Sugar Cane Sector in Brazil: labor indicators and migration

Márcia Azanha Ferraz Dias de Moraes

ESALQ/University of Sao Paulo/Brazil
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The importance of the Brazilian sugar-cane sector

- Brazil is the world’s largest producer of sugar cane and sugar and the 2nd producer of alcohol.
- It is also the largest exporter of sugar and alcohol.
- Alcohol use represents over 50% of the fuel for light vehicles (total fleet: 22 million vehicles).
- Flex-fuel cars correspond to 86% of the sales of new units (end of 2007).
- In 2006/07: 426 millions tons of sugar cane were processed at 376 sugar and alcohol mills.
- Harvest area: 19,2 millions acres.
### Main economic agents of the sector

**Sugar Cane Production**
- 50 thousand sugar cane producers

**Industrial Sugar and Alcohol Production**
- 376 Sugar Mills/Alcohol Destileries
- 567 thousand employees

**Gas Stations**
- 32 thousand sell both alcohol and gasoline
- Prices: on the free market

**Alcohol Exports**
- 1.03 Billion galons in 2007

**Fuel Distributors**
- 160 Distributors
- The gasoline alcohol mixture can only be made by distributors

Fonte = MAPA – MME – MDIC - 2005
The Sugar Cane Sector in Brazil: Overview

To produce:
- 5.8 billion gallons of ethanol
- 30 million tons of sugar
- Area: 19.2 millions acres
- 0.9% of the area of Brazil (2,100 millions acres)
- 0.4% of the area of crops

Fontes: IBGE (Vegetação) e CTC (Cana)
Ethanol and Sugar Mills Location - 2007

NORTH-NORtheast REGION
78 INDUSTRIAL UNITS:
• SUGAR MILLS 9
• ETHANOL PLANTS 20
• ETHANOL AND SUGAR 49

8% of the ethanol production
13% of the sugar production
49% of the sugar cane’s jobs

SOUTH-CENTER REGION
298 INDUSTRIAL UNITS:
• SUGAR MILLS 6
• ETHANOL PLANTS 100
• ETHANOL AND SUGAR 192

92% of the ethanol production
87% of the sugar production
51% of the sugar cane’s jobs


Operating Sugarcane Mills
Sugarcane Mills under construction

Jobs in Sugar cane production (2007): 532,263
The migration of sugarcane employees

Per capita GIP N
US$ 2,987

Per capita GIP NE region
US$ 2,258

Per capita GIP CW
US$ 5,990

Per capita GIP SE region
US$ 6,354

Per capita GIP SP state
US$ 7,384

Per capita GIP South Region
US$ 5,425
Data

Survey of socioeconomic information in the PNAD database

• PNAD - National Household Sample Survey
• Carried out by the Brazilian Institute for Geography and Statistics – IBGE (Federal Government)
• All statistical analyses take into account the expansion sector associated with sample observation, as provided by IBGE
Evolution of the Number of Employees and of the Sugar Cane Production

Source: Prepared based on data provided by PNAD (several years)
Growth of Mechanical Harvesting – SP State

- 2006/07:
  - Mechanical Cut: 34%
  - Hand Cut: 66%

- 2007/08:
  - Mechanical Cut: 47%
  - Hand Cut: 53%
Sugarcane: Number of registered and free lancers workers Brazil, NNE region and SP state - 2006.

Source: Prepared based on data provided by PNAD.
It should be highlighted that the average schooling is very low:

- 77.3% of the workers in sugarcane sector in Brazil have up to 4 years of schooling

- 29.4% (that is, about 155 thousand workers) are illiterate

Source: Prepared based on data provided by PNAD.
Conclusion

• The migration of sugarcane workers in Brazil occurs from the poorest region of the country, the North-Northeast region, to Sao Paolo state, the richest and the most important producer of sugarcane in Brazil.

• The ban of sugarcane in this state is leading to a mechanical harvesting of greencane.

• There will be an important layoff of workers, with a negative impact in the labor market and in some states of the Northeast region of Brazil.
Thank for your attention

Feel free to contact

madfmora@esalq.usp.br