GENERALITIES OF SUGARCANE CROP IN HONDURAN AGRO INDUSTRY

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May 8th 2011
Introduction

- Sugar Agro industry
  - 7 sugar mills
- Harvested Area
  - 46,149 ha,
  - 50% owned by sugar mills
  - 50% independent growers
Yield trends
Honduran Sugar Markets

• Destination of exports:
  – USA,
  – Guyana,
  – Jamaica
  – Russian Federation
  – Haiti
  – Trinidad & Tobago
  – Sri Lanka
  – Yemen
Social impact of the Sugar Industry

• More than US$25 million is paid in salaries yearly and US$40 million is paid by the sugar mills to independent sugar producers

• Generates jobs for about ten percent of the economically active population in Honduras

• It is estimated that more than 200,000 people receive direct or indirect benefits from the sugar sector
Commerce

• Sugar industry is represented by the Honduran Sugar Producers Association (APAH)

• Mills sell their production to the Sugar Mill’s Central (CISA).

• Domestic consumption is about 321,000 MT.

• Per capita sugar consumption is 85 pounds

• By law, Honduran sugar mills must add Vitamin “A” to all the sugar for human consumption
Cogeneration

• Sugar mills supply 10% of national demand of energy

• Generation of 128 Mw, with a potential of 344 Mw of power electricity.
Factors affecting production

• The climate

• Insecurity in land tenure

• Low agricultural ceilings imposed through industry limits established in the agrarian law

• Access to credit
Irrigation in Honduras

Type of Irrigation in Honduran Sugarcane Industry

<table>
<thead>
<tr>
<th>Type of irrigation</th>
<th>Hectareas</th>
</tr>
</thead>
<tbody>
<tr>
<td>SPRINKLER</td>
<td>10,988</td>
</tr>
<tr>
<td>GRAVITY</td>
<td>7,959</td>
</tr>
<tr>
<td>DRIP</td>
<td>7,616</td>
</tr>
<tr>
<td>RAINFED</td>
<td>19,586</td>
</tr>
<tr>
<td>TOTAL</td>
<td>46,149</td>
</tr>
</tbody>
</table>
Irrigation by Mill

Percentage of Irrigated Area by Sugar Mill

Percentage of Type of Irrigation by Sugar Mill
Productivity by Type of Irrigation

**Metric Tons of Sugar per Hectare**

<table>
<thead>
<tr>
<th>Irrigation</th>
<th>2007/08</th>
<th>2008/09</th>
<th>2009/10</th>
<th>2010/11</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>DRIP</td>
<td>13.4</td>
<td>13.0</td>
<td>13.1</td>
<td>13.0</td>
<td>13.1</td>
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<tr>
<td>SPRINKLE</td>
<td>11.3</td>
<td>11.7</td>
<td>11.5</td>
<td>11.0</td>
<td>11.4</td>
</tr>
<tr>
<td>RAINFED</td>
<td>9.3</td>
<td>9.2</td>
<td>8.9</td>
<td>9.6</td>
<td>9.2</td>
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</table>
Honduran Variety Distribution

- CP 72-2086, 46.8%
- PINDAR, 10.4%
- MEX 69-290, 5.4%
- JA 6420, 4.3%
- PR 1013, 8.4%
- PR 61-632, 2.9%
- B 37-172, 2.2%
- MEX 68-P-23, 2.0%
- OTHERS, 8.8%
- NA 5679, 8.8%
CATV Varieties

Cultivated area by main Varieties

- Pindar
- Mex 79-431
- Mex 69-290
- CP 84-1198
- CP 72-2086
- CB 3822

# Regional Data

## ZAFRA 2009/2010

<table>
<thead>
<tr>
<th></th>
<th>Costa Rica</th>
<th>El Salvador</th>
<th>Guatemala</th>
<th>Honduras</th>
<th>Nicaragua</th>
<th>Panamá</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TotalProduction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>MT Sugar</td>
<td>385,256</td>
<td>569,437</td>
<td>2,313,096</td>
<td>404,744</td>
<td>546,184</td>
<td>146,437</td>
<td>4,365,154</td>
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<tr>
<td>Milled Sugarcane</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MT</td>
<td>3,918,829</td>
<td>5,284,552</td>
<td>22,216,807</td>
<td>4,101,937</td>
<td>5,104,818</td>
<td>1,539,566</td>
<td>42,166,509</td>
</tr>
<tr>
<td>Ha</td>
<td>37,062.94</td>
<td>58,144.00</td>
<td>210,685.00</td>
<td>44,366.29</td>
<td>42,000.00</td>
<td>32,000.00</td>
<td>424,258</td>
</tr>
<tr>
<td><strong>Productivity</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kg/MT</td>
<td>108.82</td>
<td>118.14</td>
<td>104.00</td>
<td>98.47</td>
<td>106.77</td>
<td>100.50</td>
<td>105.89</td>
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<tr>
<td>TCH</td>
<td>105.73</td>
<td>83.18</td>
<td>105.45</td>
<td>92.46</td>
<td>121.54</td>
<td>48.11</td>
<td>98.33</td>
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<tr>
<td>TSH</td>
<td>11.51</td>
<td>9.83</td>
<td>10.97</td>
<td>9.10</td>
<td>12.98</td>
<td>4.84</td>
<td>10.40</td>
</tr>
</tbody>
</table>
Comparative of sugar productivity with Central American mills

MILLS

- AGROINDUSTRIA GT
- AGROINDUSTRIA ES
- CONCEPCIÓN
- LA UNION
- MADRE TIERRA
- MAGDALENA
- CATIV
- MONTEROSA
- PALO GORDO
- PANTALEON
- SANTA ANA
- TRINIDAD
- TULILA

TSH

- 2009-2010
- 2010-2011
Future Trends

- An Ethanol prefeasibility project on the east zone, with annual production of 72 mm liter

- Considered about 10,000 ha for this project

- Estimated investment of US $ 120 mm