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Tenure and Biofuels: Trends and Future Issues

Augusta Molnar, Rights and Resources
Group, RRI

www.rightsandresources.org

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Outline

- What are the pressures on land from biofuel and climate change and how predictable are they?
- Where is the land still available and what is its resource base and productive potential?
- What are the tenure and rights issues for communities and rural producers and how will they change over time?
- What are the practical steps to address tenure and land and resource rights issues going forward?

What are the pressures now and in the future?

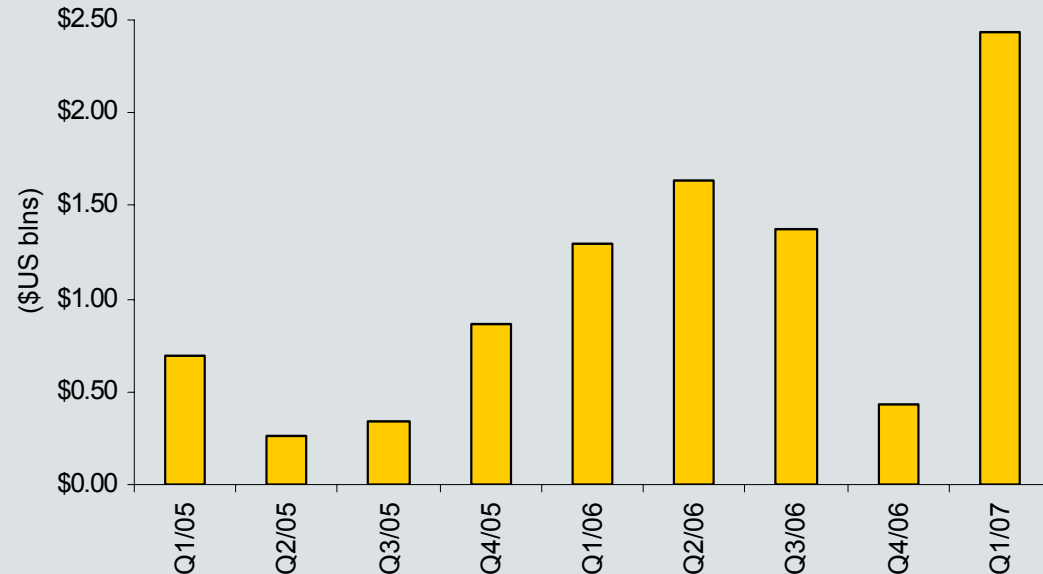
- Growing of biofuels from grains, sugar cane, oil palm, grasses?
- Growing of biofuels from woody plantations?
- Growing of additional foodstuffs in lands not currently under agriculture
- Pressure on forests for sub-soil extraction
- Pressures on grazing and drylands for wind production
- Land speculation (REDD, tourism, biofuel, urban, etc)
- Displaced populations (environmental refugees, conflict refugees, etc)

New Challenges (1) Energy: Big Changes, Big Biofuels

Projected world biofuels consumption (MToe)

2010	2015		2030
With No New Government Measures On Climate Change			
Europe	14.8	18.0	26.6
US	14.9	19.8	22.8
Brazil	8.3	10.4	20.3
China	0.7	1.5	7.9
India	0.1	0.2	2.4
Total	41.5	54.4	92.4
With Government Measures			
Europe	16.4	21.5	35.6
US	16.4	27.5	42.9
Brazil	8.6	11.0	23.0
China	1.2	2.7	13.0
India	0.1	0.3	4.5
Total	48.8	73.0	146.7

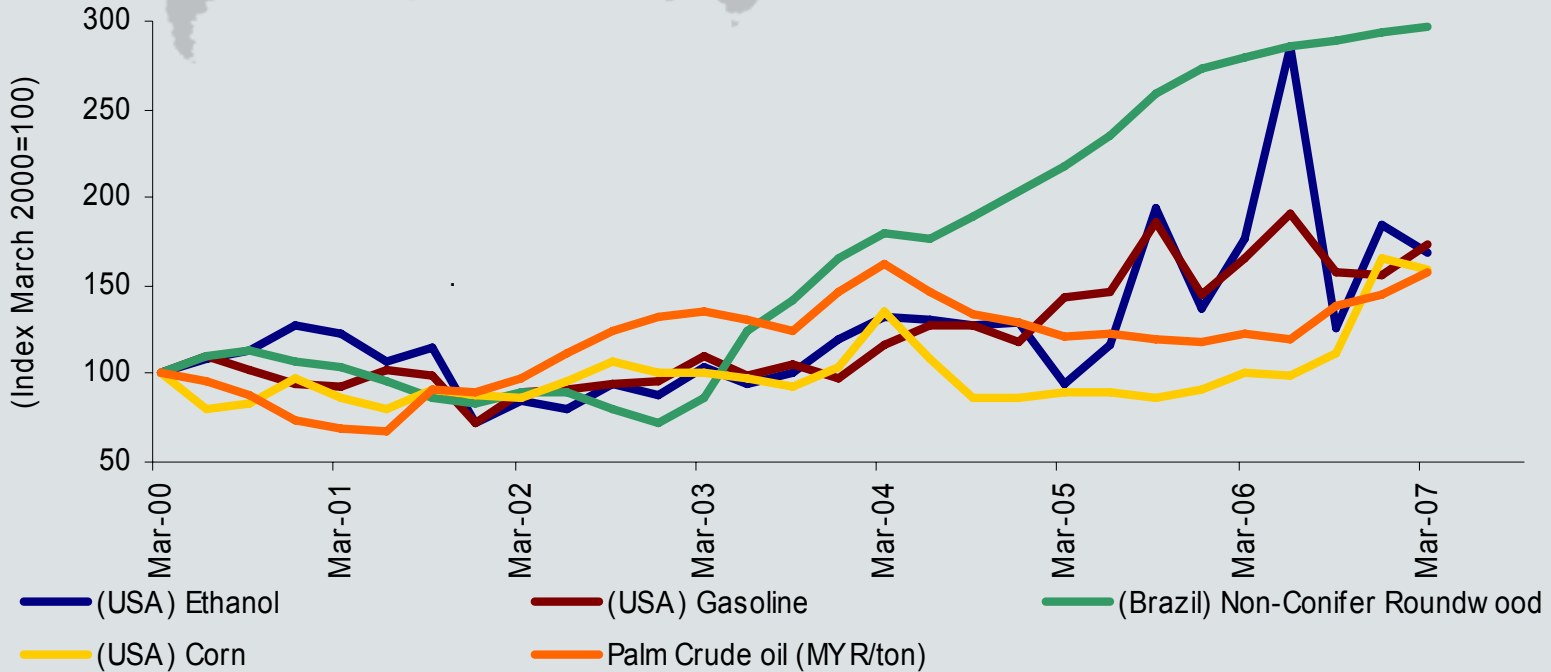
- By 2030 Demand for energy 50%
- Biofuels – increase in investment, consumption and area
- Brazil – 4.5 million ha by 2016,
- Oil palm in tropics – up by 5.5 million ha in last 10 years (doubled)
- 100 MToe of biofuels = 35 million ha



Source: OECD/IEA (2006).

Global Biofuels Financings: Q1/05-Q1/07

New Challenges (2) Convergence of Food, Fuel, Fiber Markets - Pressure



Source: Bloomberg, Wood Resources, CIBC World Markets

- Food, fuel and fiber all competing for the same, declining amount of land – about 300 million available (IIASA 2007), all driving concerns about food security, riots, conflicts

Where is the land and what is its productivity?

- Agricultural and pasture land going out of production due to climate shifts and unpredictable seasons? Need for additional land under agriculture to meet new demand.
- Pressure on agricultural and pasture land for growing biofuels, establishing wind farms, etc?
- If biofuel production is more dominated in the future by wood lignose based products how will this affect the value of forest land and pressure on forest land at the margins?
- IIASA projections are that there is limited available land relative to the multiple demands --about 300 million hectares available versus a demand of 200 million for new agriculture, 25 million for industrial forestry, and 290 million (at least) for biofuel, ignoring other demands.

What are the tenure and rights issues and how will they change over time?

- Securing forest tenure is an unfinished agenda compared to agricultural sector --- plus state keeps alienation rights and retains a regulatory role distinct from agricultural sector
- Land and forest reform and adjudication are often at cross purposes and sub-soil extraction or tourism may ignore both
- New and increased demands on land have not been addressed in government and donor strategies for tenure reform
- Carbon rights are another layer of rights and have not been clarified yet: will smallholders growing biofuels be direct beneficiaries and control their management decisions?

Recommendations for the Sector?

- Secure customary tenure rights using tools and methods that recognize local governance of land/resources and their use.
- Advance post-colonial reform processes, particularly for forests and drylands, prior to promoting investment in these lands.
- Set standards and design new instruments for due diligence for investors and investment contracts
- Decentralized governments and community organizations need to understand the tradeoffs of biofuel plantations -- build knowledge
- Coordinate information gathering with other sectors --conservation, extractive industry, tourism, urban, etc
- Track the shifts in energy production, land use and ownership and impacts on tenure rights and access, livelihoods, and equity

Thank You



*Challenges never so
daunting, opportunity for a
dramatic difference never so
great*

**We must do things
differently**

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