



Bush Control and Biomass Utilisation

Governance and policy framework of the biomass sector in Namibia



Outline

*“The governance of biomass production and use addresses the following questions:
- What are the roles, rights and responsibilities of the different stakeholders?
- What policies, regulations and institutions, and information and communication channels that need to be in place?”*

1. Bush-based biomass: a sector in formation
2. Economic potential
3. Current governance framework
4. Main challenges
5. Way forward: a dedicated framework for the sector and the establishment of a coordinating body



Bush-based biomass: a sector in formation

- From a rangeland management approach to an industrialization opportunity.
- The sector surrounding encroacher bush-based biomass is developing across many fields: agriculture, energy, conservation and land rehabilitation.
- **Different aims** and goals for various actors of the sector:
 - Farmers : clearing land for grazing, rehabilitating the land to return to grassland for grazing, producing feed from bush
 - Charcoal producers: encroacher bush as a sustainable source of wood
 - Energy producers: encroacher bush biomass for energy production

Need for a common understanding of the sector and its opportunity for Namibia



Bioeconomy

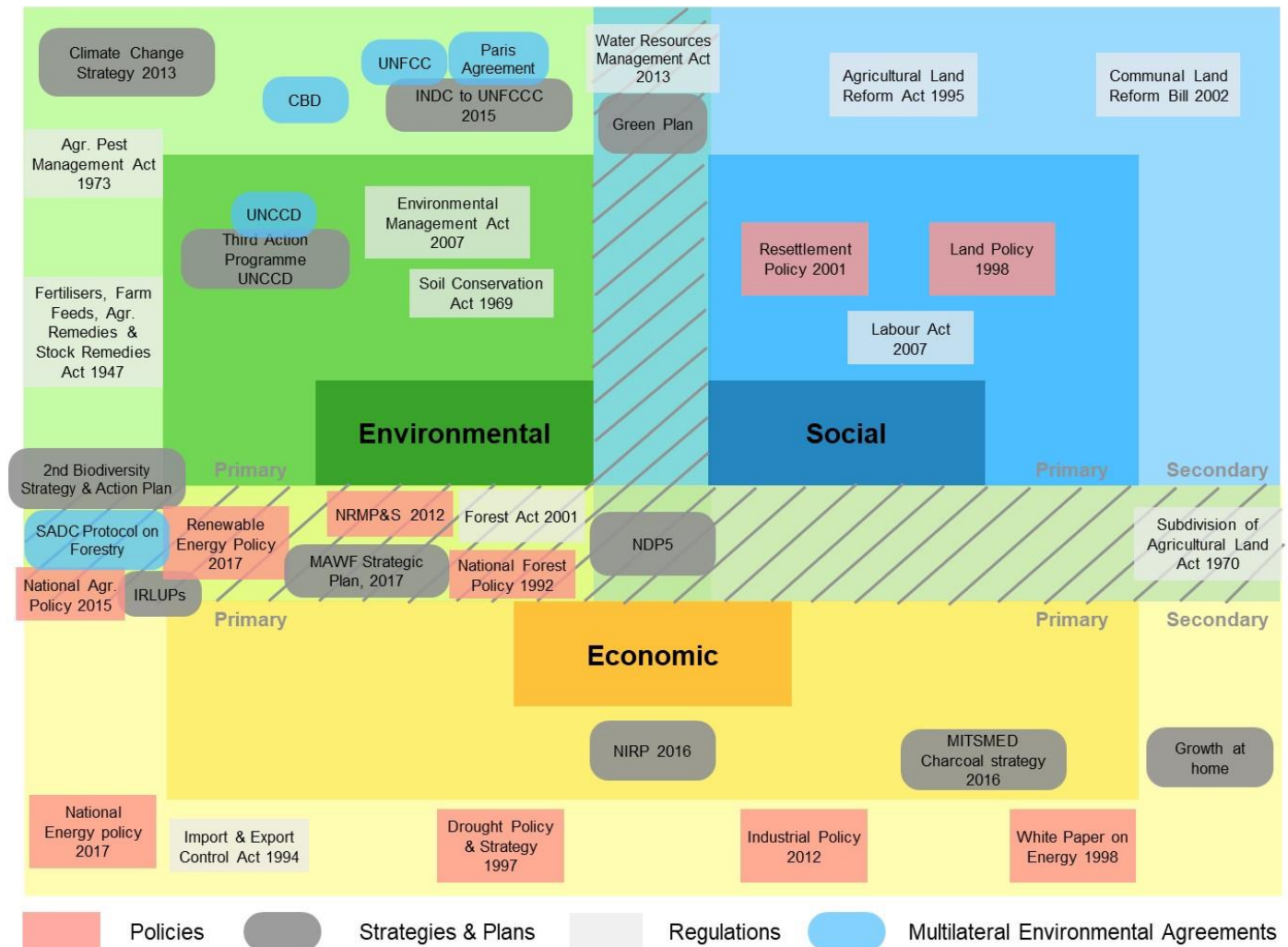
- The “bioeconomy” can be defined as *the production, utilization and conservation of biological resources, including related knowledge, science, technology, and innovation, to provide information, products, processes and services across all economic sectors aiming toward a sustainable economy.*
- In Namibia the interest in the development of a **bioeconomy framework** is emerging in different sectors including **wildlife, agriculture, marine resources, and biomass.**
- The Namibian bush-based biomass sector fits into this overarching economic development approach based on the sustainable use of natural and biological resources.
- Research and innovation is a key component of the bioeconomy framework.



Economic significance of the sector

- An **industrialization opportunity**: biomass powerplant, charcoal, feed..
- **Spurring research and innovation**: biochar, plant-based protein, bio-degradable materials ...
- **Economic opportunity**: job creation, increasing livestock production, potential for innovation and export.
- **Environmental benefits**: improving groundwater recharge, rehabilitating grasslands, restoring mosaics, combatting land degradation.
- Combining environmental benefits and economic potential, national bush control with biomass utilization has the **potential to generate net benefits of around N\$ 48 billion over 25 years**.
- Estimates for the 20MW Nampower biomass powerplant show that it could create between N\$1.47 and N\$1.52 bn of benefits over 25 years through job creation, increased cattle production, and enhanced groundwater recharge.

Current governance framework





Current governance framework - research

- Research, Science and Technology policy of 1999, enabling RST act No.23 of 2004.
- Other policies promoting innovation include Namibia's Industrial Policy, and Growth at Home: Namibia's Execution Strategy for Industrialisation.
- **NDP5:** By 2022 gross expenditure on R&D increase from 0.35% (2015) to 1%
 - the biomass sector could substantially contribute to this goal
- National Programme on RSTI: approved in 2015, with 15 thematic areas (including biomass under the energy sector)



Barriers to research and innovation

- **Outdated, policy and legislation** hamper efforts to harness opportunities for enhancing development and well-being through Biotechnology and other key innovations.
- Lack of targeted funding.
- **Science to policy platforms** are emerging, but more integration and exchange from academia to policy-makers should be promoted.



Governance challenges

- **Differences within and between institutions** on the governance of the bush control and biomass sector are numerous.
- For instance, strategies promoting bush thinning (e.g. NDP5) could also be interpreted as contradictory to strategies and policies targeting reduced deforestation (e.g. INDC) – *Mitigation vs Adaptation*
- Lack of clear definition and distinction between forest and areas covered by bush, as well as what is considered sustainable bush control in regulations and policies.
- One of the main challenges, seriously complicating the coordination of the biomass industry, is that **decisions on resource use rest under different ministries** (MFMR, MET, MAWF, MME)

Governance challenges

PROBLEM

Wide range of sectoral and cross-sectoral stakeholders and highly specialised Ministries that do not collaborate sufficiently on cross-cutting issues.



CHALLENGE 1

A combination of complex issues (financial constraints, compartmental involvement, over-reliance on external technical experts for the policy process) resulted in a lack of inclusive direction from line ministries.



CHALLENGE 2

Lack of ownership from relevant line ministries required to develop and grow the sector.



SOLUTION

Bring all relevant ministries together to discuss their roles and navigate the complex biomass sector. Equitably represent all key stakeholders through membership in the coordinating body and inclusion in the policy development process.



Way forward

- A **specific governance framework** for the biomass sector could unlock opportunities for further research and innovation.
- It would also support the sustainable development of the industry.
- GiZ BCBU and NNF therefore started a re-engagement process to establish a dedicated governance framework for the sector, including the creation of a coordinating body.



The roles and responsibilities of line ministries need be clearly defined, especially with regards to the future of the sector and within a national coordinating body. Mechanisms **facilitating cooperation between ministries and with key stakeholders** need to be established or reinforced.



The future bush-based biomass sector **coordinating body must include a self-financing component**, for example through levies, taxes or payments for services of the governing body.

Cross-sectoral policy dialogues

- **Staged approach** to record all interests
- **Inclusive** of all stakeholders,
- **Flexible** to accommodate the rapid change in the sector

Government

Technical Review Workshop:
Review old or draft policies and strategies: Bush encroachment policy / biomass optimisation strategy.

Policy Landscape Workshop:
Discuss policy landscape and how bush based biomass would fit in

Policy Content Workshop:
Detailing content, pilot projects and financing options.

Individual consultations and working groups.

Private Sector / Civil Society

Consultative Workshop:
Collecting views and propositions on existing regulatory barriers and policy gaps for the development of the bush-based biomass sector.

Broader Stakeholder Workshop:
Presentation of first draft and high-level meeting to find a common way forward.

Verification Workshop:
Detailed planning and agreement on the developed policy and formation of a coordinating body (implementation plan).



We need your input

- What do you perceive as the main risks or barriers to research in the biomass sector?
- How could a biomass policy address these challenges in the research and innovation sector?
- What would you suggest would be the appropriate division of roles/tasks between the main public stakeholders given the cross-disciplinary nature of the sector?

**You can also submit your inputs to:
juliette@nnf.org.na**



NAMIBIA NATURE FOUNDATION
76 – 78 FRANS INDONGO STREET
WINDHOEK, NAMIBIA
TEL: + 264 61 248345
EMAIL: INFO@NNF.ORG.NA



Thank you!