oct 2017		Oct 2018		Oct 2019	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1820	1820	1820	1840	0	1850
Beginning Stocks	569	569	350	238	0	236
Production	4050	4010	4100	4200	0	4300
MY Imports	6	19	20	20	0	20
TY Imports	6	19	20	20	0	20
TY Imp. from U.S.	5	10	0	10	0	10
Total Supply	4625	4598	4470	4458	0	4556
MY Exports	75	10	75	22	0	10
TY Exports	75	10	75	22	0	10
Feed and Residual	200	250	200	200	0	200
FSI Consumption	4000	4100	3900	4000	0	4100
Total Consumption	4200	4350	4100	4200	0	4300
Ending Stocks	350	238	295	236	0	246
Total Distribution	4625	4598	4470	4458	0	4556
Yield	2.2253	2.2033	2.2527	2.2826	0	2.3243
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Barley

Production:

Barley production for MY 2019/20 is projected to come in at 2.3 million metric tons. This increase is in response to growing demand of malt barley for a newly constructed beer factory. Two of the world's largest breweries, Heineken and Diageo, are working with farmers to produce malt barley for their industries.

In MY 2018/19 barley production trended slightly upward to 2.2 million metric tons from USDA official and post estimate. This is due to increased yields due to distribution of improved seed from Ethiopia Institute of Agricultural Research.

The Agricultural Transformation Agency (ATA) provides support to the barley value chain by organizing out-grower farmers and linking them with the beer factories. The agency established linkages among government agencies at both federal regional levels as well as providing input on specific agricultural information needs. The Ethiopian Institute of Agricultural Research contributed with research, knowledge and experience on improved barley varieties for the specific agro-ecological situation.

Consumption:

MY 2019/20 barley consumption is forecasted at 2.3 million metric tons taking into consideration the future needs of the beer factories and assumption of good growing conditions.

MY 2018/19 barley consumption revised slight upward to 2.2 million metric tons which is close to both USDA official and post estimate. This increase is due to better production from favorable weather conditions on the high lands of Ethiopia.

Farmers usually replace barley with wheat when wheat prices are high. Barley has supplied the necessities of life like food, feed, local beverages and roof thatch for people in the highlands for hundreds of years. Many Ethiopian households use roasted barley as snack and it is considered the king of grains in much of the country.

Trade:

MY 2019/20 barley imports are forecast at 10,000 metric tons, unchanged from previous year's newly-revised estimate. MY 2018/19 is estimated to maintain 10,000 metric tons due to limited supply of hard currency to import barley.

The Ethiopian beer industry continues to import malt barley, most of which is from Belgium. In the future, the volume of imports is expected to diminish as the country's capacity to produce malt barley increases.

Stocks:

Barley stocks in 2019/20 projected to 90,000 metric tons out of which 40-50 percent of the barley stocks are estimated to be malt barley. Small land holder farmers and local traders control the remaining barley stocks.

Production, Supply and Demand Data Statistics:

Barley	2017/2018		2018/2019		2019/2020	
Market Begin Year	Oct 2017		Oct 2018		Oct 2019	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1200	1200	1200	1205	0	1210

Beginning Stocks	288	288	333	90	0	80
Production	2100	2100	2170	2200	0	2300
MY Imports	20	7	20	10	0	10
TY Imports	20	7	20	10	0	10
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	2408	2395	2523	2300	0	2390
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	125	120	125	120	0	100
FSI Consumption	1950	2185	2000	2100	0	2200
Total Consumption	2075	2305	2125	2220	0	2300
Ending Stocks	333	90	398	80	0	90
Total Distribution	2408	2395	2523	2300	0	2390
Yield	1.75	1.75	1.8083	1.8257	0	1.9008
(1000 HA) ,(1000 MT) ,(MT/HA)						

Commodities:

Millet

Production:

Millet production for MY 2019/20 is projected to approximately 805,000 metric tons due to expected favorable weather condition in the semi-arid and arid parts of the country. Production in MY 2018/19 is estimated to be similar to USDA official estimate which is 810,000 metric tons. The low production data shows that there is little support from researchers and other stockholders to improve production through the provision of improved input supply to the millet farmers. Post's data is based on the information from the millet growing regions.

Millet production accounts for only 3-4 percent of the total area devoted to cereal production. Farmers prefer to grow other grains as the price of millet is so low relative to other grains and the fact that it is a more labor intensive crop. Further, the yields for millet are quite low since farmers tend to use relatively low inputs and plant millet in less fertile, marginal areas.

Consumption:

MY 2018/19 millet consumption estimate is close to both USDA official and post estimate. Millet in Ethiopia is used for malt in the making of local beer called *tela* and distilled liquor known as *areki* (local gin). It is also widely used as a food cereal, especially during times when other cereals are scarce. In low-income households, families substitute millet for *teff* when making *injera* because of its lower cost. It is also a gluten-free grain like *teff* and a good source of fiber. As the price of *teff* has increased, millet consumption has increased proportionately. About 10 percent of millet production is used for animal feed, also because of its low price. Millet straw is also used for shade construction and as forage for cattle, sheep, and goats.

Trade:

There is no formal export and import market for millet in Ethiopia. There is small informal trade along the Sudan boarder depending on production and rainfall in the neighboring countries.

Stocks:

Ending stocks are very low and held by farmers for seed.

Production, Supply and Demand Data Statistics:

Millet	2017/2018		2018/2019		2019/2020	
Market Begin Year	Oct 2017		Oct 2018		Oct 2019	
Ethiopia	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	440	440	440	420	0	410
Beginning Stocks	0	0	0	20	0	25
Production	810	810	810	810	0	805
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	810	810	810	830	0	830
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	25	40	25	25	0	25
FSI Consumption	785	750	785	780	0	790
Total Consumption	810	790	810	805	0	815
Ending Stocks	0	20	0	25	0	15
Total Distribution	810	810	810	830	0	830
Yield	1.8409	1.8409	1.8409	1.9286	0	1.9634
(1000 HA) ,(1000 MT) ,(MT/HA)						