USDA Foreign Agricultural Service
GAIN Report
Global Agricultural Information Network

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: 5/27/2011
GAIN Report Number: MX1044

Mexico

Tomato Annual

MY2011/12 Production Forecast to Rebound

Approved By:
Allan Mustard

Prepared By:
Dulce Flores and Adam Branson

Report Highlights:
Marketing year (MY) 2011/12 tomato production is forecast at 2.1 million metric tons (MMT). Production for MY2010/11 is estimated at 1.81 MMT as a strong February 2011 freeze damaged production in the state of Sinaloa. Tomato exports for MY2010/11 are estimated lower than MY2009/10 total exports of 1.51 MMT. Production under protected agriculture technology is expanding throughout the country for several horticultural products, including tomato.

Commodities:

Tomato Paste,28-30% TSS Basis

Tomato Sauce

Tomatoes, Canned

Production:

The Post/New tomato production forecast for the October to September MY2011/12 is 2.1 MMT assuming favorable weather conditions and attractive international prices. Although there is no official Government of Mexico forecast for overall tomato production for MY2011/12, Post expects that good weather, attractive international market prices, as well as a favorable exchange rate will encourage production. The overall tomato production estimate for MY2010/11 was expected to be higher than MY2009/10 production; however, due to a strong February 2011 freeze that affected blossoming and younger plants in the state of Sinaloa, production is estimated at 1.81 MMT as mature plants and greenhouse plants were harvested. Open field tomatoes in northern Sinaloa were lost almost entirely and the tomato crop in the central area of Sinaloa experienced partial damage. Horticultural shade house producers had varying degrees of losses, but about 40 percent of tomato production was damaged. Greenhouse producers experienced minor damage in Sinaloa. Sources report that, overall, 40 percent of the total production in Sinaloa was lost. The spring tomato crop from Baja California and other states is expected to be normal. The Post/New MY2009/10 overall tomato production estimate was revised downward from the Post/Old estimate to 2.06 MMT as extreme heat stressed plants in Sinaloa and tomatoes were available earlier than usual in December 2009. In addition, the Baja California spring tomato crop was delayed due to cooler temperatures.

Total planted area for tomatoes has been decreasing steadily. In 1990, planted area was about 85,500 hectares (ha). In 2000, tomato planted area was about 75,800 ha. In 2011, tomato planted area is expected to about 57,300 ha. Despite the trend, there are significant changes in how planted area is used and which areas are being planted. For example, tomato-producing states like Sinaloa and Baja California are switching from open field production to greenhouse production and using less area while increasing yields. In addition, some projects in, for example, some areas of Queretaro and Oaxaca, are producing tomatoes under protected agriculture as the technology is supported, partially, by the government (see Policy section).

MY2011/12 tomato planting area for fresh consumption is forecast at levels similar to MY2010/11. The MY2010/11 planting area estimate was revised downward from 57,400 ha to 57,300 ha. Despite the reduction, winter season plantings in Sinaloa increased, where more production was expected in comparison with MY2009/10. However, the 2011 February freeze damaged about 30 to 40 percent of the planted area and, as a result, MY2010/11 harvested area was revised downward to 48,650 ha (about 6,770 ha in Sinaloa were damaged). The planting estimate for MY2009/10 was revised downward from 57,300 to 54,238 ha and harvested area was increased to 48,889 ha based on official data. The Roma

variety now represents more than 57 percent of Mexican tomato production as demand for this type of tomato has increased over the round tomato.

Yields vary depending on production conditions and inputs. Yields have grown from 23 MT/ha in 1990 to 28 MT/ha in 2000 and are expected to reach 40 MT/ha in 2011. Baja California and Sinaloa growers generally achieve the highest fresh tomato yields, about 45 MT/ha or more, due in part to their pest and disease control programs. In other areas of Mexico, growers have lower yields averaging from 20 to 30 MT/ha. This is attributable to less intensive use of inputs. Greenhouse/shade house yields tend to vary significantly among producers, variety, and state. These yields generally range from 150 MT/ha to 200 MT/ha depending on the technology used.

Table 1. Mexico: Tomato Production Area (ha) and Volume (MT) for MY2009/10 through MY2011/12

	Estimate MY 2009/10	Estimate MY 2010/11	Forecast MY 2011/12
Total Planted Area (ha)	**54,238**	**57,300**	**57,300**
• For fresh consumption	51,238	53,300	53,300
• For processing	3,000	4,000	4,000
Total Harvested Area (ha)	**48,889**	**48,650**	**54,300**
• For fresh consumption	45,889	44,650	50,300
• For processing	3,000	650	4,000
Total production (MT)	**2,058,424**	**1,812,000**	**2,100,000**
• For fresh market	1,968,424	1,782,000	1,980,000
• For processing	90,000	30,000	120,000

Open-field tomato production area has shown a tendency to decrease due to pest problems, high costs of production, swings in both international prices and exchange rates, and limited water availability. The decrease in open field area is more evident in states like Sinaloa, Baja California, and Jalisco. In addition, small open field producers are switching to other products like corn and beans in search of better financial returns. There has also been a gradual switch from open field tomato production to protected production. Greenhouse/shade house operations are concentrated in the states of Sinaloa, Baja California and Jalisco, but there are also greenhouse operations in the states of Colima, Mexico, Hidalgo, Michoacán, Querétaro, San Luis Potosí, Sonora, and Zacatecas. According to industry sources, there are probably over 4,000 ha of protected agriculture throughout Mexico devoted to tomato production.

According to sources, protected agriculture is growing in Mexico at about 15 percent a year, as producers increasingly become aware of the benefits in production, quality, pest control, and reduced risk exposure to climate change. Moreover, there is growth in protected agriculture as the government, at various levels, sees the benefit of introducing this production method to rural and poorer areas as a form of social development.

In Sinaloa, a winter tomato producing state, there are about 15,000 ha devoted to tomatoes of which approximately 1,700 ha are under protected production. Due to strong returns, production has trended towards increased use of shade houses, mainly for products destined for the export market. Growers,

however, indicate that combining open field and shade house production has been useful for the market. However, sources point out that there is little agricultural sophistication (i.e., lack of established marketing channels, insufficient capital, and ability to manage weather events), and, sometimes, growers abandon these facilities. Through a recent study, the Mexican Association of Protected Horticulture (AMHPAC) found that, out of the approximately 9,000 ha of greenhouses existing in the northern states of Sinaloa, Sonora, Baja California Norte, and Baja California Sur, 30 percent were not operating.

During the October to May winter season, Sinaloa growers are the main producers and exporters of fresh tomatoes. Other significant producers include Michoacan, Jalisco, and Baja California Sur. Growers in Sinaloa are anticipating that the use of improved and extended shelf varieties, drip irrigation, and plastic mulch will help maintain their high yield levels. During the summer season (May to October), Baja California growers are the main producers and exporters of fresh tomatoes. The states of Michoacan, Jalisco, and Morelos follow Baja California's production. Producers in Sinaloa and Baja California are considered more technologically advanced than other producing states. As a result, U.S. California tomatoes face direct competition from Baja California tomatoes. Growers in Jalisco produce tomatoes for the summer cycle, and usually export in October, November, and December after Baja California. The states of Jalisco and Queretaro have increased shade house planted area. This increase is largely attributable to success in exporting to the United States.

Planting and harvesting of tomatoes for processing is largely a function of fresh domestic market prices and international tomato paste prices. Area that was previously devoted to planting tomatoes for the processing industry have shifted to the fresh market, as demand for processing tomatoes has declined in the face of high international fresh market prices. Area planted for both MY2010/11 and MY2011/12 of processed tomatoes was estimated at 4,000 ha. Yields for this type of tomato range from 30 MT/ha to 40 MT/ha given normal weather conditions. If the industry needs to process additional tomatoes, it purchases supplies from the open market. Due to the February 2011 freeze in Sinaloa, a large portion of the area devoted to industrial tomato use was damaged.

Tomato production costs remain high across the country. Credit availability remains a constraining factor for growers, since Mexican banks do not provide loans for tomato production. In a few instances, producers with export contracts can receive some operating capital from contracting companies in the United States. According to growers, imported agrochemicals, seeds, and fertilizers are the most costly inputs. The Mexican Government Agricultural Trust Fund (FIRA) prepared an analysis on costs of production for tomato under three different technologies: greenhouse, shade house, and open field. Table 3 data for greenhouse tomato production corresponds to small and medium production units from the state of Michoacan. Tables 4 and 5 have data for shade house and open field costs from the state of Sinaloa.

Table 3. Mexico: 2009 Costs of Production for Greenhouse Tomatoes Originating from Michoacan in Pesos

	Greenhouse Area		
	528 m^2	**2,500 m^2**	**3,000 m^2**

Variable Costs Wages and Salaries Fertilizer & Pesticides Seed (production & bees) Material & Equipment	**72,484**	**257,031**	**305,291**
Fixed Costs Depreciation Gas, Electricity, Maintenance, Assessment	**29,030**	**75,140**	**147,085**
TOTAL COST	**101,514**	**332,171**	**452,376**
Cost of Production per m^2	192	144	151
Cost of Production/MT	6,144	6,051	5,331
Sales Revenue	**107,380**	**385,580**	**551,525**
Total Production (MT)	16.52	59.32	84.85
Average sales price (Pesos/MT)	6,500	6,500	6,500
Cost/Benefit Ratio	**1.06**	**1.16**	**1.22**
Source: FIRA- Panorama Agroalimentario- Tomate Rojo 2010			

Table 4. Mexico: 2009 Costs of Production for Shade house Tomatoes Originating from Sinaloa in Pesos/Hectare

ITEMS	COST
Land Preparation	2,430
Planting	29,826
Agricultural Labor	33,500
Irrigation & Drainage	1,500
Fertilization	55,080
Pest Control	25,427
Permits & other	10,840
Harvesting Labor	58,500
FIELD TOTAL COST	**217,103**
Yields (MT/Hectares)	53.7
Average Rural Price	7,624
TOTAL REVENUE	**409,550**
Cost/Benefit Ratio	**1.9**
Source: FIRA- Panorama Agroalimentario- Tomate Rojo 2010	

Table 5. Mexico: 2008 Costs of Production for Open Field Roma Tomatoes Originating from Sinaloa in Pesos/Hectare

ITEMS	COST
Land Preparation	2,605
Labor and Planting	33,320

Fertilization practices	17,836
Weed Control	3,880
Pest Control	12,598
Tillage	9,703
Irrigation	3,315
Planting material	6,040
Harvesting Labor	8,750
Financial Expenses	9,677
Miscellaneous	22,916
TOTAL COST PER HECTARE	**130,640**
Total cost per MT	2,177
Total Income	**184,750**
Yield per MT	49.9
Mid Rural Price (Pesos/MT)	3,702
Cost/Benefit Ratio	**1.4**
Source: FIRA- Panorama Agroalimentario- Tomate Rojo 2010	

The following table indicates hectares and yields under protected agriculture for some states in Mexico according to official information for MY2008/09.

Table 6. Mexico: Tomato Yields under Protected Agriculture for MY2008/09

STATE	HECTARES	YIELDS
Shade House Type		
Baja California	915	78.8
Jalisco	20	48.0
Sinaloa (Roma)	304	113.7
Sinaloa (Round)	218	67.8
Greenhouse Type		
Jalisco	395	73.2
Baja California	53	116.1
Baja California Sur	43	90
Sinaloa (Roma)	27	186.3
Sinaloa (Round)	104	107
Jalisco	268	167.7
S.L.P.	148	150
Coahuila	247	64.2
Zacatecas	192	133.4

Consumption:

The MY2011/12 final consumption figure will depend on tomato exports to the United States, as domestic consumption is a residual after exporting. Tomato consumption for MY2009/10 is estimated at about 460,000 MT, lower than the previous marketing year due to higher exports and high domestic

prices. Consumption for MY2010/11 is estimated to be similar to MY2009/10 due to lower supplies during the winter season, high export volumes, and high domestic prices.

Tomato consumption is price sensitive in Mexico, thus marginal changes in prices tend to lead to significant changes in demand. Although protected production is still limited, and tends to be higher priced, the market now has the option of meeting some of the domestic demand with greenhouse/shade house tomatoes.

Local tomato prices tend to rise from March to May because of increased exports from the state of Sinaloa, which in turn reduces supply in the domestic market. Exports also increase from June to August, as this is the international market window for tomatoes from Baja California. By the end of November and December, tomato prices usually rise again, due to the increased export volume from the states of Jalisco and Sinaloa.

The tomato paste industry always buys tomatoes from the fresh market in addition to buying contracted tomatoes for processing. However, price competition in the fresh market has developed into a problem for the processing industry. Over the past several years, relatively high fresh tomato prices have diverted product away from the processing market. Thus, there has been very little industry demand for tomatoes destined to paste production, as it is economically more feasible to import tomato paste rather than produce it domestically.

Trade:

Exports for MY2011/12 are expected to rebound from MY2010/11 levels if weather conditions are good. Tomato exports for MY2010/11 are estimated lower than MY2009/10 total exports that were 1.51 MMT. According to industry sources, tomato exports during the MY2010/11 winter season were lower as exports from Sinaloa decreased by about 40 percent during this season. According to information for the Nogales/Tucson border crossing, there was a 31 percent decrease in exports during the September 2010 to May 2011 period in comparison to the prior period a year earlier. However, it seems that exports from other states increased during this time. Tomato exports for MY2009/10 were higher than expected due to stronger than anticipated demand during the winter. The January 2010 freeze that damaged the Florida tomato crop resulted in a strong export season for the state of Sinaloa because of higher international prices. According to the U.S. Census Bureau, 33 percent of all tomatoes imported into the United States from Mexico during MY2009/10 were shade/greenhouse tomatoes.

Fresh tomato imports from the United States represent a small portion of Mexico's fresh consumption and fluctuate depending on international prices and domestic availability. Due to high international prices, imports for MY2009/10 were 28,850 MT in comparison with MY2008/09 imports of 45,964 MT. Imports for MY2010/11 might be similar to MY2009/10 imports due to higher import prices and good supplies from the domestic market. Most imported tomatoes are sold in the northern states of Nuevo Leon, Sonora, Baja California, and Chihuahua.

Policy:

A**s** mentioned in GAIN report MX0037 *Area Planted Down But Production Up*, the Secretariat of Agriculture, Livestock, Rural Development, Fisheries and Food (SAGARPA) announced a strategic project in March 2010 for protected agriculture. This strategic plan is supposed to generate new employment in the rural areas utilizing funds from FIRCO, which is the Mexican trust fund for shared

risk (www.firco.gob.mx/). Only investments for new infrastructure and new equipment are supported and funds cannot be used to buy land or housing. Support could reach up to 50 percent for very marginal areas and up to 40 percent for other producers. Individual project limits were set at $3 million pesos (U.S. $246,000) and other guidelines were established. However, due to large demand for support in 2011, FIRCO stopped granting requests for support in April 2011, as the budget limit was reached.

Most of these support funds were geared towards small producers. Sources indicated that a first-time building credit typically paid up to 50 percent of the investment or, up to, approximately $53,000. Some producers initially failed when using this credit due to the lack of a well-established marketing channel while other producers, however, used the funding appropriately and continue growing tomatoes.

Federal funding is not the only support mechanism available to producers. The state of Queretaro, for example, through the State Secretariat of Agricultural Development, supported a greenhouse program in 2010. These greenhouses were built in locations where the facility would not compete against another facility. The state devoted $2.06 million dollars for the construction of 92 greenhouses that produce tomato, pepper, and zucchini. Seventy-four of the greenhouses were designed as development centers where producers can learn and develop their projects for commodities destined for consumption in local communities. The government provides training in these social oriented production centers, as well.

Both producers and SAGARPA officials are extremely cognizant of the importance of meeting quality standards for fruits and vegetables and have implemented programs to comply with U.S. food safety requirements.

The Tomato Suspension Agreement between Mexico and the United States, signed on December 4, 2002, bound all tomato exporters to an agreed upon reference price. The reference price for exporting fresh tomatoes for the summer season (July 1 to October 22) is 17.2 cents per pound, and the reference price for the winter season (October 23 to June 30) is 21.69 cents per pound. According to growers, tomato prices for MY2010/11 have been above reference prices. Fresh tomato exports to the United States as well as imports have a zero duty under NAFTA. The tomato tariff classification numbers are 0702.0001 and 0702.0099.

TARIFFS

Mexico, in general, does not import tomatoes from countries other than the United States. Mexico's most favored nation (MFN) applied tariff rate for tomato (HTS 0702) imports is 10 percent. Countries with tariff free access to Mexico include: the United States; Canada; Chile; Costa Rica; Nicaragua; Uruguay; Bolivia; the European Union; and, Japan. There is an applied tariff rate of 28 percent for tomatoes from Colombia. Mexico does not assess an export tariff.

Marketing:

Fresh tomatoes destined for domestic consumption, including imported tomatoes, pass through wholesale markets and proceed to large supermarkets and retail stores. A few stores import directly without going through wholesale marketing channels. This remains somewhat rare, however, since most retail operations do not have expertise importing or the labor resources to repack tomatoes based on maturity, size, etc. before products are showcased before consumers. In the past, promotional

campaigns for U.S. tomatoes focused on proper tomato handling techniques, point of sale materials, and in-store promotions. Most of the imported product is destined to border cities and states. Tomatoes for the export market are shipped directly from the producing area to the United States border.

Production, Supply and Demand Data Statistics:

PRICES

Export prices for tomatoes in January 2011 were $6 to $9 per 15-lb box. In March 2011, prices had increased to $22 to 25 dollars per box. By May, prices returned lower and were $6 to $8 dollars per box.

Table 7. Mexico: Wholesale Round Tomato Prices in Mexico City in Pesos/Kilogram

MONTH	**2009**	**2010**	**2011**	CHANGE %
JANUARY	7.08	11.05	8.60	(22.17)
February	4.74	12.29	15.73	27.99
MARCH	7.15	26.03	24.53	(5.76)
APRIL	10.53	17.40	30.63	76.03
MAY	9.00	11.96	16.87	41.05
JUNE	16.38	6.09	N/A	N/A
JULY	13.68	7.88	N/A	N/A
AUGUST	14.06	12.00	N/A	N/A
SEPTEMBER	15.06	12.69	N/A	N/A
OCTOBER	14.62	14.44	N/A	N/A
November	17.56	11.84	N/A	N/A
December	16.13	11.59	N/A	N/A

Table 8. Mexico: Wholesale Roma Tomato Prices in Mexico City in Pesos/Kilogram

Month	**2009**	**2010**	**2011**	CHANGE %
JANUARY	6.11	5.72	8.20	43.35
February	3.94	6.60	9.83	48.93
MARCH	6.06	9.42	10.42	10.61
APRIL	9.38	5.54	16.06	189.89
MAY	8.24	4.95	7.99	61.41
JUNE	8.52	4.15	N/A	N/A
JULY	9.31	5.76	N/A	N/A

AUGUST	12.59	6.44	N/A	N/A
SEPTEMBER	15.31	8.45	N/A	N/A
OCTOBER	9.63	12.19	N/A	N/A
November	7.89	11.78	N/A	N/A
December	7.20	10.66	N/A	N/A

Source: Sevicio Nacional de Informacion de Mercados
Note: 2010 Exchange Rate Avg.: U.S. $1.00 = 12.62 pesos. April 26, 2011 Exchange Rate: U.S. $1.00 = 11.62 pesos

Figure 1. Mexico: Round Tomato Wholesale Prices in Mexico City for Marketing Years 2009/10 and 2010/11 in Pesos/Kilogram

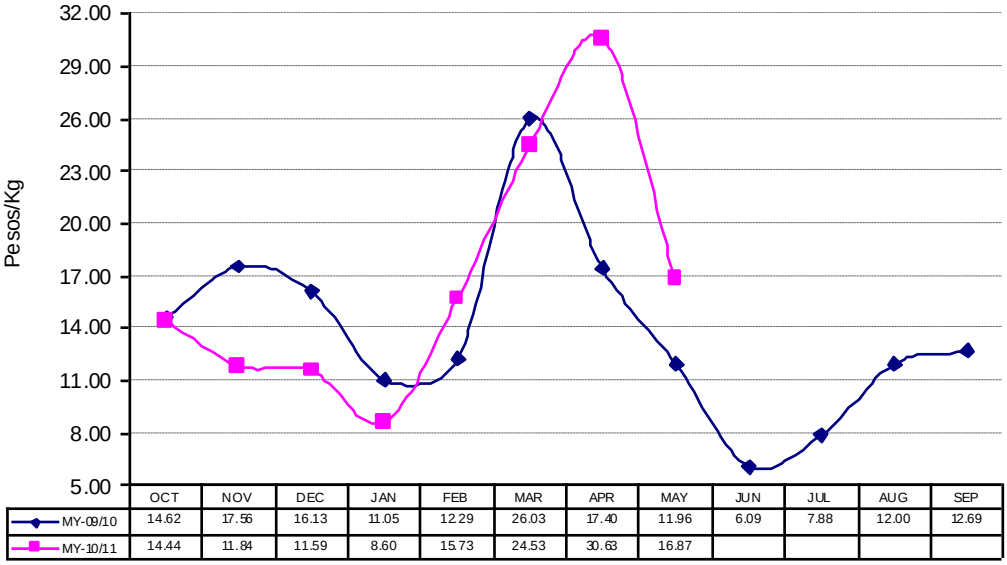

Figure 2. Round and Roma Wholesale Tomato Prices in Mexico City in Marketing Year 2010/11 in Pesos/Kilogram

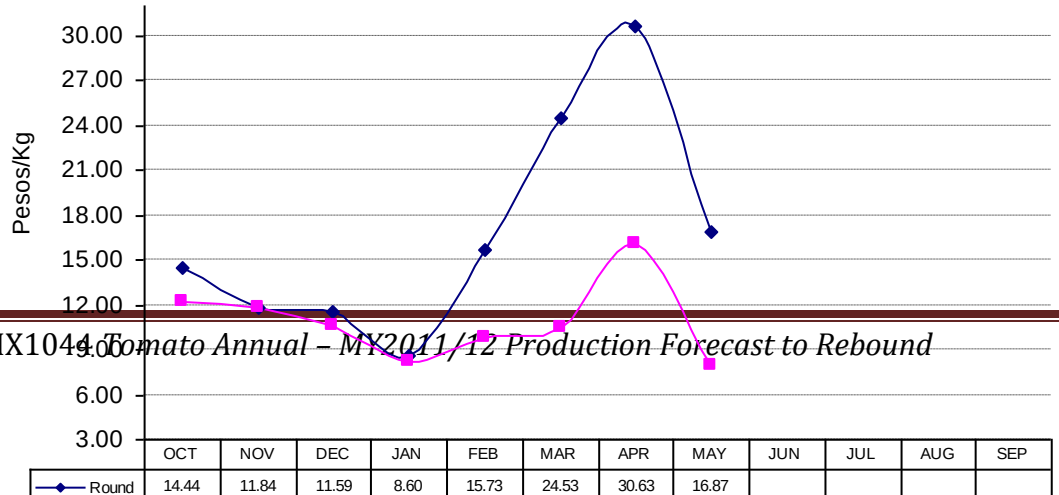

Table 9. Mexico: MY2009/10 Tomato Exports and Imports by Volume (MT) and Value ($)

Exports for MY 2009/10 (OCT-SEPT):			Imports for MY 2009/10 (OCT-SEPT):		
Destination	Volume	Value	Origin	Volume	Value
U.S.	1,493,112	$1,620.427	U.S.	28,850	$69,114
Canada	12,479	13.390			
OTHERS NOT LISTED	6,679		OTHERS NOT LISTED	0	
GRAND TOTAL	**1,512,270**	**$1,640.089**	**GRAND TOTAL**	**28,850**	**$69,114**

SOURCE: Global Trade Information Services, Inc. Global Trade Atlas, Mexico Edition, January 2011

Table 10. Mexico: MY2010/11* Tomato Exports and Imports by Volume (MT) and Value ($)

EXPORTS FOR MY 2010/11 (OCT-SEPT):			IMPORTS FOR MY 2010/11 (OCT-SEPT)		
Destination	Volume	Value	Origin	Volume	Value
U.S.	414,536	$479,756	U.S.	13,580	$22,472
CANADA	18,635	21,425	CHILE	0	
OTHERS NOT LISTED	490		OTHERS NOT LISTED	0	
GRAND TOTAL	**433,661**	**$501,735**	**GRAND TOTAL**	**13,580**	**$22,472**

*** Through January 2011**

SOURCE: Global Trade Information Services, Inc. Global Trade Atlas, Mexico Edition, January 2011

Table 11. Mexico: Monthly Exchange Rate Averages for 2008-2011 in Mexican Pesos/U.S. $1.00

	2008	2009	2010	2011
January	10.91	13.15	12.80	12.13
February	10.77	14.55	12.95	12.06
March	10.74	14.71	12.59	12.00
April	10.52	13.41	12.23	11.73
May	10.44	13.19	12.71	
June	10.33	13.47	12.72	
July	10.24	13.36	12.65	
August	10.10	13.00	13.15	
September	10.61	13.41	12.84	
October	12.56	13.24	12.44	
November	12.31	13.12	12.33	
December	13.40	12.85	12.39	
Annual Avg.	**11.14**	**12.33**	**12.65**	**12.06**

Source: Mexican Federal Register

Note: Monthly rates are averages of daily exchange rates from the Banco de Mexico.

Author Defined:

For More Information

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

FAS/Mexico YouTube Channel: Catch the latest videos of FAS Mexico at work http://www.youtube.com/user/ATOMexicoCity

Report Number	Subject	Date Submitted
MX1012	Hard Freeze Damages Sinaloa Corn and Produce	2/14/2011
MX0083	Fresh Fruit Grading Suspended in Nogales	11/9/2010
MX0054	Mexico Increases Trucking Retaliation Against Ag. Products	8/19/2010
MX0037	Area Planted Down But Production Up	6/21/2010
MX0024	Greenhouse and Shade House Production to Continue Increasing	4/26/2010

Useful Mexican Web Sites: Mexico's equivalent to the U.S. Department of Agriculture (SAGARPA) can be found at www.sagarpa.gob.mx , equivalent to the U.S. Department of Commerce (SE) can be found at www.economia.gob.mx and equivalent to the U.S. Food and Drug Administration (SALUD) can be found at www.salud.gob.mx. These web sites are mentioned for the readers' convenience but USDA does NOT in any way endorse, guarantee the accuracy of, or necessarily concur with, the information contained on the mentioned sites.