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# Background

- <u>Changing market conditions:</u>
  - Price volatility in agricultural markets
  - Biofuels: linkages between food and energy markets
- Production and Trade:
  - National Program of Sugarcane Agro-industry (PRONAC)
  - North American Free Trade Agreement (NAFTA)
  - Trade agreements: Central American countries and Trans Pacific Partnership (TTP)
- <u>New institutional framework:</u>
  - Sugarcane Rural Development Sustainable Law (2005)
  - Sugarcane National Committee for Sustainable Rural Development (CONADESUCA) (2008)

### Mexico: World 7th largest producer and exporter

Production World Centrifugal Sugar 1,000 Metric Tons, Raw Value

	2008/09	2012/13	CAGR (%)		2008/09	2012/13	CAGR (%)
Brazil	31,850	37,500	4.2	Brazil	21,550	25,000	3.8
India	15,950	25,630	12.6	Thailand	5,295	7,500	9.1
EU-27	14,014	16,390	4.0	Australia	3,522	3,100	-3.1
China	13,317	14,580	2.3	India	224	2,200	77.0
Thailand	7,200	9,930	8.4	Guatemala	1,654	1,725	1.1
U.S.	6,833	8,006	4.0	EU-27	1,332	1,500	3.0
Mexico	5,260	6,008	3.4	Mexico	1,378	1,372	-0.1
Russia	3,481	4,850	8.6	Colombia	584	875	10.6
Pakistan	3,512	4,670	7.4	Russia	200	300	10.7
Australia	4,814	4,300	-2.8	Pakistan	75	300	41.4
Other	37,657	40,446	1.8	Other	11,150	11,872	1.6
Total	143,888	172,310	4.6	Total	46,689	55,144	4.2

**Exports** World Centrifugal Sugar 1,000 Metric Tons, Raw Value

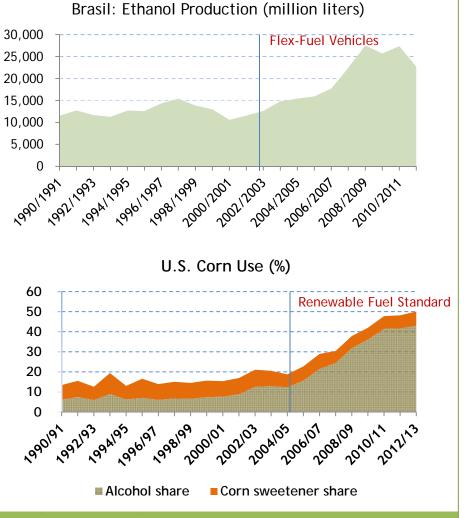
Source: Sugar: World Market and Trade, FAS/USDA, November 2012. CAGR: Compound Annual Growth Rate

## Sugar world exports

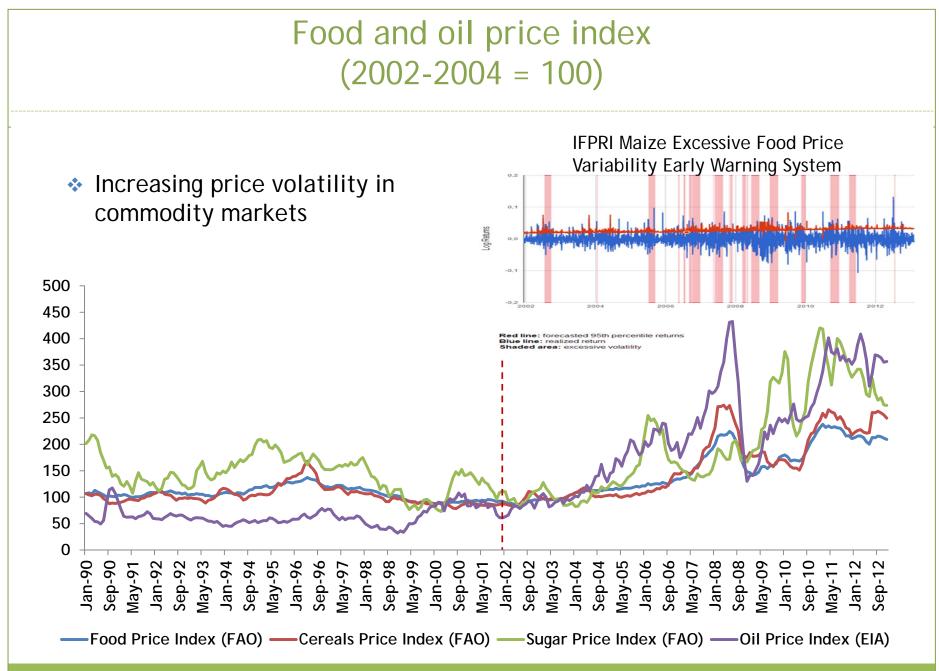
(%)	Brazil	EU-27	India	Mexico	World
2009/10	12.8	98.7	0.4	-45.5	8.4
2010/11	6.2	-58.0	1,634.7	107.5	9.8
2011/12	-4.5	114.6	-10.4	-36.8	1.0
2012/13	1.4	-37.2	-37.1	39.3	-1.8

#### Sugar Exports Annual Change (%)

- New technologies and biofuel mandates
- Climate conditions
- Consumption in emerging countries

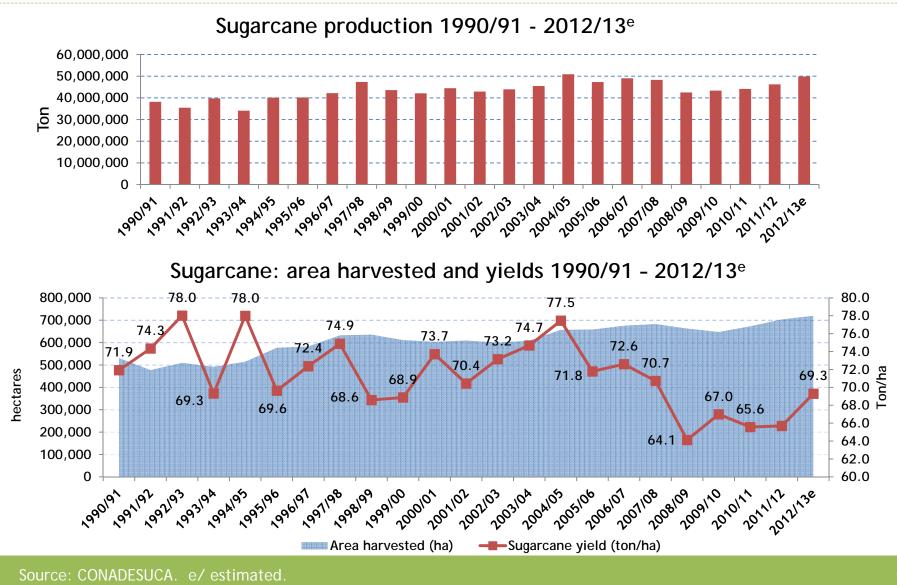


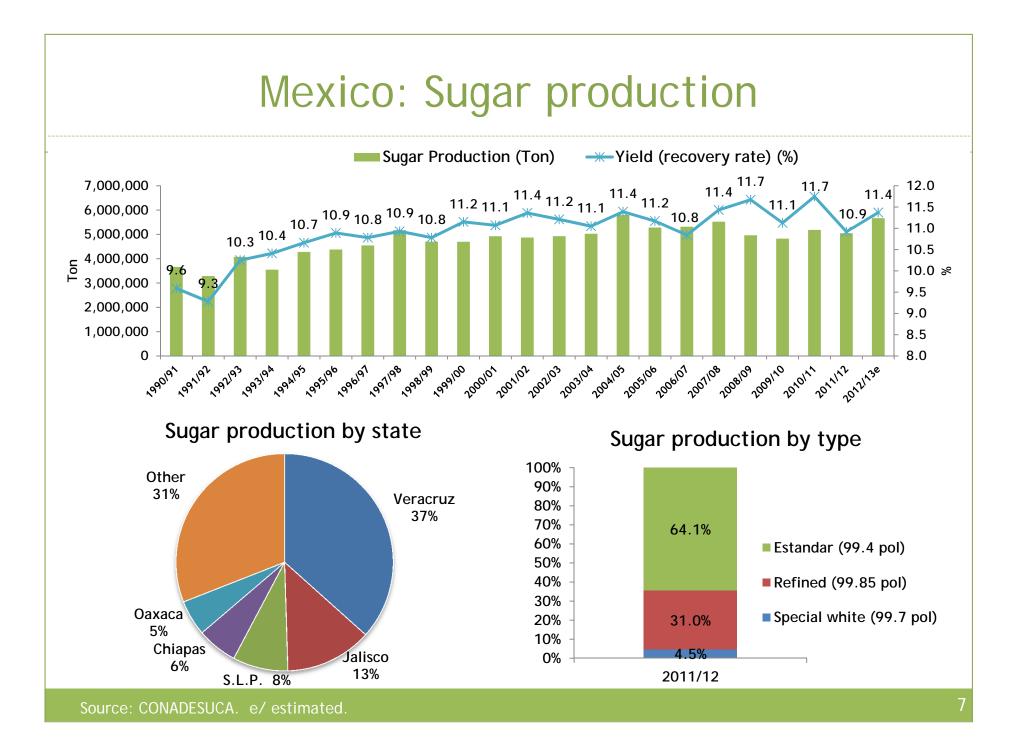
Sources: USDA (World exports), UNICA (Brazilian Production) and USDA (U.S. Corn Use).



Source: FAO and Energy International Agency (Index Prices) and IFPRI (Price variability).

# Mexico: Sugarcane production

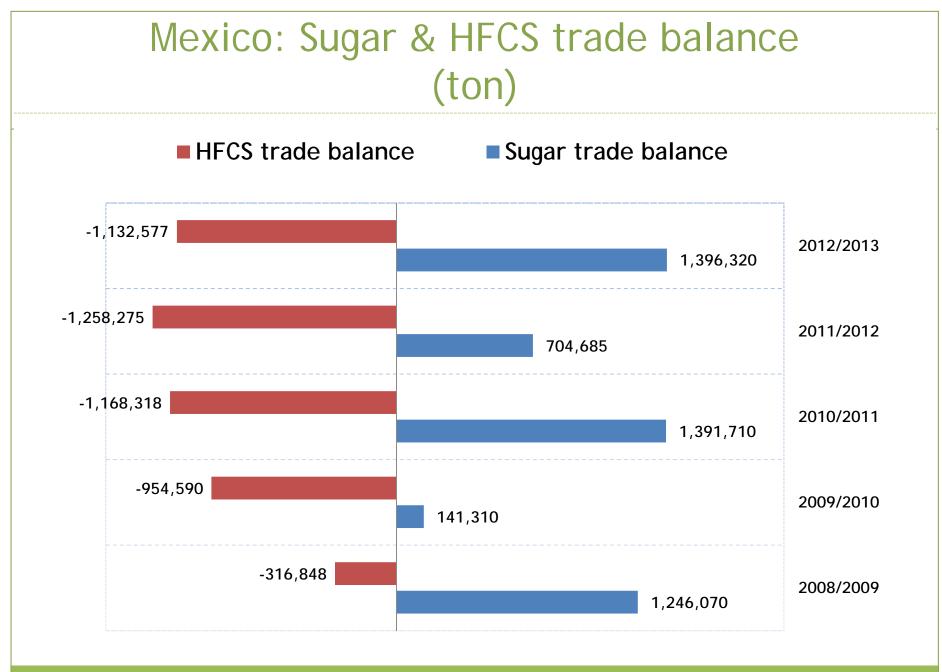




# Mexico: Sweeteners Balance (tons)

Marketing year	2008/09	2009/10	2010/11	2011/12	2012/13 e/	2012/13 vs. 2008/09 CAGR (%)
Total Supply	7,552,894	7,461,291	7,868,104	7,804,467	8,260,306	2.3
Beginning Stocks	1,864,446	587,895	918,099	759,906	957,809	
Production	5,324,162	5,288,659	5,650,295	5,525,290	6,130,442	3.6
Imports	364,286	1,585,198	1,299,710	1,519,271	1,172,055	33.9
Total Demand	6,964,999	6,543,192	7,108,198	6,838,873	7,211,269	0.9
Exports	1,293,509	771,918	1,523,101	965,681	1,435,798	2.6
Consumption	5,671,490	5,771,274	5,585,097	5,873,192	5,775,471	0.5
Final Stocks	587,895	918,099	759,906	965,593	1,049,037	

Source: CONADESUCA Sweeteners Balance e/ estimated.

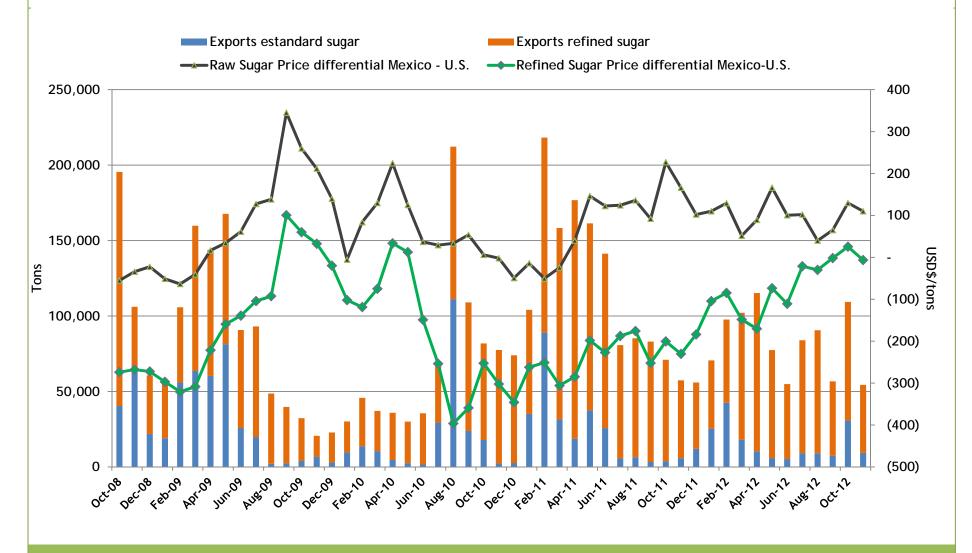


Source: CONADESUCA. e/ estimated. HFCS (tons, dry weight)

# Mexico: Sugar market

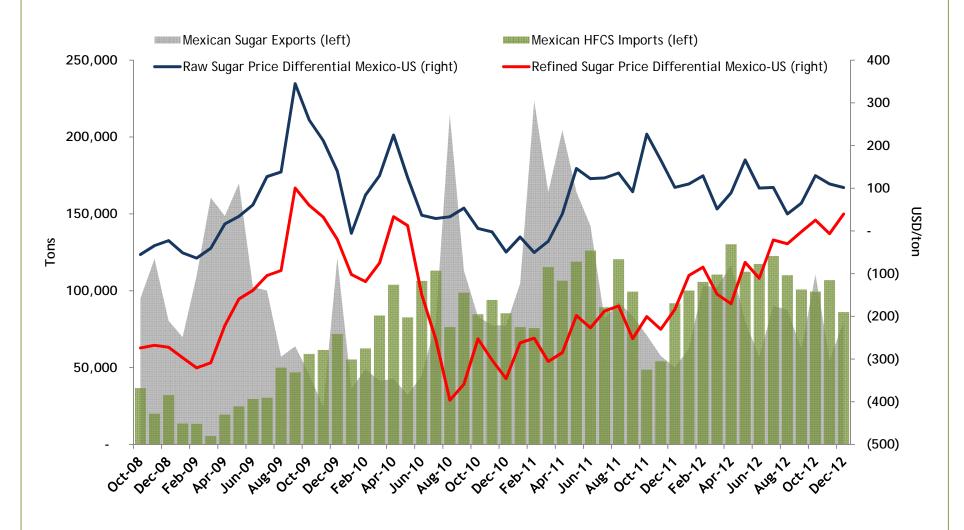


# Mexico: Sugar market by type of sugar



Source: Ministry of Economy, CONADESUCA and USDA

# Mexico: Sugar exports, HFCS imports and sugar price differentials



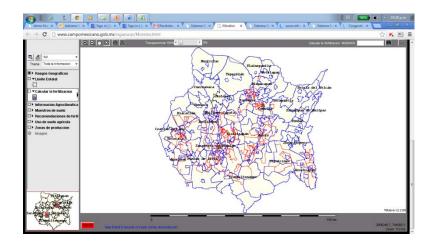
# Mexico - U.S. Comparative sugar policy

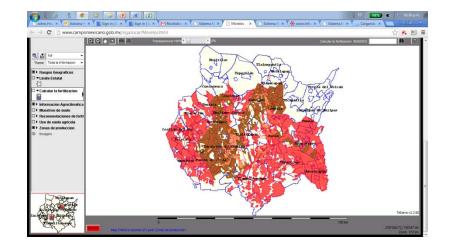
MEASURES	MEXICO	U.S.		
Legal Framework	<ul> <li>Sugar Law:</li> <li>Ley de Desarrollo Rural Sustentable para la Caña de Azúcar (LDRSCA) (2005).</li> <li><u>CONADESUCA (Executive Committee)</u> with the participation of Federal Government, producers and industry (mills).</li> </ul>	<ul> <li>Food, Conservation and Energy Act 2008-2012</li> <li>(Farm Bill)</li> <li>Federal policy.</li> <li>Participation of sugar producers and industry in the discussion of the Farm Bill.</li> </ul>		
Price support	<ul> <li>Market reference price for sugarcane (weight price of the domestic and export sugar markets).</li> <li><u>No supply control.</u></li> </ul>	<ul> <li>Loan rates for raw cane sugar and refined beet sugar.</li> <li>Marketing allotments (85% of U.S. sugar consumption).</li> <li>No fiscal cost for the loan rate program.</li> </ul>		
Productivity	National Program of Sugarcane Agro-industry (PRONAC 2007-2012) <ul> <li>Increase sugarcane yields.</li> <li>Sugar Research Institute (proposal).</li> </ul>	Farm Bill (2008-2012) <ul> <li>National research (no specific institute for sugar).</li> </ul>		

# US - Mexico Comparative sugar policy

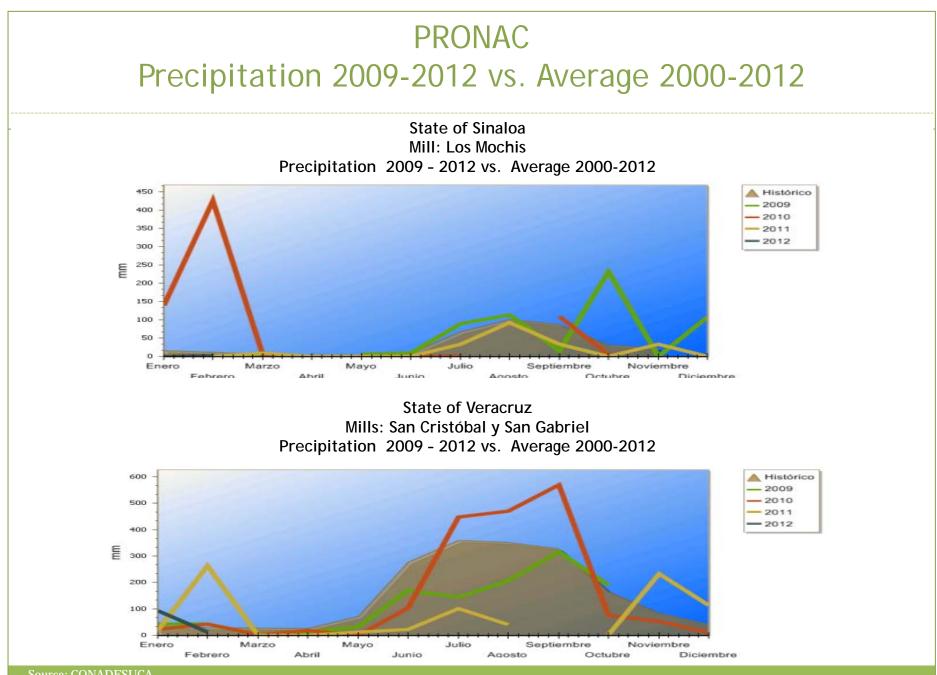
MEASURES	MEXICO	U.S.		
Trade policy	Trans-Pacific Partnershi	<ul> <li>Agreement (NAFTA) (Full implemented)</li> <li>Agreement (TPP) (in negotiations)</li> <li>WTO TRQs (minimum access).</li> <li>Additional TRQs to "meet domestic demand at reasonable prices". Criteria defined in the Farm Bill.</li> <li>FTAs: DR-CAFTA, Chile, Peru, Panama and Colombia, but subject to the condition of "net exporter."</li> </ul>		
Biofuels & Energy	<ul> <li>Biofuel Law.</li> <li>Non-commercial production (ethanol).</li> <li>Co-generation.</li> </ul>	<ul> <li>Option to use sugarcane to produce bioethanol.</li> <li>Corn-base production of ethanol. Potential effect on HFCS production and exports.</li> </ul>		

# National Program of Sugarcane Agro-industry (PRONAC)



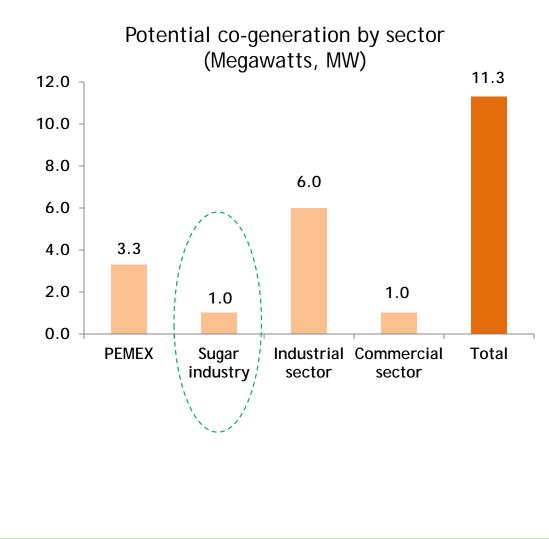


- Technologies to improve the decisionmaking process.
  - Soil fertility and fertilizers
  - Sugarcane production and mills location.
  - Weather
  - Water



http://www.conadesuca.gob.mx/reportesdeinteres/graficasdeprecipitacion/07%20graficas\_Lluvia\_inifap\_febrero\_2012.pdf (accessed February 8, 2013)

# Energy: co-generation



- Increasing use of renewables in the power sector
  - The Renewable Energy Development and Financing for Energy Transition Law (2008)
- Potential of the sugar industry co-generation capacity: 1.0 MW
- Financing
- Regulation
- Investment

# Future challenges: PRONAC 2013-2018?

- NAFTA full integration and TPP negotiations
- Price volatility
- Sustainable production and climate change
- Biofuel policy
- Changes in consumer preferences