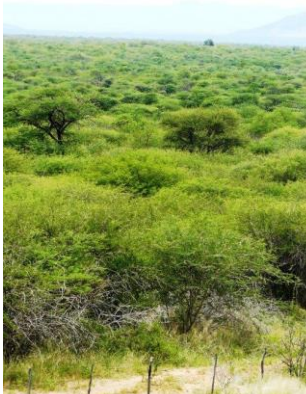




Bush Encroachment & Bush-to-Electricity



Decentralised Power Supply Solutions in Namibia

Support to De-Bushing Project

Background

- Bush encroachment affects 30 million ha, reducing rangeland productivity by 2/3
- Considered a “National Disaster”

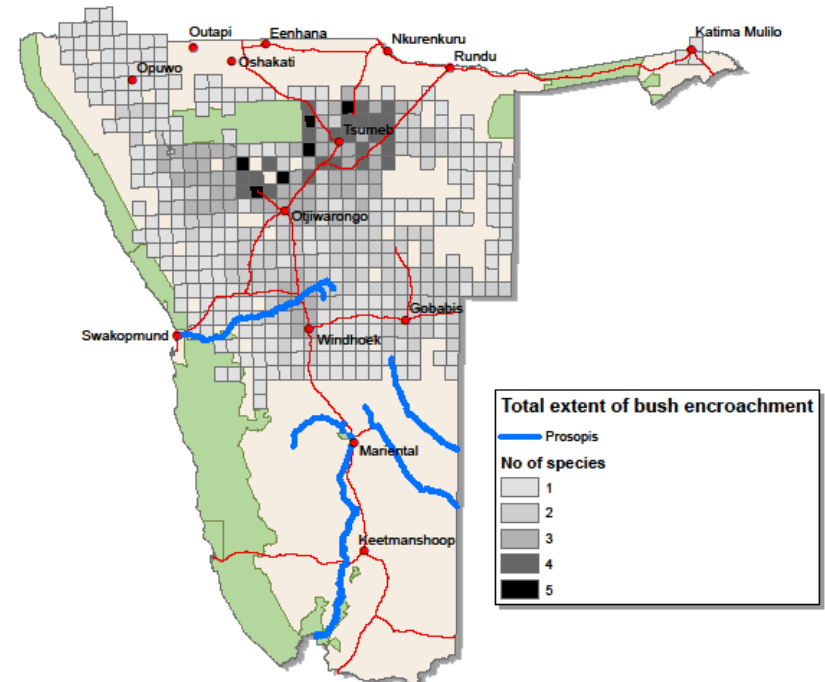
Project objective

- ... to develop strategies to upscale de-bushing in Namibia

Value addition ...

- ... energy / power generation from encroacher bush is the most obvious solution

Total Extent of Bush Encroachment



Energy Supply Options

On-grid power generation

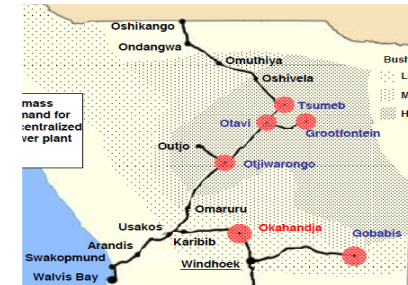
- Decentralised 5-20 MW biomass power plants; close to off-takers and the resource base

Off-grid / mini-grid power supply solutions

- Supply of „island solutions” for industrial SME parks a/o rural communities

Industrial applications (boilers)

- Biomass boilers allow to substitute imported fossil fuel with local biomass





Perspectives & Concerns

Sustainable supply of biomass?

- Re-growth alone exceeds current national electrical energy demand
- 20 – 35 km radius suffices to supply 5-20 MW - for 20 years

Economically viable supply?

- Ohorongo Cement has demand of up to 80,000 tonnes p.a. and introduced “3rd party wood” supply agreements
- Harvesting methods ranges from mechanised to labour based





Conclusions ...

Huge biomass resource that

- ... can be supplied sustainably and economically
- ... supports decentralised baseload energy solutions

Encroacher bush offers macro-economic benefits

- ... Rangeland restoration: agricultural productivity increases
- ... Creation of business and employment opportunities - along the value chain
- ... Safeguarding „ecosystem services”, such as groundwater recharge

Rangeland



Growth



Energy





Thank you!

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