

# Introduction to the draft Revised National Science, Technology and Innovation Policy (RNSTIP) 2021-2030



Ministry of Higher Education, Technology and Innovation

REVISED  
NATIONAL SCIENCE, TECHNOLOGY AND INNOVATION POLICY (NSTIP)  
(2021-2030)

WINDHOEK, NAMIBIA

Cabinet decision number:  
Adopted:

Harnessing Knowledge and Innovation for Sustainable Development

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Otjiwarongo*

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Ministry of Higher Education, Technology and Innovation



# Why the need for an STI Policy and the reason for the Revision of the 1999 RST Policy?

- The current National Policy on Research, Science and Technology (NRST) was adopted in 1999 and contains explicit policy measures for the promotion and governing of scientific and technological development.
- The NRST Policy of 1999 led to the promulgation of the Research, Science and Technology Act, 2004 (Act No. 23 of 2004) and the establishment of the National Commission on Research, Science and Technology (NCRST).
- The 1999 NRST Policy initiated (1) developments such as improved coordination, monitoring and supervision of research activities in the country; (2) the development of a national research programme which sets out priority research areas for Namibia; (3) institutional and human capacity development, and (4) dedicated funding for research, science and technology application and development in Namibia.



- Despite various recorded achievements, the NRST Policy of 1999 was overtaken by a number of developments within the socio-economic setup of the country and international developments in the area of science, technology and innovation.
- Particular the greater emphasis on innovation, entrepreneurship capacity building and Technical, Vocational and Education Sector have been added to the priorities in achieving national goals.
- Moreover, the research, science, technology and innovation sector remains to be confronted with various challenges:
  - i) limited scientific and technological human and institutional capacity;
  - ii) limited investment in R&D;
  - iii) limited private sector/industry participation in R&D;
  - iv) a weak entrepreneurial and innovation culture;
  - v) weak linkages between universities, Research & Development (R&D) institutes and industry; and a
  - vi) lack of a well-defined information management system and a lack reliable statistics and STI indicators.



- In order to respond to the changes and address existing challenges, the Ministry, in collaboration with the NCRST initiated a consultative process to review the NRST Policy of 1999.
- The revised policy was formulated in the context of Namibia's Vision 2030, National Development Plan 5 (NDP5), the Harambee Prosperity Plan and the Sustainable Development Goals (SDGs), African Union (Agenda 2063, Science, Technology and Innovation Strategy 2012-2024 (STISA 2024)) as well as the Southern Africa Development Community (SADC) Protocol on Science, Technology and Innovation (2008), among others.
- Benchmarking with other countries.
- Regional Commitments: e.g. SADC Charter on Women in Science, Engineering and Technology Organization. Development of Namibia's National Chapter (Final Stages).



The review process identified specific policy measures and related institutional adjustments required to:

- (1) strengthen the national system of innovation, and
- (2) to spur scientific research, technological competence and innovation in the country.

The Revised NSTIP is a policy that will replace the current National Research, Science and Technology Policy of 1999.

The RNSTI Policy will among others focus on addressing the following key policy imperatives:

- (1) Improve capacity by building a critical mass of fulltime researchers, technicians and engineers;
- (2) Improve research and innovation infrastructure provision and skills;
- (3) Promote a culture of science, technology, innovation and entrepreneurship;
- (4) Provide incentives and increase support to enterprises that engage in research and technological innovation, that would initiate product development and commercialisation;
- (5) Promote strategic partnerships and collaborations (stronger linkages with industry);
- (6) Improve gender equality and mainstreaming in Science, Technology, Engineering and Mathematics (STEM);



(7) Science Diplomacy;

(8) Establishment of key institutions: Academy of Sciences, SADC WISETO Namibia Chapter, Makerspaces, science parks;

(9) The RNSTI Policy also provides an avenue for the development of other Policies that will address Indigenous Knowledge Systems, Bio-economy, Infrastructure, Research ethics;

(10) Improved data collection and dissemination and M&E; and to

(11) Strengthen the research, science and technology fields in the TVET sector

# Custodian of the NRSTI Policy

- One of the mandates of MHETI is to promote science and technology application in the country and to create the conditions for innovation.
- MHETI is the custodian of the RSTI Policy with NCRST as the main implementing agency together with relevant stakeholders.
- National Commission on Research, Science and Technology (NCRST) and key partners: Technical support to the Ministry, was key driver in the development of the Policy during its early stages,
- Finalization (comments addressed from internal consultations and NPC) done by MHETI and review and validation done by NPC.





# Consultations

- The draft RNSTI Policy has gone through various consultations with more than 44 stakeholders.
- In 2016 the Ministry responsible for Science, Technology and Innovation, named then the Ministry of Higher Education, Training and Innovation, in collaboration with all stakeholders launched a consultative process to comprehensively review the National Policy on Research, Science and Technology of 1999 (NPRST) and to identify strengths and weaknesses of the National System of Innovation (NSI).
- Several prior review initiatives, including the 2005 review of the National Science and Technology System by the United Nations Educational, Scientific and Cultural Organization (UNESCO) and the draft Framework Policy on Innovation in 2011 also provided the basis for developing the Revised NSTIP.



# Content of the RNSTIP

The RNSTIP has been structured according to the Guidelines of the NPC.

**Rationale:** paragraph discusses the purpose of the Policy and its intended replacement of the 1999 NRST Policy.

**Alignment:** paragraph discusses the alignment of the Policy with national, regional and international agreements, treaties, strategies and plans.

**Guiding Principles:** The design and implementation of the Revised NSTIP (2020-2030) is guided by the six principles, namely: Policy harmony, Governance, Partnerships, Human, institutional and infrastructural Capacity, Gender Equity and Sustainable development.

The **Policy Direction** includes the Vision, Mission and the Goal of the Policy:

## **Vision**

Namibia is an innovation-driven, scientifically advanced and industrialized nation by 2030.

## **Mission**

To entrench the application of science, technology, and innovation in all sectors of the Namibian economy to achieve the goals of Vision 2030.

## **Goal**

The goal of this Policy is to promote and foster the development and application of science-technology and innovation in all spheres of our society to advance socio-economic growth.



The Policy includes nine **objectives**, namely:

- To improve policy, legislative and regulatory environment;
- To promote strategic partnerships and collaborations;
- To improve scientific and technical competences in Science, Technology, Engineering and Mathematics (STEM);
- To improve gender equality and mainstreaming in Science, Technology, Engineering and Mathematics (STEM)
- To increase the utilization of scientific and technical knowledge for societal advancement;
- To promote a culture of science, technology, innovation and entrepreneurship;
- To accelerate research in the areas of technological advancement in TVET;
- To improve research and innovation infrastructure provision; and
- To increase scientific productivity and technological output.

The objectives contain twenty strategies to promote the NSI and the Government of the Republic of Namibia aims to restructure the R&D institutional configuration and create mechanisms for strengthening links between public R&D and industry.

The twenty strategies are sequenced in such a way as to ensure that there is a gradual improvement in the country's capacities to leverage STI to attain sustainable development and industrial development as envisaged in Vision 2030.



The implementation arrangements of the Policy are outlined in terms of providing the (1) Institutional arrangements; (2) Legal and Regulatory Arrangements; (3) Resource Mobilization; (4) Monitoring and evaluating framework and reporting and (5) Advocacy and dissemination (communication strategy).

### **Resource Mobilization:**

In order to effectively implement the RNSTI Policy, as per its commitment in the Fifth National Development Plan (NDP 5) to contribute 1% of GDP to research and innovation by 2022, a number of strategies have been identified to achieve efficient resource mobilization.

**Implementation Action Plan (IAP):** IAP has been developed over 5 years with allocated budgets. The policy will be implemented in 5-year cycles through the IAP, which is developed in tandem with the National Development Plans (NDPs). The IAP is structured according to the identified Objectives and its strategies.





Policy Objectives

Strategies



1) Improve policy, legislative & regulatory environment

1) Align STI legislative & regulatory environment & frameworks to national, regional and international development policies

2) Build national capacity to enhance the use of science scientific data for evidence-based policy development

3) Improve standards of Technology Support Institutions

1) Promote public understanding of science, technology & innovation

2) Promote technology audits by enterprises

3) Establish national innovation promotion schemes

Promote a culture of science, technology, innovation & entrepreneurship

4) Strengthen small & medium scale enterprises



Vision

Namibia is an innovation-driven, scientifically-advanced and industrialized nation by 2030



Promote strategic partnerships & collaborations

1) Engage with private sector & build Public-Private Sector Partnerships

2) Strengthen national, regional & international partnerships



3) Improve scientific and technical competences in Science, Technology, Engineering & Mathematics (STEM)

1) Strengthen human resources in STEM & increase full-time equivalent (FTE) researchers

2) Build capacity in the creation, management & use of intellectual property works



4) Improve gender equality and mainstreaming in Science, Technology, Engineering & Mathematics (STEM)

1) Establish & improve programmes that support women's participation in Science, Technology, Engineering and Mathematics (STEM)

2) Support the role of women in innovation systems



5) Increase the utilization of scientific & technical knowledge for societal advancement

1) Build strategic technology prospecting, fore-sighting & procurement



7) Accelerate research in the areas of technological advancement in TVET

1) Support technical & vocational research skills

2) Promote research to bridge the TVET & higher education



8) Improve research & innovation infrastructure provision

1) Develop & improve effectiveness of research & innovation infrastructure

2) Develop & improve national platforms of research & innovation excellence



9) Increase scientific productivity & technological output

1) Increase research & innovation for manufacturing & industrial competitiveness

# NAMIBIA STI POLICY 2021-30

Mission

To entrench the application of science, technology and innovation in all sectors of the Namibian economy to achieve the goals of Vision 2030

Guiding Principles

Governance

Policy Harmony

Gender Equality

Partnership

Human, Institutional & Infrastructural Capacity

Sustainable Development

Ministry of Higher Education, Technology and Innovation



Developing an STI Policy is a challenging endeavour:

- With the STI Policy it is intended to allow for an interplay between science, technology, innovation and sustainability and its impact on society, environment and economy.
- A critical and difficult task, to bring together national, regional and international commitments, plans, strategies, Policies in one Policy, knowing how critical science and technology is, in achieving all the goals. Whilst being conscious of what fits best for Namibia, our reality on the ground and how do we address home-based challenges. Ensure commitments need to be embedded in one Policy.
- Obtaining consensus on Policy Content has also been challenging, but with numerous debates and consultations, it was possible to find consensus.
- It is critical to remain up to date with current national developments: eg. IAP mentions the development of the Space Science and Technology Policy (approved March 2021-soon to be launched), Public Sector Innovation Policy, Intellectual Property Rights...These Policies have been developed and approved, allowing us to amend the IAP, accordingly. Necessary to understand the dynamic changing environment and make the changes in the draft Policy during its drafting stages.

# Current Status of the RNSTIP

- Desk studies, benchmarking initiatives, consultation and drafting processes have been concluded. The Policy has been revised and approved by NPC. The Cabinet Memo is now in the process of being finalized for submission to Cabinet.



**Thank you!**