Presenter:

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Title:

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











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.







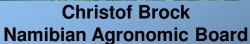




2.2. Drought resistance/Global warming mitigation

- 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.









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.**







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.



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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.









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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