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Mexico

Grain and Feed Annual

Slight Changes in Production as Grain Imports Continue Upward Trend

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Report Highlights:
Post expects relatively minor changes in 2018/19 in Mexican production of corn and sorghum, with a larger percentage decrease in wheat production due to water availability among other factors. Domestic rice production is expected to continue increasing due in part to government incentive programs. Mexican grain imports are expected to increase, due to continued growth in feed and food demand.

Commodities:

Wheat
Wheat, Durum
Corn
Sorghum
Rice, Milled

Wheat

Production

Mexican wheat production for MY 2018/19 (July-June) is forecast to decrease to approximately 3.27 million metric tons (MMT) due to a switch from wheat to corn, chickpeas, and safflower, mainly in Sonora, which is the main producing state. Reportedly, wheat producers from the Yaqui Valley in Sonora decided to reduce the wheat planted area by approximately 20 percent. They cited market conditions, including the uncertainty of specific supports to make wheat profitable, and the lack of water availability as triggers for this reduction.

According to the Secretariat of Agriculture's (SAGARPA) delegate in Sonora and private sources, wheat producers decided to lower the planed area by approximately 50,000 hectares (ha) for the 2017/18 fall/winter crop cycle. These sources noted this was a consequence of the bearish prices expected for this crop cycle. One source stated, "In grains cultivation, wheat is the most extensive [in Sonora], as on average for the last five years approximately 300,000 hectares (ha) have been planted. This year producers have played a very important role, in reevaluating planting decisions for this 2017/18 fall/winter crop cycle."

In addition, the SAGARAPA official mentioned that wheat planting in various producing regions, mainly in the agricultural valleys of southern Sonora, began on November 15 and concluded the last days of December. In the Mayo Valley, for example, there was only enough water to plant about 80,000 ha of wheat (compared to over 100,000 ha in 2016), but the additional land area programmed for this crop was replaced by safflower and chickpea, which require less water. Reportedly, due to lack of rainfall, the level of main water reservoir in this valley (Mocuzari Dam) was lower than the average level of the last few years.

Similarly, official sources noted that in the Yaqui Valley, water was available for 210,000 ha of wheat. In that region, farmers carefully analyzed costs and benefits, deciding allocate planting area to crops such as safflower, chickpea, and corn instead of wheat. It is expected that Sonora will produce approximately 1.3 MMT of wheat, against the initial expectation of 1.6 MMT, in the 2017/18 fall/winter crop cycle. In addition, Sonora has been one of the most important states for durum wheat exports (known as "*cristalino*" in Mexico). In recent years, Sonora has exported between 800,000 MT and 1.0 MMT annually. Sources stated that, of total Sonora wheat production, approximately 650,000 MT will be consumed by the wheat flour industry and the remaining production of *cristalino* wheat will be directed to the animal feed sector and exports.

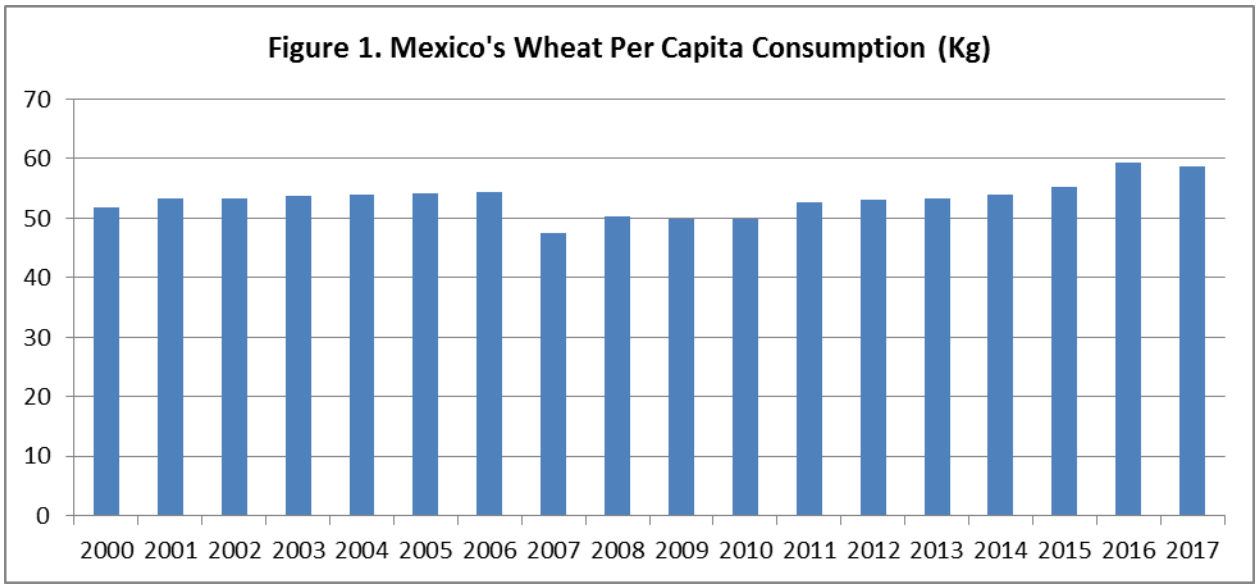
Sonora continues to be the main wheat-producing state, with approximately 50 percent of total wheat production, followed by Baja California, which contributes 14 percent, and Sinaloa and Guanajuato with

ten and nine percent, respectively. Advanced wheat production technologies, similar to those used in the United States, continue to be applied in the north and northwestern states of Baja California (i.e. Mexicali Valley) and Sonora.

Durum wheat continues to be the principal variety and is mainly produced in Sonora and Baja California. Based on official SAGARPA data, 60 percent (2.3 MMT) of total wheat production in MY2016/17 was durum wheat. The majority of wheat producers remain convinced that durum yields are higher than for bread wheat varieties in the desert regions of Baja California and Sonora. Recently, SAGARPA released a *cristalino* variety that is more resistant to current pests. This release was made through the National Institute of Forestry, Agriculture and Livestock Research (INIFAP). According to official sources, the new variety of *cristalino* wheat is known as CENEB ORO C2017 and, unlike the current main variety (CIRNO C2008), it is resistant to leaf rust.

Consumption

Mexico's total wheat consumption is expected to increase in MY 2018/19 compared to a year earlier. According to private analysts, wheat consumption in Mexico is expected to grow approximately two percent in 2018, driven by population growth (1.4 percent) and the continuing popularity of bread products, as well as interest in creating new wheat-based products with added value, new product presentations, and technological innovation. For example, industry members expect an increase in the consumption of refrigerated breads. Likewise, continued growth is expected in bread stores, as well as a trend towards increased concentration of the bread industry in traditional bakery chains, in large production capacity plants, and in supermarket stores.



*** 2017 estimated**
Source: Elaborated with SIAP-SAGARPA-CONAPO and USDA official data.

Similarly, the Mexican Millers Association (CANIMOLT) expects the product substitution trend to continue, primarily from wheat and their flours to more whole-meal products. Despite the fact there are more alternative products available, such as cornbread and breads made with potatoes and other cereals, CANIMOLT expects continued increases in consumption of wheat flour, bread, cookies, and pasta made

in a traditional way. Also, private analysts stated that, despite the fact that historically Mexican consumers have preferred corn tortillas over bread, this trend has been gradually reversed in the last few years. Reportedly, this is due to the relative improvement of consumer purchasing power and the higher price of corn tortillas, which have increased the share of wheat consumption over corn.

According to CANIMOLT, Mexico continues to have 84 different mills owned by 11 companies located across the country, which can process approximately 8.6 MMT of wheat and produce 4.9 MMT of flour each year. However, these millers are operating at approximately 74 percent of capacity (i.e., 6.5 MMT). The remaining approximately 1.0 MMT of FSI consumption is self-consumption by small farms, as well as losses and seed wheat.

Animal feed consumption is forecast to remain at 400,000 MT in MY 2018/19. Private sources stated that the affordable prices of yellow corn will continue to incentivize the animal feed and livestock sectors (mainly pork producers) to continue consume it over wheat.

Trade

Because bread wheat production continues to be insufficient to supply the domestic demand of the wheat flour industry, Mexico will import approximately 5.5 MMT of wheat in MY 2018/19, or approximately 5.7 percent more than the previous year. As noted above, durum production will continue to dominate domestic wheat production for this marketing year, causing the wheat industry to continue importing mainly soft wheat varieties.

Regarding *cristalino* (durum) wheat, CANIMOLT estimates domestic consumption is near 750,000 MT for human consumption annually. Consequently, the remainder from total domestic production is destined for export, as an opportunity market, and for the animal feed sector, which is considered as a surplus consumer market.

Though price continues to one of the main factors influencing import decisions, quality factors and protein content are gaining higher relevance in the decision making process. CANIMOLT notes that protein content, which can have a significant impact on baker's efficiency, is even more important in Mexico than in many other markets. CANIMOLT has continued promoting sourcing wheat from non-traditional suppliers such as Ukraine and Russia, where they have found the correct balance between price and quality. However, as result of some quality issues from those origins, during the first eleven months of 2017 the level of wheat imports from Russia and Ukraine have declined 32 and 22 percent, respectively, compared with the same period of the previous year. At the same time, Mexican imports of U.S. wheat have increased more than 30 percent compared to last year. The main factors that have influenced this shift have been higher protein content and quality of U.S wheat, as well as logistical advantages.

Additionally, CANIMOLT confirmed that the first shipment of Argentine wheat (33,000 MT) arrived in December 2017. The quality was average – similar to soft wheats from other origins, and its relatively low protein content means it will need to be mixed with other wheat. CANIMOLT expects Argentina to be a supplier of opportunity in the future. There may be windows in which Mexico purchases Argentine wheat at the right price, but they do not predict a large-scale shift in purchasing patterns (see 2017 GAIN Report MX7046, *Mexico to begin Importing Argentine Wheat*).

Post/New MY2017/18 wheat exports are forecast to decline to 1.0 MMT, due to lower expected production. Algeria has been Mexico's top durum wheat export market by a wide margin in recent years, followed by Italy and Turkey. SAGARPA officials stated that in mid-December 2017, Algerian buyers visited the state of Sonora to acquire durum wheat. The buyers were apparently also interested in purchasing chickpeas, which has been planted in the 2017/18 fall/winter crop cycle instead of wheat.

Stocks

For MY 2018/19, the Post/New ending stocks forecast is estimated to decrease to 596,000 MT, due primarily to lower domestic production.

Production, Supply and Demand Data Statistics:

Table 1: Mexico Wheat Production, Supply and Demand for MY2016/17 to MY2018/19

Wheat	2016/2017		2017/2018		2018/2019	
Market Begin Year	Jul 2016		Jul 2017		Jul 2018	
Mexico	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	724	724	665	665	0	625
Beginning Stocks	660	660	876	876	0	676
Production	3865	3865	3500	3500	0	3270
MY Imports	5370	5370	5200	5200	0	5500
TY Imports	5370	5370	5200	5200	0	5500
TY Imp. from U.S.	4042	4042	0	4100	0	4200
Total Supply	9895	9895	9576	9576	0	9446
MY Exports	1119	1119	1200	1200	0	1000
TY Exports	1119	1119	1200	1200	0	1000
Feed and Residual	700	700	400	400	0	400
FSI Consumption	7200	7200	7300	7300	0	7450
Total Consumption	7900	7900	7700	7700	0	7850
Ending Stocks	876	876	676	676	0	596
Total Distribution	9895	9895	9576	9576	0	9446
Yield	5.3384	5.3384	5.2632	5.2632	0	5.232
(1000 HA) ,(1000 MT) ,(MT/HA)						

Corn

Production

The Post/New MY 2018/19 (October-September) corn production forecast is 26.6 MMT, with an estimated 7.2 million ha of harvested area, assuming normal weather conditions (i.e. adequate moisture levels). Official sources expect that corn harvested area will remain practically unchanged compared with the average of the last five years. They pointed out that area available to cultivate corn in Mexico has essentially reached its limits. Consequently, the only options to increase planted area of corn or other basic grains could be reducing livestock or forested areas, which is highly unlikely. Post's total corn production estimate for MY 2017/18 has been revised upward from USDA/Official estimate to 26.8 MMT, due to more complete data from SAGARPA as of January 31, 2018.

Additional factors that are preventing an increase of corn, coarse grains and cereals production are covered extensively in a SAGARPA Diagnostic Report. It is noted one of the main problems facing Mexican agricultural sector is its low productivity. Basic crops such as corn and wheat represent nearly 40 percent of the total cultivated area and 27 percent of the value of agricultural production. According to the World Cereal Performance Index in Mexico, yields of these products are below the level of the countries with which Mexico has the greatest trade relationships. SAGARPA cites several causes that explain low productivity, among them:

- Minimal incorporation of technologies and innovations at the farm level, including low availability and out-of-date agricultural machinery. For example, Brazil and Chile possess 0.17 and 0.24 times more tractors per 100 km^2 of cultivable land than Mexico. The 2014 National Agricultural Survey shows that 13 percent of Agricultural Rural Economic Units (i.e. growers with production units - UERA) had their own tractor, 42 percent of which were more than 15 years old.
- Research centers are not well-linked with the UERAs' needs. UERAs do not identify the research centers as a means access to technological innovations in agriculture.
- In general, the subsistence-level UERAs do not have a voice in the prioritization of technological needs and budget allocation.
- Decreasing availability of water and inefficient use of this resource in the field, along with low investment in rehabilitation and modernization of irrigation systems. Available data show that only 26 percent of the arable land is irrigated. Of UERAs that have irrigation, 77 percent use gravity irrigation, 12 percent use sprinklers, and nine percent drip. The rest use other types of irrigation.
- The negative effects of climate change and the deterioration of resources (water and soil) adversely affect crop production and yields.
- Lack of coordination between different economic agents in agricultural value chains (e.g., production, transformation, and commercialization), which causes a low value added to primary production.
- Regarding vegetable nutrition, only seven percent of UERAs use some type of chemical fertilizer.
- With respect to seed use, 82 percent of UERAs use creole seeds, 29 percent improved seeds and only 12 percent certified hybrid seeds.
- Regarding the profile individual producers (in 2014), 58 percent producers had completed primary education, 14 percent had secondary education and 19 percent had no education. Thirty-six percent of producers are between 46 and 60 years of age, and 29 percent are between 61 and 75.
- Approximately 80 percent of UREA growers have landholdings smaller than five hectares, with rain-fed crops, which affects their level of production and yields.
- In addition, other structural problems adversely impacting marketing of basic grains include:
  - Insufficient and/or inadequate storage infrastructure
  - Lack of a single standard to determine the quality and classification of products
  - Inefficient transportation for crops
  - Insufficient and/or deficient communication routes (such as the access roads to harvest areas), which generate unnecessary transportation costs above market levels and bottlenecks in the Mexican corn and coarse grains sector

Mexico continues to be the fifth largest corn producer in the world. Though corn production is spread throughout the entire country, and in a wide range of climatically diverse conditions, it is primarily supplied by eight states: Sinaloa, Jalisco, Mexico, Michoacán, Chihuahua, Chiapas, Veracruz, and Tamaulipas. Combined, these states account for nearly 69 percent of total production. White corn continues to be the predominant variety produced in Mexico with nearly 87 percent of total production, while yellow corn represents only 13 percent, despite several attempts at conversion schemes (i.e. government supports) through which SAGARPA has tried to attract corn growers to plant more yellow corn or other crops in recent years.

Corn is grown throughout the year during two seasons: spring-summer (April-March) and fall-winter (October-September). Approximately 72 percent of Mexican corn is obtained from the spring-summer season, and approximately 78 percent of the corn is produced in non-irrigated farming.

Another factor that has prevented a boost in corn yields is the lack of permits for commercial production of genetically engineered (GE) corn. The Mexican government still does not issue such permits due to a federal court ruling in September 2013, which effectively suspended planting of all GE corn in Mexico by placing a provisional injunction. After more than four years, there still is no clear timeline for a resolution (See 2017 GAIN Report MX7053 for additional information).

Consumption

Total corn consumption for MY2018/19 is forecast to increase approximately 2.8 percent over last year. The two main factors driving this increase are the population growth (approximately 1.4 percent) and the expected growth in the livestock and poultry sectors.

Corn continues to be considered primarily a food grain in Mexico, more than a feed grain. White varieties are mainly used for human consumption through the elaboration of tortillas and corn flour. Demand is constant throughout the year, although production is mainly during the spring/summer crop cycle. Despite the fact that corn continues to be the most important staple crop in Mexico, private analysts stated that per capita consumption has declined in the last few years. This contraction is explained by slowed economic growth and relative deterioration in Mexican consumer income, an increase in corn flour and tortilla prices, as well as a change in consumption patterns in the last decades. This change is especially noticed in the cities, in the diet of young people, and in the middle to upper classes. It is also explained by the increasing presence of fast foods, which are already consumed in both urban and rural areas.

Yellow corn is generally used to produce cornstarch, cereals, and animal feed. According to official sources, the starch/fructose industry consumes approximately 2.8 MMT of yellow corn annually. Ninety to 95 percent of the cornstarch is produced using imported U.S. corn.

The poultry sector continues to be the primary consumer of feed grains (mainly yellow corn), and feed comprises the largest percentage of production costs for both poultry meat and eggs. The forecast for Mexican poultry production in 2018 is 3.5 MMT, up from 2017, as the increasing vertical integration has spurred producers to improve genetics and biosecurity. Based on SAGARPA official production numbers poultry and eggs account for more than 60 percent of livestock production in Mexico. According to

the National Poultry Union (UNA) feed continues representing approximately 65 percent of total cost of production of broiler meat (see GAIN Report MX8007).

Trade

Total corn imports for MY2018/19 are expected to increase approximately five percent over MY2017/18 to 16.8 MMT, to match the bullish demand particularly for feed consumption. Mexico's corn exports are forecast to remain unchanged at 1.3 MMT in MY2018/19, due to an oversupplied and very competitive international market.

The Post/New corn import estimate for MY2017/18 has been revised downward from the USDA/Official estimate to 16.0 MMT, based on information from private traders and preliminary official data from SAGARPA and the General Customs Directorate covering the first four months of the marketing year.

Stocks

Post's ending stocks for MY 2018/19 are forecast to decrease to 3.2 MMT, due to a slight decrease in domestic production. The Post/New MY2017/18 ending stock estimate was revised downward from the USDA/Official estimate to 4.6 MMT reflecting lower imports than previously estimated.

Wholesale White Corn Prices

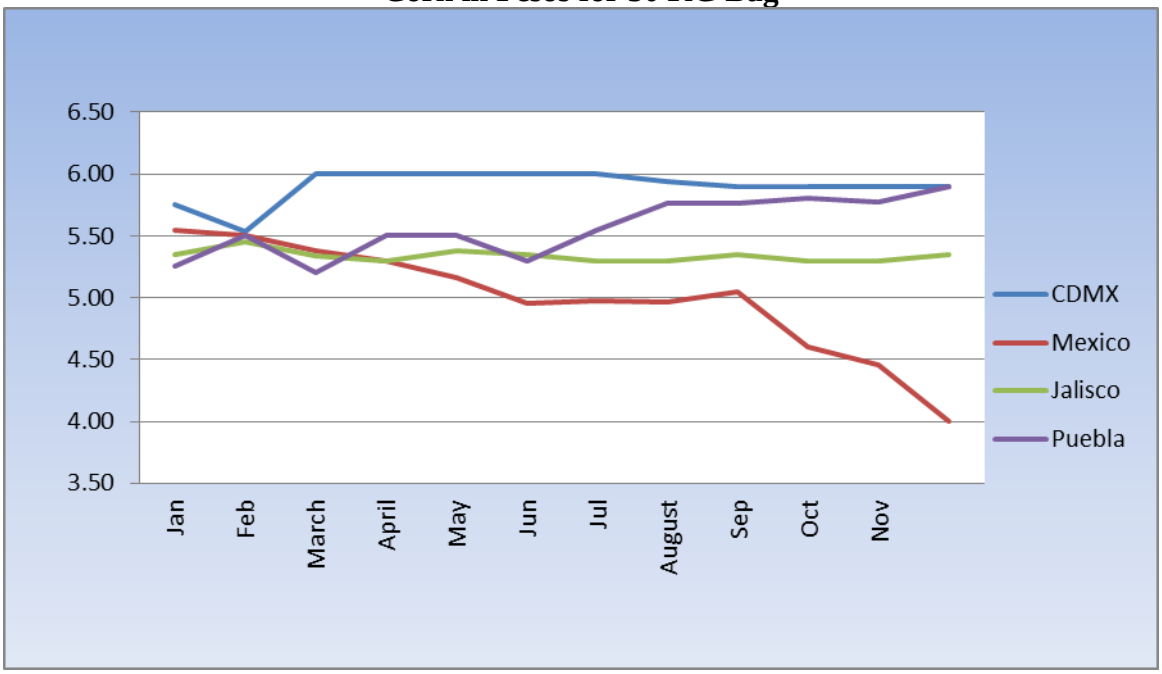
Table 2 shows the monthly average wholesale prices of white corn in several relevant states and Mexico City for calendar year 2017. In this period, a slight decrease of 1.5 percent was observed in the average price compared to December of last year. The slight overall decrease was mainly due to price decreases in Mexico City (D.F.) and the state of Mexico, despite price increases found in the states of Jalisco and Puebla.

Table 2. Mexico: Average Monthly Wholesale Price for White Mexican Corn in Pesos per 50 KG Bag

Month	D.F.	Mexico	Jalisco	Puebla
January	5.75	5.55	5.35	5.25
February	5.53	5.50	5.45	5.50
March	6.00	5.38	5.34	5.20
April	6.00	5.30	5.30	5.50
May	6.00	5.16	5.38	5.50
June	6.00	4.95	5.35	5.30
July	6.00	4.98	5.30	5.55
August	5.94	4.96	5.30	5.76
September	5.90	5.05	5.35	5.76
October	5.90	4.60	5.30	5.80
November	5.90	4.46	5.30	5.77
December	5.90	4.00	5.35	5.90

Exchange Rate: 18.67 Pesos per 1 U.S. Dollar
Source: National Market Information System (SNIM), belonging to the Ministry of Economy

Figure 2: Mexico Monthly Wholesale Price for White Mexican Corn Corn in Pesos for 50 KG Bag



Exchange Rate: 18.67 Pesos per 1 U.S. Dollar
Source: National Market Information System (SNIM), belonging to the Ministry of Economy

Production, Supply and Demand Data Statistics:

Table 3: Mexico Corn Production, Supply and Demand for MY2016/17 to MY2018/19

Corn	2016/2017		2017/2018		2018/2019	
Market Begin Year	Oct 2016		Oct 2017		Oct 2018	
Mexico	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	7509	7509	7230	7230	0	7200
Beginning Stocks	5213	5213	5418	5418	0	4618
Production	27575	27575	26500	26800	0	26600
MY Imports	14569	14569	16500	16000	0	16800
TY Imports	14569	14569	16500	16000	0	16800
TY Imp. from U.S.	14314	14314	0	15700	0	16400
Total Supply	47357	47357	48418	48218	0	48018
MY Exports	1539	1539	1300	1300	0	1300
TY Exports	1539	1539	1300	1300	0	1300
Feed and Residual	22500	22500	24300	24300	0	25250
FSI Consumption	17900	17900	18000	18000	0	18250
Total Consumption	40400	40400	42300	42300	0	43500
Ending Stocks	5418	5418	4818	4618	0	3218
Total Distribution	47357	47357	48418	48218	0	48018
Yield	3.6723	3.6723	3.6653	3.7068	0	3.6944
(1000 HA) ,(1000 MT) ,(MT/HA)						

Policy

PROAGRO

On December 29, 2017, SAGARPA announced in the Mexican Federal Register (*Diario Oficial*) the new operational rules of "PROAGRO Productivo," the Mexican domestic agricultural support program, for calendar year 2018. The program had only minor changes from the previous year.

This program provides direct support to growers with farms in operation that are appropriately registered in the PROAGRO directory. Per the notice, the specific goal of this Program is provide liquidity to the rural agricultural economic units (UERA in Spanish) to invest in productive activities. Farmers must demonstrate that they have grown any legal crop (i.e., corn, wheat, sorghum, rice, etc.) on eligible land in order to participate. Payments are made on the basis of the number of hectares registered, irrespective of the type or volume of production or the related domestic or international prices. There are three separate categories of growers, based on the total surface area eligible for the program belonging to the grower:

- Self-consumption (up to five ha of non-irrigated land and 0.2 ha of irrigated land)
- Transition (greater than five ha and up to 20 ha non-irrigated land and greater than 0.2 ha and up to five ha of irrigated land), and
- Commercial (more than 20 ha non-irrigated and more than five ha irrigated).

For 2018, PROAGRO Productivo will retain a limit of up to 80 ha that may receive support per production unit and agricultural crop cycle. Under the program, a flat rate payment for corn, sorghum, wheat, and rice will be provided to growers for the 2018 spring/summer and 2018/2017 fall/winter crop

cycles. Payments will be made, in accordance with the per-hectare allocation set out below, subject to the 80 ha maximum:

Category	Description	Allocation per eligible hectare or fraction thereof
Self-Consumption	Growers with production units (UERA) of up to three ha of rain-fed land	1,600 pesos (84.98 USD/ha)
Transition		1,000 pesos (53.11 USD/ha)
Commercial	Growers with UREA of 20 ha up to 50 ha non-irrigated, and those with more than 5 ha up to 12.5 ha of irrigated area	450 pesos (23.90 USD/ha)
	Rest of country commercial growers	180 pesos (9.56 USD/ha)

Growers with production units of non-irrigated land, whose acreage is less than one hectare, will receive the support equivalent of one hectare, with certain exceptions. The operational rules state that beneficiaries are required to plant at least the eligible supported area during the agricultural crop cycle. If weather conditions or natural disasters prevent planting in eligible areas, support may still be granted as long as the local SAGARPA Delegation submits a written request, accompanied by a technical opinion of the competent authority that endorses the presence of such conditions in the affected areas.

PROAGRO beneficiaries must demonstrate that the subsidy was used for training and technical assistance, fertilization, use of improved seeds, use of phytosanitary control products, labor, machinery, equipment and agricultural implements, storage and marketing, credit guarantees, payment of services, and fuels acquisition, inter alia.

The 2018 program notice indicated that "SAGARPA can define (subject to federal budget availability) strategies to reincorporate farmers registered in the PROAGRO directory that are not currently in the Program's target population. Similarly, SAGARPA can incorporate growers who have not been registered in the PROAGRO program, giving priority to subsistence growers that cultivate basic grains and oilseeds." The notice states that SAGARPA can pay liabilities from agricultural cycles in the previous fiscal year which were not liquidated due to lack of budget. SAGARPA is authorized to allocate up to 1.5 percent of the full program budget to establish a training and technical assistance program directed primarily to subsistence growers to facilitate the adoption of technological innovations, improve their agricultural practices, and increase their crop yields.

Forward Contract Program

SAGARPA has continued to encourage forward contract purchases between farmers and buyers through the Forward Contract Program, known as *"Agricultura por Contrato*" (see 2008 GAIN Report MX8075 "Mexico Announces Support Program for Sinaloa White Corn" for additional information on the establishment of this program).

According to SAGARPA's Marketing Services and Agricultural Market Development Agency (ASERCA), as of September, 30 2017, 16.23 MMT of various commodities have been supported

through the Forward Contract Program for the calendar year. The main crops were corn (white and yellow), with approximately 55.2 percent of the total amount supported; sorghum, with 22.4 percent; and wheat (bread wheat and durum) with 20.7 percent. For the 2016/17 crop cycle, 11.23 MMT were supported through the program, while for the 2017 spring/summer crop cycle 3.2 MMT were supported.

It should be noted that the total volume supported for the is approximately 7.5 percent lower compared with the same period a year earlier, a reduction which was provoked in part by the cutback in ASERCA's 2017 budget. ASERCA had to eliminate the support coverage for buyers and reduce the support to growers from 85 percent to 75 percent of the coverage cost (i.e. "put" or "call"). Additionally, animal feed industry sources noted that the level of the "basis" established under the terms of the Forward Contract Program by ASERCA for the 2016/17 fall-winter and 2017 spring-summer crop cycles was competitive for buyers, particularly those in the livestock and animal feed sector. ASERCA's "basis" prices for white corn are inflated by a premium, as white corn is preferred for tortillas (probably the most important source of calories for many Mexicans) in the domestic food market. This factor resulted in many buyers withdrawing from the program and finding better-priced alternatives in the international market, or even domestically outside of the traditional support programs.

Perhaps as a result of the low utilization of the Forward Contract Program, on November 16, 2017, Mexico published three notices announcing temporary incentive programs intended to address an oversupply of corn in certain parts of the country. In particular, the incentives target corn used for livestock production in the Bajio region (i.e. Guanajuato, Michoacan, and Jalisco), corn exported from Sinaloa, and corn sold to the state company DICONSA (see 2017 GAIN Report MX7055 for further details).

Sorghum

Production

Total Mexican sorghum production for MY 2018/19 is forecast at 4.8 MMT, a marginal increase compared with the previous year's revised estimate. This increase is due to a slight expansion in area planted in Mexico's sorghum producing regions, and assumes normal weather conditions. Private and official sources agree that unfavorable farm gate prices, combined with potential threat of new outbreaks of the sugar cane aphid (SCA), which could increase costs of production per acre due to the implementation of measures to control and mitigate it, make sorghum an unattractive planting alternative in some traditional planting areas during MY 2018/19.

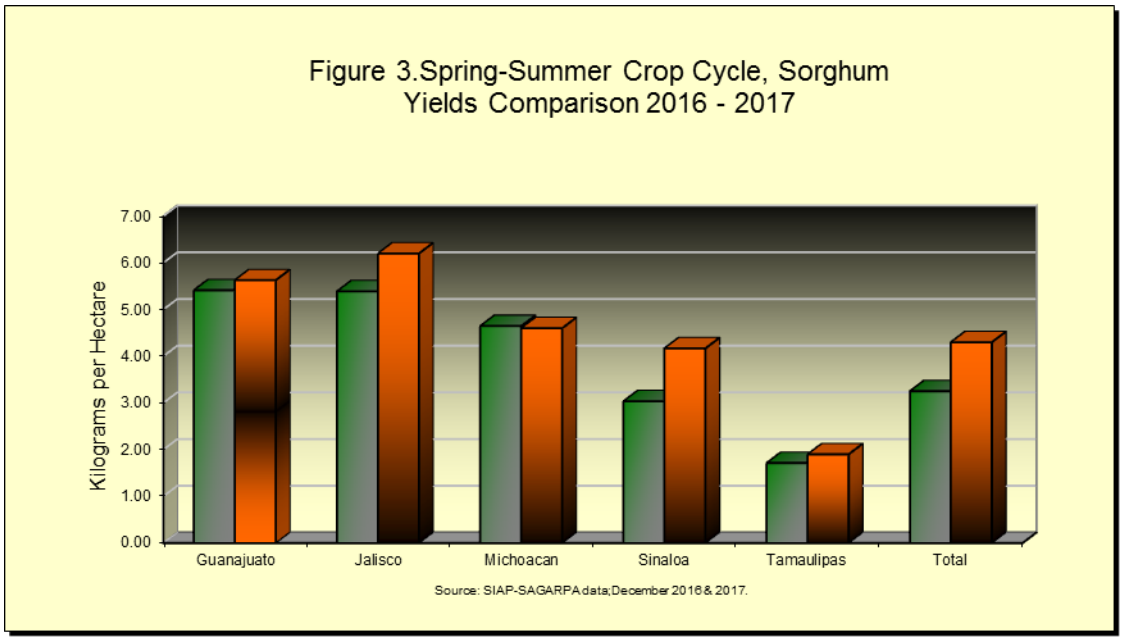
In Guanajuato, for example, despite being one of the most traditional crops, the local Ministry of Agro-food and Rural Development (SDA&R) is recommending farmers not plant sorghum in the 2018 spring/summer cycle, because of low prices. Official sources stated sorghum has been a very traditional crop in the state and for many years growers have focused on it as a primary option. However, when the SCA outbreak occurred (i.e. 2015 spring/summer crop cycle), growers became discouraged by the economic losses. Thus, many growers switched from sorghum to corn. Official sources stated that they do not openly recommend not sowing sorghum, because the farmer must analyze their production costs and market price conditions. However, the SDA&R implemented a program named "Alternative Crops", which encourages farmers seek other crops that generate higher profits. The official sources noted that sorghum has been a good choice in the past, as it is more resistant to dry weather conditions

and has a relatively shorter crop cycle. However, if the SCA infestation resurges again, growers must implement more management practices. Growers have to closely monitor their plots, and have to use control measures at the right time or bring beneficial insects to mitigate any SCA infestation, leading to additional costs and consequently very limited profit. The alternative crops that SD&R recommended to be sown are sunflower seed or yellow corn, since these crops have a better market and are easily sold.

The Post/New MY2016/17 production and harvested area estimates were revised downward and upward, respectively, reflecting final preliminary official data from SAGARPA.

Mexico is the world's third largest producer of sorghum, and its production is spread throughout the country with two crops that grown annually: a spring/summer crop cycle and a fall/winter cycle. The five states that account for approximately 73 percent of the spring/summer sorghum production are Guanajuato, Michoacán, Tamaulipas, Sinaloa, and Jalisco. The harvest of this crop cycle takes place from October to January. Production during the fall/winter cycle occurs primarily in the states of Tamaulipas and Nayarit, and it is harvested May through July. Tamaulipas alone accounts for 80 percent of Mexico's fall/winter crop cycle, and only 22 percent of the fall/winter crop is irrigated.

For MY 2018/19, yields are forecast to be 3.2 MT/ha, while the overall yield for the MY 2017/18 sorghum crop is expected to reach approximately 3.28 MT/ha. The following figure shows the comparison of sorghum yields obtained by the main producing states in the 2016 and 2017 spring/summer crop cycles:



Press reports indicated that cold weather in December 2017 and January 2018 could impact sorghum production in Tamaulipas and elsewhere. However, the crop had not been planted at the time of the cold weather, and therefore it is not expected to have a major impact on yields.

Consumption

Projected sorghum consumption for MY 2018/19 is expected to increase slightly to reach 5.0 MMT, due to the relatively strong demand of the livestock sector and assuming that sorghum-to-corn cash price ratio continues to be favorable to corn. The poultry sector continues to be the major consumer of sorghum in Mexico. Private sources stated that falling corn prices and the fact that poultry growers prefer corn nutritional feeding value over sorghum will continue to encourage higher levels of corn consumption for animal feed, while sorghum consumption could remain relatively stable or increase slightly. Reportedly, the price of sorghum must be approximately 90-92 percent of the price of corn for the poultry industry – the primary industrial consumer of corn and sorghum – to switch to sorghum, due to higher feed conversion rates and coloration benefits of corn.

Trade

Imports in MY 2018/19 are forecast to increase to 250,000 MT, due to insufficient domestic production relative to slightly stronger consumer demand. Animal feed industry sources pointed out that, as has occurred in the last few years, sorghum, corn, and even wheat will continue competing each other to meet Mexican feed demand, and ultimately the mix of these commodities will depend on the market price.

It should be noted that several years ago, Mexico was the top customer of U.S. sorghum, buying more than the 50 percent of U.S. sorghum exports. However, currently U.S. shipments to Mexico represent less than nine percent of U.S. exports, due stronger demand from other countries (i.e. China), which triggered significant price increases. Trade sources estimate this trend could reverse if the international sorghum market conditions change, permitting more affordable prices.

Stocks

Ending stocks are forecast to increase to 172,000 MT in MY 2018/19, from revised estimate of 122,000 MT in MY2017/18, due to the expected slight increase in domestic production and the relatively weak domestic feed demand. The USDA/Official ending stocks estimate for MY2016/17 has been revised downward based on lower production than previously expected.

Production, Supply and Demand Data Statistics:

Table 4: Mexico Sorghum Production, Supply and Demand for MY2016/17 to MY2018/19

Sorghum	2016/2017		2017/2018		2018/2019	
Market Begin Year	Oct 2016		Oct 2017		Oct 2018	
Mexico	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	1460	1465	1450	1450	0	1500
Beginning Stocks	286	286	184	122	0	122
Production	4700	4638	4750	4750	0	4800
MY Imports	548	548	200	200	0	250
TY Imports	548	548	200	200	0	250
TY Imp. from U.S.	548	548	0	200	0	250
Total Supply	5534	5472	5134	5072	0	5172
MY Exports	0	0	0	0	0	0
TY Exports	0	0	0	0	0	0
Feed and Residual	5250	5250	4850	4850	0	4900
FSI Consumption	100	100	100	100	0	100
Total Consumption	5350	5350	4950	4950	0	5000
Ending Stocks	184	122	184	122	0	172

Total Distribution	5534	5472	5134	5072	0	5172
Yield	3.2192	3.1659	3.2759	3.2759	0	3.2
(1000 HA) ,(1000 MT) ,(MT/HA)						

Table 5: Mexico: Production of Animal Feed
(Thousands of Metric Tons)

	2011	2012	2013	2014	2015	2016	2017
Compound Feed Capacity	35.000	35,200	35,670	36,200	37,000	38,000	38,358
Total Compound Feed Produced	28,510	28,389	29,090	29,906	30,995	32,327	33,240
---- by integrated producers	17,992	17,526	18,055	18,535	19,100	19,985	20,624
---- by commercial producers	10,518	10,863	11,035	11,371	11,895	12,342	12,616
	2011	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**
Poultry	14,613	14,187	14,484	15,040	15,535	16,152	16,545
Pork	4,305	4,428	4,600	4,630	4,801	5,024	5,230
Beef Cattle	3,157	3,222	3,360	3,399	3,469	3,571	3,659
Dairy Cattle	4,504	4,570	4,606	4,686	4,843	5,107	5,212
Aquaculture	207	197	124	172	283	285	293
Petfood	NA	NA	861	815	860	930	1,005

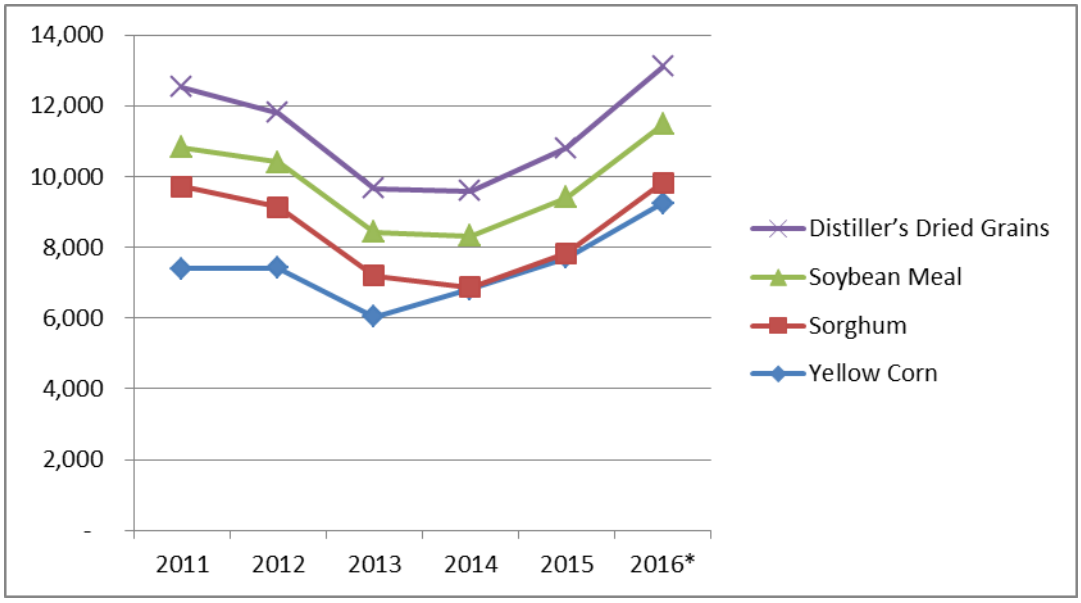
Source: Consejo Nacional de Fabricantes de Alimentos Balanceados y de la Nutricion, A.C.

Table 6: Annual Imports of Main Raw Materials by Mexico's Feed Industry, 2011-2016*
(Thousands of Metric Tons)

	Yellow Corn	Sorghum	Soybean Meal	Distiller's Dried Grains
2011	7,389	2,324	1,114	1,692
2012	7,409	1,726	1,262	1,404
2013	6,031	1,167	1,231	1,239
2014	6,814	56	1,450	1,268
2015	7,706	120	1,575	1,405
2016*	9,251	570	1,650	1,635

Source: Consejo Nacional de Fabricantes de Alimentos Balanceados y de la Nutricion, A.C.
***Preliminary**

Figure 4: Annual Imports of Main Raw Materials by Mexico's Feed Industry, 2001-2016*
(Thousands of Metric Tons)



*Preliminary

Rice

Production

Mexican rice production for MY 2018/19 (October-September) is forecast to increase nine percent to 298,000 MT (rough basis) due to higher planted area. According to private and official sources, preliminary planting intentions show that Campeche is expected to boost planted area by approximately 3,500 ha, while in Veracruz planted area could increase around 10 percent more (i.e. 500 ha), assuming the timely payment of Mexican Government supports. The Mexican Rice Council (MRC) noted one of the main factors driving this increase in harvested area continues to be the governmental support program implemented since July 2016 (see 2016 GAIN Report MX6031 "Wheat, Corn, and Sorghum Estimates Down Slightly; New Rice Program Announced"). This year's rough rice production level converts to 205,000 MT of milled rice.

Nayarit continues to be the main rice-producing state, with approximately 25 percent of total national production, followed by Campeche with 23 percent and Veracruz with 14 percent. In Nayarit and Campeche, growers have reportedly continued the effort to plant new certified long grain variety seeds and to increase the use of new cultivation technologies, based on the Brazilian model. Both measures should contribute to the production increase as well. The MRC stated that the adoption of this new technological package and new seeds in the last three years has allowed slight production and productivity increases in several planting areas.

Given that most rice production in the major growing regions is irrigated, average yields are expected to remain at approximately 6.6 MT/ha, with higher yields in the states of Michoacan and Morelos. Private sources pointed out that the application of the better technological package, the use of hybrid seed, and the governmental supports should promote the competitiveness of rice growers.

Consumption

For MY 2018/19, rice consumption forecast to reach 940,000 MT, an increase of 2.2 percent from the previous marketing year. Relatively affordable prices, due to expected higher domestic production, and population growth are the two main factors driving consumption of rice in MY 2018/19. Private analysts noted that although Mexico's per capita rice consumption is quite low (less than 7 kilograms, according to the MRC), compared with other countries in Latin America, it has continued to grow at a slightly higher rate than the population rate growth (1.4 percent). This trend is expected to continue. According to industry sources, Mexican consumers increasingly demand higher quality rice, although the market is largely price-driven

Trade

Rice imports are forecast to increase to 880,000 MT in MY 2018/19. This is primarily based on the slight increase in consumption. Similarly, exports are expected to remain at 90,000 MT in MY 2018/19, assuming that the strong demand for milled rice by Venezuela continues in this marketing year. More local trading companies (not rice millers directly) are reportedly exporting rice and other basic products, such vegetable oils, to Venezuela. The Venezuelan government has apparently been attempting to import those products with preferential dollar exchange rates in the past year.

The rice import estimate for MY2017/18 has been revised upward from the USDA/Official estimate to 860,000 MT, based on private traders' information and preliminary official data from SAGARPA and Customs covering the first four months of the marketing year.

According to private sources, Mexico's rice import and export market dynamic has been impacted by several factors in the past year.

First, Mexico has become a more attractive importer to some other countries that produce rice, such as Guyana, Uruguay, and eventually Argentina, Brazil, and Paraguay, which have shown interest in exporting to Mexico. Moreover, the Mexican Government has made public statements in 2017 indicating that it has a strategic objective to increase diversification of its agricultural import suppliers.

On December 26, 2017, Mexican Government extended the existing tariff rate quota (TRQ) for rice imports (see 2018 GAIN Report MX8000) through 2019. The TRQ allows countries that do not have free trade agreements with Mexico to benefit from duty free access, assuming the appropriate phytosanitary protocols are in place. Both paddy and milled rice may be imported under the TRQ. For some private sources, this is evidence that Mexico is trying to diversify its rice imports at the same time as attempting to control inflation. It is expected that the diversification trend will continue in 2018.

Traditionally the U.S. has been the single supplier of paddy rice to Mexico. However, in calendar year 2017, the TRQ allowed approximately 113, 525 MT of paddy rice from Guyana to be imported, making up 12.7 percent of the paddy market. Private analysts indicate that Guyana's rice crop was strong in 2017, at the same time as a significant reduction in demand from their traditional market (Venezuela). This motivated Guyana to send an official delegation to Mexico to promote their rice at very affordable prices. It is likely that Mexican rice millers could continue to source Guyanese paddy in 2018, if the prices continue to be attractive. Reportedly, Guyana traditionally exports approximately half of its more than 600,000 MT of rice produced annually. At the same time, Mexican imports of milled rice from Uruguay increased approximately 51.6 percent in 2017.

In general, Mexico imported more rice in all forms, from more origins in CY 2017 than any previous year. Private sources noted that, while a significant part of the growth in rough rice imports was due to Mexico's exports of long grain milled rice to Venezuela (approximately 84,223 MT), these exports do not explain completely the huge increase in imports of milled rice. According to the MRC, the rest of this increase was due to continued growth in rice consumption, although at slow pace.

Despite these factors, U.S rice is currently expected to continue its dominant position over other origins (U.S market share currently is 87.3 percent in paddy rice and 47.8 percent in milled rice). However, some private analysts stated this market share could shrink if the Mexican importers find the right balance between price and quality of the competitor countries. They noted that the message being expressed to U.S. exporters is that Mexico is fast opening to increased trade with other countries for rice, as well as other products. Whether through already established trade agreements or through decrees such as the recently-announced TRQ mentioned above, the Mexican Government has opened the market to duty free access for all origins. Moving forward with more options in terms of suppliers, Mexican rice buyers will be looking for greater emphasis on quality, customer service, and availability of credit from exporters.

In this vein, U.S. rice cooperators have continued with their aggressive trade servicing and promotional activities in Mexico. The cooperators have indicated that they are committed to ensuring that the United States retains a dominant share of Mexico's rice import market and will continue to highlight that the U.S. is a consistent, reliable, and timely supplier of high-quality rice, both in paddy and milled forms.

Stocks

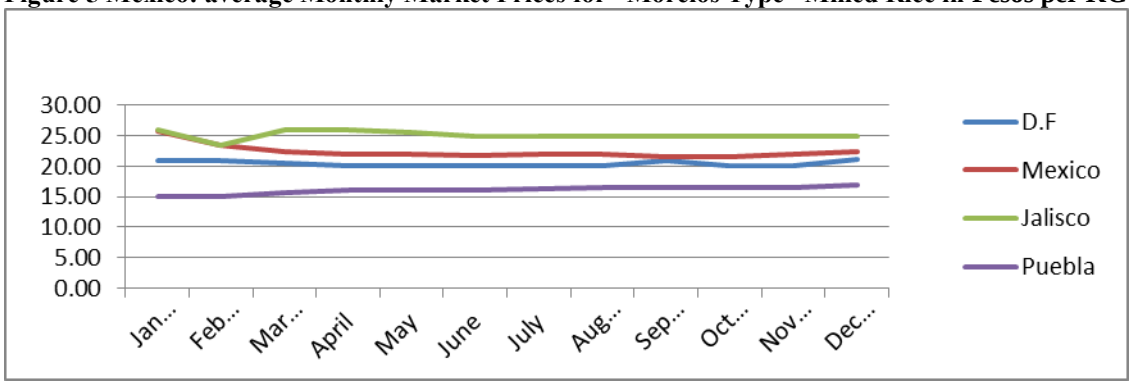
For MY 2018/19, the Post/New ending stocks forecast has been increased to 262,000 MT, due primarily to higher domestic production and total imports. The ending stocks estimate for MY2017/18 has been revised upward to 207,000 MT based on higher imports than previously expected.

Wholesale Milled Rice Prices

Table 7. Mexico: Average Monthly Market Prices for Milled Rice Type Morelos in Pesos per 50 KG Bag

Month	D.F	Mexico	Jalisco	Puebla
January	21.00	25.75	26.00	15.00
February	21.00	23.50	23.50	15.00
March	20.50	22.40	26.00	15.60
April	20.20	22.00	26.00	16.00
May	20.00	22.00	25.60	16.00
June	20.00	21.75	25.00	16.00
July	20.00	22.00	25.00	16.38
August	20.00	22.00	25.00	16.50
September	21.00	21.50	25.00	16.50
October	20.00	21.50	25.00	16.50
November	20.20	22.00	25.00	16.50
December	21.25	22.50	25.00	17.00

Figure 5 Mexico: average Monthly Market Prices for "Morelos Type" Milled Rice in Pesos per KG



Exchange Rate: 18.88 Pesos per 1 U.S. Dollar
Source: National market Information System (SNIIM), belonging to the Ministry of Economy

Production, Supply and Demand Data Statistics:

Table 8: Mexico Rice Production, Supply and Demand for MY2016/17 to MY2018/19

Rice, Milled	2016/2017		2017/2018		2018/2019	
Market Begin Year	Oct 2016		Oct 2017		Oct 2018	
Mexico	USDA Official	New Post	USDA Official	New Post	USDA Official	New Post
Area Harvested	40	40	41	41	0	45
Beginning Stocks	127	127	169	169	0	207
Milled Production	175	175	188	188	0	205
Rough Production	255	255	274	274	0	298
Milling Rate (.9999)	6870	6870	6870	6870	0	6870
MY Imports	867	867	850	860	0	880
TY Imports	870	867	850	860	0	810
TY Imp. from U.S.	0	710	0	705	0	710
Total Supply	1169	1169	1207	1217	0	1292
MY Exports	85	85	90	90	0	90
TY Exports	90	90	90	90	0	90
Consumption and Residual	915	915	920	920	0	940
Ending Stocks	169	169	197	207	0	262
Total Distribution	1169	1169	1207	1217	0	1292
Yield (Rough)	6.375	6.375	6.6829	6.6829	0	6.6222
(1000 HA) ,(1000 MT) ,(MT/HA)						

For More Information

FAS/Mexico Web Site: We are available at www.mexico-usda.com.mx or visit the FAS headquarters' home page at www.fas.usda.gov for a complete selection of FAS worldwide agricultural reporting.

Report Number	Title of Report	Date Submitted
MX8002	Corn, rice, and Sorghum Estimates Increased Slightly	1/18/2018
MX703	Slight Bump in corn Production, Smaller Wheat Harvest	9/14/2017
MX7024	Mexico Expects Strong Corn Crop Due to Favorable Weather	6/15/2017
MX7007	Average Production Expected as Consumption Growth Slows	3/14/2017
MX7001	Increased Acreage, Good Weather Boost Corn Production	2/3/2017
MX6031	Wheat, Corn, and Sorghum Estimates Down Slightly; New Rice Program Announced	9/1/2016
MX6023	June 2016 Grain and Feed Update	6/6/2016