

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

Required Report - public distribution

Date: 04/11/2017

**GAIN Report Number:** 

# Senegal

# **Grain and Feed Annual**

# 2017 West Africa Rice Annual

## Approved By:

Joshua Emmanuel Lagos

## **Prepared By:**

Fana Sylla

# **Report Highlights:**

For Burkina Faso, Cote d'Ivoire, Mali, and Senegal, MY 2016/17 (October 2016 to September 2017) total rice production (for all four countries) is estimated to fall 3.7 percent to 4 million metric tons (MMT) on lower Cote d'Ivoirian production which was affected by poor rainfall. MY 2017/18 rice production is projected to rebound to 4.4 MMT assuming good weather in all four countries. MY 2016/17 and MY 2017/18 rice imports are expected to rise one and 6.25 percent to 2.8 and 2.925 MMT on strong demand.

# TABLE OF CONTENTS

I.	Execut	ive Summary:	3
II.	Produc A. B. C. D.	tion Burkina Faso Cote d'Ivoire Mali Senegal	3 4 5 5 6
III.	Consur A. B. C. D.	mption Burkina Faso Cote d'Ivoire Mali Senegal	6 7 7 7 8
IV.	Trade A. B. C. D.	Burkina Faso Cote d'Ivoire Mali Senegal	8 8 9 9
V.	Stocks		9
VI.	Prices		9
VII.	Policy A. B. C. D.	Burkina Faso Cote d'Ivoire Mali Senegal	11 11 11 11
VIII.	Market	ing	12
IX.	Other W	Vest Africa Country Data	12
X.	Producti	ion, Supply and Demand Data Statistics	12
T F: F:	able 2: Wigure 1: Vigure 2: Vigure 3: V	Vest Africa: Rice Production Cycles Vest Africa: Production, Imports, and Consumption Overview Vest Africa: Rice Quality Preferences Vest Africa: Rice Imports Remain Strong Vest Africa: Price Fluctuations for Imported Rice Vest Africa: Price Fluctuations for Domestically Produced Rice	3 4 7 8 10

## I. Executive Summary

For Burkina Faso, Cote d'Ivoire, Mali, and Senegal, MY 2016/17 (October 2016 to September 2017) total rice production (for all four countries) is estimated to fall 3.7 percent to 4 million metric tons (MMT) on lower Cote d'Ivoirian production which was affected by poor rainfall. MY 2017/18 rice production is projected to rebound to 4.4 MMT assuming good weather in all four countries. For MY 2016/17, Mali is the top rice producer (1.8 MMT) followed by Cote d'Ivoire (1.335 MMT), Senegal (642,000 MT), and Burkina Faso (250,000 MT).

MY 2016/17 and MY 2017/18 rice imports are expected to rise one and 6.25 percent to 2.8 and 2.925 MMT on continued strong demand. Most countries in West Africa import rice to meet their food security needs. Large fluctuations in international prices can affect buying patterns, although demand is growing as more consumers shift from traditional grains such as millet to rice.

Since 2015, the Economic Community of West African States (ECOWAS), which includes most West African countries, adopted a common external tariff (CET) of 10 percent for rice imports from non-ECOWAS countries. Although to date no uniform sanitary and phytosanitary standards have been agreed to or implemented on a regional level, most members follow international guidelines recommended by the International Plant Protection Council and Codex.

## **II. Production**

MY 2016/17 (October 2016 to September 2017) rice production for the West African region (Please see Table 2) is estimated at 6.09 million tons, a 1.5 percent decrease compared to the previous year. Rice production in Cote d'Ivoire, Mauritania, and Gambia is projected to decrease 27 percent, 20 percent, and 28 percent, while rice production in Mali and Burkina Faso is projected to increase 19 percent and in Senegal by four percent. According to Table 2, Burkina Faso, Cote d'Ivoire, Mali, and Senegal represent 66 percent of total production.

**Table 1:** West Africa: Rice Production Cycles

Countries		Planting	Harvesting
Senegal	Irrigated season 1	Feb	June
	Irrigated season 2	June/July	Nov/Jan
	Rainfed	June/July	Oct/Nov
Cote d'Ivoire	Irrigated season 1	Jan	Jul
	Irrigated season 1	June	Dec
	Rainfed (Savane zone)	April	Dec
	Rainfed (Forest zone)	Feb	Sept
Mali	Irrigated season 1	Feb	May
	Irrigated season 2	May	Dec
	Rainfed	May	Dec
Burkina Faso	Irrigated season 1	Jan/Feb May/June	May/June Nov/Dec
	Irrigated season 2	May/June	Nov/Dec
	Rainfed		

Source: FAS Dakar

Table 2: West Africa: Production, Imports, and Consumption Overview

Countries	Produc	tion (1,00	0 MT)	Imports (1,000 MT) Consumption (1,0				nption (1,00	000 MT)	
	15/16	16/17	17/18	15/16	16/17	17/18	15/16	16/17	17/18	
Burkina Faso	211	250	260	350	350	375	575	600	625	
Chad	145	154	154	30	20	25	170	175	178	
Cote d'Ivoire	1,836	1,335	1,690	1,250	1,400	1,450	2,800	2,900	3,000	
Gambia	45	32	36	155	165	170	195	200	205	
Guinea-Bissau	102	111	120	140	140	140	248	252	257	
Guinea-Conakry	1,351	1,435	1,452	565	570	570	1,770	1,815	1,864	
Mali	1,515	1,800	1,820	170	50	50	1,685	1,800	1,925	
Niger	60	72	75	300	300	310	360	382	383	
Senegal	624	642	680	1,000	1,000	1,100	1,600	1,675	1,725	
Mauritania	223	177	183	100	150	150	244	250	255	
Togo	77	89	94	150	150	150	227	233	239	
Total	6,189	6,097	6,564	4,210	4,295	4,490	9,874	10,282	10,656	

Source: Country data from the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) meeting and FAS Dakar estimates

Note: Data for 2015/2016, 2016/2017, and 2017/2018 correspond to the marketing year (October/September), i.e., MY 2016/17 (October 2016 to September 2017)

## A. Burkina Faso

In MY 2016/17 (October 2016 to September 2017), rice production is estimated at 250,000 MT based on official government statistics; this is a 19 percent increase from last year due to higher planted acreage. For the same period, area increased by 19 percent to 170,000 hectares (HA) due to reportedly lower fonio and millet acreage. For MY 2017/18, Post projects that rice production could reach 260, 000 MT assuming good weather.

Rice is the fourth largest cereal crop after corn, sorghum, and millet. Burkina Faso produces three types of rice: 1) irrigated (constitutes 23 percent of total planted area and 53 percent of total production)

which yields between 4 to 7 MT per HA; 2) lowland rice which is rainfed or utilizes some irrigation (it represents with 67 percent of the area planted representing about 42 percent of total production) and yields between of 1.3 to 2.5 tons per HA; and 3) upland rice (rainfed) which constitutes 10 percent of planted area and five percent of total production and has an average yield of 1 ton per HA.

#### B. Cote d'Ivoire

For MY 2016/17, rice production and area decreased 27 percent to 1.3 million MT (MMT) and 1 million HA reportedly due to poor rainfall, which caused some farmers to leave their land fallow. In MY 2017/18, production is forecast at 1.69 MMT assuming normal rainfall.

Rice accounts for 65 percent of the total cereal production in Cote d'Ivoire followed by corn (30 percent), millet (2 percent), sorghum (2 percent), and fonio (less than 1 percent). However, according to Post contacts, in the last few years, a lack of funding, low seed supplies, weak processor demand due to limited capacity, and low market prices has dissuaded some farmers from growing rice.

Cote d'Ivoire produces lowland (irrigated), seasonal flooded (by river), and upland (rainfed) rice, which represents 13, two, and 85 percent of planted area. For lowland rice farms sizes range between 1 to 2 HA and produce around three to 10 MT per HA; seasonal flooded rice farms range between .2 to 1 HA and produce about 3 MT per HA. Upland rice production is the lowest in terms of yield; the farms cultivate .2 to 1 HA which yields between .5 to 1.5 MT per HA.

Different rice varieties are utilized for lowland, seasonal flooded, and upland rice. For lowland and seasonal flooded rice, many farmers use Wab 638-1 (Akadi), Bouake 189, WITA 4, WITA 12, and WITA 9. For upland production, farmers generally cultivate Nerica 1 (Bonfani), Nerica 2 (Keah), Wab 56-50 (Gblagnin), Idsa 10 (Fafa), and Idsa 85 (Guegbin).

## C. Mali

For MY 2016/17 rice production is estimated at 1.8 million tons based on official government statistics; it is expected to rise 19 percent higher than last year due to favorable weather conditions and higher acreage. In MY 2016/17, planted area is estimated to rise by 15 percent to 825 HA due to reportedly more rehabilitation of uncultivated land. For MY 2017/18 rice production is projected at 1.82 million tons assuming normal weather. Corn, rice, millet, and sorghum are the main cereal crops.

According to Post contacts, Malian farmers cultivate 20 percent of total irrigated area because they lack access to seeds, inputs, and agricultural equipment. Rice varieties Kogoni 91-1 and ADNY-11 are planted on approximately 60 and 23 percent of total rice area. Reportedly, less farmers are planting the BG 90-2 variety due to its apparent susceptibility to the yellow mosaic virus.

# D. Senegal

In MY 2016/17, rice production is estimated to increase three percent to 642,000 MT on higher planted area, which increased by 18 percent to 284,000 HA because of the rehabilitation of uncultivated land in the basin of Anambe and the region of Kolda. For MY 2017/18 rice production is projected at 680,000 tons assuming good weather.

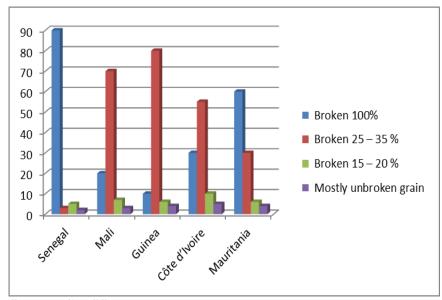
Irrigated and rainfed rice constitute 70 and 30 percent of total production. Irrigated rice is grown in the Senegal River Valley (SRV) and in the basin of Anambe; rainfed rice is cultivated in the regions of Fatick, Ziguinchor, Sedhiou, Kolda, Tambacounda, and Kedougou. Generally, rice farms are small, typically between 0.25 to 1 HA, although some larger farms exist near the SRV. Average yields for irrigated and rainfed rice are 4 and 2 MT per HA.

Within the last 20 years, Senegal has improved the quality of domestic rice production through the introduction of new varieties, better storage, and more modern processing. More recently, according to Post contacts, financing has increased from the National Agricultural Bank (CNCAS) over the last three years, which has allowed more farmers to purchase agricultural equipment and buy better quality seeds (such as NERICA which can be cultivated on upland and lowland farms). Moreover, reportedly the government has continued to rehabilitate new land and improve its extension services. However, rice production still is challenged by lackluster irrigation systems, high electricity costs, and rising labor costs.

## **III. Consumption**

For MY 2016/17 and MY 2017/18, total rice consumption in the West African region is estimated at 10.28 and 10.65 million metric tons (MMT), growing at around three percent due to population and income growth (Please see Table 2).

Figure 1: West Africa: Rice Quality Preferences



**Source: CILSS** 

#### A. Burkina Faso

For MY 2016/17 and MY 2017/18, Post estimates rice consumption to increase 4.3 and 4.2 percent to 600,000 and 625,000 MT on population and income growth; consumers generally prefer rice to traditional cereals such as millet or corn as their incomes rise. Many buyers prefer 25 percent broken rice; however, buyers with higher incomes reportedly favor 100 percent broken, which is used in local dishes. Some rural areas also demand parboiled rice. Due to its price competitiveness and higher quality, imported rice (regular and broken rice) is usually in high demand.

## B. Cote d'Ivoire

For MY 2016/17 and MY 2017/18, Post estimates rice consumption at 2.9 and 3 MMT on population and income growth. Although cassava is the most popular staple in many rural areas, reportedly more consumers prefer rice as incomes increase. Urban consumers who live in Abidjan, Bouaké, Daloa, Gagnoa, Korhogo, Man, and Odienne generally prefer rice to other cereals.

Ivoirians generally purchase 100 percent broken rice; wealthier consumers typically purchase 0 to 15 percent broken rice, as well as imported rice from India, Thailand, India, Vietnam, Pakistan, and the United States.

## C. Mali

For MY 2016/17 and MY 2017/18, Post estimates consumption at 1.8 and 1.9 MMT on population growth. Rice is not a staple food in Mali but has gradually become more popular. Most consumers purchase domestically produced rice because of its price competitiveness and quality.

## D. Senegal

For MY 2016/17 and MY 2017/18 Post estimates consumption at 1.6 and 1.7 million tons on population and income growth, as well as increasing urbanization. Since the 1970's, consumer preferences have gradually shifted from traditional cereals to rice. Many Senegalese prefer broken rice, which is used for local dishes such as *thieboudienne* (broken rice with marinated fish, tomato paste, and vegetables). Most consumers prefer imported rice due to quality and price competiveness.

#### IV. Trade

Most countries in West Africa import rice to meet their food security needs. Large fluctuations in international prices can affect buying patterns, although demand is growing as more consumers shift from traditional grains to rice. MY 2016/17 rice imports for the West Africa region are estimated to increase to 4.29 million tons (Please see Table 2).

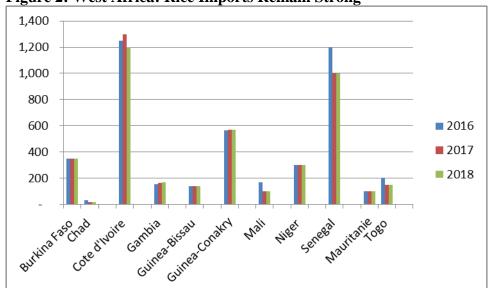


Figure 2: West Africa: Rice Imports Remain Strong

**Source: CILSS** 

## A. Burkina Faso

For MY 2016/17, rice imports are forecast at 350,000 tons, unchanged from last year due to strong domestic supplies. For 2017/18 Post projects imports to rise to 375, 000 tons on expectations of low international prices and rising demand. Rice is imported from India, Pakistan, and Thailand through Cote d'Ivoire, Ghana, and Togo. Rice transported through Cote d'Ivoire is typically shipped by truck and/or train.

#### B. Cote d'Ivoire

For MY 2016/17 Post estimates imports to rise by 12 percent to 1.4 MMT because of lower production (Please see Production section). For 2017/18, Post projects imports to increase by four percent to 1.45 MMT on expectations of growing demand.

Côte d'Ivoire imports rice in bulk; some of these imports are processed, packaged, and re-exported as semi-milled rice. In MY 2015/16, the top rice suppliers to Cote d'Ivoire were Thailand (62 percent) and India (33 percent). In MY 2015/16, Cote d'Ivoire exported 20,000 tons of rice to the sub-region, which included Ghana (45 percent), Burkina Faso (38 percent), Benin (14 percent), and Niger (1 percent).

## C. Mali

For MY 2016/17 Post estimates imports to decrease 70 percent to 50,000 MT on higher production (Please see the Production Section). For MY 2017/18, imports are projected to remain at 50,000 tons on expectations of steady demand. In calendar year 2016, the top rice suppliers for Mali were Thailand (50 percent), India (32 percent), the United States (13 percent), and Senegal (4 percent). Senegal transships rice to Mali by truck.

# D. Senegal

For MY 2016/17 and MY 2017/18 Post estimates rice imports to rise to 1 and 1.1 MMT on steady demand and expectations of continued low international prices. Senegal typically imports rice from India, Thailand, and Brazil. Imported rice is generally less expensive than domestically produced rice due to high production costs. For example, in MY 2016/17 imported rice (fragrant and regular) was on average \$1.60 to \$3.20 (per 50 KG bag) less expensive than domestically produced rice.

Since 2015, the Government of Senegal has distributed rice import quotas to importers. Quotas are reexamined throughout the year and can change based on market dynamics. Any rice importer can request an import quota; however, there is no guarantee that an importer will receive approval.

## V. Stocks

According to Post contacts, many West African governments do not hold rice stocks or only carry very small stocks. Reportedly, some private importers can hold up to 200,000 MT of rice. In January and February, 2017, the Permanent Interstate Committee for Drought Control in the Sahel (CILSS) estimated private rice stocks in several markets, noting that some private stocks did not exceed 16,000 MT.

## VI. Prices

In many West African countries, imported rice is generally less expensive than domestic rice. According to CILSS, in the last five years, domestically produced rice prices have been on average 10 percent more expensive than imported rice. On March, 2017, CILSS published additional rice price data for West Africa, noting for the last five years domestic and imported rice prices varied between -15 percent to 15 percent (Please see Figure 3 and 4 below).

SITUATION DES MARCHES EN AFRIQUE DE L'OUEST

VARIATIONS DES PRIX PAR RAPPORT A LA MOYENNE DES 5 DERNIERES ANNNEES

RIZ IMPORTE DE GRANDE CONSOMMATION

NE

Legende

VrRIO

-30 à -15%

15 à 30%

Bassin\_Ouest

Baissin\_Centre

Bassin Est

• <= -30%

-15 à 15%

> 30%

Figure 3: West Africa: Price Fluctuations for Imported Rice

Source: CILSS

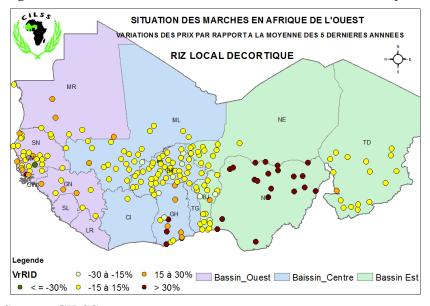


Figure 4: West Africa: Price Fluctuations for Domestically Produced Rice

Source: CILSS

## VII. Policy

Since 2015, the Economic Community of West African States (ECOWAS), which includes most West African countries, adopted a common external tariff (CET) of 10 percent for rice imports from non-ECOWAS countries. Although to date no uniform sanitary and phytosanitary standards have been agreed to

or implemented on a regional level, most countries follow international guidelines recommended by the International Plant Protection Council and Codex.

#### A. Burkina Faso

The Government of Burkina Faso developed a national strategy called Burkina Faso National Rice Development Strategy which set a goal to produce 550,000 MT of rice by 2018. Several projects and programs in Burkina Faso support the rice sector such as: The Action Plan for the Rice Sector (PAFR), The Rainfed Rice Project (PRP), Growth Cluster of Bagré, Agricultural Development Project of the Millennium Challenge Account (MCA-PDA) of Sourou, the Agricultural Sector Promotion Company (SOPROFA), The Special Program for Food Security (SPFS), The National Strategy for Sustainable Development of Irrigated Agriculture (SNDDAI), and the Interprofessional Committee of Burkina Rice (CIR-B).

## B. Cote d'Ivoire

The Government of Cote d'Ivoire (GCDI) developed a national strategy for rice development called Revised National Rice Development Strategy for the Cote d'Ivoire Rice Sector (NRSD) 2012-2020. The country's objective is to reach self-sufficiency by 2020 through the production of 2 MMT of rice. Additionally, the GCDI plans to become a rice exporter by 2018.

## C. Mali

The Government of Mali developed a Rice Development Strategy called National Strategy for the Development of Rice Growing (based on the Agricultural Guidance Law) under the framework of the African Rice Development Coalition (CARD). The goal is to attain self-sufficiency in rice by 2018 through various activities such as improving irrigation systems, access to land, availability of inputs, research capacity, technology transfer, post-harvest management, and natural resource management.

## D. Senegal

The Government of Senegal has launched several rice development strategies such as The Plan Senegal Emergent which plans by 2022 to boost agricultural and industrial growth by seven percent, and the Program to Accelerate Agriculture (Accelerated Program for Agriculture in Senegal (PRACAS), which hopes to increase rainfed rice production and lower irrigated rice production and achieve self-sufficiency by 2017. The government also implemented a project funded by the Millennium Challenge Account (MCA) (\$170 million) to irrigate and desalinate 36,500 HA in the SRV.

## VIII. Marketing

For the last five years, local businesses have created new marketing in the urban areas in order to increase demand. For example, higher quality domestically produced rice is packed in neatly labeled bags in supermarkets, which is a new concept as rice is often purchased in bulk.

For more information on rice marketing in West Africa, please see this GAIN report:

https://gain.fas.usda.gov/Recent%20GAIN%20Publications/Grain%20and%20Feed%20Annual\_Dakar\_Senegal\_5-6-2011.pdf

# IX.- Other West African Country Data

Guinea is the second largest rice producer after Mali, producing an estimated 1.4 million tons in MY 2016/17. Post contacts believe domestic rice quality is low due to poor processing, and added that some imported rice is reexported to other neighboring countries.

According to government officials, Niger rice demand is rising steadily due to changing consumer diets in the urban areas. Niger imports rice from Burkina Faso, Nigeria, and Benin.

## X.- Production, Supply and Demand Data Statistics in 1000 HA, 1000 MT, and MT/HA:

Rice, Milled	2015/2	016	2016/2	017	2017/2	2017/2018		
Market Begin Year	Oct 20	15	Oct 20	16	Oct 20	16		
Burkina	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Area Harvested	138	138	175	170	0	175		
Beginning Stocks	26	26	12	12	0	12		
Milled Production	211	211	240	250	0	260		
Rough Production	325	325	369	385	0	400		
Milling Rate (.9999)	6500	6500	6500	6500	0	6500		
MY Imports	350	350	350	350	0	375		
TY Imports	350	350	350	350	0	375		
TY Imp. from U.S.	6	4	0	6	0	5		
Total Supply	587	587	602	612	0	647		
MY Exports	0	0	0	0	0	0		
TY Exports	0	0	0	0	0	0		
Consumption and Residual	575	575	590	600	0	625		
Ending Stocks	12	12	12	12	0	22		
Total Distribution	587	587	602	612	0	647		
Yield (Rough)	2.3551	2.3551	2.1086	2.2647	0	2.2857		

Rice, Milled	2015/2016		2016/20	17	2017/2018		
Market Begin Year	Oct 2015	5	Oct 2016 Oc		Oct 2016	ct 2016	
Cote d'Ivoire	USDA Official	USDA Official New Post U		New Post	USDA Official	New Post	
Area Harvested	1400	1400	1485	1018	0	1290	
Beginning Stocks	316	316	527	527	0	287	
Milled Production	1836	1836	1950	1335	0	1690	
Rough Production	2825	2825	3000	2054	0	2600	
Milling Rate (.9999)	6500	6500	6500	6500	0	6500	

MY Imports	1250	1250	1300	1400	0	1450
TY Imports	1300	1000	1350	1200	0	1100
TY Imp. from U.S.	17	17	0	10	0	10
Total Supply	3402	3402	3777	3262	0	3427
MY Exports	75	75	75	75	0	75
TY Exports	75	75	75	75	0	75
Consumption and Residual	2800	2800	3200	2900	0	3000
Ending Stocks	527	527	502	287	0	352
Total Distribution	3402	3402	3777	3262	0	3427
Yield (Rough)	2.0179	2.0179	2.0202	2.0177	0	2.0155

Rice, Milled	2015/20	016	2016/2	017	2017/2018			
Market Begin Year	Oct 20	15	Oct 2016		Oct 2016			
Mali	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post		
Area Harvested	725	725	750	825	0	843		
Beginning Stocks	144	144	144	144	0	194		
Milled Production	1515	1515	1650	1800	0	1820		
Rough Production	2331	2331	2538	2769	0	2800		
Milling Rate (.9999)	6500	6500	6500	6500	0	6500		
MY Imports	170	170	170	50	0	50		
TY Imports	170	170	170	50	0	50		
TY Imp. from U.S.	2	2	0	2	0	2		
Total Supply	1829	1829	1964	1994	0	2064		
MY Exports	0	0	0	0	0	0		
TY Exports	0	0	0	0	0	0		
Consumption and Residual	1685	1685	1770	1800	0	1925		
Ending Stocks	144	144	194	194	0	139		
Total Distribution	1829	1829	1964	1994	0	2064		
Yield (Rough)	3.2152	3.2152	3.384	3.3564	0	3.3215		

Rice, Milled	2015/20	)16	2016/2	017	2017/20	18
Market Begin Year	Oct 20*	15	Oct 20	16	Oct 201	6
Senegal	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	235	241	260	284	0	300
Beginning Stocks	275	275	289	289	0	246
Milled Production	624	624	680	642	0	680
Rough Production	918	918	1000	944	0	1000
Milling Rate (.9999)	6800	6800	6800	6800	0	6800
MY Imports	1000	1000	950	1000	0	1100
TY Imports	985	985	990	985	0	1000
TY Imp. from U.S.	0	0	0	0	0	0
Total Supply	1899	1899	1919	1931	0	2026
MY Exports	10	10	10	10	0	10
TY Exports	10	10	10	10	0	10
Consumption and Residual	1600	1600	1640	1675	0	1725
Ending Stocks	289	289	269	246	0	291
Total Distribution	1899	1899	1919	1931	0	2026
Yield (Rough)	3.9064	3.8091	3.8462	3.3239	0	3.3333