

William H. Hejl

**World Association
of Beet and Cane
Growers**

***Sugar Situation in
the World***

American Society of Sugar Beet Technologists
2007 Biennial Meeting



**World Association of
Beet and Cane Growers**

Bill Hejl, President



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World Association of Beet and Cane Growers

**If you want to form
an association with
three farmers...**



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World Association of Beet and Cane Growers

**You must shoot
two of them!**



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2006 WABCG Meetings



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World Association of Beet and Cane Growers

What is the WABCG?

5.6 Million Farmers

**Who associate to promote beet
and cane production**



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World Association of Beet and Cane Growers

31 Countries:

Beet:

Austria
Belgium
Canada
Denmark
Finland
France
Germany
Italy
Japan
Netherlands
Spain
Sweden
Turkey
United Kingdom
United States

Cane:

Australia
Brazil
Fiji
India
Jamaica
Kenya
Malawi
Mauritius
Mexico
Pakistan
South Africa
Sudan**
Swaziland
Tanzania
Uganda
Zambia

**Associate member



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**Sugar is a
Byproduct**



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50 Million Beet and Cane Growers Produce Energy



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The World Sugar Situation:

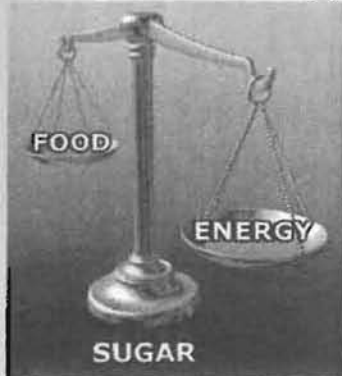
- Production increases
- Increasing demand: Food & Fuel
- Higher fuel prices drive demand for more beet and cane



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Balancing Food and Energy



Result:

- Higher prices
- Government action



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Balancing Food and Energy

Will conversion to Bio-Fuels be:

- Efficient?
- Stable?
- Sustainable?

It must be:

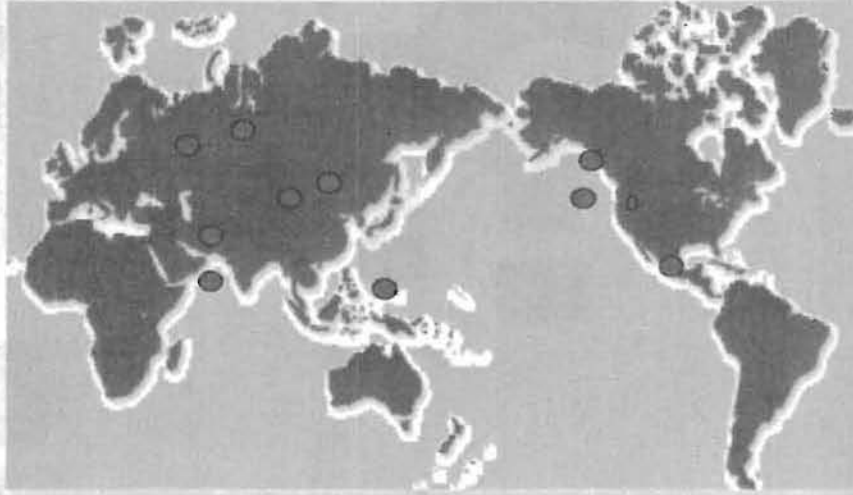
- High prices have driven investment
- Better than trade deals



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The Beet and Cane world



World Sugar Balance

(Million tons, raw value)

2005/06 Surplus: 2.7 Million Tons

2006/07 Surplus: 6.1 Million Tons



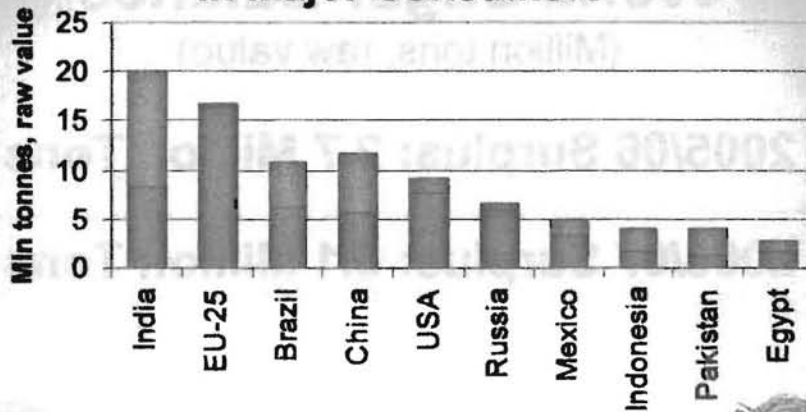
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World Prices



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Sugar Consumption Growth in Major Consumers



■ Increase in sugar consumption between 1984 and 2005
■ Sugar consumption in 1984



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Future Sugar Consumption

(million tons)



13

Demand Growth 2005 – 2009



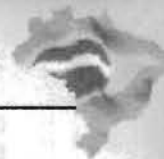
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Demand Growth 2005 – 2013



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Brazil's Sugar and Ethanol



Sugar Production Up 9 Million Tons

Sugar Exports Up 7 Million Tons

Ethanol Production Up 3 Billion Gal.

Ethanol Exports Up 1.6 Billion Gal.



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BRAZIL: TOTAL DEMAND FOR SUGAR IN 2013 (PREDICTED)

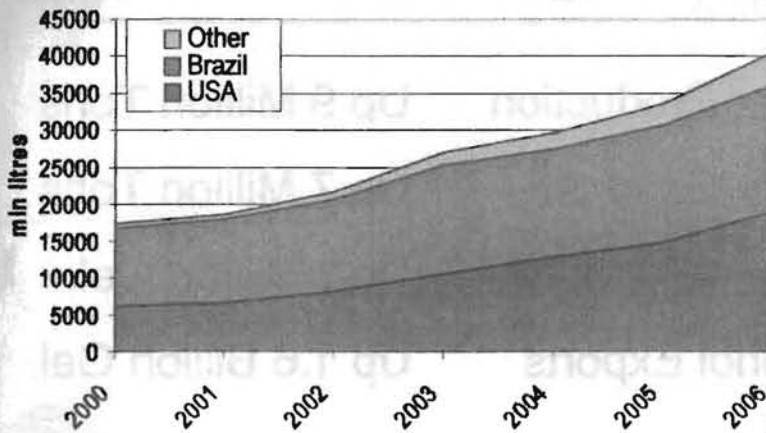
SUGAR	DOMESTIC MARKET	EXPORT	TOTAL
2006/07	10.900	19.660	30.560
2013/14	13.000	27.000	40.000
Growing	2.100	7.340	9.440

Where's the other 21 mln tons?



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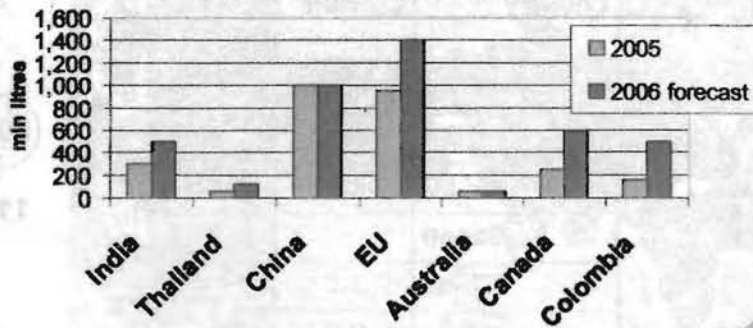
World Fuel Ethanol Production



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Fuel Ethanol

Fuel Ethanol Production outside Brazil and the US



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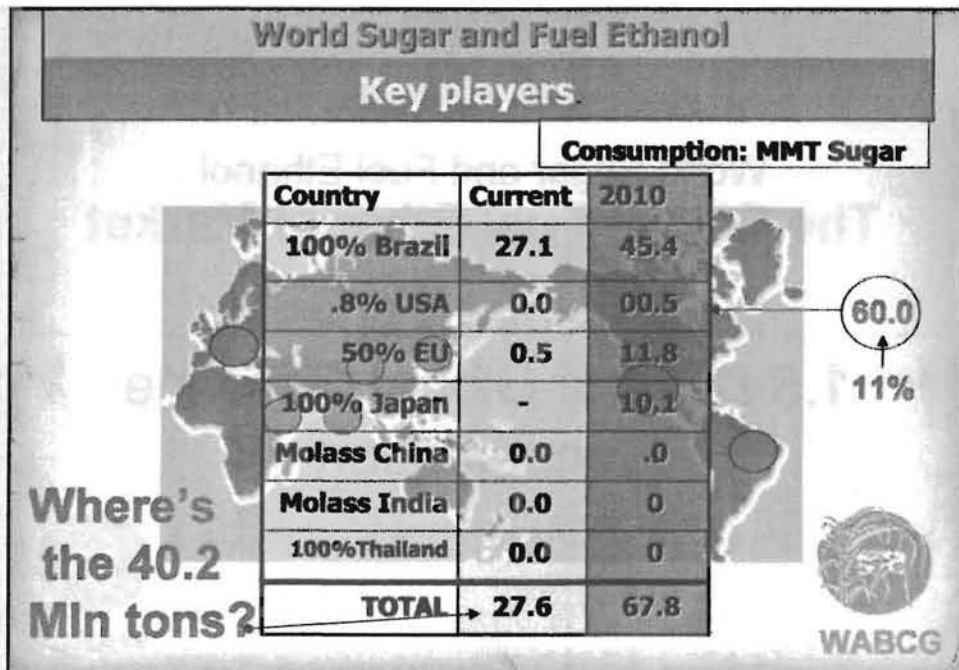
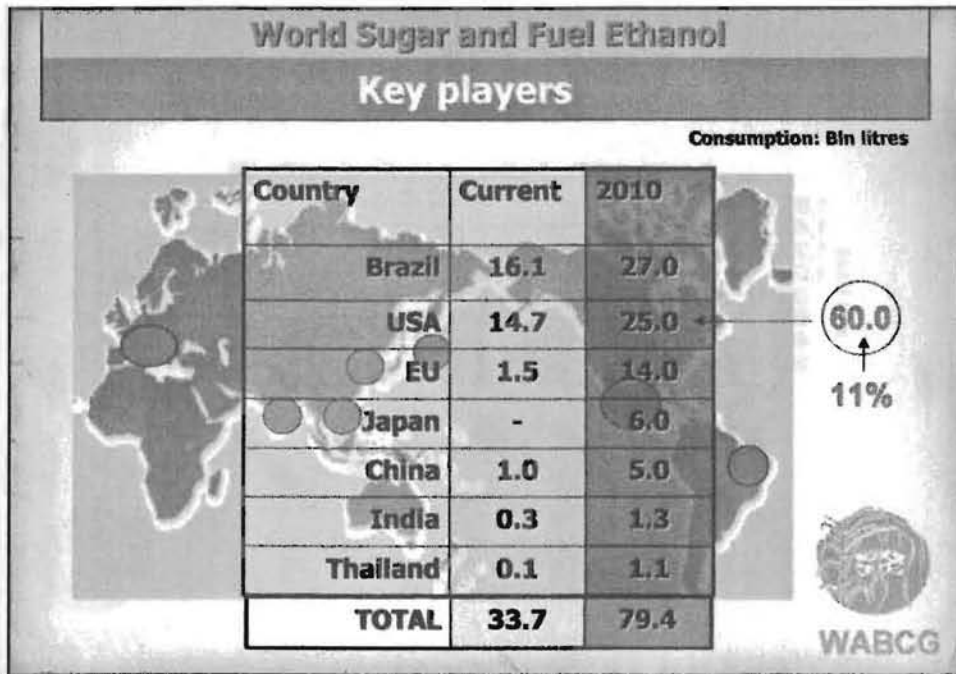


World Sugar and Fuel Ethanol The Global Fuel Ethanol Market

900 Million Gallons or
1.5 Days of Global Gasoline
Consumption



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Brazil SUGARCANE PRODUCTION IN 2010

- ISO estimates they can increase 7% per year.
- But, how are they doing?
 - 2.7% for 05/06.
 - 13% for 06/07

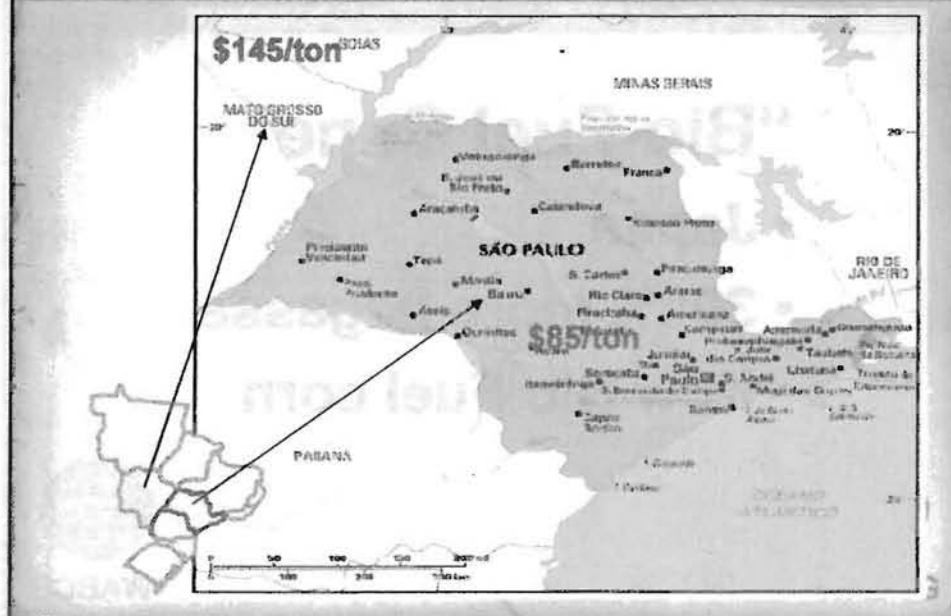
• At 7% they get to 574 million tons of cane by 2010

• At 2.7% they are 122 million tons short
They will be hard pressed to get this done on 5.17 million acres in three years



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Distance in Brazil

- Bags
- 400 meter drop in 3 miles
- Trucks not Railroads



“Bio-Fuel Cane”

- Japan
- 300% more bagasse
- Now Bio-Fuel corn



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Some Facts About India

Geographical area (million hectares)	328.73
Land utilization (million hectares)	306.06
Population (millions)	1055
Rural population (% of total)	72.2%
Work force (millions)	402.5
Per capita land (hectares)	0.33



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Russian Imports:

2005: 3.43 million metric tons

2010: ZERO



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Australia:

- **Typhoon Larry**
- **1,000 year drought**



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World Sugar and Fuel Ethanol **Will Ethanol Destabilize World Sugar Markets?**

- What happens if (or when) crude oil prices fall?
- What happens if (or when) crude oil prices rise further?

KWS

- **Increase sugar per hectare from 10 Metric Ton to 15**
 - **Breeding**
 - **Winter sown beets**



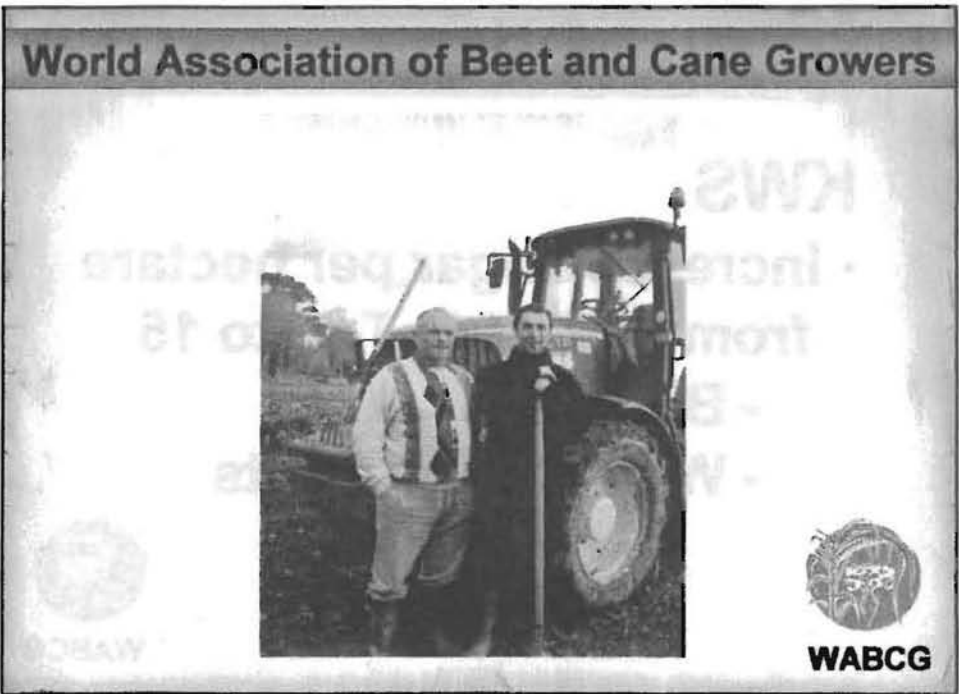
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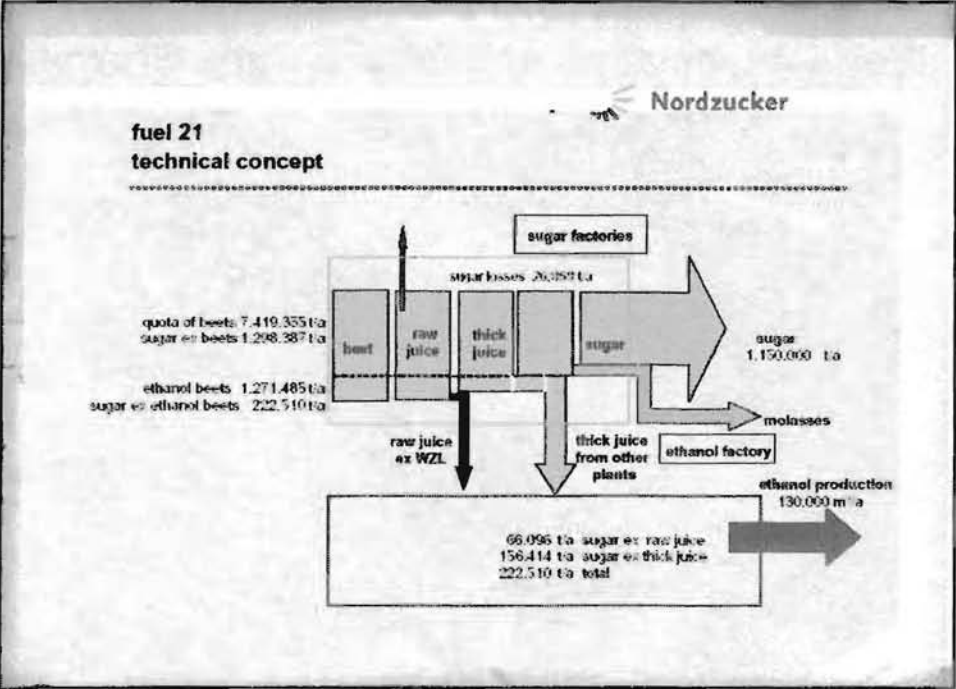
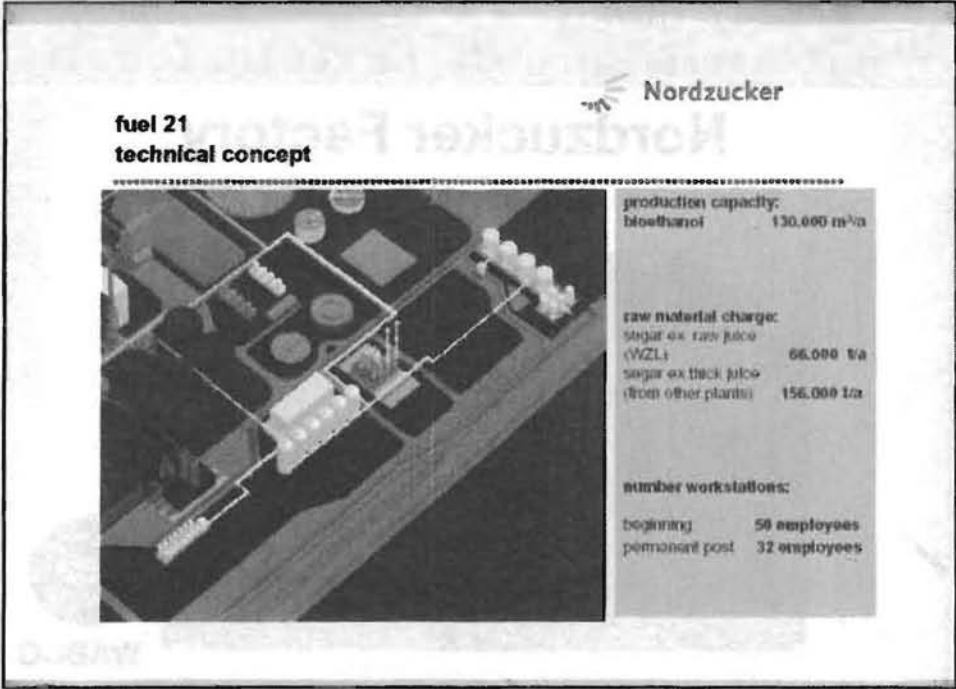
EU Reform

- **Close 33-50 factories in 2007 alone**
- **12.5% cut**
 - **No compensation**
- **21 million ton down to 12 by 2013**



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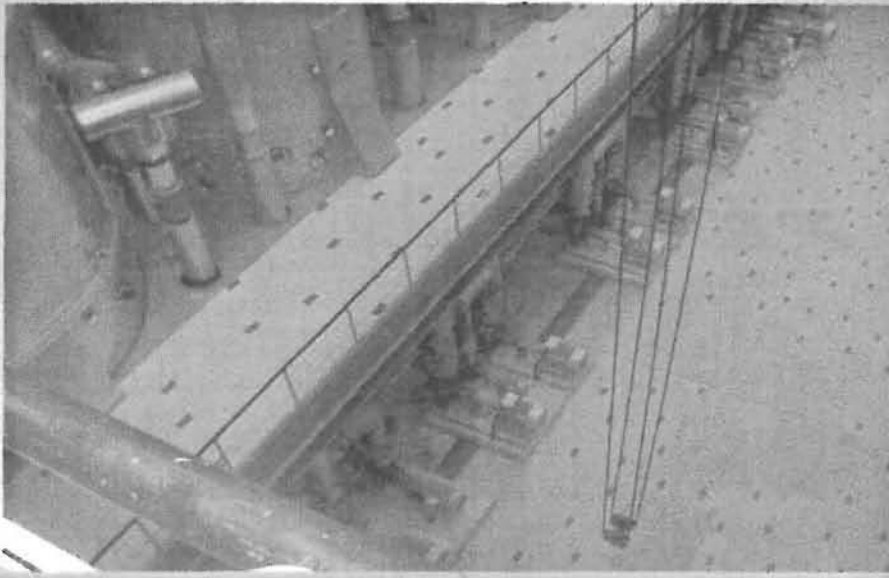
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Nordzucker Factory



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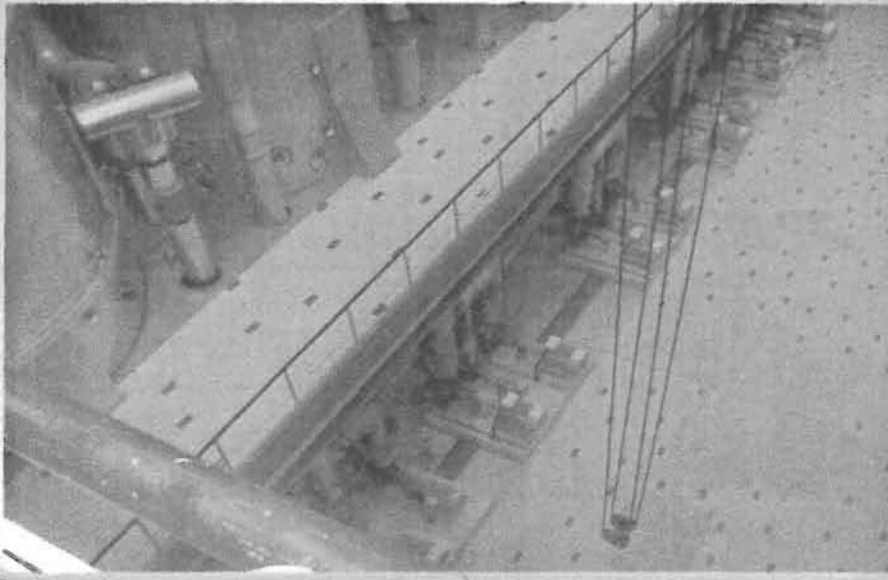
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Nordzucker Factory



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Nordzucker Factory

- 20,000 tons per day
 - 32 people during week
 - 26 on the weekend
- 30,000 ton factory in France



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Technology Brings Sustainability: Biotech Beets



Traditional sugarbeet system

Roundup Ready® sugarbeet system



May 30, 2006, 8-leaf stage. Field scale demonstration planting,
Rupert, Idaho, USA

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Traditional vs. Roundup Ready®

Traditional Idaho System

- Plow
- Pack seed bed (roller-harrow)
- Apply pre-plant herbicide
- Plant
- Post emergence spray X 3-5
- Harrow
- Cultivate X 3
- Lay-by herbicide treatment
- Hand weed
- Swath weeds
- Harvest

Ideal Roundup Ready System

- Pre-plant burn down
- No-till or minimum till plant
- Post emergence Roundup X 2
- Harvest



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Technology Brings Sustainability



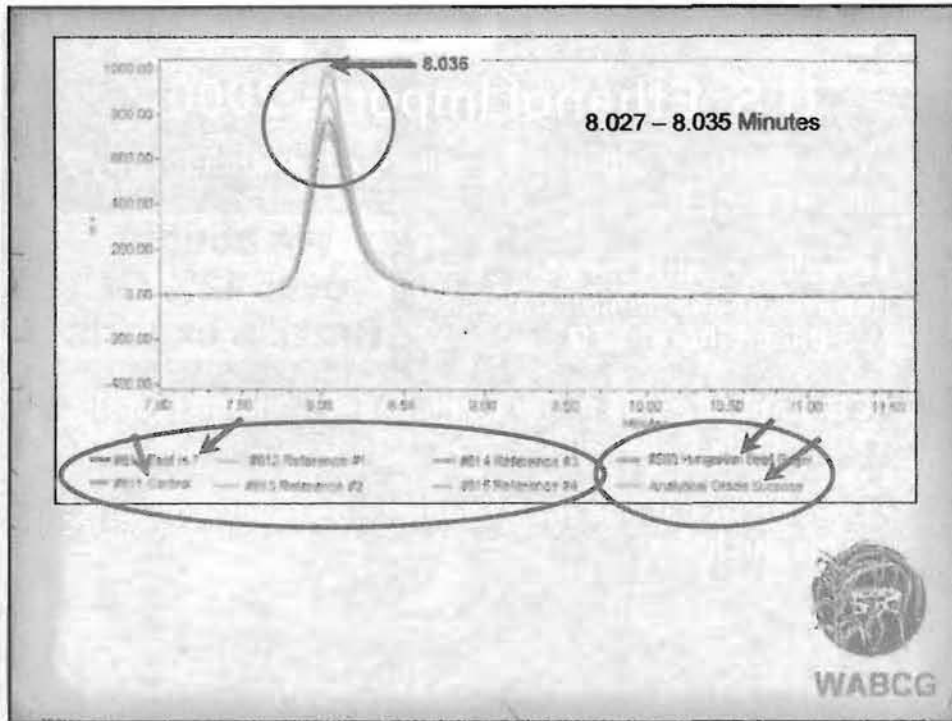
Conventional beet
June 5, 2006
3 traditional treatments



Roundup Ready® beets
June 5, 2006
1 Roundup treatment



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ace 2006

U.S. Ethanol Imports

- Perfect storm of high oil prices & MTBE transition is boosting U.S. imports of ethanol in 2006.

Year	Total U.S. Ethanol Imports
2002	46 million gallons
2003	61 million gallons
2004	161 million gallons
2005	115 million gallons
2006	600 million gallons

That's 3,811,252 metric tons of sugar

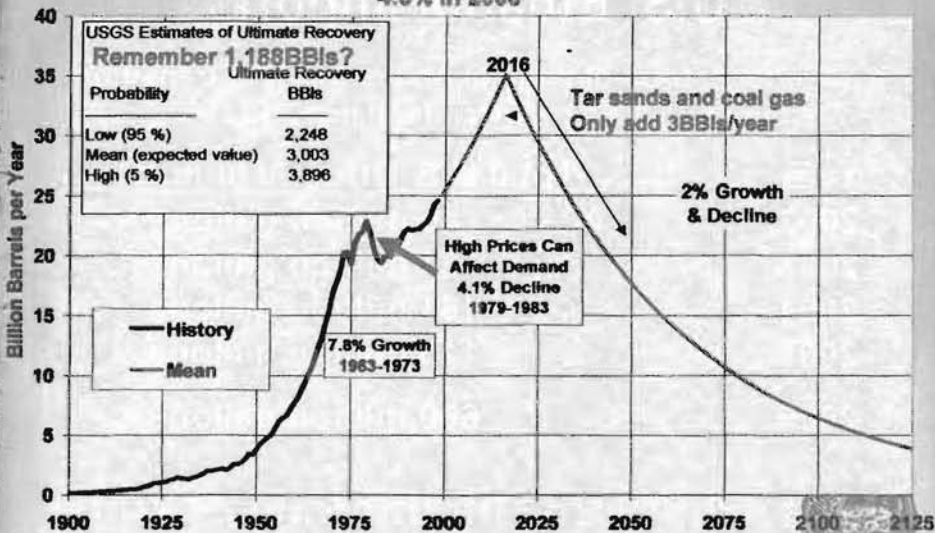
U.S. Ethanol Imports 2006*

- Year to date = 600 million gallons of ethanol (nearly 2 billion liters).
- Brazil accounts for 65% of imports or 343 million gallons (1.3 billion liters) YTD.
- CBI nations = 106 million gallons (401 million liters) YTD, mostly from Jamaica.
- DR-CAFTA nations (El Salvador) = 14 million gallons (55 million liters).

**We bought
over 42% Of
Brazil's exports**

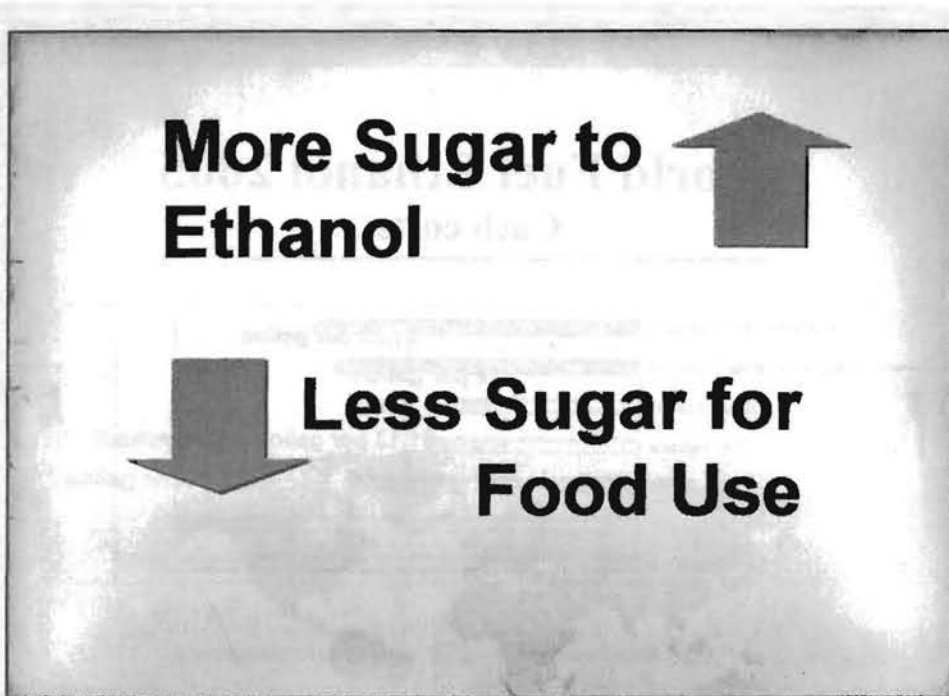
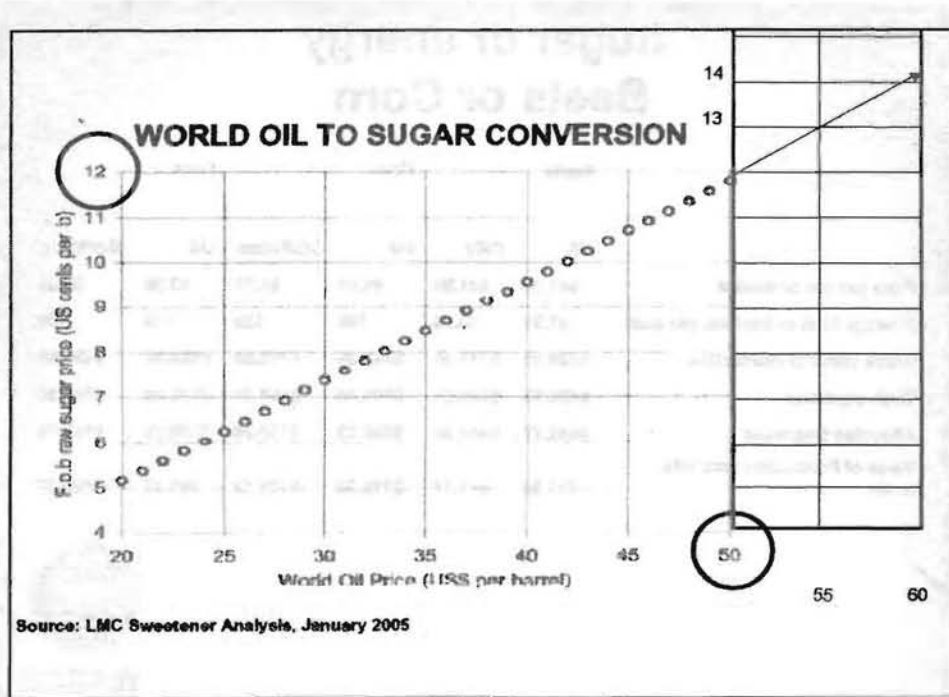
*As of Nov. 1, 2006, from the U.S. International Trade Commission

Annual Production with 2 Percent Annual Growth & Decline 4.5% in 2005



Note: U.S. volumes were added to the USGS foreign volumes to obtain world totals.

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Sugar or energy Beets or Corn

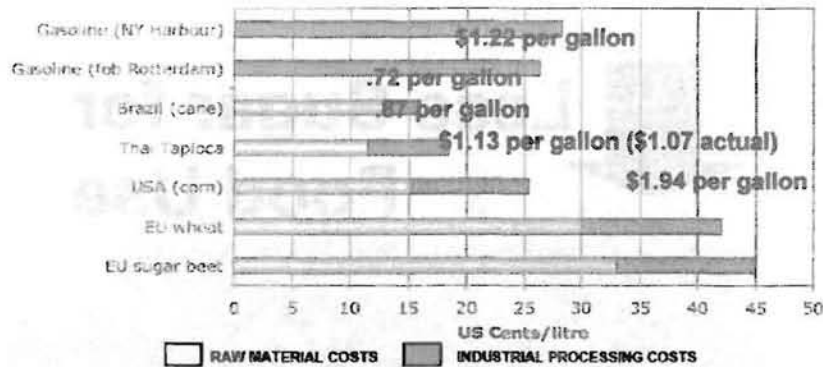
	Beets		Corn		Corn	
	US	RRV	US	NGPlains	US	NGPlains
Price per ton or bushel	\$41.30	\$41.30	\$1.81	\$1.75	\$3.00	\$3.60
Average tons or bushels per acre	21.31	18.74	166	120	166	120
Gross value of Production	\$880.10	\$773.96	\$282.36	\$210.00	\$468.00	\$420.00
Cash expenses	\$422.78	\$340.81	\$193.48	\$165.38	\$193.48	\$165.38
Allocated Overhead	\$542.17	\$444.30	\$208.23	\$165.75	\$208.23	\$165.75
Value of Production less total costs	-\$84.85	-\$11.16	-\$119.35	-\$121.13	\$66.29	\$88.87



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World Fuel Ethanol 2005 Cash costs



Source: Christoph Berg, F.O.Licht's Sugar & Ethanol Brazil, march/05

Brazilian Government

Ethanol support since 1978:

Guarantee ethanol fuel price (\leq 65% of gasoline price) Now **60% of gas price!**

(both prices were controlled by the government)

Tax reduction (- 5%) for alcohol fueled vehicles;

Subsidized loans for ethanol producers to improve capacity; (\$500 Million per year)

Obligatoriness for fuel stations to sell ethanol fuel (all over the country);

Maintenance of ethanol fuel stocks to guarantee the supply and price.



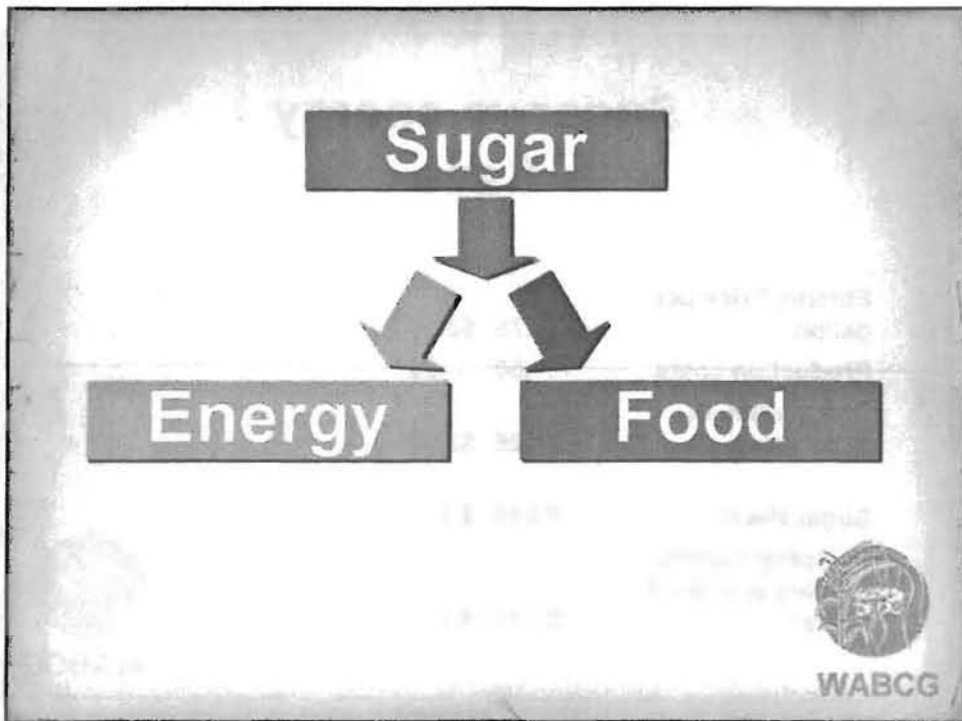
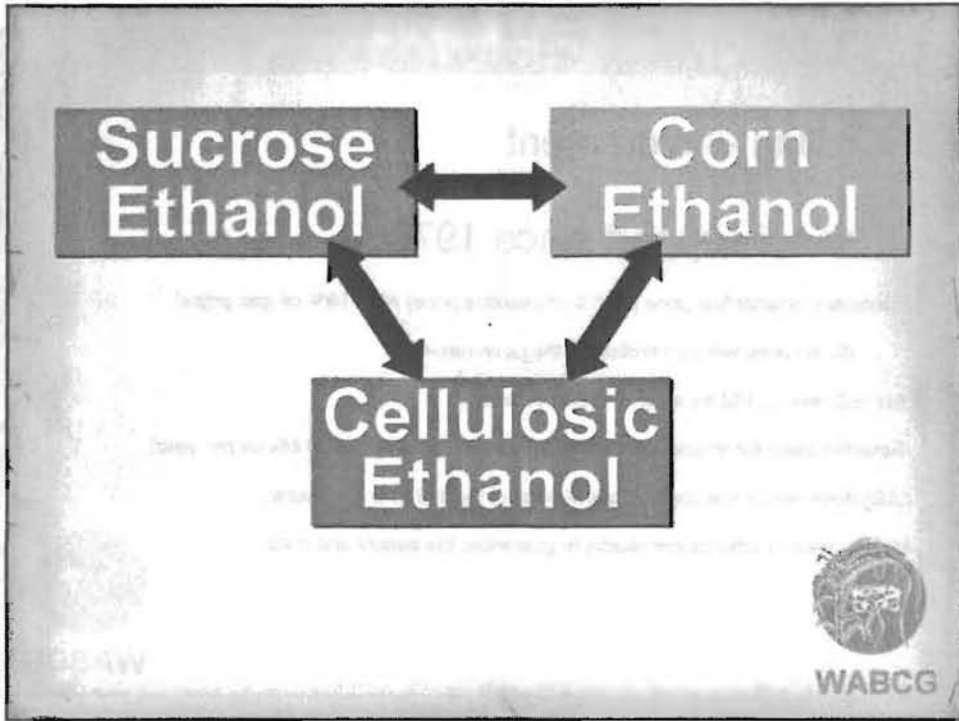
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Sugar vs energy Cane

Ethanol Price per gallon	\$1.75	\$3.00
Production costs	.50	.50
Gross value of Production	\$1.25	\$2.50
Sugar Price	\$.089	\$.178
Shipping 2 cents refining to white 4 cents:	\$.149	\$.238



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Beet and Cane Growers:

- Production increases
- Increasing demand: Food & Fuel
- Higher fuel prices drive demand for more sugar



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**A better
Old German Proverb:
We don't inherit
Our farms from our
Parents
We borrow them
from our children.**



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2007 WABCG Meetings

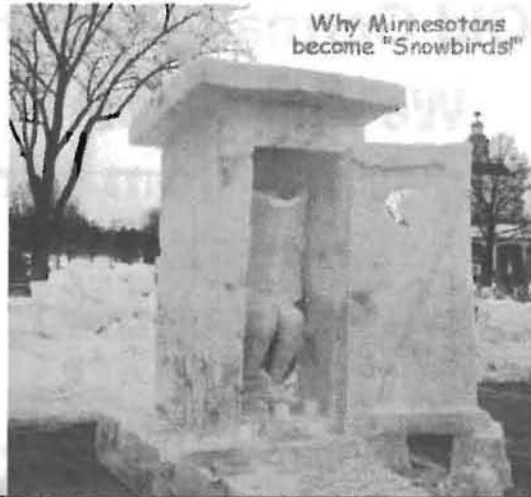
July 1-14, 2007
Brisbane, Australia



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Thank you



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