Biodiesel Social Certification System in Brazil: Reality or Deception?

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Biodiesel Program in Brazil

- Implemented in 2005
- Blending targets: B2 (2008); B5 (2013)
- Multiple feedstock (e.g., soybean, palm, castor bean, cotton)
- Inclusion of small-scale farmers in the biodiesel production chain
- Certification Program - Social Fuel Seal

Questions

- How is the Certification Program Institutionally Designed?
- What has been Accomplished by the Program so Far?

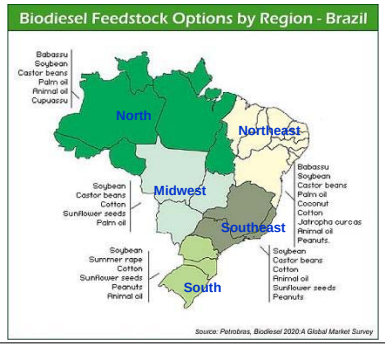
Social Fuel Seal (SFS)

Focus

Farming System
Region
Crop Type

Feedstock from Small Farmers

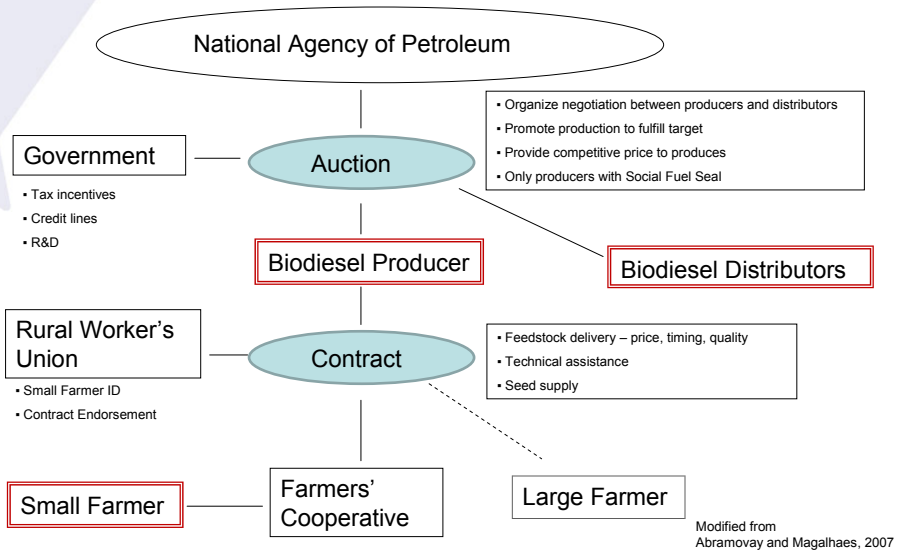
North	10%
Northeast	50%
Midwest	10%
Southeast	30%
South	30%



Taxes Exemption

	without SFS	with SFS
North, Northeast		
Castor bean, palm	32% reduction	full exemption
Other crops	none	68% reduction
Midwest, South, Southeast		
Any crop	none	68% reduction

Actors and Interactions



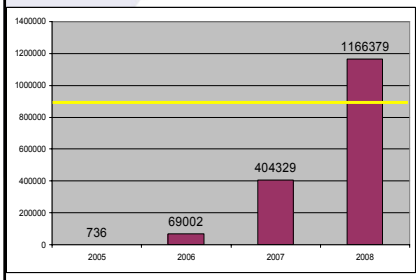
Modified from
Abramovay and Magalhaes, 2007

Auctions

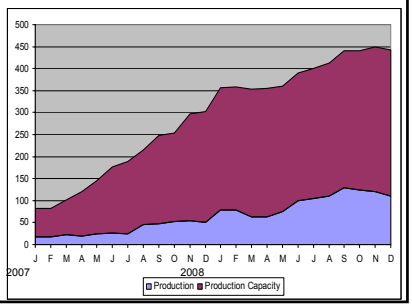
- 13 auctions (Nov 05-Feb 09)
- 3 million liters negotiated so far
- Increasing # of biodiesel plants
- Increasing negotiated price

Round	Year	Amount (l)	Average Price (R$/m^3)	Biodiesel Producer (#)
1	2005	70000	1850	5
2	2006	170000	1859,65	4
3	2006	50000	1753,79	4
4	2006	550000	1746,66	8
5	2007	45000	1862,14	4
6	2007	304000	1867	7
7	2007	76000	1863	9
8	2008	607900	2700	16
9	2008	152350	2714,49	12
10	2008	264000	2604,64	16
11	2008	66000	2609,7	14
12	2008	330000	2387,76	25
13	2009	315000	2155,22	18

Production

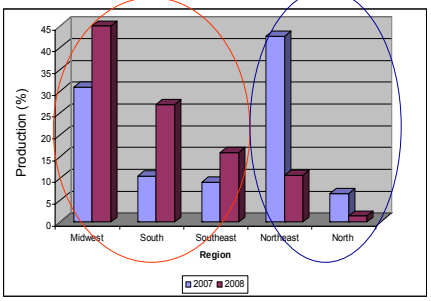


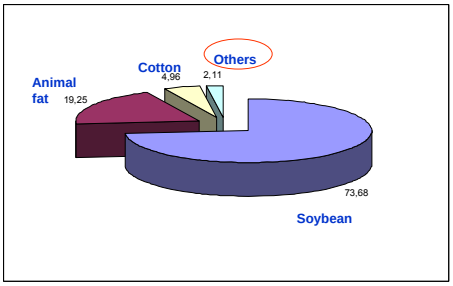
- Increasing Production (almost threefold from last year)
- Annual production above target in 2008 (B2)
- B3 introduced in July 2008
- Production capacity to reach the target B5
- 65 plants registered
- 42 plants with permission to commercialize

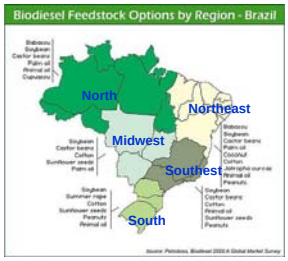


Region and Feedstock

- Increasing production in large farms region (Midwest, Southeast, South)
- Decreasing production in areas of poor small farmers (North and Northeast)
- Large Farm-based feedstock dominates (soybean)







Small Farmers

- Limited participation
- Approx. 75,000 families involved (below the target of 250,000 families)
- How small farmers are involved is still unclear (e.g., contractual terms, assistance, production system)
- Increasing participation of large farmers

Answering the question…

How is the Certification System Institutionally Designed?

- From conflict to partnership

  Small Farmers, Grassroots, Government, and Biodiesel Producers
- Weak links between actors

  Very different interests and motivations
- Strong dependency on the state regulation and negotiation
- No focus on environmental issues

Answering the question…

What has been Accomplished by the Program so Far?

- Production above the target
- Production capacity is growing
- Number of plants with Social Fuel Stamps is growing

But…

- Large farmers capture - Limited participation of small farmers
- Biodiesel plant capture – Control small farmers production via technology and assistance (dependency, give up subsistence agriculture)
- Bottlenecks: crop varieties, technology, seed availability, training, organization capacity

Social Inclusion: Discourse or Reality

- In its present form, the Seal does not promote social inclusion
- Emphasized in the government discourse (speeches, documents, PR)
- Strategy to minimize the potential criticisms related to the Ethanol Program

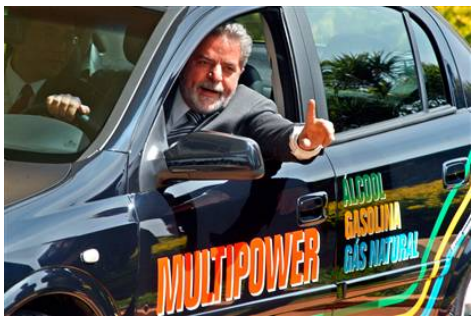
Don’t throw out the baby with the bath water…

The Social Fuel Seal has many flaws but is innovative is many ways

- Accounts for regional differences
- Brings conflicting actors to collaborate
- Opens an opportunity for smallholders empowerment

Starting point for improvement – Grassroots, NGO’s and Researchers play key role in this process

- Address Implementation Problems
- Include Environmental Issues
- Revise social fuel seal design (tax incentives, % feedstock, etc)
- Assessment of local initiatives to generate lessons



Thank you!

Biofuel Debate

Different (but Related) Issues

- Global Warming
- Conservation
- Sustainable Energy
- Rural Development
- Agribusiness,
- Oil Price
- Food Security
- Smallholder Economy
- Human Rights

Rapid Changes

- Policies (National and International)
- Production Systems
- Technologies

Incomplete Information

- Energy Efficiency
- Political Context
- Range of Options

Polarized Opinions

	Against	In favor
Food Security	• Conversion of food crop to energy crops • Threaten to subsistence agriculture	• Integrated system • Enough land for food and energy
Carbon Emission	• Increased deforestation • Burning during harvesting • Low efficiency in energy conversion	• Renewable energy • Reduction in GHG emission • Use of degraded and cleared land
Rural Development	• Capture by agribusiness • Displacement of smallholders • Slavery working conditions	• Boost rural economy • Job generation

From Assumption to Empirical Question

Stay away from generalizations…

- Biofuel is all bad
- Biofuel is a solution for all

… And ask the questions

- Does biofuel it lead to a range of outcomes?
- Under which conditions are they favorable and unfavorable