

CUBA'S SUGAR INDUSTRY: PERFORMANCE AND RECENT TRENDS



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Outline

- The 1990s as the start of a “new era for sugar”
- Select Indicators: 1990-2001
- Reorganization Plan 2002
- Select Indicators: 2002-2010
- The Current Situation: 2011- Present
 - Policy Measures to Transform the Sugar Agro-Industry
- Final Considerations

The 1990s: A “new era” for Sugar

- The end of Cuba’s “State-centric Model” (1970s and 1980s), which was characterized by:
 - **The expansion of agricultural areas** (due primarily to low yields and higher production goals)
 - **Large amounts of capital investment** (due primarily to labor shortages, and preferential trade agreements with the Socialist Camp)
 - **Extensive use of chemical inputs** (such as fertilizers and pesticides) to improve yields and output
 - **Increased mechanization**
- Situation in 1990 (before the Special Period):
 - Approximately 50% of cultivated land is dedicated to sugar
 - A large share of capital equipment was allocated to this sector:
 - 37,990 tractors (48% of the total)
 - More than 8,000 harvesters
 - Some 4,000 cane lifters (*alzadoras*)
 - 400 Kg. of fertilizers per hectare (ha.)

Select indicators: 1990 - 2000

Figure 1. Total Area Planted (Thousand Hectares)

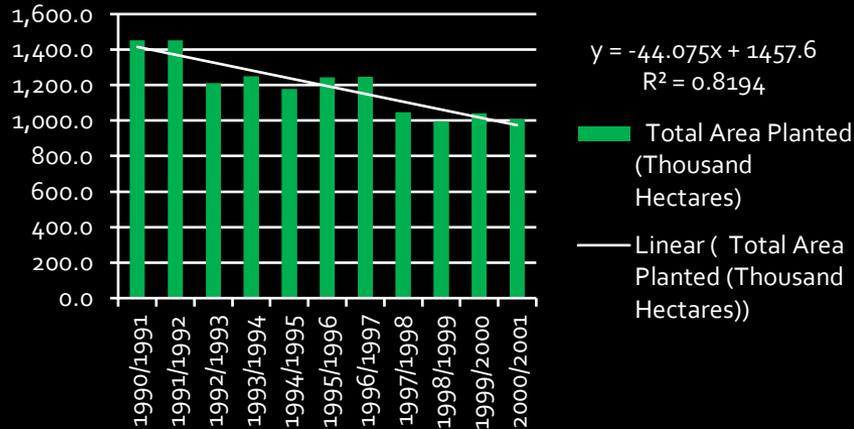


Figure 2. Total Output (MMt)

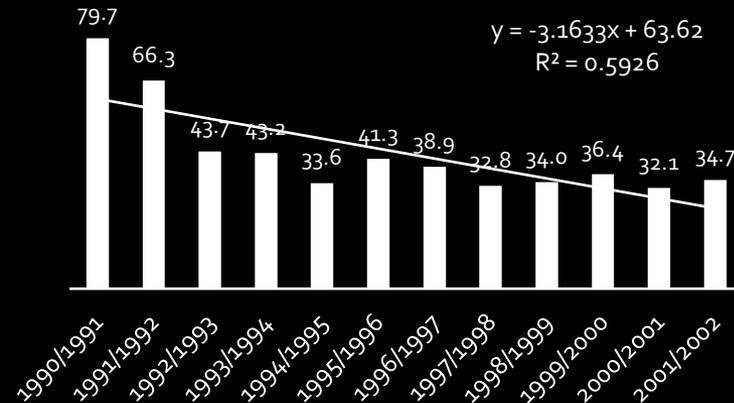
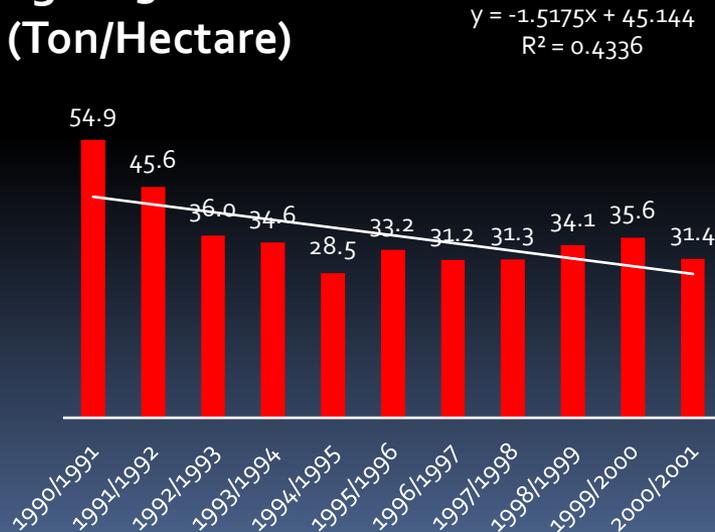


Figure 3. Yields (Ton/Hectare)



• Between 1990 and 2001:

Cuba:

- Area planted fell 28%; average for the period was 1.193 million hectares
- Sugar production declined 56%; average for the period was 4.4 MMT
- Yields decreased 39%; average = 36
- Grinding days fell from 105 (1991) to 73 (1999)
- Productivity declined significantly
- Lower international competitiveness

World:

- Production increased by 22%, from 114,158,000 MT in 1990 to 138,770,000 MT in 2001.
- But, World sugar prices fell from about \$0.13/lb. to \$0.06/lb.
- Stocks of surplus sugar grew faster than sugar consumption.

Restructuring Plan 2002



■ “Tarea Alvaro Reynoso”

- Rationale: Need to streamline sugar agro-industry on the face a depressed world prices, negative outlook for the global sugar market, and lower international competitiveness.
- Objectives:
 - To make the sugar sector more efficient and globally competitive
 - To increase food production by reallocating resources from the bloated sugar sector, and diversifying non-sugar agriculture
 - To develop a sustainable agricultural model, with a greater emphasis on technological knowledge and human capital
- Strategy:
 - 71 out 156 sugar mills were designated to produce raw sugar
 - 14 were assigned to produce raw sugar and molasses for animal feed
 - The remaining 71 were deactivated
 - 5 were converted into museums (“sugar tourism”)
 - Area planted was reduced to 750,000 hectares (compared to a little over 1,000,000)
 - Molasses production was reduced to 127,344 hectares
 - Sugar output focused on meeting domestic demand of 700,000 tons
 - Some 213,000 sugar workers were displaced; many of which were transferred to other activities, including full-time study. (At the time, there were an estimated 400,000 workers in the sugar agro-industry.)

Selected indicators: 2002 - 2010

Figure 4. Total Area Planted (Thousand Hectares)

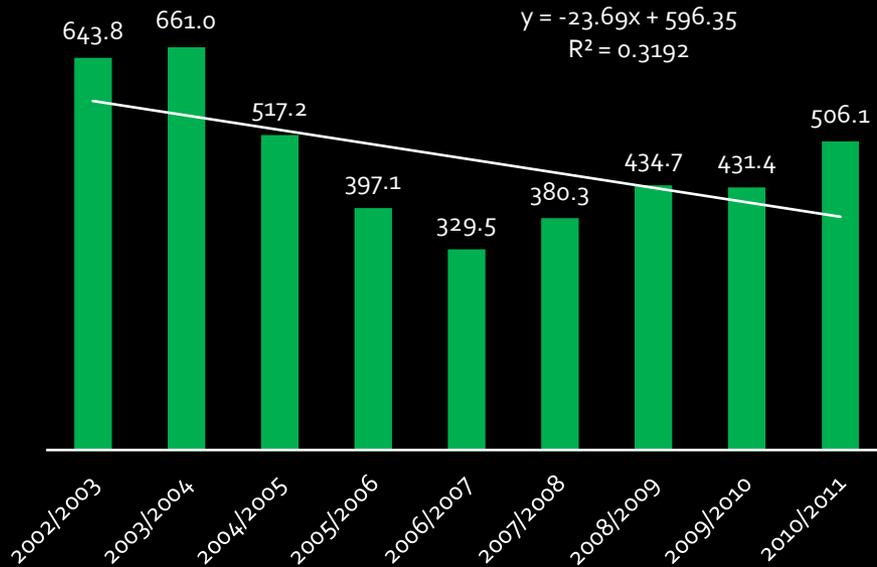


Figure 5. Total Output (MMt)

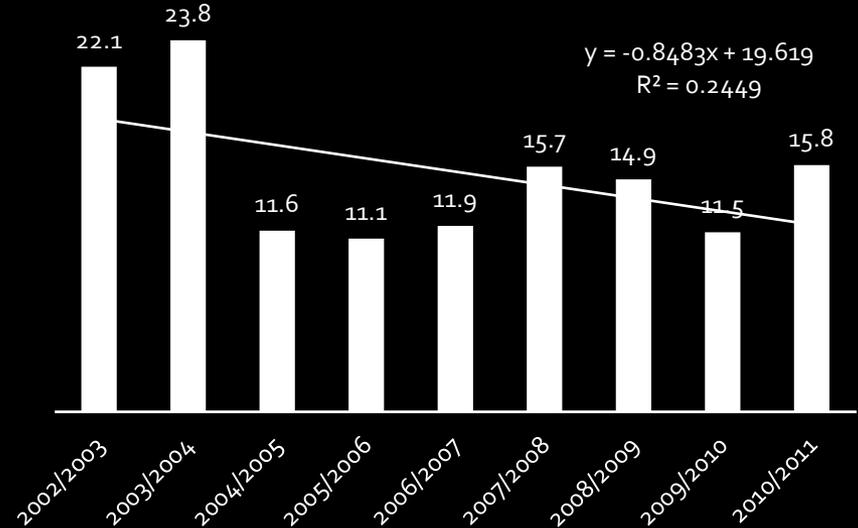
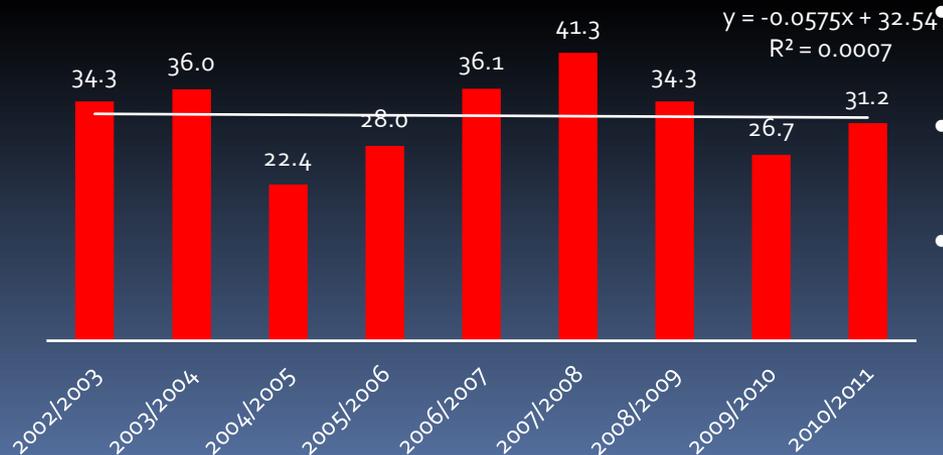


Figure 6. Yields (Ton/Hectare)



Between 2002-2010/2011:

- Area planted fell by 21%; average was 477,000 ha.
- Sugar output declined 28.5%; average was 1.5 MMTs.
- Cane yields fell 9%, but the average increased to 32 t/ha.

The Current Situation: 2011- Present

- Policy Measures to Transform the Sugar Agro-Industry:
 - Reduce the number of active sugar mills to 56.
 - Price increases to sugar cane producers from 50.90 CUP to 90 CUP per ton, based on a world price of \$0.20/lb.
 - Renegotiated outstanding debts of sugar cane producers with the State; repayment term was changed to 20 years based on a 5% tax on sugar cane sales and the commercialization of sugar.
 - Reorganization of sugar mills in 13 Provincial Enterprises.
- Decree Law 287 (2011):
 - Eliminated Ministry of Sugar (MINAZ)
 - Transferred management of agricultural lands to the Ministry of Agriculture (MINAG)
 - Ministry of the Economy and Planning (MEP) is in charge of allocating State resources to the sugar agro-industry
 - Ministry of Foreign Trade and Investment is responsible for the commercialization of Cuban sugar in the global market
- Decree Law 294 (2011):
 - Created *Grupo Azucarero* (AZCUBA) responsible for directing and controlling agricultural production (of sugar cane), industrial production of sugar and cane derivative products like alcohols, etc.,
 - AZCUBA is also responsible for the modernization and mechanization of the sugar agro-industry, as well as the application of new technologies to improve industrial and agricultural yields.
 - It is also in charge of financial management policies to improve efficiency and reduce production costs.

Final Considerations

- It is too early to tell (and quantify) the impact of the measures implemented since 2011.
- However, any efforts to modernize and improve the overall performance of Cuba's sugar agro-industry should consider the following:
 - Given its current state, the industry requires major technologically-intensive investments; some estimates are \$30 million to \$60 million USD per sugar mill.
 - The introduction and application of new technology and modern equipment is an essential requirement.
 - Productive diversification (i.e. focusing on other sugar cane products besides sugar) will likely play a key role in this process.
 - However, given recent (and forecasted) trends in global sugar prices, sugar production should an important component.

Final Considerations (Continued)

■ Challenges :

- Low productivity levels (avg. 20 tons/hectare to 32 tons/hectare (lower than world avg.))
- Technological obsolescence; Poor state or conditions of capital stock, equipment, and infrastructure
- Expenses (costs) > earnings (income); more than 50% of enterprises report losses
- High transportation costs (between 25% and 30% of the price of sugar)
- Industrial process: Costs are between 60% and 80% in cane production and between 20% and 40% in industrial production.
- Sugar cane is currently the least attractive crop for producers, sugar and derivative production is unprofitable at current levels
- The productive cycle is not closed; commercialization of sugar is separate from the managerial functions of the sugar mills.
- Distortions caused by economic policies (price setting mechanism, monetary dualism, etc.)
- Limited access to FDI

■ Opportunities and potential:

- Productive diversification: bio-energy, biomass, international reinsertion
- Accumulated experience: Research stations, human capital; production of derivative products (or by products)
- Favorable climatic conditions: