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# **Sugar and Sweeteners Outlook**

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U.S. Sugar Production Projection Reduced for 2016/17, Ending Stocks Tightened Compared to March WASDE

The April World Agricultural Supply and Demand Estimates (WASDE) raises projected total sugar supplies by 15,000 short tons, raw value (STRV) to 14.022 million STRV compared with the March report. A 110,000-STRV reduction in beet sugar production and a 25,000-STRV reduction in cane sugar production is offset by a 150,000-STRV increase in imports under the re-export program. Total use is raised 50,000 STRV to 12.380 million STRV based on higher exports projected due to the increase in imports for the re-export program. Deliveries for domestic food and beverage consumption are unchanged at 12.100 million STRV. Ending stocks are projected to be 1.642 million STRV, lowering the stocksto-use ratio from last month's 13.6 to 13.3 percent.

Mexico sugar production is reduced 185,000 metric tons, actual value (MT) to 6.186 million MT, based on current pace of the harvest. Imports are raised 15,000 MT, resulting in total supplies projected at 7.298 million MT. Domestic sugar deliveries for human consumption are raised 73,000 MT to 4.461 million MT, based on the pace of deliveries reported through February. Total exports are lowered 257,000 MT to 1.163 million, all due to fewer exports to countries other than the United States because of fewer available supplies. Ending stocks are projected to be 1.293 million MT, a 15,000-MT increase from the previous month's projection. The stocks-to-consumption ratio is projected at 29.0 percent, down slightly from the previous month's projection of 29.1 percent.

U.S. honey production in 2016 increased 3.4 percent from 2015 totals, while imports declined 5 percent. Average prices received by U.S. honey producers have continued to plateau, declining 0.4 percent in 2016 after steadily increasing from 2005 to 2014. Statelevel data show differing patterns in local and regional markets compared with national trends.

## U.S. sugar production reduced for both beet and cane sugar based on latest processing conditions

The April USDA *World Agricultural Supply and Demand Estimates* (WASDE) projects total sugar supplies to be 14.022 million short tons, raw value (STRV) in 2016/17. This is a 15,000-STRV increase from the March report, as lower domestic production is more than offset by higher projected imports. Beginning stocks coming into 2016/17 are unchanged at 2.054 million STRV.

Table 1 -- U.S. sugar: supply and use, by fiscal year (Oct./Sept.), April 2017.

Items	2014/15	2015/16 (estimate)	2016/17 (forecast)	2014/15	2015/16 (estimate)	2016/17 (forecast)
			,			
	1,000 \$	Short tons, raw	value	1,000 N	Metric tons, rav	v value
Beginning stocks	1,810	1,815	2,054	1,642	1,647	1,863
Total production	8,656	8,989	8,840	7,853	8,155	8,020
Beet sugar	4,893	5,119	4,996	4,439	4,644	4,532
Cane sugar	3,763	3,870	3,844	3,414	3,511	3,488
Florida	1,981	2,173	2,051	1,797	1,971	1,861
Louisiana	1,513	1,428	1,612	1,372	1,296	1,462
Texas	123	116	138	112	106	125
Hawaii	146	152	43	132	138	39
Total imports	3,553	3,341	3,128	3,223	3,031	2,838
Tariff-rate quota imports	1,536	1,620	1,576	1,393	1,469	1,430
Other program imports	471	396	375	427	359	340
Non-program imports	1,546	1,325	1,177	1,403	1,202	1,068
Mexico	1,532	1,309	1,162	1,389	1,187	1,054
Total supply	14,019	14,145	14,022	12,718	12,832	12,721
Total exports	185	74	125	168	67	113
Miscellaneous	0	-33	0	0	-30	0
Deliveries for domestic use Transfer to sugar-containing products	12,019	12,051	12,255	10,903	10,932	11,118
for exports under re-export program	103	148	120	93	134	109
Transfer to polyhydric alcohol, feed, other alcohol	28	22	35	25	20	32
Commodity Credit Corporation (CCC) sale for ethanol, other	0	0	0	0	0	0
Deliveries for domestic food and beverage use	11,888	11,881	12,100	10,785	10,778	10,977
Total Use	12,204	12,091	12,380	11,071	10,969	11,231
Ending stocks	1,815	2,054	1,642	1,647	1,863	1,490
Private	1,815	2,054	1,642	1,647	1,863	1,490
Commodity Credit Corporation (CCC)	0	0	0	0	0	0
Stocks-to-use ratio	14.87	16.99	13.26	14.87	16.99	13.26

Source: U.S. Dept. of Agriculture, Economic Research Service, Sugar and Sweetener Outlook.

Total domestic sugar production for 2016/17 is projected at 8.840 million STRV, a 135,000-STRV decline from the previous month. Beet sugar production is projected to be 4.996 million STRV, a 110,000-STRV decrease from the previous month, accounting for most of the projected decline. The lowered beet sugar outlook is primarily the result of an expected increase in sugarbeet shrink, as reported by beet processors. Many sugarbeet growing regions have experienced warmer-than-average temperatures in recent weeks, in particular in the last week of March through the beginning of April in the Red River Valley. Sugarbeets stored in exposed, nonventilated piles are particularly vulnerable to warmer weather conditions.

Table 2: Beet sugar production projection calculation, 2016/17

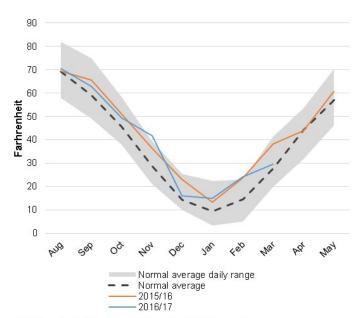
	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	2016/17	2016/17
								March	April
Sugarbeet production (1,000 short tons) 1/	29,783	32,034	28,896	35,224	32,789	31,285	35,371	36,881	36,881
Sugarbeet shrink 2/	5.7%	5.9%	5.9%	4.8%	6.8%	5.4%	6.5%	5.8%	7.0%
Sugarbeets sliced (1,000 short tons)	28,097	30,137	27,184	33,532	30,545	29,595	33,066	34,742	34,314
Sugar extraction rate from slice	14.3%	15.4%	15.0%	15.3%	14.3%	14.6%	14.6%	13.9%	13.8%
Sugar from beets slice (1,000 STRV)	4,023	4,631	4,086	5,142	4,325	4,325	4,820	4,837	4,727
Sugar from molasses (1,000 STRV) 2/	325	357	401	327	324	341	362	353	353
Crop year sugar production (1,000 STRV) 3/	4,348	4,987	4,487	5,469	4,648	4,667	5,183	5,190	5,080
August-September sugar production (1,000 STRV)	396	623	294	708	315	461	688	606	606
August-September sugar production forecast (1,000 STRV) 4/							606	483	483
Sugar from imported beets (1,000 STRV) 5/								40	40
Fiscal year sugar production (1,000 STRV)	4,575	4,659	4,900	5,076	4,794	4,893	5,119	5,106	4,996

Notes: 1/ National Agricultural Statistics Service, U.S. Dept. of Agriculture. 2/Projections based on processor forecasts published by Farm Service Agency. 3/ August-July basis. 4/ 2016/17 based on 10-year historical average. 5/ Sugar from imported beets split out for projections only. They are incorporated into total production in historical data.

Source: U.S. Dept. of Agriculture, Economic Research Service and World Agricultural Outlook Board.

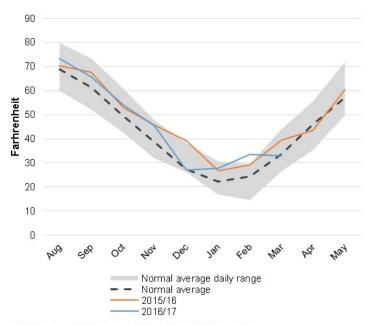
Figure 1

Fargo, ND temperatures, monthly averages, 2015/16-2016/17 and normal



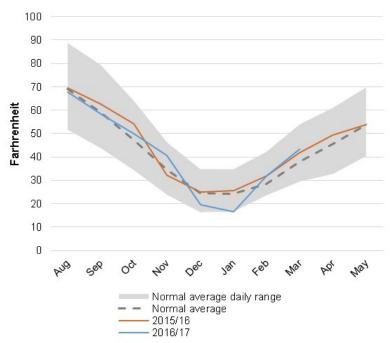
Source: U.S. Department of Agriculture, Office of the Chief Economist.

Figure 2
Saginaw, MI temperatures, monthly averages, 2015/16-2016/17 and normal



Source: U.S. Department of Agriculture, Office of the Chief Economist.

Figure 3
Pocatello, ID temperatures, monthly averages, 2015/16-2016/17 and normal



Source: U.S. Department of Agriculture, Office of the Chief Economist.

In addition to a higher shrink, the amount of sucrose extracted from sliced sugarbeets is lowered slightly from 13.9 percent to 13.8 percent. Sucrose extraction from sliced beets continues to be low compared with the performance over the last 10 years. The current rate reflects the cumulative extraction rate through February (13.7 percent), as well as the average difference in cumulative rates in February and final rates. Although the national 2016/17

sugarbeet crop achieved a record yield in tons of sugarbeets per acre, it appears that the larger tonnage has not necessarily translated into additional tons of sugar per acre.

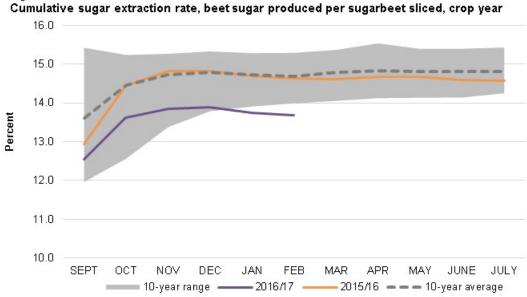


Figure 4

Source: U.S. Dept. of Agriculture, Economic Research Service and Farm Service Agency.

Projected beet sugar production for 2016/17 includes 483,000 STRV of sugar in August and September, primarily the result of early season production from the 2017/18 crop that is currently being planted. The rate of spring planting and the condition of the crop in July are key indicators for what proportion of a sugarbeet crop can be harvested early and produced prior to the October 1 beginning of the fiscal year. The current projection reflects the 10-year average. As expectations for the 2017/18 crop are better formed, however, this portion of the 2016/17 projection may be adjusted to reflect any changes.

Cane sugar production is projected to be 3.844 million STRV in 2016/17, a 25,000-STRV decline from the previous month. Most of the decrease is accounted for by a 21,000-STRV decline in sugar from Florida, projected at 2.051 million STRV. The reduction is in line with processor forecasts, which reduced sugarcane production and expected sucrose recovery rates within the State. Production in Texas was also lowered 4,000 STRV to 138,000 STRV based on processor forecasts. Cane sugar production in Louisiana and Hawaii remain unchanged from the previous month at 1.612 million STRV and 43,000 STRV, respectively.

### Imports raised, based on increased projected imports under the re-export program

Total U.S. imports for 2016/17 are projected to be 3.128 million STRV, a 150,000-STRV increase from the previous month. The increase is entirely accounted for by imports under the re-export program, projected at 375,000 STRV. The increase in imports under the program are based on a Foreign Agricultural Service (FAS) survey of license holders and is supported by the large spread between the U.S. and World raw sugar price.

Figure 5
U.S. and World raw sugar prices, monthly, January 2013 to March 2017



Source: U.S. Department of Agriculture, Economic Research Service.

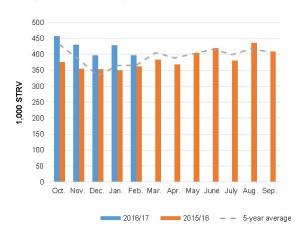
Imports under quota programs are projected to be 1.576 million STRV, unchanged from the previous month as the projected shortfall of the WTO raw sugar TRQ is still expected to be 99,000 STRV, based on the current quota amount and allocations to quota-holding countries. Imports from Mexico are projected to be 1.162 million STRV, also unchanged from the previous amount. The total reflects the Export Limit for the 2016/17 Export Limit Period set by the Department of Commerce (USDOC) subsequent to the March WASDE, as specified in the suspension agreements between the Government of Mexico and the USDOC in December 2014, as well as a small shipment that entered under the 2015/16 Export Limit but was recorded by Census in the first few days of the 2016/17 fiscal year.

### Domestic deliveries for food and beverage unchanged, exports raised for 2016/17 projections

Total sugar use in the United States for 2016/17 is projected to be 12.380 million STRV, a 50,000-STRV increase from the previous period. Total domestic deliveries are unchanged from the March report, however, at 12.255 million STRV. Deliveries for food and beverage purposes are also unchanged at 12.100 million STRV, which would represent a 1.8-percent increase over 2015/16 deliveries.

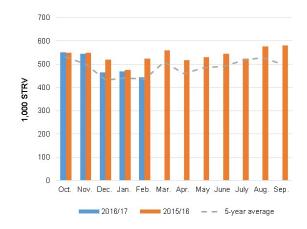
Through February, domestic sugar deliveries have maintained a strong pace, with total deliveries for human consumption 7.8 percent ahead of the same point in 2015/16. This is primarily due to strong deliveries of sugar from beet processors—17.4 percent ahead of the same period in 2015/16. Year-over-year comparisons are in the context of a comparatively weak year for beet sugar deliveries in 2015/16, although at the current pace beet sugar deliveries would reach a record-high total. Deliveries by cane sugar refineries are 5.6 percent lower than the previous year. Conversely to beet sugar deliveries, 2015/16 cane sugar deliveries were a record. Monthly cane deliveries have largely been comparable to the levels in 2013/14 and 2014/15. Imports from nonreporters are 7.4 percent higher than 2015/16 through February and have accounted for 9.3 percent of total deliveries for human consumption.

Figure 6
Beet sugar deliveries, monthly, 2010/11 to 2016/17



Source: U.S. Department of Agriculture, Farm Service Agency.

Figure 7
Cane sugar deliveries, monthly, 2010/11 to 2016/17



Source: U.S. Department of Agriculture, Farm Service Agency.

Domestic deliveries for other uses remain unchanged from the previous month's projection at 155,000 STRV.

U.S. sugar exports are projected to total 125,000 STRV, a 50,000-STRV increase from the March projection. The increase in exports is related to the increase in imports under the re-export program. Due to existing credit balances by license-holders in the program, however, it is not necessary for the changes to be correlated on a one-for-one basis.

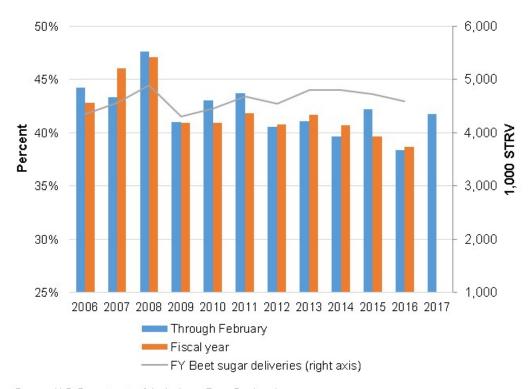
U.S. ending stocks are projected to be 1.642 million STRV, a 35,000-STRV reduction from the previous month as the increase in projected use exceeds the increase in projected supplies. The resulting stocks-to-use ratio is 13.26 percent, compared with the previous month's ratio of 13.60 percent.

# Divergence in U.S. refined market likely to remain in 2016/17, but trends indicate stabilization likely

Differences in market fundamentals for the beet and cane sugar sectors has been an important theme in the U.S. sugar markets for the past year. Both supply and demand factors contributed to a market situation in 2015/16 where the beet sector had burdensome ending stock levels while cane sugar supplies were relatively tight. This led to a sustained price differential between the two sectors, with the price premium for refined cane sugar growing throughout 2015/16 and carrying over thus far into 2016/17.

The USDA does not have official projections for deliveries of cane and beet sugar separately. The final fiscal year totals for beet and cane sugar deliveries remains a key variable in understanding the outlook of each sector for 2016/17 and how the disparity in market fundamentals will evolve. As noted earlier, beet sugar deliveries have been very strong through February, as reported by the SMD. Beet processors' deliveries have accounted for 41.8 percent of total deliveries for human consumption thus far in 2016/17. This is substantially higher than the previous year's total of 38.4 percent and could even be an improvement over the 2014/15 percentage of 42.2 percent. In 2014/15, early-year beet sugar deliveries saw a temporary increase prior to the implementation of the suspension agreements with Mexico. Subsequently, cane sugar deliveries picked up and the final fiscal year proportion of beet sugar deliveries fell to below 40 percent. The current performance is perhaps more comparable to the market conditions between 2008/09 and 2012/13. There is no statistical significance between the rate through February and for the full fiscal year, but the rate to date does provide context for evaluating plausible market scenarios.

Figure 8
Share of sugar food and beverage deliveries from beet sugar procesors, FY2006 to FY2017



Source: U.S. Department of Agriculture, Farm Service Agency.

Using the current WASDE projections for supplies and total deliveries, if beet sugar deliveries maintain the current 41.8 percent of total deliveries, the beet sector would have a stocks-to-use ratio of 21.4 percent and the cane sector a ratio of 7.5 percent. This would stabilize the divergence in stock levels between the two sectors that occurred in 2015/16. Significantly, it would also result in fewer beet ending stocks than in the previous year. This would likely ease some of the physical storage constraints for the beet processing sector. Under this scenario, the cane sector would also see its stocks-to-use ratio continue to fall relative to 2015/16, as limited availability of raw sugar supplies within certain areas of the sector would continue to limit stock-building. The higher beet sugar deliveries would also likely result in a notable decline in deliveries from cane refineries, in contrast to the 5 consecutive years of growth between 2011/12 and 2015/16. Additional scenarios highlight how the market situation would be heightened or eased depending on the mix of cane and beet sugar deliveries.

Table 3: Beet and cane sugar hypothetical food deliveries and ending stock scenarios 1/, 2016/17, April 2017.

		Beet sugar	•	Cane sugar			
Beet sugar proportion of							
total	Deliveries for	Ending	Stocks-to-use	Deliveries for	Ending	Stocks-to-use	
deliveries 2/	consumption	stocks	ratio	consumption	stocks	ratio	
Percent	1,000 S	TRV	Percent	1,000 S	TRV	Percent	
35.0	4,235	1,925	44.5	7,865	-283	-3.5	
37.5	4,538	1,623	35.0	7,563	19	0.3	
40.0	4,840	1,320	26.8	7,260	322	4.3	
41.8	5,057	1,103	21.4	7,043	539	7.5	
42.5	5,143	1,018	19.4	6,958	624	8.7	
45.0	5,445	715	12.9	6,655	927	13.5	
47.5	5,748	413	7.1	6,353	1,229	18.8	
50.0	6,050	110	1.8	6,050	1,532	24.6	

<sup>1/</sup> USDA does not make official projections for beet sugar and cane sugar deliveries for food and beverage use. Numbers reflect potential market outcomes within the March 2017 WASDE's 2016/17 food deliveries and ending stocks. 2/ Shaded row reflects a continuation of current pace through February. Source: U.S. Dept. of Agriculture, Economic Research Service.

### Mexico sugar production lowered and domestic deliveries raised, reducing projected total exports

Mexico sugar supplies for 2016/17 are projected to be 7.298 million metric tons, actual value (MT), a 170,000-MT reduction from the March projection. Sugar production in Mexico is projected to be 6.186 million MT, a 185,000-MT reduction from the previous month, but still a 1.1 percent increase from 2015/16 production levels. Through April 8, Mexico's harvested area has been 2.5 percent ahead of the previous year, but it still lags behind previous estimates from *Comité Nacional para el Desarrollo Sustentable de la Caña de Azúcar* (Conadesuca). Overall, sugarcane production has been 0.3 percent behind 2015/16 through the same period and production of sugar 0.2 percent behind. The reduction in projected sugar production reflects the current pace of this year's campaign as the harvest begins to move beyond its peak period. The figure also aligns with updated projections published by Conadesuca. Similarly, imports are raised 15,000 MT to 75,000 based on changes made by Conadesuca in their recently updated market projections.

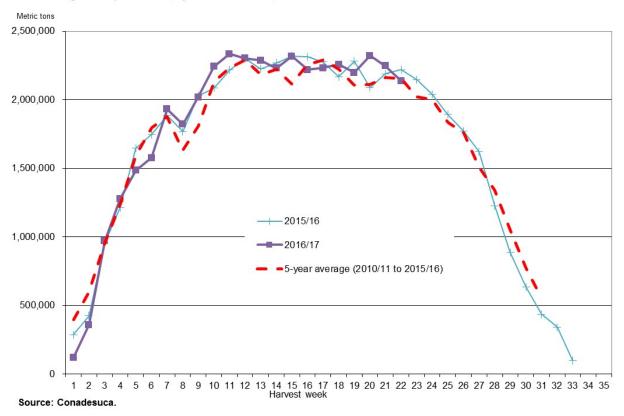
Table 4 -- Mexico sugar supply and use, 2014/15 - 2015/16 and projected 2016/17, April 2017.

Items	2014/15	2015/16 (estimate)	2016/17 (forecast)			
	1,	000 metric tons, actual weight				
Beginning stocks	831	811	1,037			
Production	5,985	6,117	6,186			
Imports	128	83	75			
Imports for consumption	8	17	25			
Imports for sugar-containing product exports, IMMEX 1/	121	66	50			
Total supply	6,944	7,011	7,298			
Disappearance						
Human consumption	4,408	4,387	4,461			
For sugar-containing product exports (IMMEX)	337	330	330			
Other deliveries and end-of-year statistical adjustment	-54	50	50			
Total	4,691	4,767	4,841			
Exports	1,442	1,207	1,163			
Exports to the United States & Puerto Rico	1,311	1,120	995			
Exports to other countries	131	86	169			
Total use	6,134	5,974	6,005			
Ending stocks	811	1,037	1,293			
	1,000 metric tons, raw value					
Beginning stocks	881	859	1,099			
Production	6,344	6,484	6,557			
Imports	136	88	80			
Imports for consumption	8	18	27			
Imports for sugar-containing product exports (IMMEX)	128	70	53			
Total supply	7,361	7,431	7,736			
Disappearance						
Human consumption	4,673	4,650	4,729			
For sugar-containing product exports (IMMEX)	357	350	350			
Other deliveries and end-of-year statistical adjustment	-57	53	53			
Total	4,973	5,053	5,132			
Exports	1,529	1,279	1,233			
Exports to the United States & Puerto Rico	1,389	1,187	1,054			
Exports to other countries	139	92	179			
Total use	6,502	6,332	6,365			
Ending stocks	859	1,099	1,371			
Stocks-to-human consumption (percent)	18.4	23.6	29.0			
Stocks-to-use (percent)	13.2	17.4	21.5			
High fructose corn syrup (HFCS) consumption (dry weight)	1,444	1,482	1,484			

<sup>1/</sup> IMMEX = Industria Manufacturera, Maquiladora y de Servicios de Exportación.

Source: USDA, World Agricultural Supply and Demand Estimates and Economic Research Service, Sugar and Sweeteners Outlook; Conadesuca.

Figure 9
Mexican sugarcane production, by week of harvest, 2010/11-2016/17



Domestic deliveries in Mexico are projected to total 4.481 million MT, a 73,000-MT increase from the March projection based on higher deliveries for human consumption. Projected deliveries for human consumption are 4.461 million MT, matching the updated projection of Conadesuca. Through February, sugar deliveries for human consumption have been 6.1 percent higher than the previous year. There have also been increases in deliveries of high-fructose corn syrup (HFCS), which was 9.7 percent ahead of the previous year through February. Projected HFCS deliveries are raised 25,000 MT to 1.484 million MT for 2016/17.

Figure 10 Mexican sweetener consumption October to February, fiscal year 3,000 Thousand MT 2,500 2,000 1,500 1,000 500 0 2011/12 2012/13 2013/14 2014/15 2015/16 Sugar HECS

Source: Conadesuca.

Mexico sugar exports are projected to be 1.163 million MT, a 257,000-MT reduction from the March projection. Exports to the United States are unchanged at 995,000 MT, in line with the USDOC's most recent Export Limit calculation based on the March WASDE. Projected exports to other countries, totaling 169,000 MT, are reduced by the entirety of the 257,000 MT decline. The reduction is the result of the lower production and higher domestic deliveries total in the current projection. With fewer supplies expected to come to market and great domestic use, there will be less need to export sugar to countries in order to maintain inventories at reasonable levels.

Ending stocks are projected at 1.293 million MT, a 15,000-MT increase from the previous month. The projection assumes that Mexico will maintain inventory levels to cover 2.5 months of total domestic deliveries, as well as enough supplies to fill 30 percent of its expected 2017/18 Export Limit amount to the United States, as specified in the Shipping Pattern provisions of the suspension agreements signed in December 2014. The increase in projected ending stocks is the result of higher domestic deliveries projected for 2016/17. The stocks-to-consumption ratio is lowered to 29.0 percent, compared with the previous month's projection of 29.1 percent.

### U.S. honey production recovers in 2016 as imports fall for first time in 6 years

U.S. honey production in 2016 totaled 161.9 million pounds, a 3.4-percent increase from 2015 based an increase in colonies. There were 2.775 million colonies in honey production in 2016, a 4.3-percent increase from the previous year and the highest number of colonies in production since 1994. Honey yields of 58.3 pounds per colony were down a slight 0.9 percent from 2015 but were in line with levels of the past 5 years.

80.0 3,000 70.0 2,500 60.0 2,000 50.0 Thousand Colonies 40.0 ,500 30.0 .000 20.0 500 10.0 0 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 Colonies Yield

Figure 11 U.S. honey bee colonies and honey yields, 2006-2016

Note: Data include only beekeepers with five or more colonies. Source: U.S. Department of Agriculture, Farm Service Agency.

Stocks held by honey producers totaled 41 million pounds in 2016, a 2.3-percent decline from the previous year. Stock levels in 2016 were in line with the 10-year average, however. National average honey prices were 207.5 cents per pound, which is 0.4 percent below the revised 2015 price. It also represents the second consecutive year of

annual decline in national honey prices. Honey producers have experienced a sustained upward trend in prices since the late 1990's through 2014 as apparent domestic honey use increased. As demand has leveled off the past few years, prices have also plateaued, although both prices and demand remain substantially higher than in any historical period.

500 400 400 300 100 500 100 500

2009 2010 2011

Production

0

2012 2013 2014 2015

Average Price

Imports

Figure 12 U.S. honey supplies and prices, 2006-2016

Note: Stocks held by producers.

Stocks

100

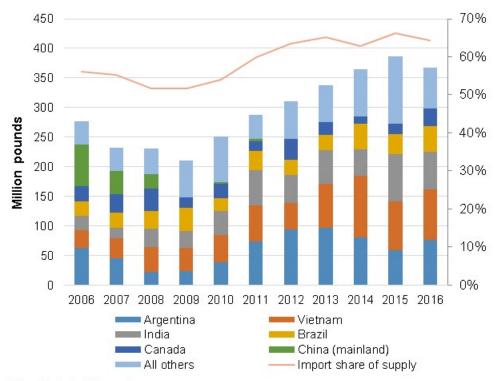
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Source: U.S. Department of Agriculture, Farm Service Agency.

2008

Imports into the United States were 367 million pounds in 2016, a 5.0-percent decline from the 386 million pounds imported in 2015. Imports made up 64.3 percent of U.S. total honey supplies (sum of production, imports, and previous-year ending stocks). While this is a decline from the previous year's total of 66.1 percent, it continues the longer term trend of a growing share of honey supplies from foreign sources. The largest foreign source of honey in 2016 was Vietnam, for the third consecutive year, followed by Argentina, which retook that spot from India. Although honey imports were recorded for 60 different countries in 2016, the top 5 foreign suppliers (consisting of Vietnam, Argentina, India, Brazil, and Canada) have accounted 81 percent of total imports. This is in line with concentrations over the past 5 years, where the imports from those countries ranged between 70 and 82 percent.

Figure 13 U.S. honey imports by country and import share of total supplies, 2006-2016

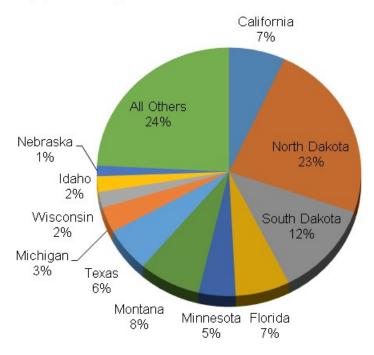


Note: Stocks held by producers.

Source: U.S. Department of Agriculture, Farm Service Agency.

Within domestic markets, there have been differing trends in honey production and prices among States and regions over the past several years. There is commercial honey production in nearly every State, varying in size. North Dakota accounts for the largest proportion of production with 37.830 million pounds, followed by: South Dakota (19.880 million pounds), Montana (12.243 million pounds), California (11.160 million pounds), and Florida (10.750 million pounds). A large portion of production, however, is in States aggregated by NASS into the category "All Others."

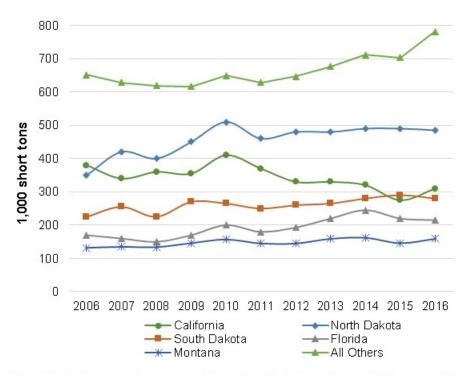
Figure 14 U.S. honey production, by State, 2016



Note: Data includes only bee keepers with more than 5 colonies. Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

Trends in production of individual States are well reflected in the number of colonies producing honey in each State; production is influenced by honey colony yields, which can vary widely due to conditions that change from year-to-year, such as weather. Many States have had a gradual increase in colonies over the past 5 years, with growth leveling off or even slightly declining in the last 2 or 3 years. California, which once had the greatest number of colonies in the country--peaking at over 500,000 in 1999--has seen honey bee colonies declining steadily since 2010; although the number rebounded slightly in 2016. This trend is likely due to a combination of factors, including sustained drought conditions in recent years and competition for bee colonies in the pollinator markets, which are in high demand in the State, rather than a focus on honey production. By contrast, honey bee colonies in the aggregate All Other States have had the strongest and most sustained growth over the past 5 to 10 years. This could indicate that honey producers are finding demand within their local markets, although there is limited data on honey marketings for concluding how honey production and consumption interact from a geographical and industrial organization standpoint.

Figure 15
U.S. honey bee colonies for top-producing States, 2006-2016

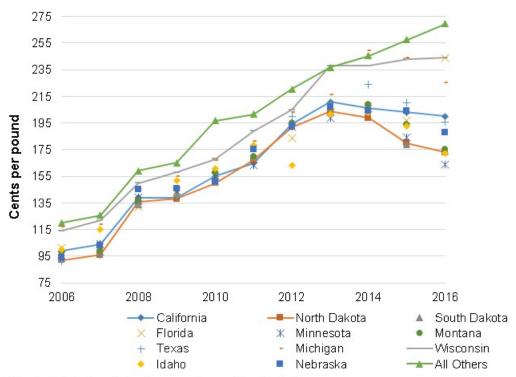


Note: Data includes only bee keepers with more than 5 colonies. Presented States account for 37 percent of U.S. total.

Source: U.S. Department of Agriculture, National Agricultural Statistics Service.

Prices for honey producers have also seen differing trends within States that show more context to the domestic honey market than national prices imply. As noted, national average prices have declined for 2 consecutive years and have plateaued recently. At the State level, however, there has been an increase in the range of prices received by producers, particularly since 2013. There has been a decline in prices in many of the high-producing honey States such as North Dakota and California, which perhaps compete more closely with imports for industrial-end uses. On the other hand, prices in lower producing States, such as Wisconsin and the markets included in All Others, have maintained strong price levels. As with production trends, these price trends among States may indicate that U.S. honey markets have become more segmented and regionalized over the past 4 years.

Figure 16 U.S. honey prices by State, 2006-2016



Note: Data includes only bee keepers with more than 5 colonies. Source: U.S. Department of Agriculture, Farm Service Agency.

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Sugar and Sweeteners Outlook http://www.ers.usda.gov/Publications/SSS/WASDE http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documented=1194 Sugar Topics http://www.ers.usda.gov/topics/Sugar/

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