JATROPHA CULTIVATION INITIATIVES

NAMIBIAN EXPERIENCE

Ву

LAMECK MWEWA &

ANGELICA BERGMANN

CONTENTS

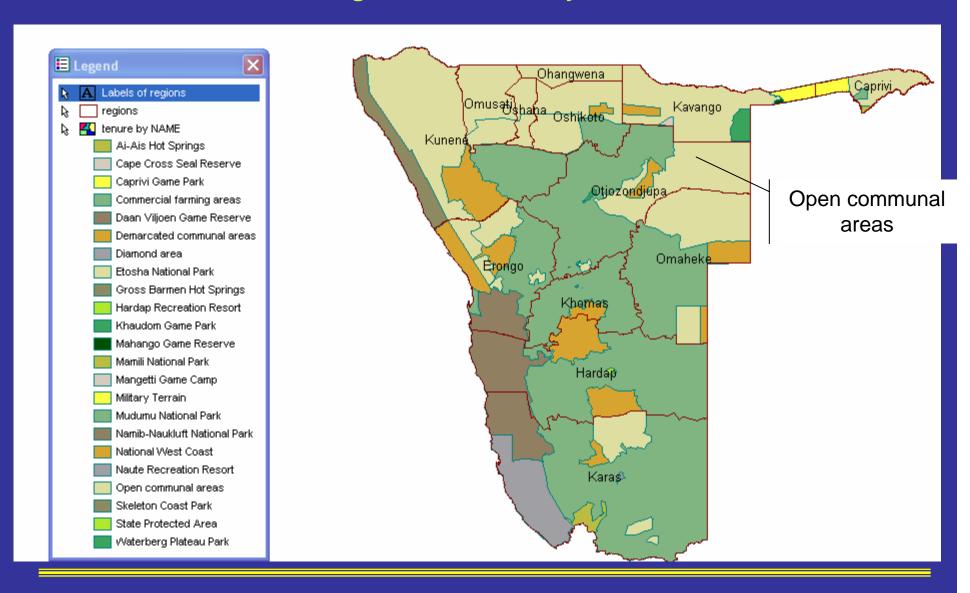
- Some geographic facts on Namibia
- Reaction to bio-diesel demand
- Jatropha cultivation initiatives
- MTCT: Org and objectives
- Current Activities
- Challenges
- Recommendations

Geography of Namibia

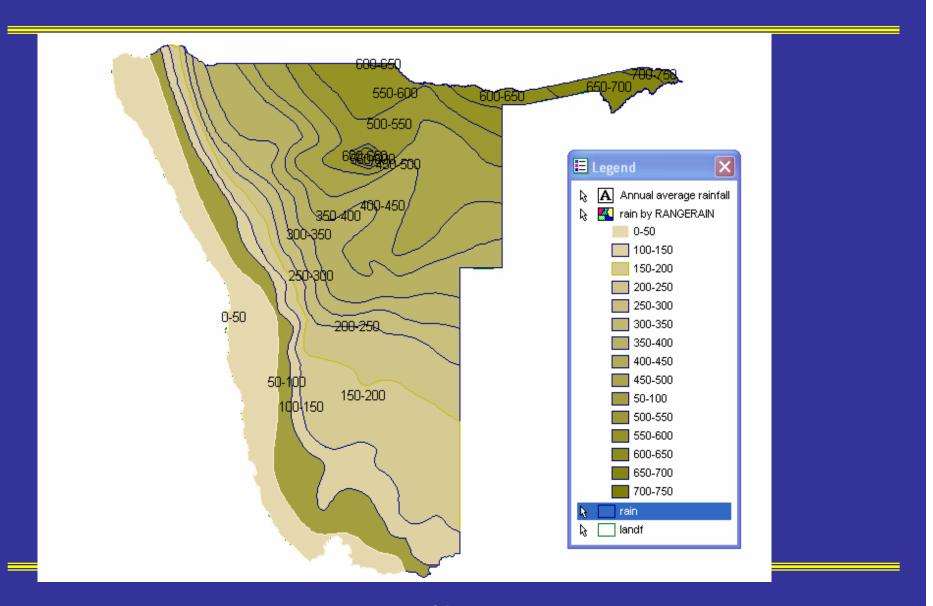
SATELLITE IMAGE SHOWING LAND COVER

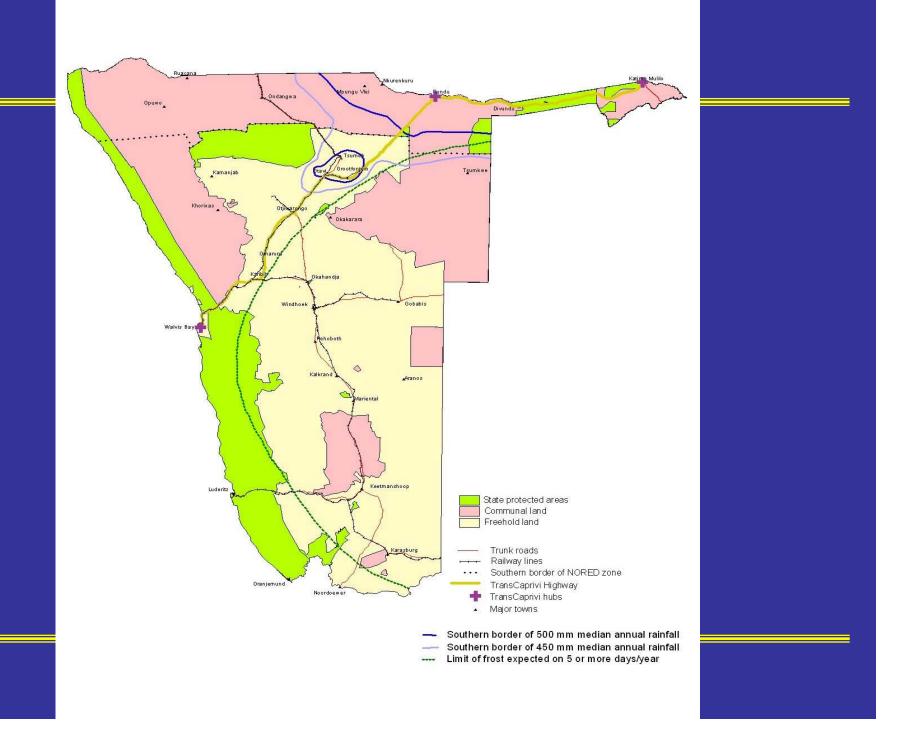


Regions and tenure by name

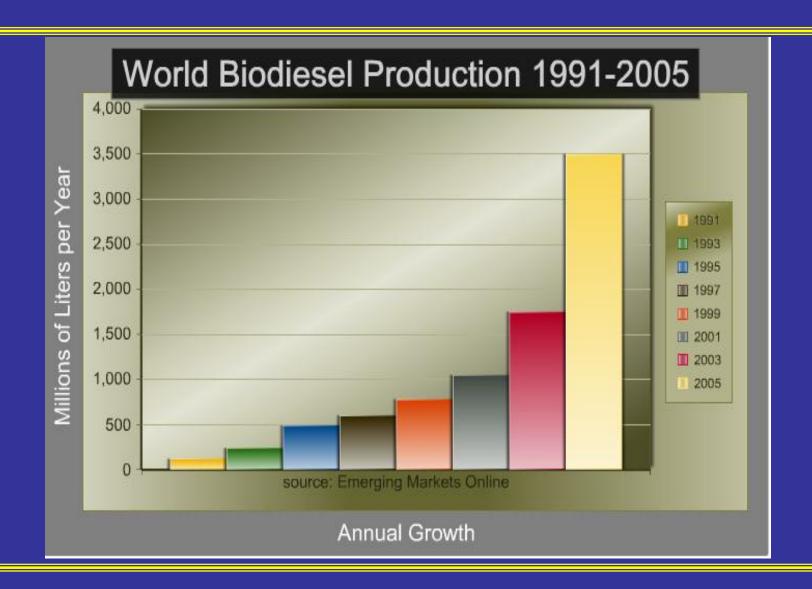


Average annual rainfall





BIO DIESEL PRODUCTION



REACTIONS TO MEET DEMAND FOR FEEDSTOCK

- Convert more food crops to energy
 - Selling food crops for energy
 - Creates imbalance in food supply
 - Results in high food prices
 - Affects the poor most
- Switch from growing food crops to energy crops
 - Replacing food production with energy crops like Jatropha
 - Causes food insecurity
 - Leads to high food prices

REACTIONS TO MEET DEMAND FOR FEEDSTOCK

- Clear more land for energy crops
 - Causes deforestation
 - Loss of bio-diversity
 - Possibility of land degradation and eventual desertification
- Utilize waste or abandoned land for energy crops
 - Increases farm income
 - Meets demand for feedstock
 - Prevents land degradation
 - Improves soil conservation

WHY JATROPHA IN NAMIBIA?

WHY JATROPHA IN NAMIBIA?

- VISION 2030: Namibia's development vision
- BIOFUEL ROADMAP 2006
- MILLENNIUM DEVELOPMENT GOALS
- LOOMING ENERGY CRISIS
- HARSH AGRO ENVIRONMENT
- PLANT EXISTS IN THE COUNTRY



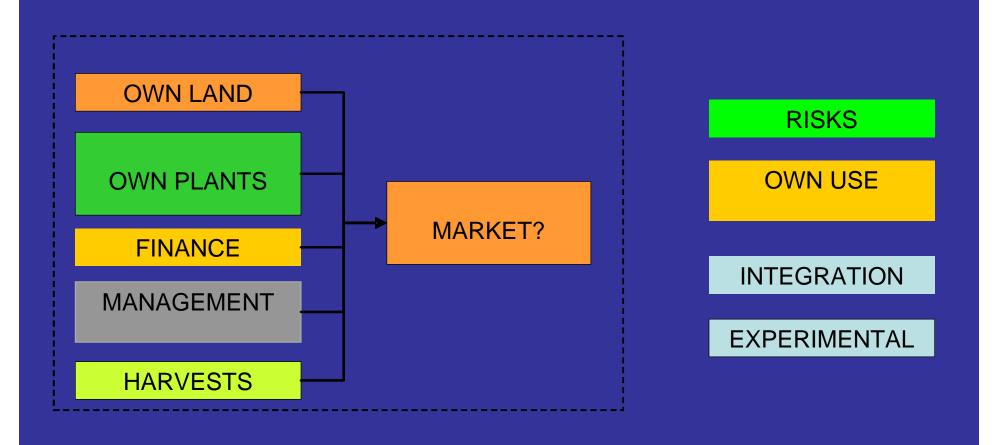




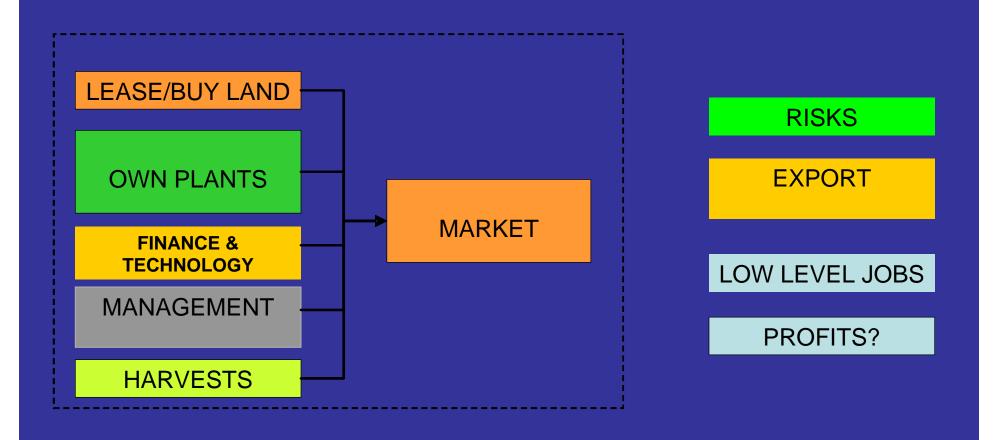
JATROPHA IMPLEMENTATION MODELS IN NAMIBIA



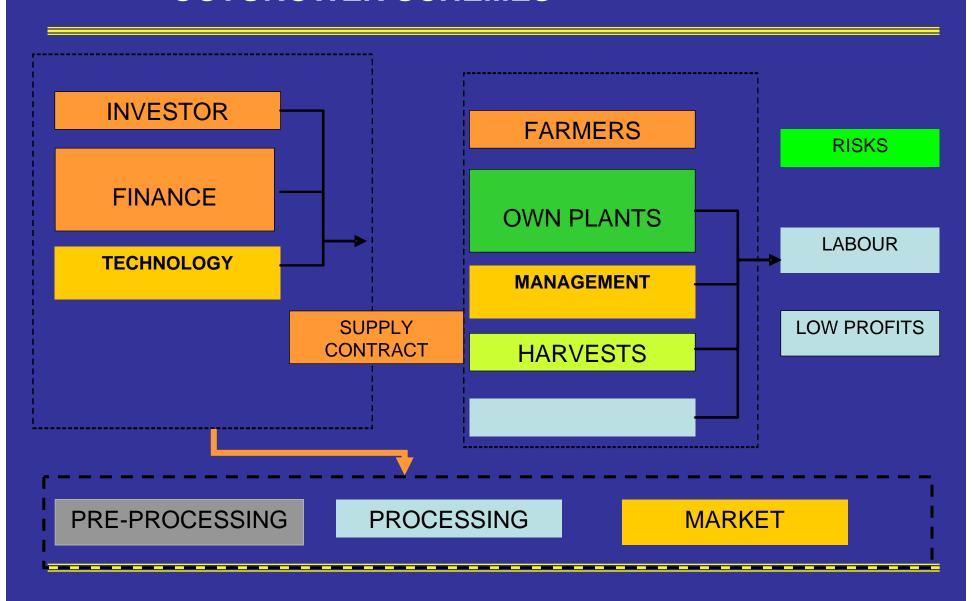
PRIVATE FARMER/INDIVIDUAL INITIATIVES



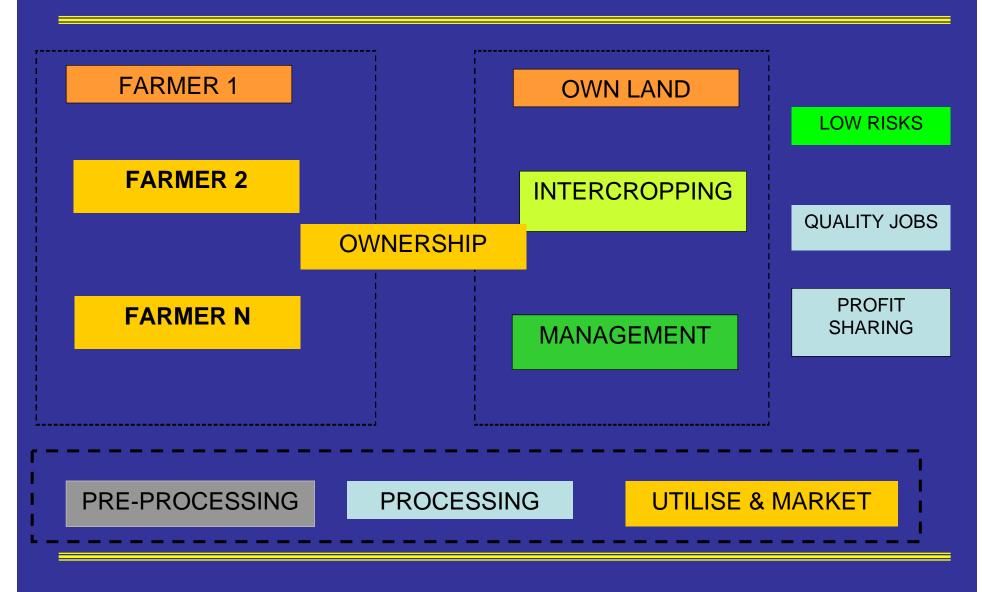
INVESTOR DRIVEN



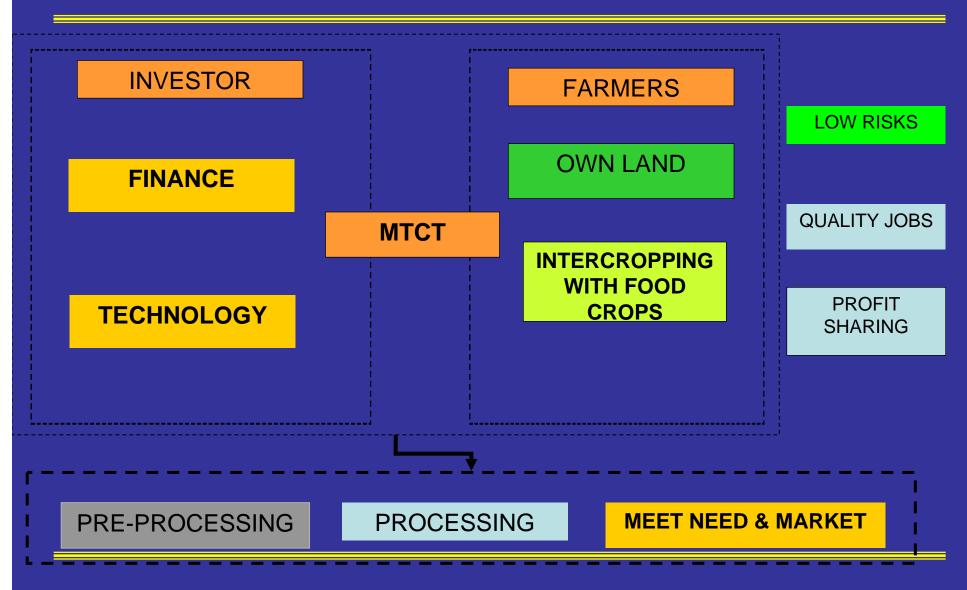
OUTGROWER SCHEMES

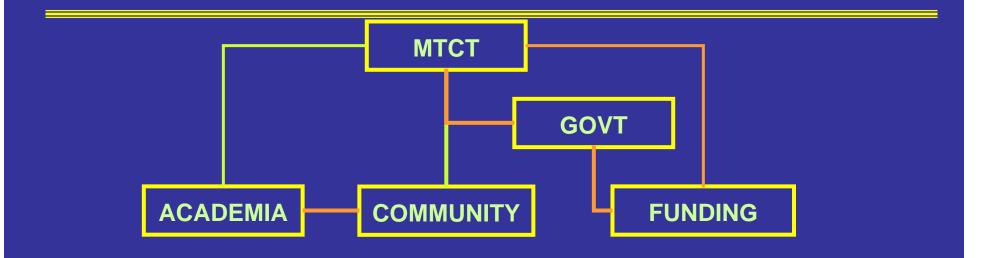


FARMERS COOPERATIVES



MTCT MODEL





- MTCT
 - Fund mobilization
 - Community mobilization and training
 - Negotiates on behalf of the community
 - Project management & monitoring

- ACADEME
 - Mentor
 - Training
 - Research
 - Monitoring
 - WEL

- Community
 - Land
 - Nursery establishment
 - Jatropha cultivation
 - Harvesting
 - Local utilization

MUKWAMHALANGA TUKONDJENI

COMMUNITY TRUST

What is MTCT?

- MTCT is a registered non-profit NGO
- Founded in 2005 by the First Lady of Namibia
- MTCT is a voluntary organisation
- The main aim is to facilitate community sustainability
- Focused on facilitation, support and economic empowerment of women



Main Objectives of the Trust

- Improve agriculture productivity through timely support for agric input
 - Seeds and organic fertilizers,
 - irrigation facilities, land utilisation
- Creating local self-employment opportunities
 - Mentoring
 - Skills training
- Organise awareness campaigns for women
- Promote local products in urban market

CURRENT ACTIVITIES

- Fund raising
- Community mobilization in 6 regions
- Community training
- Nurseries establishment in the community
- Brokering suitable land utilization
- Brokering best business arrangements
- Seed procurement
- Coordination









CHALLENGES

- ✓ LAND TENURE
- ✓ AWARENESS
- ✓ APPROPRIATE POLICY
- ✓ LIMITED CAPACITY WITHIN COMMUNITIES
- ✓ FUNDING (NO SUBSIDY, TAX INCETIVES)
- ✓ UNCERTAIN FUTURE MARKETS
- ✓ COMPETING PROJECTS
- ✓ EMPIRICAL DATA
- ✓ MULTI LEGAL FRAMEWORKS

RECOMMENDATIONS

- ✓ Tax incentives
- ✓ Land tenure management
- ✓ Govt development grants
- ✓ Policy and regulatory framework
- ✓ Scalable subsidies
- ✓ Down stream marketing
- ✓ Community awareness
- ✓ Life cycle analysis

What to consider when choosing energy crops

- CHOICE OF CROP TYPE FOR STOCKFEED IS CRUCIAL
- QUESTIONS TO CONSIDER:
 - ✓ Is it a food crop or non-food crop?
 - ✓ <u>Is it perennial</u> or annual crop?
 - ✓ Is it Irrigated or <u>rain-fed crop?</u>
 - ✓ Can it grow on marginal lands?
 - ✓ Has it got a high energy balance crop?
 - ✓ Can it be done with low management and labour cost?
 - ✓ Has it got high oil content % per yield/ha?
 - ✓ Any potential for multiple use?
 - ✓ Any land use, land tenure problems?

THANK YOU FOR LISTENING