

**NCRST**  
NATIONAL COMMISSION  
ON RESEARCH SCIENCE & TECHNOLOGY



Food and Agriculture Organization  
of the United Nations

## **Setting Namibia's national bioeconomy agenda: where are we and what is the way forward?**

**Presented at Safari Hotel and Conference Centre, Windhoek  
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# BACKGROUND

- In 2018, NCRST together with focus groups from different sectors in Namibia, facilitated the development of a draft Bioeconomy Strategy 2023-2028.
- In 2019, NCRST partnered with the Food and Agriculture Organization of the United Nations (FAO) to conduct a stocktaking and analysis.
- NCRST constituted the Bioeconomy Multisectoral Working Group (BMWG) consisting government institutions, private companies, non-governmental organizations, public enterprises, and higher education institutions to advise on the focus areas which the National Bioeconomy Strategy.
- Regional consultations were conducted in all 14 regions last year 2021(22 Feb -12 May 2021) of which a stocktaking and analysis report which informed the drafted National Bioeconomy strategy.
- Final validation workshop for the strategy was conducted on 22 June 2022.
- The strategy will be forwarded to the Minister of Higher Education, Technology and Innovation for vetting before cabinet approval.



# BIOECONOMY?

The definition of Bioeconomy was adopted by Global Bioeconomy Advisory Council, (2020), which entails:

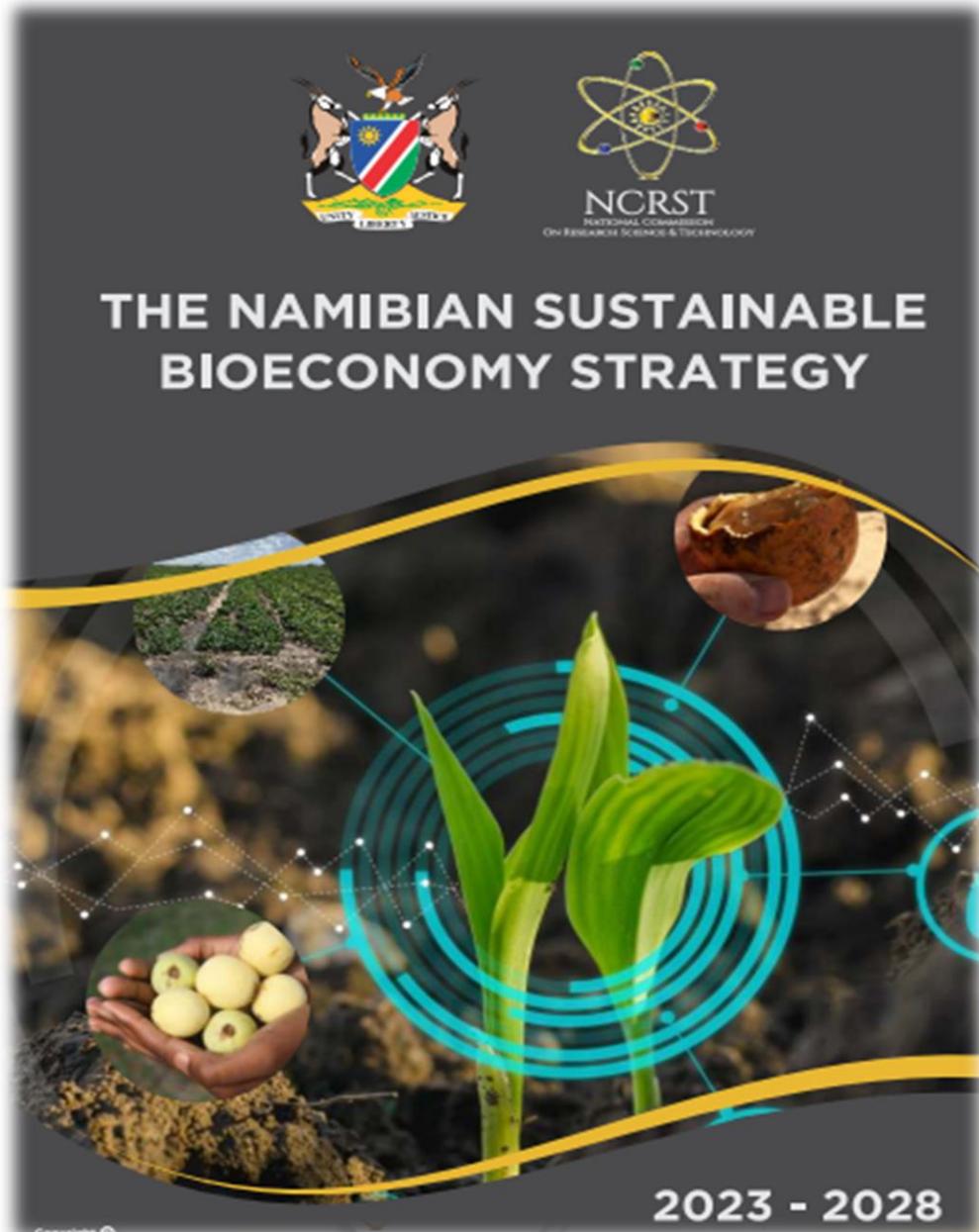
“the production, utilization, conservation and regeneration of biological resources, including related knowledge, science, technology, and innovation, to provide sustainable solutions (information, products, processes and services) within and across all economic sectors, and enable a transformation to a sustainable economy.”



*Bush to feed production*



# BIOECONOMY STRATEGY 2023 - 2028



## Vision

A vibrant bioeconomy that drives innovation, conservation and sustainable utilization of biological resources.

## Mission

To promote and accelerate the deployment of innovations and the sustainable use of biological resources for growth and sustainable development in Namibia.

# BIOECONOMY STRATEGY FOCUS AREAS

- Agriculture
- Health
- Natural resources management
- Cross-cutting issues related to Bioeconomy

PRIORITIES



# STRATEGIC OBJECTIVES

## Strategic Objective 1

Value addition and employment creation

## Strategic Objective 2

Environmental sustainability

## Strategic Objective 3

Research Development and innovation (RDI)

## Strategic Objective 4

Improve awareness and promotion of bioeconomy activities in different sectors.





## STRATEGIC OBJECTIVE 1 (SO1): VALUE ADDITION AND EMPLOYMENT CREATION

SFA	STRATEGIC INITIATIVES
AGRICULTURE	<ul style="list-style-type: none"><li>❖ Increase seed funding for value addition in agricultural produce with a focus on neglected and underutilised crops, microorganisms, and plants</li><li>❖ Develop bush biomass value chain which includes communal farmers</li><li>❖ Improve livestock feed production</li></ul>
NATURAL RESOURCES MANAGEMENT	<ul style="list-style-type: none"><li>➔ Support the development of sustainable value chains based on non-timber forest products and wildlife in conservancies and community forests</li></ul>
CROSS-CUTTING	<ul style="list-style-type: none"><li>➔ Increase market access for local production</li><li>➔ Funding for research, innovation, and training</li></ul>

## SOME ENVISAGED ACTIVITIES

- Organise business trade fairs and conventions involving bioresource producers and industry.
- Initiate dialogue with the retail and informal business sector to ensure that it shows cases of bio-based products.
- Strengthen the animal processing industry sectors involved in transformation and value addition
- Organise training for SMEs and Entrepreneurs to Promote the production and the use of plant fibres and co-products.
- Include communal farmers in the development of the bush biomass value chain - access to market – funding of equipment for de-bushing and production of products such as charcoal)
- Establish trade relations with regional and international governments on the trade of bioproducts.





## STRATEGIC OBJECTIVE 2 (SO2): ENVIRONMENTAL SUSTAINABILITY

SFA	STRATEGIC INITIATIVES
AGRICULTURE	<ul style="list-style-type: none"><li>➔ Restoration of agricultural land through sustainable bush thinning and biomass utilisation</li></ul>
NATURAL RESOURCES MANAGEMENT	<ul style="list-style-type: none"><li>➔ Introduction of technologies that capture carbon for local industries (eg. charcoal)</li><li>➔ Support community-based organisations for sustainable use and commercialisation of their natural resources (forest and wildlife).</li><li>➔ Safeguard the environment through the development of ecosystem-based monitoring tools</li></ul>
CROSS-CUTTING	<ul style="list-style-type: none"><li>➔ Promote certification schemes and ensure sustainable use of natural resources.</li><li>➔ Restoration of agricultural land through sustainable bush thinning and biomass utilisation</li><li>➔ Mass trees plantation campaign</li></ul>



## STRATEGIC OBJECTIVE 3 (SO3):

### RESEARCH DEVELOPMENT AND INNOVATION (RDI)

SFA

#### STRATEGIC INITIATIVES

#### AGRICULTURE

➤ Research that strengthens agricultural biosciences innovation to ensure food security, enhance nutrition and improve health, enable job creation through the expansion and intensification of sustainable agricultural production and processing

#### NATURAL RESOURCES MANAGEMENT

- Strengthen research efforts to create the next generation of products in partnership with rural communities
- Develop innovative digital value-chains based on biodiversity, thereby diversifying income streams and mitigating risks of external shocks (such as the covid-19 pandemic)
- Strengthen research efforts to monitor and improve bush thinning practices to ensure environmental sustainability

#### CROSS-CUTTING

- Promote sustainable utilisation of bioresources in protected areas and communal areas
- Training in product development for target youth and women groups.
- Establish partnerships between the private sector and research institutions to fund applied research

## SOME ENVISAGED ACTIVITIES

- ❑ Foster partnership between researchers and rural communities
- ❑ Patents of intellectual property and innovative discoveries and indigenous knowledge are critical in protecting indigenous knowledge.
- ❑ Establish/Enhance national RDI Centres/Institute of excellence in Bioeconomy





## STRATEGIC OBJECTIVE 4 (SO4):

### CREATE AWARENESS AND PROMOTE BIOECONOMY ACTIVITIES IN DIFFERENT SECTORS

SFA

STRATEGIC INITIATIVES

CROSS-CUTTING

- Upscaled capacity building through knowledge dissemination and training
- Equip communities with training and research
- Raise brand awareness with a social media campaign.
- Protection of indigenous knowledge and protection of natural resources through amendment and promulgation of relevant policy and legal frameworks.
- Training on negotiation skills and intellectual property rights
- Awareness programmes for producers on technology readiness and available tools for value chain development



## SOME ENVISAGED ACTIVITIES

- ❑ Organise scientific conferences on the bioeconomy to sensitise the research community - every two years
- ❑ Organise training of Regional Councils members and Constituencies Counsellors on the integration of Bioeconomy principles in the regional or municipal strategic and management plans
- ❑ Strengthen and expand the mandate of the National Botanical Research Institute to serve as a national biomass resources observatory (NBRO)
- ❑ Dissemination of bioeconomy concepts in education and training courses and school programmes (Inclusion in Curricula)
- ❑ Develop/Design tailored awareness initiatives for key policymakers and government bodies of bioeconomy and its benefits and risks.
- ❑ Raise awareness to key policymakers and government bodies of bioeconomy and its benefits and risks: Organise training/seminars for Parliamentarians, Ministers and cadres in different Government agencies
- ❑ Organise the training on bioeconomy for farmers and marginalized communities, and youth groups are critical for the strategic impact.



# IMPLEMENTATION PLAN & MONITORING AND EVALUATION

- The **Bioeconomy multisectoral working group** will continue overseeing the implementation of the bioeconomy strategy;
- **NCRST** will coordinates all the activities related to the strategy
- The Monitoring process implies a **monthly** continuous data collection of the different performance indicators of the Bioeconomy Strategy and
- an aggregation compilation at the end of each semester (after six months).
- **Mid-term Evaluation:** after two years of execution (2025)
- **End-term and Evaluation:** (2028)



# FUNDING STRATEGY

- **The Government of the Republic of Namibia will be funding the implementation of the Bioeconomy strategy with support from multilateral and bilateral partners – existing and new partnership agreements with the multilateral and bilateral partners to cover the gap in financing the implementation of the bioeconomy.**
- **Grants will be notably provided through grant writing in partnership with the UN agencies, the European Union (EU), USAID, DFID, and other bilateral partners.**
- **The government would facilitate investments and access to bank loans by developing financial tools such as zero-collateral loans for farmers and entrepreneurs in the bioeconomy in collaboration with the private sector, including Agribank and Development Bank of Namibia.**



# Project Milestones



**Bioeconomy Stock taking report**



**Draft II Bioeconomy report**



**Bioeconomy draft II strategy presented to stakeholders  
(14, 15 & 16 July 2021)**



**Inputs Incorporated**



**Final stakeholder validation workshop (22 June 2022)**



Submission to the Minister for Cabinet Approval



# THANK YOU

