Sugarcane production in Brazil: an overview of the production system and costs

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Agenda

1. What is *agri benchmark*?
2. Sugar and ethanol production in Brazil
3. Sugarcane production system (typical)
4. Sugar raw material costs – Sugarcane vs. Sugar Beet
5. Summary
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Who we are and what we do

1. *agri benchmark* is a global, non-profit network of agricultural economists, advisors, producers and specialists in key sectors of the value chains.

2. We use internationally standardized methods to analyze farms, production systems and their profitability.

3. We combine our farm-level knowledge with our expertise in international commodity markets and value chains.

4. Thereby we are able to provide scientifically consistent and soundly based answers on strategic issues to decision makers in agribusiness, policy and farming.
Present in all major countries and crops

Crop coverage:
- Corn
- Soybeans
- Wheat
- Sugar beet
- Rice
- Rapeseed
- Oats
- Rye
- (Malting) barley
- Sunflower
- Sorghum
- Cotton
- Peas
- Beans
- Palm oil
- Sugar cane

Countries participating in *agri benchmark* Cash Crop

Countries to come online 2014/15

Priorities for new partnerships
Major clients and research partners
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Importance of sugarcane in Brazil

Production Gross Value (%) - 2011

- **3rd most** important crop (around USD 20 bn)
- **2nd biggest** crop including industrial processing
- About **25%** of world sugar and ethanol production
- About **20%** of Brazilian primary energy source

source: adapted from Conab (2013)


• BR is the largest sugar exporter

• Ethanol – domestic consumption (90%)
Sugarcane production evolution


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Sugarcane production systems

- Land Preparation
- Harvesting and Transportation
- Planting
- Ratoon management
- Cultivation after planting

5 to 8 years
Production systems – Land preparation

- Spraying
- Subsoiling
- Lime application
- Harrowing

LAND PREPARATION

HARVESTING AND TRANSPORTATION

PLANTING

RATOON CULTIVATION

CULTIVATION AFTER PLANTING
Production systems - Planting

Mechanized planting

Mix of manual and mechanized planting

Fertilizer application

Transplanting

Covering
Production systems – Cultivation after Planting

Herbicide and Insecticide application

Sugar mills

Filter cake application

Vinasse application
Production systems – Ratoon management

Herbicide and insecticide application

Fertilizer application

Cultivation
Production systems – Harvesting and Transportation

- Manual harvesting
- Mechanized harvesting
- Loading
- Transportation
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Yields in t of sugar / ha – sugarcane (Preliminary)

- BR farms with significant higher sugar yields per ha
- TH farm suffered considerable with droughts
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Summary

I. *agri benchmark* provides a suitable platform to analyze sugar production costs worldwide.

II. The major sugar exporting countries are already represented in our database – aiming to include others like India, Columbia, etc.

III. Brazilian sugarcane industry is facing financial and environmental problems – increase the importance of ethanol domestically

   I. Inefficient factories leaving the market (80 units since 2008)

IV. Looking at the raw material production, sugar beet seems to be more competitive. What about industrial costs? Next steps in our network.
Thank you for your interest in *agri benchmark*.

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