

Presenter:

**Christof Brock, CEO,
Namibian Agronomic Board**

Title:

**The National Bio-Oil Energy Road Map 2006
(focussing on Jatropha) and developments in
Namibia since.**



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Namibian Agronomic Board**



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1. Background

1.1. Interest arose;

- 1.1.1. Diversity from annual crops into perennial crops.
- 1.1.2. Rising fuel prices.

1.2. NAB commissioned road map.



2. Advantages of Jatropha

2.1. Depleted soil layer/Jatropha's tap root.

2.1.1. depleted soil in the top.

2.1.2. soil below enriched reached by tap-root. Helped with a shovel of manure.



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2.2. Drought resistance/Global warming mitigation

2.2.1. Jatropha is perennial (50 yrs+) in a drought year little expansion but still nuts.

2.2.2. Years with high rainfall can build up for later drought year.

2.2.3. Mitigate the effects by risk diversification, mitigate the causes by absorbing carbon.

2.3. Carbon Credits

2.3.1. In addition, 'cherry on the cake' through the carbon credits of the Kyoto Protocol.



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3. Road Map Summary

August 2006 over 80 stakeholders found consensus.

- 3.1. *Jatropha curcas* viewed as the most feasible plant for dry-land cultivation for the extraction of bio-oil.
- 3.2. That it can grow approximately in the same areas as maize can only grow **but only in the less frost-prone areas, i.e. only in Caprivi, Kavango and the 'maize triangle'**.
- 3.3. suited to small-holder as well as large scale farming.
- 3.4. Envisaged that approx. **63,000 ha**. This would contribute **0.5% to GDP**.



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3.5. Likely to be used in the bio-oil energy sector as follows:

- Blending into commercial diesel;
- Decentralised on-farm/village-level blending into agricultural diesel;
- Exports;
- Running decentralised power stations;
- Substitution for paraffin; and
- For soap making.

3.6. Four intermediate objectives.

- Bilateral and multilateral agreements;
- Policy instruments;
- Management of process, product and market risks;
- Optimum primary production.



3.7. that, to oversee and drive the above.

- National Oil crops for energy committee (NOCEC) comprising Ministries, private sector organisations and actual entrepreneurs, is formed.
- NOCEC need at least one full-time high-level focus official.

3.8. That *Jatropha* should be **gazetted**.

3.9. That appropriate regulations of liquid-fuel standards in terms of the Petroleum Products Act should be gazetted.



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4. Factors limiting progress

4.1. Difficulties with Fund Raising

4.1.1. Such applications failed.

4.2. Difficulties with leases/security for investments.

4.2.1. Namibian Government has resisted granting alienable leases.

4.2.2. But in spite of this, a good number of foreign investors started to get active.



4.3 Food-security Issues

- 4.3.1. Fears that farmers might be lured into abandoning grain farming arose.
- 4.3.2. Cabinet sub-committee report was never compiled.



4.4. Free-holder Farmers' Experience

4.4.1. More susceptible to frost;

4.4.2. Is eaten by wild animals;

4.4.3. Cost of harvesting;

4.4.4. Thus free-hold farmers are not to pursue the cultivation.



- 4.5. Globally, success stories around have Jatropha reduced substantially.
- 4.6. NOCEC has become dormant.
- 4.7. Some, small-scale farmers, are looking for buyers of their small initial harvests. obviously they are disappointed.



5. The future

5.1. In spite of this, a few foreign investors continue to be active.

5.2. Entrepreneurship.

5.3. Room for compromise regarding:

5.3.1. food security debate;

5.3.2. the alienable lease debate.

5.4. A number of official studies into the latest being a GTZ study.

5.5. I do not see a bright future for *Jatropha* in Namibia.



THANK YOU!



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