NCRST
National Commission
On Research Science & Technology

2016 - 2017
ANNUAL REPORT

Government has long recognized the importance of Research, Science and Technology as an engine of economic growth and development, hence the enactment of the Research Science and Technology Act, 2004 (Act no 23 of 2004).

www.ncrst.na

NCRST
NATIONAL COMMISSION ON
RESEARCH, SCIENCE & TECHNOLOGY

Passion for **Excellence**

Passion is an intense emotion compelling, enthusiasm, or desire, in this case we have the passion to excel.

WE STRIVE FOR PERSONAL EXCELLENCE TO MAKE SIGNIFICANT CONTRIBUTIONS TO NCRST EXCELLENCE

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Foreword by the Chairperson

Dr. John Shoopala
Chairperson

It is my pleasure to present the Annual Report of the National Commission on Research, Science and Technology (NCRST) for the 2016/17 financial year and to congratulate the NCRST team on achieving the goals set out in the Annual Business Plan for the year.

The NCRST continues to play its pivotal role of coordinating, developing, promoting and funding research, science, technology and innovation towards socio-economic advancement for Namibia. Our focus remains that of strengthening the national system of innovation and to address challenges in the system. The strength of the system would be measured through indicators as set out in the National Programme on Research, Science, Technology and Innovation (NPRSTI) for the period 2014/15 and 2016/17. These indicators include:

- Increase in number of researcher in the country;
- Increase in the R&D output in the forms of patent as well as of peer reviewed journal articles; and,
- An increase in the number of doctoral students supported.

The NCRST recognises that for it to succeed to achieve the above-mentioned targets, it is critical to foster relationships with key stakeholders. For this reason, new strategic partnerships were formed between NCRST and the following institutions during the period under review:

- Agro-Marketing and Trade Agency (AMTA);
- Namibia Water Corporation (NAMWATER);
- Namibia Ports Authority (NAMPORT);
- The International University of Management (IUM)
- SME Bank; and,
- And the Namibia Students Financial Assistance Fund (NSFAF)

The NCRST also continues to engage fully with its line Ministry as well as the Ministry of Education, Arts and Culture in order to ensure

successful execution of its mandate. The year under review has been productive, with its share of challenges and successes, which are detailed in this report. One of the most significant concerns that the Commission was preoccupied with during the year was the financial sustainability of the National Research, Science and Technology Fund (NRSTF). We continue to engage key stakeholders to ensure that the NRSTF is well capitalised to enable the NCRST to fund R&D and innovation projects which are focused on developing new ideas and creative thinking, while strengthening concepts of innovation and able to address enabling technologies which will provide wide-application solutions that address economic and social challenges within the Namibian society.

The year ahead will hold several changes as the term of office of the current Commissioners comes to an end in May 2017 and that the NCRST will formulate a revised strategy for the period 2017/18 to 2021/22. The formulation of the revised strategy for the period 2017/18 to 2021/22 will be done to ensure alignment to the Fifth National Development plan (NDP5).

I would like to sincerely thank Honourable Dr. Itah Kandjii-Murangi, the Minister of Higher Education, Training and Innovation for her visionary leadership and continuous support.

To my Commissioners, executive management and the rest of the staff, I thank you for your commitment and service to the organisation and our country. I look forward to your continued support as we work together towards transforming growth of our economy through research, science, technology and innovation.

THE YEAR UNDER REVIEW HAS BEEN PRODUCTIVE, WITH ITS SHARE OF CHALLENGES AND SUCCESSES...

REVIEW BY THE CHIEF EXECUTIVE OFFFICER

Dr. Eino Mvula
CHIEF EXECUTIVE OFFICER

The NCRST is proud to present the Annual Report of the National Commission on Research Science and Technology (NCRST) for the financial year 2016/17. The report outlines the organisation's performance for the year under review and highlights the achievements in the implementation of Annual Business Plan for 2016/17.

Our success is visible in all areas related to the 5 themes of our Strategic Plan:

- Creating awareness of Science, Technology and Innovation: Our awareness and promotion activities have improved especially through the launch of the month of science and profiling of innovators that are supported by the NCRST.
- Establishing Smart Partnership and Cooperation: The NCRST is increasingly recognised as the lead agency for the promotion, coordination, development and funding of science, technology and innovation as can be seen in the number of organizations with which it has partnership.
- Creating an enabling Policy Environment: The NCRST has successful finalised the development of the biosafety regulatory framework which includes the regulations, procedures and guidelines. We have also completed a review of the STI landscape and the R&D survey report which are instrumental in providing the evidence required for the finalisation of the STI Policy and its Implementation Plan.
- Building Research and Development Capability: Our efforts in funding research through various funding instruments is yielding result with tangible output which include publications as well as students completing their Masters and PhDs. The development of the national research facilities is about to become a reality following the approval of the STI infrastructure strategy and the establishment of High Performance Computing Centres at NUST and UNAM.
- Promoting innovation for Namibia's Prosperity: The meaning of

innovation and its value is now being realised as tangible products and services are being developed with the NCRST initiatives such as the innovation challenges and Demola.

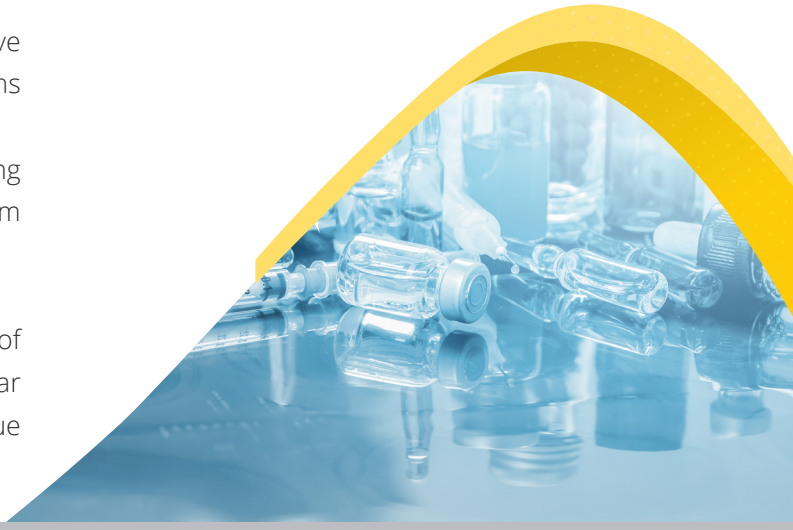
We recognise that given the current economic conditions, the investments required for STI toward infrastructure (i.e. the construction of the STI Valley), human resource development and direct funding towards research and innovation activities might be difficult to achieve. Going forward we need to rethink our approach for us to succeed. This will include:

- Leveraging on our already existing partnerships within the country and explore existing bilateral and multilateral agreement to secure funding;
- Focusing on fewer priorities to make the desired impact instead of attempting to address all challenges at once which could result in spreading our effort too thinly;
- Revisiting our internal process to improve efficiency towards meeting the expectations our stakeholders;
- Investing more in our people through training and development opportunities to enable them to execute their functions.

The next financial year will surely bring its own mix of successes and challenges, but our direction is clear and we know what we must do. Our job is to continue to focus intently on playing our role in contributing to the long-term aspirations to transform Namibia into a knowledge based society as set out in Vision 2030.

I would like to thank the NCRST Board of Commissioners for their unwavering commitment and support towards the attainment of the NCRST's Vision. I also wish to sincerely thank the NCRST staff who continue to give their time and expertise in carrying out their work as assigned to them.

Finally, I wish to express our appreciation to our partners who continue to contribute so generously to the work of the NCRST. I look forward to the collective efforts of all stakeholders as we join hands in Science, Technology and Innovation to build the future we want for our country.



...BUT OUR DIRECTION IS CLEAR AND WE KNOW WHAT WE MUST DO

LIST OF ACRONYMS & ABBREVIATION

AVN	African VLBI Network
BITRI	Botswana Institution for Technology Research and Innovation
CEO	Chief Executive Officer
CeSTII	Centre for Science, Technology and Innovation Indicators
CRAN	Communications Regulatory Authority of Namibia
EXCO	Executive Committee
FIARM	Finance, Investments, Audit and Risk Management Committee
FRST	Foundation for Research, Science and Technology
GMO	Genetically Modified Organisms
HSRC	Human Science Research Council
ICT	Information and Communication Technology
IK	Indigenous Knowledge
IKS	Indigenous Knowledge Systems
IP	Intellectual Property
IPR	Intellectual Property Right
ITD	Innovation and Technology Development
IUM	International University of Management
MHETI	Ministry of Higher Education, Training and Innovation
MoU	Memorandum of Understanding
NAMWISET	Namibian Women in Science, Engineering and Technology
NCRST	National Commission on Research, Science and Technology
NDP5	Fifth National Development Plan
NEPAD	New Partnership for Africa's Development
NIKSC	National Indigenous Knowledge Systems Council
NPRSTI	National Programme on Research, Science, Technology and Innovation
NRF	National Research Foundation of South Africa
NRS	National Research Symposium
NRST	National Research, Science and Technology
NRSTF	National Research Science and Technology Fund
NSA	Namibia Statistics Agency
NSFAF	Namibia Students Financial Assistance Fund
NSI	National System of Innovation
NSSC	National Space Science Council
NUST	Namibia University of Science and Technology
R&D	Research and Development
RSTI	Research, Science, Technology and Innovation
RSTICS	Research, Science, Technology and Innovation Coordination and Support
SKA	Square Kilometre Array
STI	Science, Technology and Innovation
STI	Science, Technology and Innovation
TIA	Technology Innovation Agency of South Africa
TKS	Traditional Knowledge Systems
UNAM	University of Namibia
UNESCO	United Nations Educational, Scientific and Cultural Organization

PART I:
ORGANISATIONAL OVERVIEW

1 Corporate Overview

1.1 NCRST Mandate

The importance of Research, Science and Technology as an engine of economic growth and development cannot be over emphasized. It is on this premise that Namibia has enacted the Research, Science and Technology Act, 2004 (Act No 23 of 2004). The objectives as outlined in section 1 of the Act are:

(a) to ensure the co-ordination, monitoring and supervision of research, science and technology in Namibia;
(b) to promote and develop research, science and technology in Namibia;
(c) to promote common ground in research, scientific and technological thinking across all disciplines, including the physical, mathematical and life sciences, as well as human, social and economic sciences;
(d) to encourage and promote innovative and independent thinking and the optimum development of intellectual capacity of people in research, science and technology;
(e) to ensure dedicated, prioritised and systematic funding for research, science and technology application and development in Namibia;
(f) to promote linkages between Namibia and international institutions and bodies on the development of research, science and technology.

1.2 Mission

Establish a national system that promotes, develops, coordinates and informs Research, Sciences, Technology and Innovation towards a knowledge-based society.

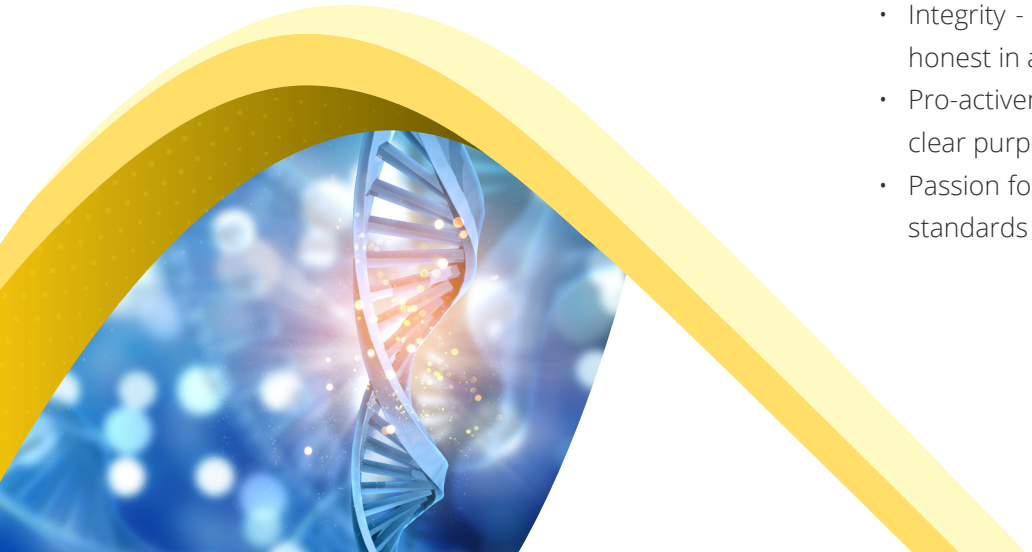
1.3 Vision

To be a leading agency that facilitates the development of Research, Science, Technology and Innovation towards socio-economic advancement for Namibia.

1.4 Values

The NCRST strives to further value based behaviour, engaging and relating, decision making and action. Stakeholders interacting with the NCRST and its representatives should consistently experience these values in all interactions and decisions, and all staff members must consciously practise the values so as to develop a consistent values-based approach.

- Integrity - We are consistently trustworthy and honest in all our interactions.
- Pro-activeness - We act responsibly guided by a clear purpose.
- Passion for Excellence - We persistently pursue standards of excellence.



1.5 Strategic Themes

The following themes are of vital strategic importance over the next five years and create distinct focal clusters against which objectives can be defined:

- Creating awareness of Science, Technology and Innovation – In order to create interest and a certain pull for RSTI in Namibia, public awareness and understanding will be vital. Here leverage should be sought by targeting segments of the population that will further RSTI progress most favourably (optimal effort-return ratio).
- Establishing Smart Partnership and Cooperation – to identify active and potentially active RSTI "players" and create linkages, networks and ventures that will further and optimise RSTI progress within the delivery funnel; and
- Creating an enabling Policy Environment – to establish a relevant and desirable operating environment underlying legislative and statutory frameworks aligned and integrated towards optimal mobilisation of RSTI in Namibia.
- Building Research and Development Capability -Building research capacities together with researchers' mobility and attractiveness will not be enough, therefore technical and research managerial skills are to be created for efficient running of projects and facilities.Correspondingly, provision of infrastructure should be planned, under a rationale of centralization and optimization of means.
- Promoting innovation for Namibia's Prosperity -Through the NPRSTI, the NCRST will address innovation as the right approach to advance the industrialization of the country, boosting mid- and long-term development towards a knowledge based economy, through both supporting knowledge transfer to the private and entrepreneurial sector, as well as supplying human and financial resources for integrating the culture and practice of innovation in the socio-economic environment.

2 Board of Commissioners Structure

2.1 Functions

The National Commission on Research Science and Technology (NCRST) is established in terms of section 4 of the Research Science and Technology Act, 2004 (Act No 23 of 2004). The NCRST is governed by the Commission consisting of 16 members appointed by the Minister and a five-member Executive committee which executes the decisions of the Commission.

The functions and powers of the Commission in terms of section 5 of the Act are:

(a) to monitor and supervise the promotion, co-ordination, development and continuation of research, science and technology in all sectors in Namibia, and to minimize overlapping in the fields of research, science and technology;

(b) to prepare and review a national programme in the manner referred to in section 18;

(c) to co-ordinate and facilitate the development of research, science and technology at national, regional and local levels, and to provide direction and policy guidance to the research, science and technology innovation systems in Namibia;

(d) to promote broad participation in research, science and technology activities with the aim of promoting designated groups or persons belonging to designated groups;

(e) to promote the participation of Namibians and research institutes in regional and international research, science and technology projects and events, and, in co-operation with the Minister and Ministers responsible for foreign affairs and finance, to enter into agreements on co-operation and maintenance of relationships with similar foreign institutions in the fields of research, science and technology;

(f) to promote awareness and national appreciation of the value of research, science and technology to social, cultural and economic development;

(g) to promote, facilitate and organise seminars, conferences, lectures, workshops and similar events relating to research, science and technology;

(h) to promote the application of research, science and technology to the development and improvement of industrial and commercial outputs, designs and productivity;

(i) in co-ordination with the Minister responsible for foreign affairs, to participate in international research, science and technology events of national interest, and to represent Namibia at research, science and technology conferences, meetings, workshops or other similar events;

(j) to participate, in co-operation with relevant bodies and institutes, in studies on human resources relating to research, science and technology activities, and where appropriate, to promote the growth and development of human resources for such activities;

(k) to collect and distribute, in accordance with this Act, financial, human and other resources for the efficient management and promotion of councils and research institutes and to solicit and make priorities for funding in respect of-

(i) research, science and technology purposes;

(ii) a framework for expense on research, science and technology;

(iii) the building and maintenance of research, science and technology capacity by way of

selective funding of training and development; and

(iv) national facilities for research, science and technology;

(l) to co-ordinate the use of funds of the Fund and investments, and to facilitate, separately or in co-operation with the private sector, the use of public good research outputs, and to stimulate proposals of broad national interest for research;

(m) to provide research grants, loans, bursaries and similar financial aid in research, science and technology;

(n) to collect, disseminate and promote any research, science and technology results, statistics, reports, literature, data, services or any other information, including the establishment and maintenance of information systems to support -

(i) the monitoring and evaluation of the overall management and functioning of the science and technology system and the national system of innovation; and

(ii) the continuous revision of science and technology policies to address changing and new circumstances;

(o) to undertake, in co-operation with the appropriate institutions and other bodies, the development and exploitation of any research, science and technology invention, and to provide advice and assistance to innovators and inventors in the registration and protection of their innovations and inventions;

(p) to identify and validate national research and development priorities in or relating to research, science and technology;

(q) to identify and raise awareness with any authority, institution, body or person, of any need relating to the establishment, transformation or dissolution of any relevant research, science or technology body or policy or other relevant matter, including the co-ordination of any request for advice in this regard;

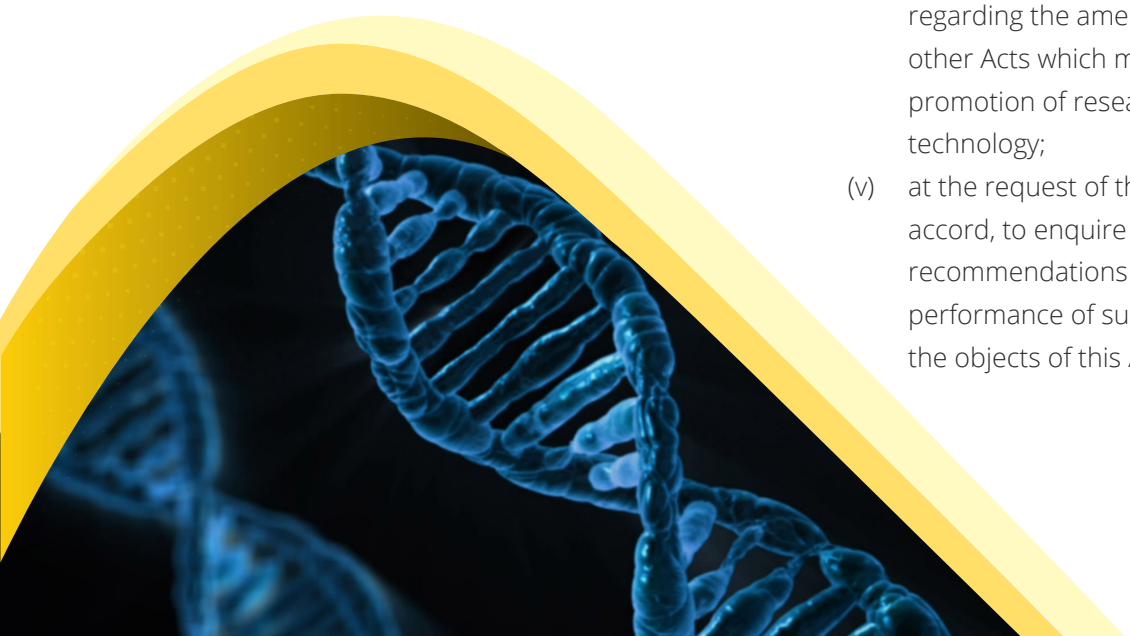
(r) to build capacity, skills and know-how of the staff of the Commission and councils and Namibian people in general;

(s) to advise the Minister on procedures of how to secure a sustained basis for the funding of research, science and technology;

(t) to advise the Minister, the President, Parliament and any other authority or body on the functions and initiatives of the Commission and on any matter relating to research, science and technology;

(u) to make recommendations to the Minister regarding the amendment of this Act or any other Acts which may contribute to the promotion of research, science and technology;

(v) at the request of the Minister, or on its own accord, to enquire into, report on and make recommendations on any matter, or the performance of such other tasks, falling within the objects of this Act.



2.2 NCRST Commissioners

Dr Johannes D. Shoopala
Ministry of Agriculture, Water and Forestry

Chairman

Ms Josephine Joste /Haubas
Office of the President

Member

Mr Johannes Aipanda
National Planning Commission (NPC)

Member

Mr Maitjituavi Stanley Kavetu
Namibia National Students Organisation (NANSO)

Member

Mr Uda Nakamhela
The Law Society of Namibia

Member

Ms Elly Hamunyela
Ministry of Environment and Tourism

Member

Ms Graca D' Almeida
Ministry of Fisheries and Marine Resources

Member

Mr. Franz Uirab
Ministry of Works and Transport

Member

Ms Vicky Do Cabo
Ministry of Mines and Energy

Member

Dr Martha Kandawa-Schulz
Chairperson: Biosafety Council

Member

Mr. Moses Molatendi
Chairperson: Indigenous Knowledge Council

Member

Dr Eino Mvula
NCRST: CEO

Resigned May 2017
Ex Officio Member

Ms Enid Keramen
Head: Company Secretariat & Legal Advice

Company Secretary & Legal Advice

During the period under review, the Commission held two (2) ordinary meetings and three (3) special meetings as indicated below.

MEETING TYPE	DATE
Ordinary	8 & 9 April 2016
Special	12 October 2016
Ordinary	19 November 2016
Special	03 December 2016
Special	15 December 2016

The Commission approved the following matters during the year under review:

(a) Revised Strategic Plan for the period 2014/15 to 2018/19 and Business Plan for 2016/17;
(b) Annual Report and Audited Financial Statements for 2015/16
(c) Finance related Policies and Procedure;
(d) Training and Development Policy and Procedure
(e) ICT related Policies and Procedures;
(f) Internal Audit Charter
(g) Proposals received under the various National Calls for Research Proposals in line with Sections 5 (m) and 24 (3) (c) of the Research, Science and Technology Act, 2004 (Act No 23 of 2004)).
(h) Revised organisational structure as well as the salary structure.
(i) Administrative Procedures and Guidelines for the implementation of the Biosafety Act, 2006.
(j) National Strategy for Science, Technology and Innovation Infrastructure
(k) Namibian Space Science and Technology Policy
(l) Appointment of External Auditors
(m) Construction of STI valley

2.3 NCRST Committees and Councils

The Commission shall, in terms of Section 31 of the Act, delegate certain functions to the Chairperson of the NCRST ("the Chairperson"), the CEO or any other statutory Committees established under the Act, without abdicating its own responsibilities. The functions may be delegated to the following committees:

- Executive Committee (EXCO);
- Foundation for Research, Science and Technology (FRST);
- Finance and Audit and Committee (FA);
- Human Resources and Remuneration Committee; and
- Tender Committee;

2.3.1 Executive Committee (EXCO)

Section 12 (1) of Research Science and Technology Act, 2004 (Act No 23 of 2004) ("the Act") establishes the Executive Committee (EXCO) whose functions is to execute decisions and manage the affairs and activities of the Commission. The EXCO shall consist of five members appointed by the Commission, comprising the following persons as listed in Section 12 (3) of the Act:

- Chairperson of the Commission (the "Chairperson");
- Vice-Chairperson of the Commission (the "Vice-Chairperson");
- Three other Commissioners elected by the Commission;
- The Chairperson and Vice-Chairperson of the Commission shall be the Chairperson; and Vice-Chairperson of the EXCO, respectively.

During the period under review, the Executive Committee held one (1) ordinary meeting and one (1) special meeting as indicated below.

MEETING TYPE	DATE
Ordinary	14 November 2016
Special	29 November 2016

The EXCO duly considered matters from all the other committees for onwards submission to the Commission. These included:

(a) Revised Strategic Plan for the period 2014/15 to 2018/19 and Business Plan for 2016/17;
(b) Annual Report and Audited Financial Statements for 2015/16
(c) Finance related Policies and Procedure;
(d) ICT related Policies and Procedures;

2.3.2 Foundation for Research, Science and Technology

The Foundation for Research, Science and Technology (the "Foundation") whose functions are as specified in section 13 (4) of the Research Science and Technology Act 23 of 2004 (the "Act"). The Foundation shall consist of seven members elected by the Commission from their number to serve on an annual basis, or such longer period as the Minister may determine on recommendation of the Commission.

The Foundation shall have the following powers and functions:

- To advise the Commission in formulating national policies and strategies on Research, Science, Technology and Innovation.
- To oversee the development of the National Research, Science, Technology and Innovation Programme and monitor its implementation as provided for in Section 18 of the Act.
- To oversee and approve the allocation of resources necessary to advance and implement the National Research, Science, Technology and Innovation Programme.
- To guide the allocation of the resources necessary to advance strategic regional and international collaborations in the field of Research, Science, Technology and Innovation.
- To evaluate and approve grants for research and innovation.
- To actively pursue international collaboration and funding opportunities for collaborative research.
- To ensure that Intellectual Property Rights (IPR) issues emanating from publicly funded research are handled in a fair and equitable manner in line with Section 33 of the Act.

During the period under review, the Foundation on RST held one (1) ordinary meeting and two (2) special meetings as indicated below.

MEETING TYPE	DATE
Ordinary	3 November 2016
Special	11 November 2016
Special	28 November 2015

The FRST duly considered the following and recommended for approval by the Commission:

(a) proposals received under various National Calls for Research Proposals in line with Sections 5 (m) and 24 (3) (c) of the Research, Science and Technology Act, 2004 (Act No 23 of 2004)
(b) Draft National Strategy for Science, Technology and Innovation Infrastructure

(c) Draft Namibian Space Science and Technology Policy

2.3.3 Finance and Audit Committee

The primary purpose of this committee is to assist the Commission in discharging its duties relating to the safeguarding of assets, the operation of adequate systems, control processes and the preparation of accurate financial reporting, state of compliance with all applicable legal requirements and accounting standards and risk management.

During the period under review, the Finance and Audit Committee held one (1) ordinary meeting and one (1) special meeting as indicated below.

MEETING TYPE	DATE
Ordinary	7 November 2016
Special	11 January 2017

The following items were considered by the Finance and Audit Committee and recommended to the full Commission for approval:

(a) Audited Financial Statements for 2015/16
(b) Nomination of external auditors 2016/17 to 2018/19
(c) Nomination of Bank Signatories;
(d) Risk Register for 2016/17; and
(e) Audit Plan for 2016/17.
(f) Budget for 2017/18
(g) Internal Audit update and risk register update

2.3.4 Human Resources and Remuneration Committee

This committee's major duties are:

(a) To oversee compliance with HR related Policies and provide advice on such Policies to the Commission.
(b) To initiate and oversee the formulation and review of all HR related Policies and recommend to the Commission for approval with due consideration of guidelines contained in the Labour Act, 2007 and Public Enterprises Governance Amendment Act, 8 of 2015 where appropriate.

During the period under review, the Human Resources Committee held one (1) ordinary meeting as indicated below.

MEETING TYPE	DATE
Ordinary	1 November 2016

The HR Committee has considered and recommended the following to the Commission for approval:

(a) Training and Development Policy and Procedure
(b) Cost of Living adjustments for 2017/18

2.3.5 Tender Committee

The primary purpose of this Committee is to assist the Commission in discharging its duties in ensuring that an appropriate procurement system is established and maintained. During the period under review, the Committee held one (1) ordinary meeting as indicated below.

MEETING TYPE	DATE
Ordinary	11 November 2016

The meeting considered the award of the Tender for the bulk services for the construction of the STI Valley and renovation of the Innovation Hub.

2.3.6 Biosafety Council

The objectives of the Biosafety Act are-

(a) to introduce a system and procedures for the regulation of genetically modified organisms in Namibia, in order to provide an adequate level of protection to the conservation and sustainable use of biological diversity, taking into account-
   i. potential risks to the health and safety of humans and potential harmful consequences to the environment posed by genetically modified organisms or genetically modified products; and
   ii. social, cultural, ethical and economic considerations:
   Provided that lack of scientific knowledge due to insufficient relevant scientific information or scientific consensus should not be interpreted as indicating a particular level of risk, or absence of risk, or an acceptable risk; and

(b) to provide a framework for responsible research, development and the use of genetic engineering and to manage the potential risks posed by or as a result of gene technology by regulating activities involving the development, production, use, import, export, transport, release into the environment, marketing and other uses of genetically modified organisms and genetically modified products.

The composition of the Biosafety Council is prescribed in terms of section 6 of the Biosafety Act:

(a) Environmental issues, including environmental assessment;
(b) Public health issues, including food hygiene and food safety;
(c) Animal health and welfare or other related agricultural issues;
(d) Molecular biology;
(e) Law;
(f) Research, science and technology; and
(g) Trade and economy.

Members of Biosafety Council are:

	Name	Representation	Role on the Council
1.	Dr Martha Kandawa-Schulz	Molecular biology	Chairperson
2.	Mr Etuna Josua	Law	Deputy Chairperson (acting Chair)
3.	Dr Herbert Schneider	Animal health and welfare or other related agricultural issues	Member
4.	Vacant	Environmental issues, including environmental assessment	Member
5.	Dr Ronnie A. Bock	Public health issues, including food hygiene and food safety	Member
6.	Vacant	Trade and economy	Member
7.	Dr Caroline !Garus-Oas	Research, science and technology	Member

During the period under review, the Biosafety Council held two (2) ordinary meetings as indicated below.

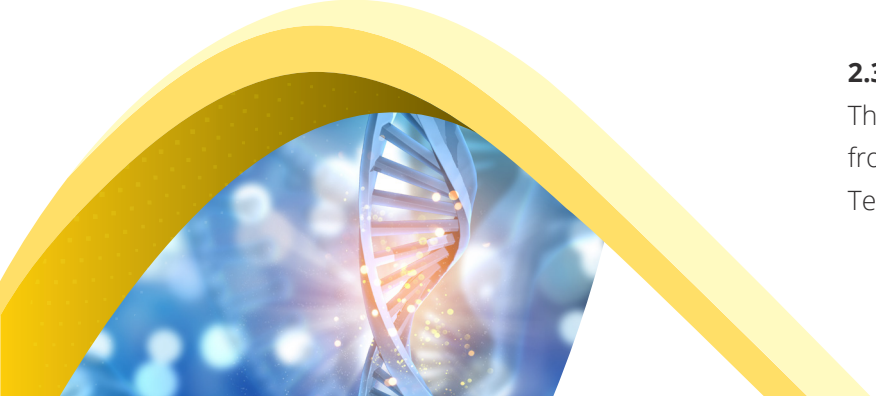
Meeting Type	Date
Ordinary	11 October 2016
Ordinary	31 January 2017

During the period under review, the Biosafety Council concluded its Annual Work Plan for 2016/17 and recommended it to the Commission for approval. The Council has finalised the drafting of administrative procedures, guidelines and forms for the implementation of the Biosafety Act, 2006, and submitted to the full Commission for approval.

2.3.7 National Indigenous Knowledge Systems Council (NIKSC)

The establishment of the National Indigenous Knowledge Systems Council (NIKSC) draws its mandate from Section 19 of the Research, Science and Technology Act, 2004 (Act No 23 of 2004) which states that "the Commission, from time to time in the prescribed manner and after consultation with the Minister, may establish one or more councils in the Research, Science and Technology sector to perform such functions as prescribed and as may be assigned to it by the Commission. A council performs its functions under the supervision of the Commission."

The objective of the NIKSC is to facilitate the development of a National Agenda related to Indigenous Knowledge in all related sectors. This may include the development of National IKS Policy in order to: Provide a strategic direction on matters related to IK e.g. ethics in IK research, identify IK activities relevant to Namibia, promote IK research and development, and gather Namibian IK related material. The NIKSC consists of 5 members appointed by the Commission with prior approval of the Minister. The appointed members represent the following fields or sectors: (a) Culture, (b) Health, (c) Natural Sciences, (d) Social Sciences, (b) Law



Members to the NIKSC are:

	Name	Representation	Role on the Council
1.	Mr Moses Molatendi Moses	Law	Chairperson
2.	Ms Ivonne Mujoro-Kaukuetu	Natural Sciences	Deputy Chairperson (acting Chair)
3.	Prof Jekura Uaurika Kavari	Culture	Member
4.	Mr Nyanyukweni Pandeni Tshifugula	Health	Member
5.	Dr Michael U. Akuupa	Social Sciences	Member

During the period under review, the NIKSC held four (4) meetings, l as indicated below.

Meeting Type	Date
Ordinary	26 May 2016
Ordinary	15 July 2016
Ordinary	21 October 2016
Ordinary	25 January 2017

During the period under review, the National Indigenous Knowledge Systems Council (NIKSC) concluded its Annual Work Plan for 2016/17 and recommended to the Commission for approval. The Council has been preoccupied with the formulation of the National IKS Policy.

2.3.8 National Space Science Council (NSSC)

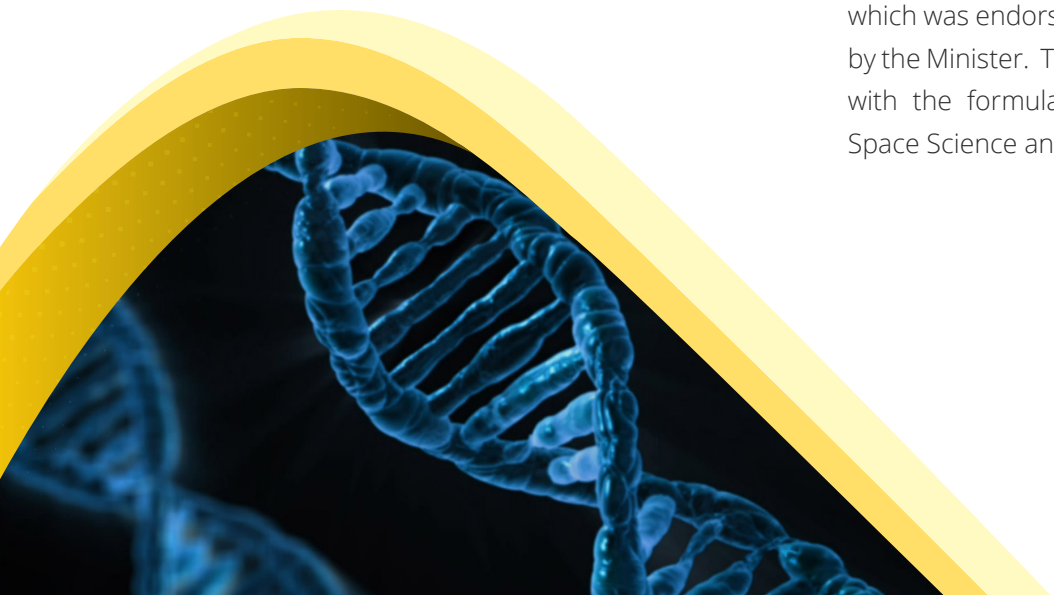
The establishment of the NSSC draws its mandate from Section 19 of the Research, Science and Technology Act No 23 of 2004 which states that "the

Commission, from time to time in the prescribed manner and after consultation with the Minister, may establish one or more councils in the Research, Science and Technology sector to perform such functions as prescribed and as may be assigned to it by the Commission.

A council performs its functions under the supervision of the Commission." The major aim is to facilitate the development of a national agenda related to Space Science in all sectors. This may include national space policy development, provision of a strategic direction on matters related to Space Science (e.g. ethics in Space Science research), identification of space activities relevant to Namibia, and the promotion of Space Research and Development. The NSSC consists of six (6) members appointed by the Commission with prior approval of the Minister.

The appointed members represent the following fields or sectors:

(a) Astronomy and Astrophysics;
(b) Engineering;
(c) Environmental Sciences;
(d) Information and Communication Technology (ICT);
(e) Law; and,
(f) Defence Force (National Security).



Members of National Space Science Council are:

	Name	Representation	Role on the Council
1.	Dr Riaan Steenkamp	Astronomy and Astrophysics	Chairperson
2.	Ms Valerie Garises	ICT	Deputy Chairperson
3.	Dr Lisho Mundia	Environmental Science	Member
4.	Mr Emmanuel Iikuyu	Defence	Member
5.	Ms Emilia Nghikembwa	Law	Member
6.	Mr Laban Hiwilepo	Engineering	Member

During the period under review, the NSSC held three (3) meetings, l as indicated below.

Meeting Type	Date
Ordinary	11 March 2016
Ordinary	7 November 2016
Ordinary	10 February 2017

During the period under review, the NSSC concluded its Annual Work Plan for 2016/17 and recommended to the Commission for approval. The Council has been preoccupied with the formulation of the Namibian Space Science and Technology Policy, which was endorsed by the Commission for approval by the Minister. The Council was further preoccupied with the formulation of the National Strategy on Space Science and Technology.

3 Management and Support Structure

3.1 Executive Management

The CEO and the Executive management members guide the strategic and policy direction of the NCRST.

Dr Eino Mvula

CEO

Dr Diina Shuuluka

GM: Research, Science, Technology and Innovation Coordination and Support

Mr John Sifani

Resigned in November 2016

Ms Albertina Ngurare

GM: Business Support

Mr Vincent Nowaseb

GM: Innovation and Technology Development (Management of National facilities)

Ms Enid Keramen

Head: Company Secretariat and Legal Advice

Mr Metlem Kahona

Resigned in February 2017
Head: Internal Audit

Ms Elzita E. Beukes

Resigned in November 2016
Head: Corporate Communication and Marketing

Mr Matheus Shikongo

Head: Quality Assurance and Operational Excellence

3.2 Office of the CEO

The CEO is responsible for implementing the strategy set by the Commission, while also exercising specific supervisory roles of the divisions within the CEO's Office, namely: Internal Audit and Risk, Legal Advice and Company Secretary, Quality Assurance and Operational Excellence, Corporate Communication and marketing function. These divisions are managed by the Heads.

Dr Eino Mvula

CEO

Ms Enid Keramen

Head: Company Secretariat and Legal Advice

Mr Metlem Kahona

Resigned in February 2017
Head: Internal Audit

Ms Elzita E. Beukes

Resigned in November 2016
Head: Corporate Communication and Marketing

Mr Matheus M. Shikongo

Head: Quality Assurance and Operational Excellence

3.2.1 Internal Audit and Risk

Internal Auditing is an independent, objective assurance and consulting activity that is guided by a philosophy of adding value to improve the operations of NCRST.

3.2.2 Company Secretariat and Legal Advice

This unit provides for complete legal services as well as secretariat services to NCRST Board of Commissioners, its Committees, Councils and Management.

3.2.3 Quality Assurance and Operation Excellence

Quality Assurance and Operational Excellence is tasked to develop Quality Management Systems and provide support and services to other Departments/ Divisions/Units in order to ensure superior organisational effectiveness, efficiency and consistency in achieving set objectives throughout the NCRST.

3.2.4 Corporate Communications and Marketing

The Corporate Communications and Marketing department is tasked to position the NCRST both internally and externally as an effective and valuable driver of RSTI in Namibia by establishing key communications and marketing avenues that will optimally serve NCRST image and standing both in the eyes of our customers and stakeholders within the RSTI funnel as well as the eyes of the public, and by leveraging possibilities of maximum positive impact.

3.3 Research, Science Technology and Innovation Coordination and Support (RSTICS)

The RSTICS department has four divisions, namely, Policies and Programme Development, Resource Mobilization and Grant Management; Intellectual Property and Knowledge Management, and Human & Institutional Development and Science & Technology Promotion. Through these divisions the department strives to:

- develop Research, Science, Technology and Innovation (RSTI)] policy and STI indicators;
- develop National Programme on Research, Science, Technology & Innovation (NPRSTI) and monitor and evaluate NPRSTI implementation;
- implement and maintain the National STI Information Management System;
- ensure full implementation of RST Act (Act No. 23 of. 2004) regulations;
- develop funding instruments for RSTI Programmes and to provide grant management services in support of socio economic development;
- manage the development of platforms for knowledge management, provide support to researchers and innovators on issues of intellectual property rights, and facilitate the transfer of RSTI outputs to industry, doing so with dedication, efficiency and professionalism; and,
- create and deepen Research, Science, Technology and Innovation (RSTI) awareness in Namibia, to recognize outstanding contributions made to RSTI in Namibia, and to identify the gaps in terms of Science, Technology and Innovation human and institutional resources and develop programs to address these gaps.

Dr Diina Shuuluka

GM: Research, Science, Technology and Innovation Coordination and Support

Mr Gernot Piepmeyer

Manager: Policies, Programmes and Council Services

Ms Alushe Nditya

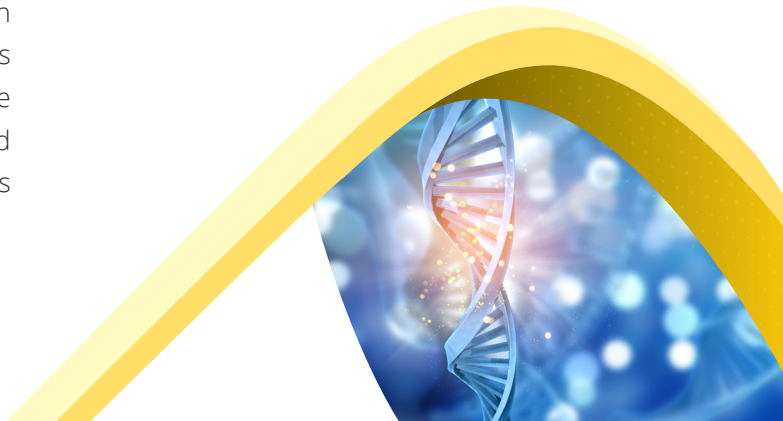
Manager: Resource Mobilisation and Grant Management

Ms Angelique Philander

Manager: Resource Human & Institutional Development and Science & Technology Promotion

Mr Moses M. Moses

Manager: Knowledge Management and Intellectual Property Coordination:



3.4 Innovation and Technology Development (Management of National Facilities) Department (ITD)

The ITD department has three divisions, namely, Innovation and Industrial Research, Natural Science Research and Biotechnology. Through these divisions the department strives to:

- ensure the full implementation of Biosafety Act 2006 (Act no. 7, 2006) through provision of reliable GMO inspections and accurate GMO detection results;
- to create and manage linkages and platforms that promote Industrial Research, Innovations spin-offs, Value addition, and Technology Transfer; and,
- coordinate research on new scientific and technological trends in order to support the implementation of the National Programme on Research, Science, Technology & Innovation as well as other related regulatory frameworks

Mr Vincent Nowaseb

GM: Innovation and Technology Development (Management of (National Facilities

Ms Lovisa Kambonde

Manager: Innovation and Industrial Research

Ms Hilya Shikongo

Manager: Natural Science Research

Mr Paulus Mungeyi

Manager: Biotechnology

3.5 Business Support Department

The services are provided through the four divisions, namely, Finance, Fund and Investments, Human Resources and Organisational Development, and Information and Communications Technology (ICT). Through these divisions the department strives to:

- provide the required finance administration, estate and fleet logistical support services to the Commission;
- manage and provide accurate and timely information about the Fund's financial position, develop and coordinate fund framework (mobilisation) and ensure appropriate investment opportunities;
- deliver strategic human resources programs, services, and technologies to build a talented, diverse, engaged and productive workforce in support of the corporate strategy; and,
- provide strong, flexible, efficient, and secure ICT services enabling the NCRST and its stakeholders that meets the needs of the NCRST strategic Vision.

Ms Albertina Ngurare

GM: Business Support

Mr Simon Nghipangwa

Manager: Finance

Mr. Jeremiah Ntinda

Resigned in August 2016

Ms Saima Neke

Manager: Fund and Investments

Ms Johanna Hatutale

Manager: Human Resources

Mr Kevin Fisch

Manager: ICT

PART II:
PERFORMANCE OVERVIEW

The NCRST measures its success in developing a responsive national system of innovation based on how well the challenges related to outdated policies and legal framework, low investment in research and development; the fragmentation of science, technology and innovation (STI) activities; unavailability of centralized information system on STI related activities such as research and development (R&D); and innovation indicators, inventory of facilities, laboratories and instruments for research, are being addressed. In this regards, we report on progress made in achieving the objectives under each of the five strategic themes namely:

- Creating awareness of Science, Technology and Innovation
- Establishing Smart Partnership and Cooperation
- Creating an enabling Policy Environment
- Building Research and Development Capability:
- Promoting innovation for Namibia's Prosperity

4 STRATEGIC THEME 1
CREATING AWARENESS OF SCIENCE, TECHNOLOGY AND INNOVATION

This strategic theme calls for intervention that are targeted not only to the Namibian science and technology community but also the economic actors and the whole of the population in order to fully improve their understand on the role of knowledge in supporting the attainment of the country's development objectives as well as supporting the defined goals and the corresponding allocation of public resources. Under this theme the specific objective is focused on significantly improving public awareness of RSTI & its socio-economic value.

Our awareness and promotion activities have improved especially through the launch of the month of science and profiling of innovators that are supported by the NCRST. The Month of Science comprised of four major events centred on science, technology and innovation. The four events that made up the Month of Science were the National Science Fair (5-9 September 2016); the National Science, Technology and Innovation Festival (12-16 September 2016); the NamPort Biggest Brainer Science Quiz (19 to 21 September 2016); and the National Research Symposium (21 to 23 September 2016).

(a) Science, Technology and Innovation Festival

The Science, Technology and Innovation (STI) Festival was successfully hosted from 12-16 September 2016 at the Ongwediva Trade Fair Centre. The event was celebrated under the theme "Love Pulses" in cerebration with UNESCO's International Year of Pulses. The purpose of the Science, Technology and Innovation Festival is to popularize science, technology and innovation amongst students, educators and the general public. The aim is to cultivate a public informed by science, inspired by its wonder, convinced of its value, and prepared to engage with its implications for the future. A total of

3 636 participants attended this event. As shown in Figure 1, the number of participants has increases in 2016/17 as compared to 2015/16.

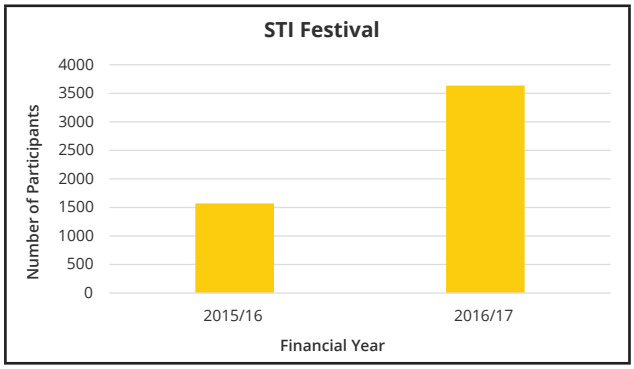


Figure 1: Participants at the STI festival during 2015/16 and 2016/17 financial years

(b) NamPower Annual National Science Fair:

The National Commission on Research, Science and Technology (NCRST) in collaboration with the Ministry of Education, Arts and Culture, and NAMPOWER Foundation, successfully hosted the Annual National Science Fair 2016. This year event took place from 05-09 September 2016. The aim of the event is to stimulate interest in young people in science, math, and engineering, to provide educational experience through participation in scientific research, to give public recognition to learners for the work that they have done, to encourage inquisitive students to explore their environment in a systematic, logical manner; and to stimulate students interest in science and technology while simultaneously promoting the development of the life skills of communication, decision making, evaluation of alternative solutions, and critical thinking. A total of 20 637 learners has participated in the Science Fair, starting from the circuit to the national level. There has been significant increase year on year in the number of participants in the Annual National Science Fair since 2014/15 as shown in Figure 2.

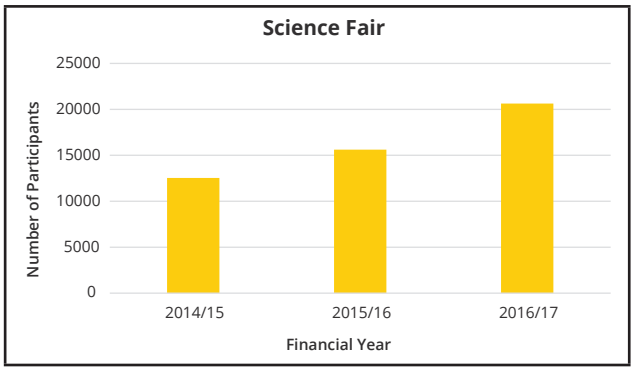


Figure 2: Participants at the Science Fair during 2014/15, 2015/16 and 2016/17 financial years

(c) Regional Level and National Level Science Quiz Competition 2016

NamPort Biggest Brainer Science Quiz was hosted on 19 - 21 September 2016. The Quiz was hosted in collaboration with the Ministry of Education, Arts and Culture, and NamPort, the main sponsor. The competition aimed at helping learners to master different topics in Science and Technology; provide awareness about the role of Science & Technology in society; instil in learners the values of knowledge, wisdom and compassion and make them smart citizens as well as generate scientific minded citizens; coupled with adding fun to the learning of science. Participation in a science quiz competition stimulates learner's interest in science and technology while simultaneously promoting the development of the skills such as communication, strategic thinking, teamwork, and lights the fire for knowledge. Student decisions about study and career paths are primarily based upon interest in a particular field and on their perception of job prospects in that field. Positive contacts with science and technology at an early age can have a long-lasting impact.

The event was hosted as collaboration between the NCRST, NAMPORT and the NBC. Thirteen regions participated, and overall, more than 3106 leaners participated in the competition at the school level this year (see Figure 3).

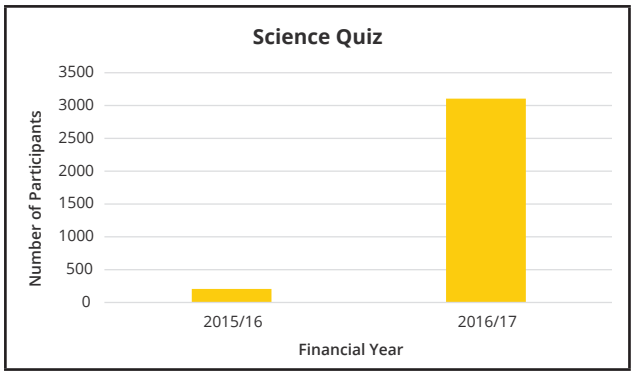


Figure 3: Participants at the STI festival during 2016/16 and 2016/17 financial years

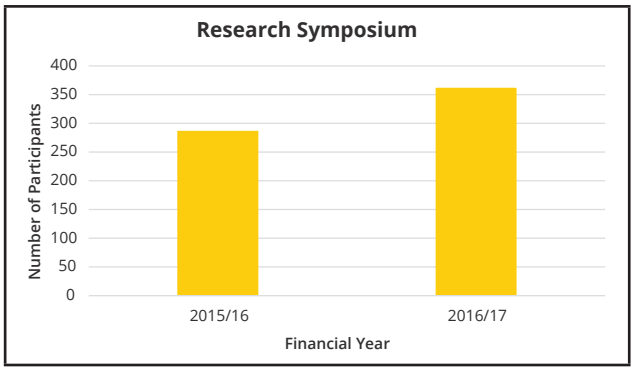


Figure 4: Participants at the National Research Symposium during 2015/16 and 2016/17 financial years

(d) National Research Symposium (NRS)

The National Research Symposium was successful hosted from 21-23 September 2016 at Safari Hotel in Windhoek. The symposium brought together researchers and related practitioners from all over the country to share their research experiences, expertise and findings with the broader audience including the industry. The theme of the National Research Symposium 2016 was 'Engaging Conversations, Enhancing Research Quality'. The objectives of the symposium were to:

- enhance sharing of research outputs, experiences and opportunities amongst researchers;
- promote and encourage the establishment of collaborations amongst researchers as well as amongst research institutions;
- enhance capacity building and professional development of young and upcoming researchers;
- create a knowledge brokerage between researchers and industry; and,
- to support good research practice and recognition of best research practice through awards;

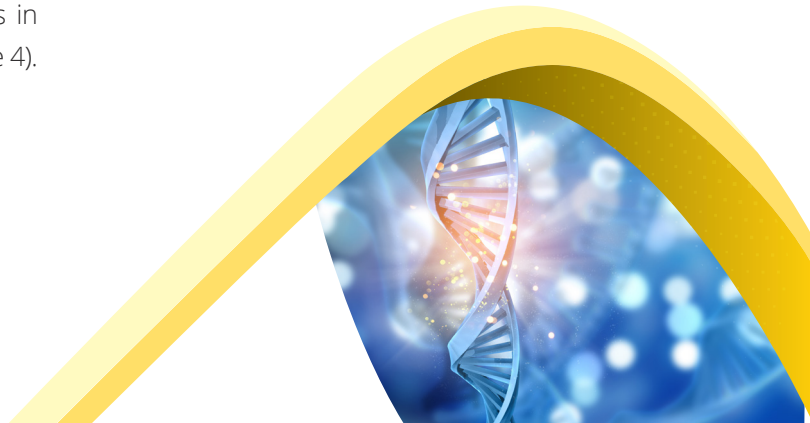
The symposium was attended by 362 participants in 2016/17 as compared to 287 in 2015/16 (see Figure 4).

(e) Namibian Women in Science, Engineering and Technology (NAMWISET).

The Charter for the establishment of the NAMWISET Chapter has been developed in line with the SADC WISET Charter and AU Statute. Currently consultations are underway with relevant stakeholders to finalize the Charter.

(f) Mathematics Teaches Workshop

The NCRST hosted a teachers' workshops targeting science teachers from Grade 1-12, which was hosted during the science festival for a period of 4 days from 13 -16 September 2016. The aim of the workshop was for science teachers to share the best practises, promote and encourage the teachers to make the teaching of science fun as well as to realise the science in the everyday life related to the syllabus that can be used in the classroom. The Workshop was attended by 146 teachers from 4 regions: Oshana, Omusati, Ohangwena and Oshikoto.



(g) RSTI Awards

A total of 21 nominees were received. The table below shows categories that were awarded as well as the nominees and winners.

AWARDS	NOMINEES	WINNERS
Scientist of the year	• Dr. Valerianus Hashiyana • Dr Heike Winschiers-Theophilus	Dr Heike Winschiers-Theophilus
Upcoming Young Scientist of the year	• Mr. Andreas Sakaria • Mr Vaino T Shaumbwa • Dr Petrina Kapewangolo • Dr Paulus Sheetekala • Ms Josefina Hamutoko	Ms Josefina Hamutoko
Research unit of the year	Faculty of Science, University of Namibia	Faculty of Science, University of Namibia
Researcher of the year	• Dr Heike Winschiers-Theophilus • Dr Hans Justus Amukugo • Dr Cyril Ayetuoma Ogbokor • Ms Alma Mekondjo Nankela	Dr Heike Winschiers-Theophilus
Geologist of the year	Dr Akalemwa Frederick Kamona	Dr Akalemwa Frederick Kamona
Physical Scientist of the year	Dr Riaan Steenkamp	Dr Riaan Steenkamp

(h) Innovation Garage Competition

Innovation Garage Competition offers opportunities for inventors and innovators with products and services to showcase them at the NCRST Science, Technology and Innovation Festival. The purpose is to celebrate and acknowledge the individuals, organisations or institutions that have proven concept, prototype or demo version of innovation or invention. At the same time, it is the platform to accelerate proven concept to full commercialisation. In 2016, a total of 10 innovators participated in the competition and the following prizes were awarded to the winners:

- First Prize: N$ 25 000.00
- Second Prize: N$ 10 000.00
- Third Prize: N$ 5 000.00

(i) Regional Workshops on the implementation of the Biosafety Act, 2006 (Act no 7 of 2006)

In order to raise awareness and build the capacity of individuals and institutions that will be involved in the implementation of the Biosafety Act , 2006 (Act No. 7 of 2006), the NCRST hosted a series of regional workshops on the implementation of the Biosafety Act, 2006 (Act No. 7 of 2006) in Khomas region, Otjozondjupa region, Kavango East region, Kavango West region, Zambezi Region, Hardap region, // Kharas region, Oshikoto region, Ohangwena region, Oshana region, Omusati region, Kunene region and Erongo region. The last workshop was held on 30 March 2017 in Omaheke Region. These workshops presented an overview of the Biosafety regulatory framework and Biosafety Procedures and Guidelines to stakeholders.

(j) Namibia Biosafety Clearing House online Portal

The Biotechnology division launched the Biosafety Clearing-House (BCH) online portal (http://bch.ncrst.na/). The BCH is a mechanism set up under the Cartagena Protocol on Biosafety to facilitate the exchange of information on Living Modified Organisms (LMOs) and assist the parties of the protocol to better comply with their obligations under the Protocol. Establishment of the Namibian BCH is a

major achievement that enable users to share information regarding the implementation of the Biosafety Act, 2006.

(k) Specific Awareness Programme through Workshops

Grant Proposal Writing Workshop

The Grant Proposal Writing Workshop was held on 22-23 August 2016 and attracted 72 participants. The workshop was designed for stakeholders who wish to improve their research or innovation proposal writing skills which in turn will enable them to develop more competitive grant proposals. Workshop Participants gained hands on experience on proposal writing and experienced a deeper understanding of the NCRST funding programmes, the programme needs, criteria and requirements. Workshop participants also gained insight into the requirements for developing and delivering a compelling and competitive grant or innovation proposal.

Research Project Coordinator's Workshop

A total of 14 participants attended the workshop for Research Coordinators which was held on 11 February 2016 and was aimed at providing a platform for dialogue between NCRST and the research Coordinators from grant funded institutions. Participants included delegates from the University of Namibia (UNAM), the Namibia University of Science and Technology (NUST), the International University of Management (IUM) and Gobabeb Research and Training Center (Gobabeb). The workshop discussed Research Management; Financial Models for Research Administration as well as an aligned Research Management Framework for NCRST.

Transdisciplinary Training Workshop

NUST, UNAM and NCRST held a Trans-Disciplinary workshop (24-25 October 2016) with a view to fostering inter institutional and disciplinary collaboration based on defined and identified challenges from the fieldwork in response to the Harambee Prosperity Plan and the NCRST's National Programme on Research, Science, Technology and Innovation (NPRSTI). The TD Workshop provided participants with a platform to understand the emergence of Transdisciplinary research in the context of societal changes; it imparted skills in TD modelling and a field excursion provided participants with first-hand experience regarding TD challenges and possible solutions which were narrated by an affected community in Walvis Bay.

SME Bank / NCRST Innovator's Support Programme

The NCRST together with the SME Bank held an Information Sharing Session which was aimed at providing innovators with an overview of the Innovator's Support Programme. The ISS was held on 29th November 2017 and was attended by 20 NCRST funded innovators. The programme is aimed at preparing the innovators to enable them to successfully cross the bridge between innovation and commercialisation of their products.

The Fundamentals of Intellectual Property and Technology Transfer

NCRST in collaboration with the Southern African Research and Innovation Management Association held workshop that provided an introductory training on Intellectual Property (IP), IP identification and its role in research. It further introduced the participants to the technology transfer process, IP ownership, IP utilisation and commercialisation, and the Namibian patent legal framework. The workshop was held on 21 to 22 November 2016 and was attended by 69 attendees. Participants were equipped with valuable skills that will enable them to develop IP protection and commercialisation strategies for specific technologies emerging from their institution.

5 STRATEGIC THEME 2: ESTABLISHING SMART PARTNERSHIPS AND COOPERATION

This strategic theme calls for development of a research and innovation ecosystem in Namibia fostered through enhanced cooperation both at local, as well as at regional and international levels. Here we are focused on strengthening linkages with and amongst stakeholders within RSTI funnel. The specific interventions are aimed at fostering smart partnership and cooperation involving educational institutions and various industries, cooperation of research units in interdisciplinary projects, relevant institutions in the region and beyond as reported below. While one partnership was formed in 2014/16, the NCRST manage to forge partnership with 10 institutions during the year under review (see figure 5).

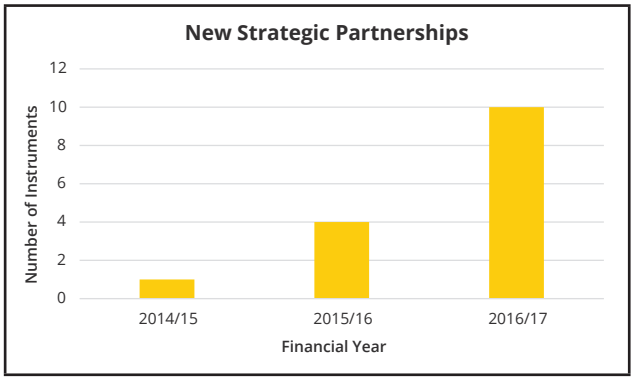


Figure 5: New Strategic Partnerships established during 2014/15, 2015/16 and 2016/17 financial years

(a) Cooperation with International Agencies

During the year in review, the NCRST entered into an agreement with the Southern Africa Network for Biosciences (SANBio) to co-fund innovation projects in the Biosciences. SANBio is a NEPAD agency which facilitates innovation in support of the development of a knowledge economy in Southern Africa.

Together with support from BioFISA (Finnish-Southern African Partnership to Strengthen NEPAD/SANBio), the NCRST and SANBio have agreed to pair Namibian innovators with their counterparts in the Southern African region in order to exchange ideas and expertise. The aim of this programme is to support innovation projects that demonstrate commercialisation potential with potential regional and global impact.

Table 1: Scope of the MoU signed between NCRST and international partner institutions

NO	INSTITUTION	FINANCIAL YEAR SIGNED	SCOPE
1	Botswana Institution for Technology Research and Institutes (BITRI)	2015/16	The purpose of this MoU is to facilitate support of collaborative research and exchange activities between BITRI and NCRST in accordance with the following provisions. The terms of cooperation for each specific activity implemented under this Memorandum of Understanding (MoU), including financial aspects, shall be mutually discussed and agreed upon in writing by BITRI and NCRST prior to the initiation of any activity.
2	National Research Foundation (NRF) South Africa	2015/16	The objective of this Memorandum of Understanding (MoU) is to promote cooperation in the fields of Science (including Social sciences and Humanities), Technology and Innovation between the parties on the basis of equality and mutual benefit. The two parties shall cooperate in the following priority areas of Science, Technology and Innovation (STI) taking into consideration each country's needs and capabilities: • Biosciences (with focus on food, agriculture and health technologies) • Space Science (with emphasis on astronomy and earth observation) • Indigenous Knowledge Systems • Mathematical sciences • Mineral Resources (with focus value addition) • Laser Sciences • Energy (with emphasis on renewable energy and efficiency) • ICT • Logistics • Environment & Tourism
3	Technology Innovation Agency (TIA), South Africa	2015/16	The Parties, agree to co-operate with each other in regard to the areas and matters set out below as follows: • Undertake Joint Review of research projects for potential technology development support; • Facilitate Joint Workshops/Seminars on commercialization and IP management; • Experience sharing on the establishment technology station, start-ups and incubation services; and • Training on Technology Management for government institutions/programmes / audience.

(b) Cooperation with South Africa

The Namibia / South Africa Bilateral Agreement signed in March 2005 has taken science and technology to higher frontiers in Namibia. Namibia values this agreement as a critical instrument for advancing Science, Technology and Innovation for its national economic competitiveness. In accordance with Article 6 of the Agreement, parties of the Agreement are expected to hold an annual joint committee meeting to review progress on the agreed research priority areas.

NCRST together with the MHETI and the South African Department of Science and Technology successfully hosted the African Square Kilometre Array (SKA) Senior Official meeting. The platform was aimed at fast tracking the finalization of the following:

- Draft MoU for institutionalizing cooperation in Radio Astronomy. Upon completion, partner countries' Ministers are expected to sign the MoU;
- Draft implementation of readiness strategy and plan of action for the African VLBI Network (AVN) and SKA, Draft Funding Strategy, Draft Communication Strategy and Draft Governance Structures. Upon completion, these documents will be presented to partners' countries' Ministers for approval.
- Member states further deliberated on the on the progress made on the roll out of AVN project and implementation of Big Data Implementation Strategy

in partner countries. To date, Namibia has received two High Performance Computing Racks donated by the University of Texas through South African Centre for High Performance Computing and are hosted by NUST and UNAM. Administrators of these racks were trained during the year in review.

- In addition, Namibia received 10 computers donated by Hartebeesthoek Radio Astronomy Observatory and are hosted by NUST and UNAM, computers being split equally. Both facilities are aimed at training and capacity building purposes.

During the year in review, the NCRST and National Research Foundation of South Africa signed a Memorandum of Understanding (MoU) to establish a Joint Research Chair in Astronomy and Astrophysics. The purpose of this MoU is to strengthen Astronomy and Astrophysics cooperation between both countries. The Agreement provides a framework for a joint public call, nomination and selection procedures as well as funding and management guidelines for the Nam-SA Research Chair Programme.

(c) Cooperation within Namibia

The NCRST signed Memorandum of Understanding (MoU) with Agro-Marketing and Trade Agency (AMTA), Namibia Water Corporation (NAMWATER), Namibia Ports Authority (NAMPORT), University of Namibia (UNAM), Namibia University of Science and Technology (NUST), The International University of Management (IUM) to strengthen research and innovation in the Country. The detailed scope of the agreements are outlined in Table 1.

Table 1: Scope of the MoU signed between NCRST and local partner institutions

No	Institution	Financial year Signed	Scope
1	Namibia Statistics Agency (NSA)	2014/15	The purpose of this memorandum of understanding is to set out the respective areas of responsibilities between the National Commission on Research Science and Technology (NCRST) and the Namibia Statistics Agency (NSA). The Memorandum provides a framework for the NCRST and NSA to agree on mutual areas of cooperation including commissioning the NSA to conduct Surveys on behalf of NCRST.
2	Communication Regulatory Authority of Namibia (CRAN)	2015/16	The purpose of this MoU is to clearly identify the roles and responsibilities of each party as they relate to the planning of collaborative research and development, educational and training activities of mutual interests and where appropriate the joint funding of these planned collaborative efforts. In particular, this MoU is intended to: • Promote applied research and capacity development on the socio-economic impact (and assess capacity) of information technology usage in Namibia; • Promote applied research on and awareness of cyber security threats and develop globally-relevant strategies to secure ICT's resources and users of the country; • Promote applied research and develop application on sectoral information systems; and • Promote green ICT practices with specific focus on e-waste.
3	Namibia Students Financial Assistance Fund (NSFAF)	2015/16	The NSFAF and NCRST agree to co-fund Students' Post Graduate Education in areas as identified in the National Programme on Research, Science, Technology and Innovation (NPRSTI) read with NSFAF funding and award criteria, in accordance with the timeframes as required by the applicable Institution of Higher Learning, through jointly issuance of calls for application for Postgraduate scholarship and research grants.

4	Agro-Marketing and Trade Agency (AMTA)	2016/17	The Parties, agree to co-operate with each other regarding the areas and matters set out below as follows; • Support for agricultural research projects for potential technology development, innovation and value addition; • Facilitate Joint Workshops/Seminars on agricultural research, product development, manufacturing, commercialisation and marketing; • Sharing of Laboratory facilities and resources for testing and research on Genetically Modified Organisms (GMOs). • Capacity Building in agricultural research and biotechnology • Resource sharing in inspectorate services
5	SME Bank	2016/17	The purpose of this MoU is to clearly identify the roles and responsibilities of each party as they relate to the planning of collaborative enterprise research, development and innovation and training activities of mutual interests and where appropriate, the joint funding of these planned collaborative efforts. This MoU is intended to: • Promote an Entrepreneurship Development Programme; • Promote a Business Linkages Programme which links SME's to large corporate / commercial companies to further their growth and development; • Promote the up-scaling of NCRST funded innovation projects that demonstrate potential for growth; • Promote a programme that bridges support for SME Bank applicants to enhance their bankability through Research & Development; • To promote any other Flagship Programme as agreed upon by the parties.
6	Namibia University of Science and Technology (NUST)	2016/17	The Agreement will streamline the process of disbursing funds to researchers and innovators based at NUST, it also gives assurance that the grants will be managed in accordance with the institution's existing financial management policies, and the timely reporting of the project execution as part of their monitoring and evaluation process.
7	Namibia Ports Authority (NAMPORT)	2016/17	The Agreement set out the cooperation for the co-sponsorship of the Biggest Brainer Science Quiz, which is an annual national Competition.
8	University of Namibia (UNAM)	2016/17	The Agreement will streamline the process of disbursing funds to researchers and innovators based at NUST, it also gives assurance that the grants will be managed in accordance with the institution's existing financial management policies, and the timely reporting of the project execution as part of their monitoring and evaluation process.
9	Namwater	2016/17	This MoU is dedicated towards the coordination and establishment of the Water Research Fund with a view to mobilising and funding research and innovation in the Water Sector. The MoU also promotes water research and innovation at all levels including for local authorities, industry and to undertake flagship programmes that innovate for the water sector.
10	MOHSS	2016/17	This MoU was particularly targeted at undertaking the first phase of the National Survey on the prevalence, prevention and treatment of suicide in Namibia by the Ministry of Health and Social Services. This first phase involved training of 76 social workers; Field based data Collection and capturing from all 14 Regions; Statistical analysis and reporting.

6 STRATEGIC THEME 3: CREATING AN ENABLING POLICY ENVIRONMENT

The NCRST is mandated under section 5 (1) (c) of the Research, Science and Technology Act of 2004 to co-ordinate and facilitate the development of research, science and technology on national, regional and local level, and to provide direction and policy guidance to the research, science and technology innovation systems in Namibian. The NCRST has successful finalised the development of the biosafety regulatory framework which includes the regulations, procedures and guidelines. We have also completed a review of the STI landscape and the R&D survey report, which are instrumental in providing the evidence required for the finalisation of the STI Policy and its Implementation Plan. The NCRST successfully completed the development of 5 new Policies and Regulatory instruments developed during 2016/17 as compared to 2 in 2015/16 as shown in Figure 6. The detail on the instruments developed is reported below.

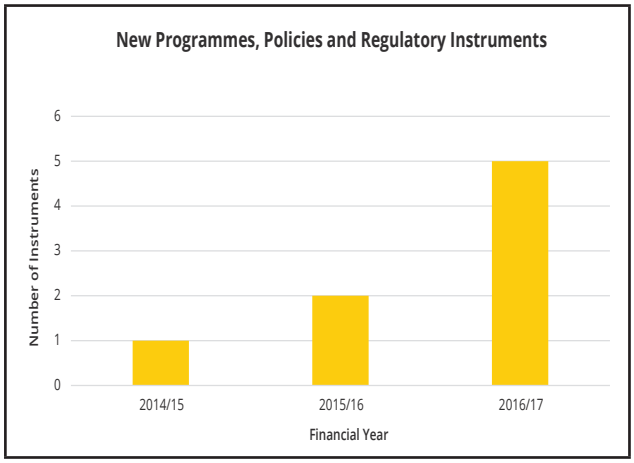


Figure 6: New Policies and Regulatory instruments developed during 2014/15, 2015/16 and 2016/17 financial years

(a) R&D and Innovation Survey

The Research and Experimental Development (R&D) survey was conducted with close cooperation between the various stakeholders and the NCRST work closely with the NSA in line with the memorandum of understanding which lays the foundation for collaborative and strategic partnership between our two institutions, as well as UNAM also in line with the service agreement to collect data for this survey.

The Centre for Science, Technology and Innovation Indicators (CeSTII) in South Africa assisted the NCRST with data analysis and generation of the report under the framework of Namibia/South Africa bilateral agreement on Science and Technology. The Launch of the Research and Experimental Development (R&D) survey (2013/14 fiscal year) report is scheduled for March 2017. This will be the first ever National Survey on Research and Development report produced in Namibia.

The indicators contained in this report are very important in understanding the size and shape of the Namibia R&D landscape and their use in system-level planning, monitoring and evaluation. The Innovation survey was conducted simultaneously with the Research and Experimental Development (R&D) survey, however the Innovation survey will be finalized by the end of March 2017 and be launched at the beginning of 2017/18. The innovation data are becoming a core asset in the economy, fostering new industries, processes and products and creating significant competitive advantages.

(b) The New Science, Technology and Innovation Policy

Namibia is in the process of formulating a new modern policy framework for science, technology and innovation (STI). The formulation of the new policy framework is being informed by a thorough review of Namibia's National System of Innovation (NSI) and the evaluation of the implementation of the National Research, Science and Technology (NRST) Policy of 1999. An initial stakeholder consultative workshop on the review process of RST Policy of 1999 was held in February 2016 which was two folds: to sensitize the stakeholders on the review process and to get their inputs into the draft document on the Review of the National RST Policy and National System of Innovation (NSI). The new National STI Policy and its implementation plan are expected to be completed in the next financial year.

(c) Implementation and Monitoring and Evaluation Framework for the National Programme on Research, Science, Technology and Innovation.

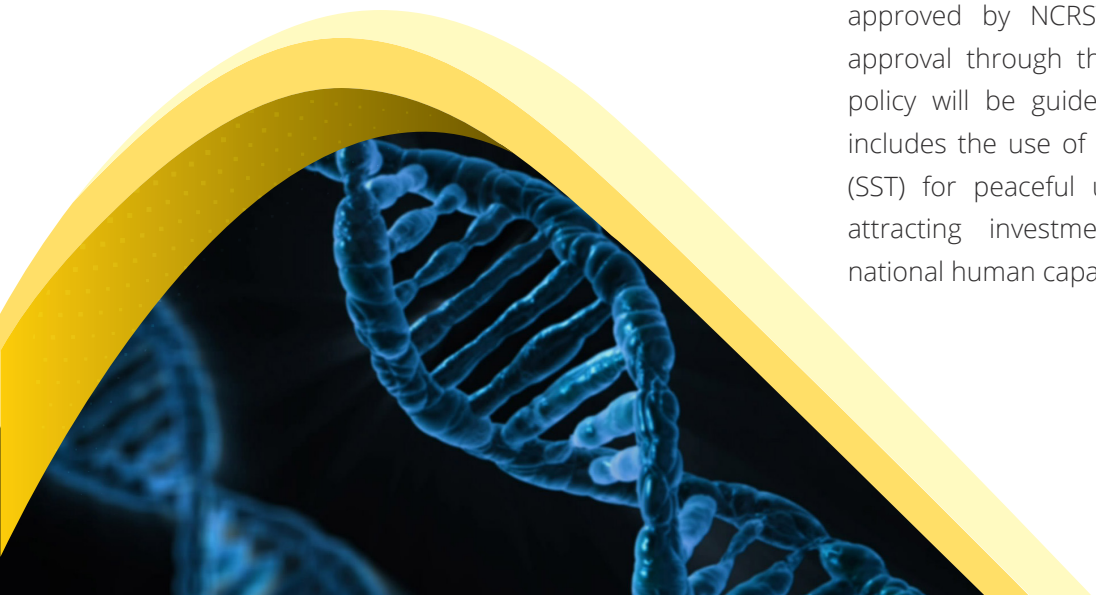
In terms of section 18 of the Research, Science and Technology Act, 2004 (Act 23 of 2004), subject to subsection (2), the National Commission on Research, Science and Technology (NCRST), once in every three years, or at such other intervals as the Minister may determine, must prepare a national programme for research, science and technology for the following three years, or such other period as the Minister may determine. The Monitoring and Evaluation data for the implementation of research initiatives and programme of the National Programme on Research, Science, Technology and Innovation (NPRSTI) were collected in 2016 and a Monitoring & Evaluation report will be finalized before the end 2016/17. This report summarizes the output of work of diverse stakeholders and it will serve as a main vehicle to provide wider audiences with information about the implementation of the NPRSTI initiatives.

(d) National Strategy for Science, Technology and Innovation (STI) Infrastructure

The National STI Infrastructure Strategy was finalized during the year under review and is due for submission to cabinet for approval. This strategy focuses on initiatives aimed at advancing research and development through the establishment of National STI facilities, enhancing and upgrading existing STI facilities, and ensuring optimum and effective utilization of STI facilities through strengthening human capacity and promoting collaboration and open access to STI facilities.

(e) National Space Science and Technology Policy and Strategy

The Policy was developed through several stakeholder consultative engagements and was approved by NCRST Board and awaits Cabinet approval through the MHETI. Once approved the policy will be guided by several Principles which includes the use of Space Science and Technology (SST) for peaceful use, sustainable development, attracting investments in Namibia, developing national human capacity and stimulating innovation.



In addition to the Policy, the National Space Science and Technology Strategy was also developed. The development process went through various stakeholder's consultative engagements and once approved by the Minister, the strategy will aim to:

- promote Space Science to the Namibian public as an economic and a social enabler;
- advocate the integration of space science into the school curriculum;
- foster national, regional and global collaboration on Space science;
- develop Namibia's Space Science capacity and generate new scientific knowledge;
- establish appropriate infrastructure to effectively engage in Space Science related activities; as well as
- promote and support the applications, development and commercialisation of space science in Namibia.

(f) National Policy on Indigenous Knowledge Systems

The National Policy on Indigenous Knowledge Systems (IKS) has been developed through a consultative process under the technical guidance of the National Planning Commission. The development process has gone through several stakeholder's consultative engagements, including regional consultations. The document is in its final stages and is expected to be presented for endorsement by the NCRST Board prior to submission to the Minister of Higher Education, Training and Innovation for presentation to Cabinet. Once approved, the Policy aims to achieve the following objectives:

- To recognize the role of IKS in efforts of transforming Namibia into a Knowledge Based Economy;
- To promote the public understanding of TKS/IKS for nation building;
- To preserve and maintain TKS/IKS for the benefit of all citizens of Namibia;
- To ensure fair and equitable benefit sharing resulting from the access to, and commercial usage of, natural resources and/or associated TK/IK;
- To ensure the development of TKS/IKS products and services with emphasis on value-addition and commercialization;
- To provide for the utilization of TKS/IKS in the sustainable management of the components of biodiversity;
- To ensure equity and redress to protect and promote TKS/IKS; and
- To develop an information management system for the protection and management of TKS/IKS.

(g) Biosafety Act and Regulations

Regulations to the Biosafety Act, 2006 (Act No.7 of 2006) were finalized and gazetted on the 1st of November 2016. These regulations deal with the monitoring of activities involving the research, development, production, marketing, transport, and handling of genetically modified organisms (GMOs). A critical element for implementation of the Biosafety Act, 2006 is the establishment of a GMO Testing Laboratory. The NCRST has completed development of the Biosafety Procedures, Guidelines and Application forms. The Biosafety administrative procedures will provide internal guidance both to the division and the Biosafety Council during the implementation of the Biosafety Act, 2006, while the Biosafety guidelines (Contained Use, Field Trials and Environmental release) will give guidance to any one in Namibia who want to deal with GMOs in Namibia.

(h) GMO baseline Survey

The NCRST has completed phase I of the GMO baseline survey, which aimed at establishing the status of GMO in Namibia. Samples were collected from 11 locations in the Kavango East, Kavango West and Zambezi regions in February 2015, and again in

6 locations in Oshikoto, Otjozondjupa and Omusati regions. The focus was on grains which have genetically modified counterparts currently being grown commercially in South Africa under general release permits and major commodities which are commercialized in other parts of the world given the possibility of them entering the Namibian system through import, such as rice, wheat and sunflower.

(i) IKS documentation Survey

Since 2015, NCRST has been offering technical and financial support to a joint Research and Development project which focuses on the documentation of Namibian Indigenous Knowledge (IK). The documentation mainly covers medicinal plants, traditional foods and beverages. This is a baseline data-capturing activity, which is jointly conducted by senior researchers from the two local Universities; UNAM (Multidisciplinary Research Centre) and NUST (Computing and Informatics). The IK data collected will form part of the National IKS database which is under development. As part of the project capacity building initiatives, both institutions involved postgraduate students as part of the technical research teams that conducted the regional surveys. In the same vein; the project also involved local personnel in the respective regions through training and active participation as survey enumerators. During the year in review, the NCRST had fully funded two surveys which covered //Kharas and Hardap Region respectively. A total amount of N$485 000 has been expended on the two surveys and the related costed project activities.

7 STRATEGIC THEME 4: BUILDING RESEARCH AND DEVELOPMENT CAPABILITY

The NCRST support research and development programmes that benefit our community. At present, NCRST focuses on the following fields: Health, Agriculture, Energy, Water, Geoscience and Mining, Environment and Tourism, Social Sciences, logistics, ICT, Manufacturing Technologies, Biotechnology and space sciences. Under this theme, the specific objectives are focused on build human resources capacity in RSTI and build research and innovation infrastructure.

(a) R&D Projects Funded

Our efforts in funding research through various funding instruments is yielding result with tangible output which include publications as well as students completing their Masters and PhDs. The NCRST is currently funding 146 research and development projects performed by researchers at various institutions in Namibia to the value of N$ 79.72 million. The distribution of grants under various funding instruments is indicated in Figure 7. Although the National Research, Science and Technology Fund is not well capitalised, The NCRST has managed to fund 29% of application received (see Figure 8). It is important to note that the NCRST funding is done on a competitive basis through a rigorous peer review of project proposals to ensure excellence in R&D and innovation

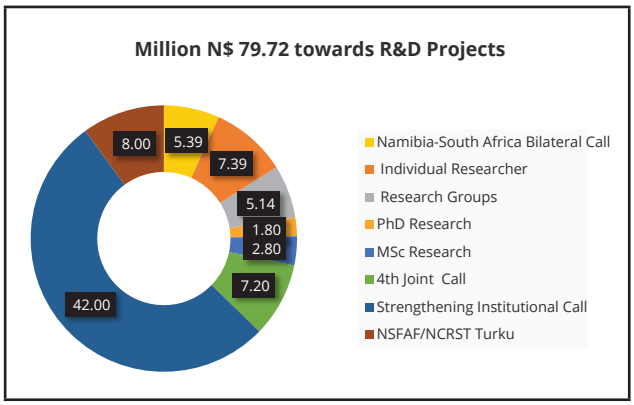


Figure 7: Distribution of R&D grants amount for different funding instruments since 2013

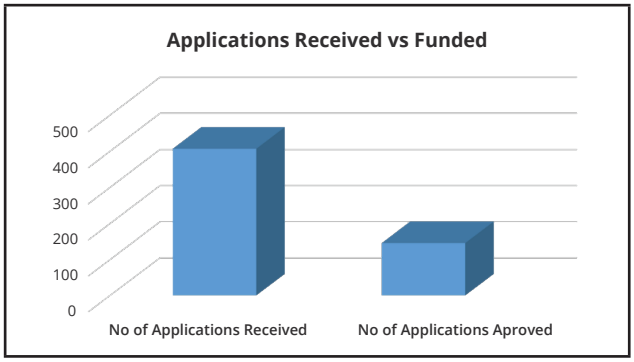


Figure 8: Number of Applications received by the NCRST through the Advertised Calls vs the Number of applications approved.

As shown in Figure 9, our values of the grants awarded grew year on year with only N$5.9 mill awarded in 2013/14 as compared to N$57.2 million awarded in 2016/17, which is indicative of continuous improvement in the grant making and award process.

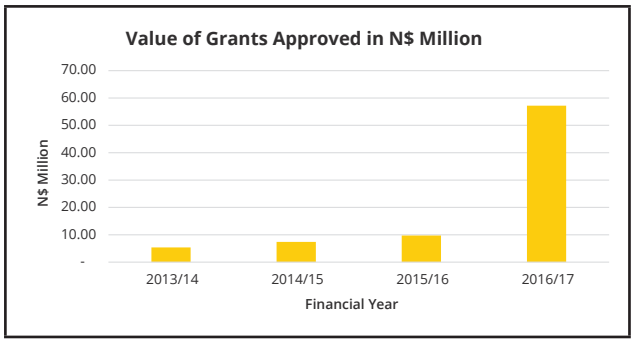


Figure 9: Value of R&D grants awarded annually

(b) Establishment of Research Chair

NCSRT and South Africa's National Research Foundation have signed a Joint Research Chair MoU in Astronomy and Astrophysics. The MoU stipulates that the individual chair holder and the facilities supporting the activities of the Research Chair, will be jointly located at the Namibian and South African University and will be jointly funded by MHETI/NCRST and DST/NRF. Once appointed the chair is expected to:

- mutually strengthen Namibia/South Africa research and innovation capacity in Astronomy;
- promote international exchange and cooperation of both countries' Astronomers, post graduate students and international partners as well as other major international astronomy facilities;
- foster excellence in education and research in Namibia and South Africa especially among emerging researchers and scientists;
- increase production of masters and doctoral graduates in astronomy and related disciplines; and
- create research pathways for young and mid-career researchers and human capital development output trajectory.

During the year in review, the NCRST and NRF have facilitated a joint public call inviting interested applicants to submit their proposals. The selection process has been completed, suitable candidate recommended and awaits official appointment of the chair holder.

(c) Establishment an Online Grant Management System (OGMS)

An Online Grant Management System (OGMS) was developed. The system is expected to assist the NCRST in managing all future calls online and to administer the calls in real time. Phase I of the system's development has been completed and a first trial was undertaken where the Innovation Challenge Phase II was implemented through the OGMS. The OGMS is expected to be up and running during the 2017/2018 Financial Year.

8 STRATEGIC THEME 5: PROMOTING INNOVATION FOR NAMIBIA'S PROSPERITY

The NCRST invests in strengthening the country's innovative capacity, especially within particularly important target groups. The meaning of innovation and its value is now being realised as tangible products and services are being developed with the NCRST initiatives such as the innovation challenges and Demola. The innovators that have been supported have demonstrate their commitment to execute their projects and tangible results have been achieved, which include the development of the following software applications:

(a) Funding of Innovation

The NCRST created funding instruments aimed at creating opportunities for young people through innovation and entrepreneurship. This is achieved by providing financial support and business development services to youth owned enterprises. To this end, the NCRST supported 23 innovation projects comprised mainly of youths to commercialize their innovations through its Youth Innovators Funding Call and Innovation Challenge Call to a tune of N$10,222,913.00. The distribution of innovation grants under the two innovation funding instruments is indicated in Figure 10.

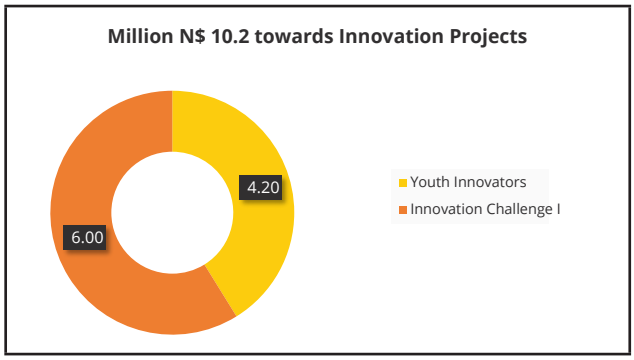


Figure 10: Distribution of innovation grant amounts for different funding instruments since 2013.

As shown in Figure 10, the values of the innovation grants awarded increased from N$4.2 mill in 2015/16 to N$ 6 million awarded in 2016/17.

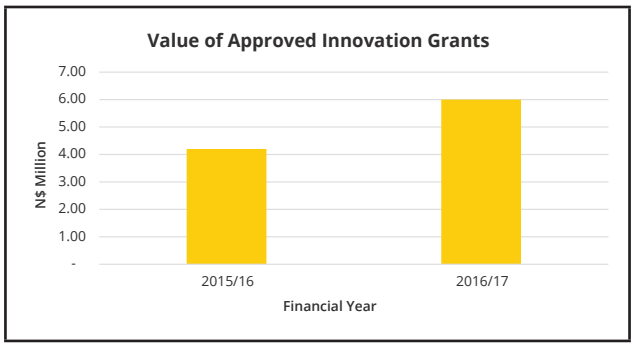


Figure 11: Value of innovation grants awarded annually

(b) Operationalization of Demola

The NCRST operationalized the Demola Innovation Programme in Namibia. This Programme, which is implemented in partnership with Finland, offers a platform where business challenges from the industries are solved by local students. In this reporting period six (6) industry challenges were solved through this new co- creation method, and solutions provided are being implemented by the respective companies. This initiative is expected to continue in the next financial year and it is anticipated that it will attract more challenges through involvement of more local companies. Demola Namibia facilitator worked with a total of 24 students that provided solution to the following challenges:

- Easy connect
- Achieving practical fixed mobile convergence
- Migration from circuit switch platform to an all-IP environment on IMS
- Accounts relevance and value addition

- Payment with a difference
- Standards in action

(c) Innovation Fostering Programme

Secured Fish Project-Extrusion

The project is using an extruder to produce fish-snacks. Additionally, this extruder runs on solar power, thus tapping into cleaner energy, and reducing the footprint of the project. An amount of N$ 250 000.00 has been awarded for the 2015/2016 financial year, however the duration of the funding period is three years. N$ 100, 000.00 has been disbursed so far which catered for formulation trials and proximate analyses. Extrusion ratio has already been determined, but not yet refined. Technical audit on this project was done on the 9th of September 2016, and further audit was done in 02 and 03 March 2017 to observe the whole documented process achieved thus far. The remaining part of technology and knowledge transfer to yet to be identified small and medium entrepreneurs that would take up the technology develop, is scheduled for the next financial year.

Master terminator (device) - Satellite Dish

The project is using the master terminator device to improve the problem of limited and low internet connectivity in remote areas. An amount of N$ 250,000.00 has been awarded for the 2015/2016 financial year, however the duration of the funding period is three years. There have been a lot of delays on this project due to incorrect paper work submission and questionable suppliers. Currently N$161,498.00 has been disbursed, which has catered for software development and buying of supporting equipment. The innovator visited Hong Kong to work on his prototype development. He is yet to present and demonstrate to NCRST how the developed prototypes functions.

Dynamic Cosmetics (African Radiance)

Through Adventure, two innovators were identified initially, but only one has signed an agreement, namely; Dynamic Cosmetics. The project was awarded an amount of N$ 190,000.00 for the 2015/2016 financial year, to cater for the formulation and testing. The initial formulation was completed of the 6 products (with Ochra) were completed by SDK and samples send back to Dynamic Cosmetics for testing and feedback. After sample testing in the local environment, inputs were given to SDK and the formulation was to be adjusted. The adjustments were made to the products and now the products are undergoing full stability testing. On completion with positive results, the products will be tested for SPF and will then be sent in for production. Once SPF testing is completed, NCRST will than pay for packaging and the production of the first batch of product that is anticipated in the coming financial year.

(d) Value addition Project (Mahangu Project)

The Pearl Millet /Olute Foods & Research Development Centre, housed at the Community Skills Development Centre (COSDEC) in Ondangwa. The overall objective of the Centre is to promote agro-based industrial processing in one of the lagging parts of the country through the production of cereal instant porridge, puffed snacks and biscuits from the staple food grain, mahangu. The Centre also aims to generate increased employment opportunities for the youth and local women. NCRST has managed this Centre since 2013. This Centre was extensively reviewed during the last financial year and a decision was reached by the NCRST Board and the line Minister to transfer the Centre to COSDEC. Hence, the Centre was officially handed over to COSDEC Ondangwa on the 17th February 2017

PART III:
NCRST Funded Research and Innovation Projects

9. RESEARCH AND DEVELOPMENT PROJECTS

(a) Projects funded under the South Africa-Namibia Cooperation Agreement

Under the South Africa-Namibia Cooperation Agreement, the NCRST and the National Research Foundation (NRF) of South Africa subsequently have funded 30 research proposals under the Joint Third Call (2013) to the value of N$ 5,390,442 for a period 01 April 2013 up to 31 December 2016. These projects represented a range of disciplines such as animal sciences, computer science, education, environmental sciences, food sciences, microbiology, molecular genetics, astronomy, Indigenous Knowledge Systems and oceanography. The grant recipients have provided the reports, which are summarised in the Table 2 below. The grants awarded under the bilateral Call are expected to make a meaningful contribution to the attainment of targets set out in the National Programme on Research, Science, Technology and Innovation in that about 42 scientific publications have been authored and 36 students enrolled for the Bachelor of Science degrees and 22 students enrolled for the MSc programme. The PhD programme has 7 students who are currently carrying out research work in the projects funded under this bilateral agreement.

Table 2: Funded Projects and their Output

Priority Research Area	Project Title	Gender	Institutions	Region	Amount (N$)	Student Capacity Development	Output
Environment	Testing climate change responses of fauna of a fog-dependent desert, using lizards as indicator species	F	University of the Witwatersrand /Gobabeb Research and Training Foundation	Erongo	159,750	2 Masters 2 Honours	8 Publications
	Tracking impacts of climate change on the west coast of South Africa	F	UNISA/Gobabeb Research and Training Foundation	Erongo	200,000	1 Master	5 Publication
	Environmental and anthropogenic-determined spatial and temporal patterns of plant health of *Welwitchia mirabilis* in the central Namib Desert?	M	Gobabeb Research and Training Centre/ North-West University South Africa	Khomas	200,000	1 Master	1 Publication
	Study on Namibia Dust Emission Hot Spots and the Processes	M	University of Namibia and University of Cape Town	Khomas	121,050	1 Honours	
Environment	Throughput Optimization of Broadband FSO networks under the Southern African Cloud Climatology	M	University of Namibia/ Council for scientific and industrial Research (CSIR)	Oshana	188,800	No data	
	Environmental education for sustainable development (EE for SD) in Namibia and South African schools	M	University of Namibia and North-West University	Khomas	199,965	No data	

Space Science	Remote Sensing of the Upper Ionised and Lower Neutral Atmosphere using Signals from Global Navigation Satellite systems and satellite-borne Radio Beacons	F	Polytechnic of Namibia/ South African National Space Agency	Khomas	200,000	2 Honours	1 Publication
	Geomagnetic disturbance monitoring in Namibia	M	Polytechnic of Namibia/ SANSA Space Science	Khomas	188,250	5 Honours	10 Publications
	On-chip and hybrid passive components for 94 GHz near-earth observation transceivers	M	Polytechnic of Namibia and university of Pretoria	Khomas	182,000	No data	
Water	Evaluation of antibacterial properties of Moringa species found in South Africa and Namibia and the development of seeds biosand filters.	M	Polytechnic of Namibia/ University of Johannes-burg	Khomas	200,000	3 Honours	
	Understanding the interdepend-ence of water resources, climate change and biodiversity in arid to semi-arid regions of Namibia	M	University of Namibia/ University of Stellenbosch	Khomas	181,960	1 PhD 1 Masters 2 Honours	1 Publication
	Enhancing capacity to access, use and efficiently manage scarces water resources in rural communi-ties: Experiences from Namibia and South Africa	F	HSRC/University of Namibia	Khomas	200,000	1 PhD 1 Masters	4 Publication
ICT	An Evidence-based and Standard-ised Digital Forensic Framework for Cloud Computing and Solid-State Drives (SSDs	F	Polytechnic of Namibia/ University of Pretoria	Khomas	200,000	2 PhD	
	Live Design, Transform Life: Mobile education and service design to promote gifted youth development for innovation.	F	Polytechnic of Namibia/ Cape Peninsula University of Technology	Khomas	200,000	1 Masters 6 Honours	3 Publications
Tourism	What works in HIV and AIDS and the World of work in the South African and Namibian Tourism Industry?	M	Polytechnic of Namibia/ Social Aspect of HIV/AIDS Research Alliance (SAHARA)	Khomas	200,000	4 Masters	
Agriculture	Assessing ecological knowledge and adaptations to climate and environmental change amongst rural communities along an aridity gradient from Namibia to South Africa	F	University of Namibia/ Agricultural Research Council	Khomas	200,000	1 PhD 1 Masters	
	Genetic variability of the MHC class II in indigenous cattle breeds of Namibia and South Africa	F	Polytechnic of Namibia/ University of Pretoria	Khomas	180,000	2 Honours	1 Publication
	Identification of toxic compounds in *Helichrysum argyrosphaerum* a plant responsible for livestock poisoning in Southern Africa	M	Stellenbosch University/ University of Namibia	Khomas	188,167	3 Masters 1 Honours	
	Isolation and characterisation of starch from marama (*Tylosema esculentum*) tuber (root)	M	University of Namibia/ University of Pretoria	Khomas	200,000	1 Masters	1 Publication

Agriculture	An investigation into the ethnovet-erinaty practices of communal farmers	M	University of Namibia and University of fort hare	Khomas	107,200	No data	
	Screening of indigenous Namibia mushrooms for their antimalarial activities against sensitive and resistant strains of the malaria parasites	M	University of Namibia and MRC	Khomas	200,000	No data	
	The use of sheep ewes as incubators for fertilization of bovine gametes and embryo culture, followed by transfers recipient cows - a sustainable alternative for natural farming	M	University of Namibia and University of VendaW	Khomas	200,000	No data	
	Meat quality in relation to quality assurance schemes at Namibia and South African abattoirs	F	University of Namibia and University of fort hare	Khomas	116,000	No data	
Indigenous Knowledge	Ethno botanical knowledge on medicinal plants uses by traditional healers in Kavango, Namibia and the Western Cape, South Africa (plants validation)	M	University of Namibia/ University of western Cape	Khomas	200,000	5 Honours	5 Publications
	Capacity Development in NMR spectroscopy for molecular structure determination of indigenous plant extracts	F	University of Namibia/ University of Pretoria	Khomas	160,000	3 Masters 6 Honours	
	Indigenous knowledge in reproduc-tive practices and health care: an intergenerational comparative study of Namibian and South African rural women	F	University of Namibia/ University of Johannes-burg	Khomas	160,000	1 PhD 1 Masters	1 Publication
Health	Mycorrhizal Fugal Interaction of Aloe Species and Commercial Propagation and Conservation	F	University of Namibia and Rhodes University	Khomas	200,000	No data	No data
Fisheries	Phytoplankton Community Structure in the Northern Benguela Ecosystem	M	Bayworld/Ministry of Fisheries and Marine Resources	Erongo	133,800	No data	No data
	Assessing the distribution, abundance and migrations of Antarctic blue whales off the coasts of west South Africa and Namibia	M	Ministry of Fisheries and Iziko SA Museum	Karas	97,000	No data	No data
Biotechnology, Tourism & Environment	Investigation of the genetic component of oxalate nephrosis in the cheetah	F	Cheetah conservation fund	Otjozondjupa	190,500		
						TOTALS	13 Females 17 Males 7 PhD 22 Masters 42 Publications 9 No records

- Projects Funded under the First National Call for Individual Researchers

Under the 1st National Call for Research, the NCRST is funding 23 projects being performed by Individual Researcher to the value of N$ 7,369,060 for the period 01 February 2015 up to 31 March 2017. The projects are in nine (9) research disciplines, namely, Biosciences, Energy, Information Communication Technology, Indigenous Knowledge Systems, Laser Sciences, Mineral Resources; Mathematical Sciences, and Space Sciences and Social Sciences. The grant recipients have provided the reports which are summarised in the Table 6 below. About 17 scientific publications have been authored and 41 students enrolled for the Bachelor of Science degrees and 11 students enrolled for the MSc programme. The PhD programme has 5 students who are currently carrying out research work in the projects funded under this call.

Table 3: Funded Projects and their Output

Priority Research Area	Project Title	Gender	Institutions	Region	Amount	Student Capacity & Development	Output
Space Science	Rehabilitation of Sand mining pits in North Central Namibia	M	UNAM	Khomas	400,000	5 Honours	Pending
Agriculture	Profiling studies of Namibian indigenous seed oils	F	UNAM	Khomas	400,000	1 PhD 1 Honours	1 Publication
	Potential of urea treated de-bushed biomass pellets as supplementary feed for cattle	M	UNAM	Khomas	249,300		Pending
	The microbiology of Eendjeke additive and their effect on fermented pearl millet flour	F	UNAM	Khomas	315,000		Pending
	Aroma profiling, shelf life extension, starch, structure elucidation, sensory evaluation and meta-genomic analysis of Oshikundu: Cereal fermented beverage from Namibia	M	UNAM	Khomas	400,000	1 PhD 3 Honours	2 Publications
	Development of high seed producing Marama bean: An arid adapted nutrition bean (DoHMB)	M	UNAM	Khomas	400,000	4 Honours	Pending
	Evaluation of ethnoveterinary medicinal plants of Namibia	M	UNAM	Khomas	200,000		Pending
	The development of a plant based toothbrush sanitizer	F	UNAM	Khomas	276,600	1 Honours	1 Publication
	Identification of genetic markers associated with pelt quality traits in Swakara seep breed	F	UNAM	Khomas	200,000	2 Honours	2 Publication
	Farmer assisted mobile application	M	NUST	Khomas	400,000		1 Publication
	Integrated agriculture technologies for small holding farming	M	NUST	Khomas	315,000	5 Honours	1 Publications
	Fabrication and optimisation on an electrolytic cell for the production of chemical products and fertilisers using bring solution	M	NUST	Khomas	253,400	1 Masters 2 Honours	1 Publication

Social Sciences	Urban livelihoods, quality of life and health in informal settlements of Windhoek, Namibia	M	UNAM	Khomas	210,260	1 Masters 1 Honours	1 Publication
	Setting up of a point of care diagnostic testing and research centre of excellence for HIV and HIV related diseases in Namibia	M	NUST	Khomas	400,000	1 Masters 3 Honours	Pending
Indigenous Knowledge	A botanical filed guide of Omusati Region, central northern Namibia	M	UNAM	Khomas	137,900	3 Honours	Pending
	The Development and validation of High throughput screens for drug discovery from medicinal plants	M	UNAM	Khomas	400,000	1 Honours	1 Publication
	In search of innovative models of developing sustainable health policies and practices through linking indigenous knowledge to literacy	F	UNAM	Khomas	400,000	1 PhD 3 Masters	1 Publication
	Capturing and preservation of indigenous knowledge in Namibia	F	MIN OF EDUCATION	Khomas	400,000		1 Patent
	Computer Science & Cultural Institutions	M	NUST	Khomas	202,000		Pending
	Namibian communities Indigenous Knowledge Management System	F	NUST	Khomas	348,600	1 Master 7 Honours	3 Publications
Fisheries	Monitoring of ocean acidification along the Namibian continental shelf and its impact on Namibian oyster culture industry	M	UNAM	Erongo	400,000	1 PhD 3 Honours	2 Publications
Environment	Application of artificial devices to monitor levels of organic and metal pollutants along the Namibian coastline	M	UNAM	Khomas	261,000		Pending
Mathematical Sciences	An automated road quality assessment framework for Namibia	M	NUST	Khomas	400,000	1 PhD 1 Masters	Pending
						TOTALS	5 PhD 11 Masters 41 Honours 17 Publications 1 Patents

- Project funded under the Second National Call for Research Groups
- Under the 2nd National Call for Research Groups, the NCRST is funding 14 projects to the value of N$ 5,143,524 for the period 01 October 2015 up to 31 September 2017. The projects are in 15 Priority research areas as outlined in the National Programme for Research, Science, Technology and Innovation (NPRSTI), namely,
- Research Areas addressing social and economic challenges: Health; Agriculture; Fisheries; Water; Energy; Geosciences; Mining; Indigenous Knowledge Systems; Social Sciences & Humanities; Logistics; Environment & Tourism,
- Research Areas addressing social and economic challenges: Manufacturing Technologies; Information and Communication Technology; Biotechnology; Space Science

Although the projects only commenced in the second half of the financial year, the preliminary report a provided by the recipients indicates that 45 students are participating in the projects and 6 publications are being authored as summarised in Table 4.

Table 4: Funded Projects and their Output

Priority Research Area	Project Title	Gender of PI	Institutions	Region	Amount	Student Capacity & Development	Output
Water	Water- Air -Climate interaction in Namibia	F	NUST	Khomas	428,392	3 students	Pending
	Reducing the risk of algal toxicity through improvement of algal toxin assessment methods and removal of algal toxicity within the Swakoppoort dam, Namibia	F	UNAM	Khomas	430,000	3 Students	Pending
Environment	A survey of incidences, distribution and chemico-dynamics of physiologically disruptive Arsenic (As) and other toxic metals (Cd, Mn, Zn and Cu)	M	NUST	Khomas	430,000		4 Publications
	Recycling by bicycle: A green alternative to expand recycling and create jobs in the Ongwediva town, Namibia	F	NUST	Khomas	430,000	4 Students	Pending
	Application of geosciences to promote conservation and tourism in the Greater Waterberg Landscape (Project awaits clearance from the MET)	F	Cheetah Conservation Fund	Otjozondjupa	430,000	3 Students	Pending
Social Sciences	International Corpus of English Namibia	M	NUST	Khomas	350,000	5 Students	Pending
	Case Management (CM) by Social Workers as an Effective Service Delivery Framework in Namibia	F	UNAM	Khomas	205,132	4 Students	Pending
Health	Prevalence of *toxoplasma gondii,* rubella and cytomegalovirus among pregnant women attending the antenatal at Windhoek Central Hospital, Namibia	F	NUST	Khomas	430,000	2 Students	Pending
	Neurofeedback and Mindfulness Cognitive Behavioural therapy for elderly people with psychotic and insomnia symptoms and related mental disorders	F	Namibia Neurorehabilitation Research and Training Unit (NNRTU)	Khomas	430,000	4 Students	Pending
Energy	Energy generation from Urban waste	M	African Expert Federation	Khomas	430,000	3 Students	2 Publications
Geosciences	Geochemistry and Geophysics of basement rocks in Namibia	M	UNAM	Khomas	350,000	3 Students	Pending

Fisheries	Biodiversity Conservation and Tourism Development in Impalila Island, Namibia	M	UNAM	Khomas	430,000	4 Students	Pending
	Human health risk assessment of emerging phycotoxins affecting the Namibian marine culture industry.	M	UNAM (SANUMARC)	Erongo	370,000	3 Students	Pending
Space Science	Investigative of Active Galactic Nuclei with the H.E.S.S telescopes	M	UNAM	Khomas	430,000	4 Students	Pending
						TOTALS	45 Students 6 Publications

10. INNOVATION PROJECTS

(a) Project funded under the Fourth National Call for Youth Innovators

Under the 4th National Call for youth innovators, the NCRST is funding 11 projects to the value of N$ 4,222,913 for the period 01 January 2016 up to 31 December 2017.

This Call for Youth Innovators was aimed at Namibian youth (between the age of 19 and 35 years) who are able to develop new ideas and creative thinking, while strengthening concepts of innovation and able to address enabling technologies which will provide wide-application solutions that address economic and social challenges within the Namibian society. The Call focused on two research areas, namely Manufacturing Technologies and Information & Communication technologies, which have been identified as priority technology enablers in the National Programme for research, science Technology and Innovation for 2014/15 to 2016/17.

Although the projects only commenced in the last quarter of this financial year, the youth have demonstrated their commitment to execute their projects and tangible results have been achieved as summaries in section 10.2 under success stories. Table 8 lists the funded innovation projects and the expected outputs.

Table 7: Funded Innovation Projects and their Output

Priority Research Area	Project Title	Company	Gender	Region	Amount	Output
ICT	Development of the Open Data Portal	Provespace Labs	M	Khomas	246,000	Improved data Service
	Owela Game	National Software Engineering Academy	M	Khomas	326,948	Owela Gaming product
	Ticket Booth Namibia	Silicon Business Solution Namibia	M	Khomas	291,500	Ticketing service
	Mobile Application ePula24	EPula 24 Investments cc	M	Khomas	451,500	Marketing service
	Save My City	Byteable Investments CC	M	Khomas	239,300	Community Service
MT	Stationery Manufacturing	Eco-Climate Advancers	F	Khomas	499,850	Stationery products
	Manufacturing of Scientific reagents for testing laboratories	NSVP Scientific	F	Khomas	500,000	Laboratory chemicals
	Cosmetic Manufacturing	Kiyomisandz Beauty Products cc	F	Khomas	497,615	Cosmetic products
	Sustainable Mushroom Cultivation	Cuvelai Media	M	Khomas	270,200	Mushroom products
	M&O Décor	M&O Décor Enterprise CC	F	Khomas	400,000	Décor products
	Cotton Linen Manufacturing Plan 100%	Lipitua Trading CC	F	Khomas	500,000	Linen products

(b) Project funded under the Sixth National Call for Innovation Challenge Phase I

The NCRST continued implementation of the Innovation Challenge which is open to receiving calls three times a year. The purpose of the Innovation Challenge is to provide an opportunity for Namibian Innovators to present solutions to pressing social and national challenges through an outside-the-box thinking approach and to open the door to new opportunities that challenge the status quo. The NCRST assessed, evaluated and committed funding to nine (9) successful innovation projects under this call. The call value is N$ 4,500,000 and each projected will receive funding of N$250,000 per annum over a period of two years (2016/17 to 2018/19). Funding for year 2 is dependent on the project's performance during the first year of implementation. A total of 15 Innovators are being supported under this call and all funded projects have commenced activities.

Table 8: Funded Innovation Projects and their Output

Priority Research Area	Project Title	Company	Gender	Region	Amount	Output
ICT	Wi-Fi Kiosks	Mowira Investments	M	Khomas	500,000	Centralize internet in CBD
	Smart Forms	Greenforms cc	M	Khomas	500,000	One-stop shop forms from various institutions
Energy	Bio-energy and waste management utilizing livestock manure waste water and food	Hand Agri CC	M	Otjozondjupa	500,000	Bio-energy product
	Pedal Power Exercise bike-electricity generator	Kinetics Electric Investments cc	M	Khomas	500,000	Human Powered pedal generator
Agriculture	Mpela Hydroponic Farming	Mpela Hydroponics CC	M	Oshikoto	500,000	Agricultural products
Water	Smart Water Network	Water Technology Solution CC	M	Kavango East	500,000	Driven Distribution Pump Unit Product
	Aquamonitor Greenstar Water Consumption Monitors	Hydro Metering Solutions	F	Khomas	500,000	Wireless water meter sensor
MT	Design of a programmable automatic Oshifima cooker	Neno Electronic System CC	M	Oshana	500,000	Automated Cooker Product

11. Masters and Doctoral Grants

3rd National Call for Research PhD Proposals

Under the 3rd National Call for Research PhD Proposals, the NCRST funding 27 currently registered for PhD at accredited institutions to the value of N$ 1,817,807 for the period 01 October 2015 up to 31 September 2017 (see Table 9). The purpose of this Call was to provide funding to students who are pursuing PhD studies in areas as outlined in National Programme for Research, Science, Technology and Innovation (NPRSTI), namely:

- Research Areas addressing social and economic challenges: Health; Agriculture; Fisheries; Water; Energy; Geosciences; Mining; Indigenous Knowledge Systems; Social Sciences & Humanities; Logistics; Environment & Tourism,
- Research Areas addressing social and economic challenges: Manufacturing Technologies; Information and Communication Technology; Biotechnology; Space Science

Table 9: Funded Research Projects towards Doctoral degrees.

Priority Research Area	Project Title	Gender	Institutions	Region/Country	Amount	Output
Agriculture	Financing Agricultural Small and Medium Scale Enterprises in Namibia	F	University of Pretoria	South Africa	78,668	Dissertation Accepted
Agriculture	Developing a framework for improving coordination in the provision of agricultural support services to farmers in Oshikoto region, Namibia	F	University of Cape Town	South Africa	54,600	Pending Dissertation
Agriculture	Dynamics of Governance arrangements for Small-Scale vegetable farmers in Namibia: A new institutional economics analysis.	M	University of Stellenbosch	South Africa	61,890	Pending Dissertation
Health	Breast Density: Improving the detection of breast cancer and assessment of breast cancer risk	F	University of Sydney	Australia	64,300	2 Full Publications 2 Conference Papers
Health	Investigating the relationship between different hormonal contraceptives and movement of HIV particles in cervical mucous from the genital tract of young South African women	F	University of Cape Town	South Africa	47,500	1 Publication
Health	Identify the critical success factors in the implementation of the strategic plans in Public Health Care System in Namibia	M	University of Namibia	Namibia	64,900	Pending Dissertation
Health	Children of the Sun: Children's understandings of health and illness in Northern Namibia	F	University of Canterbury	New Zealand	120,000	Pending Dissertation
Health	Factors contributing to malnutrition in children 6-24 months admitted to two district hospitals in the northern regions: Namibian case study.		University of Pretoria			Pending Dissertation
Health	Investigating the effectiveness of Telemedicine adoption and sustainability in a tertiary health centre: The case of Namibia	F	University of Cape Town	South Africa	73,301	Pending Dissertation
Social Sciences	Robust numerical methods for solving fractional differential equations	M	University of Western Cape	South Africa	63,000	Pending Dissertation
Social Sciences	NAMLISH: Fact or Fiction? An Investigation into Placing L2 English in Namibia amongst World English	F	University of Cape Town	South Africa	73,000	Pending Dissertation
Social Sciences	Assessment of library and Information service's' impact on Namibia's Knowledge Economy, a comparative study	F	University of Western Cape	South Africa	70,859.98	Pending Dissertation
Social Sciences	A Methodological Framework for Quality Assurance of Higher Education Institutions in Namibia	F	Vilnius University	Lithunia	100,000	1 Conference paper
Social Sciences	Flood disaster preparedness and Economic Impacts on Rural Households: A comparative study of Mwandi District of Zambia and Eastern Zambezi Region of Namibia	F	University of Kwa-Zulu Natal	South Africa	80,000	2 Conference Papers Pending Dissertation
Social Sciences	Robust Numerical Methods for Fractional Differential equations arising in Finance and Epidemiological Modelling	M	University of Western Cape	South Africa	63,000	2 Conference Papers Pending Dissertation

Social Sciences	Dynamics affecting the performance of Small and Medium Enterprises in Namibia	M	University of Namibia	Namibia	59,350	Pending Dissertation
	Top Management Team Diversity, Innovativeness and Performance	M	University of Namibia	Namibia	79,566	Pending Dissertation
IKS	Product development, Biochemical characterization and value addition of Oshikundu	M	University of Namibia	Namibia	70,000	Pending Dissertation
Fisheries	Hydrate Slurry Flows in Subsea Pipelines: Advanced Modelling and Experiments	M	University of Edinburgh	UK	120,000	Pending Dissertation
Fisheries	Isolation, structural Characterization, Bioactivity and Computational Studies from Natural Products of Selected Namibian Red Marine Algae	M	University of Namibia	Namibia	60,000	Pending Dissertation
Fisheries	Establishing the behavioural ecology of selected indigenous fish species in Okavango river and evaluating their potential as a viable food source for aquaculture	M	University of Kwa-Zulu Natal	South Africa	80,000	2 Publication 1 Magazine article Pending Dissertation
Water	Estimation of groundwater recharge of perched aquifers in the Cuvelai-Etosha Basin, Namibia	F	University of Namibia	Namibia	45,000	1 Publication
Water	Developing a Flood Risk Assessment Framework using Flood models, Remote Sensing and GIS in the Cuvelai Bain, Namibia	M	University of Canterbury	New Zealand	120,000	2 Conference Papers
Water	The role of Management of water technology innovations in enhancing job creation: A Case Study for Kavango East in Namibia	M	University of Namibia	Namibia	62,400	Doctorate Achieved
Energy	Investigation into Energy Storage Devices	F	University of Cape Town	South Africa	55,000	Pending Dissertation
Energy	Study on Oil and Gas discovery in Namibia; the Oil Sector Management; lessons from Nigeria and South Africa	F	University of Namibia	Namibia	80,000	Pending Dissertation
Space Science	Design Techniques for Reconfigurable Microwave Multiband Filters on Multilayer Substrates.	M	University of Cape Town	South Africa	45,000	1 Prototype 1 Publication
					TOTALS	17 Pending Dissertation 1 Accepted Dissertation 8 Publications 8 Conference Papers 1 Magazine Article 1 Doctorate Achieved 1 Prototype Developed

(a) 5th NCRST Call for Masters Researchers

Under the 5th National Call for Masters Researchers, the NCRST funding 45 students currently registered for their Masters at accredited institutions to the value of N$ 5,820,000 for the period 01 June 2016 up to 31 May 2018 (see Table 10). The purpose of this Call was to provide funding to students who are pursuing PhD studies in areas as outlined in National Programme for Research, Science, Technology and Innovation (NPRSTI), namely:

The purpose of this Call was to provide funding to students who are pursuing their Masters studies in areas as outlined in National Programme for Research, Science, Technology and Innovation (NPRSTI), namely:

- Research Areas addressing social and economic challenges: Health; Agriculture; Fisheries; Water; Energy; Geosciences; Mining; Indigenous Knowledge Systems; Social Sciences & Humanities; Logistics; Environment & Tourism,
- Research Areas addressing social and economic challenges: Manufacturing Technologies; Information and Communication Technology; Biotechnology; Space Science

Table 10: Funded Research Projects towards Doctoral degrees.

Priority Research Area	Project Title	Gender	Institutions	Region/Country	Amount	Output
Agriculture	The Microbiology of Eendjeke Additive: Identification of Specific Fermenting Microorganisms	M	UNAM	Namibia	115,000	Pending Thesis
	Genetic variation of BoLA DRB3.2 region and its association with tick resistance in cattle breeds in Namibia	F	UNAM	Namibia	60,000	Pending Thesis
Biotechnology	Synthesis and characterization of mesoporous silica/titania nanocomposites for dye sensitized solar cell application	M	University of Johannesburg	South Africa	38,000	Thesis Accepted Masters Achieved
	Identification and characterization of biltong microbiota from Namibian Central regions	F	UNAM	Namibia	94,000	Pending Thesis
	MicroRNA-127 expression levels in HIV-Positive and HIV negative Diffuse Large B-Cell Lymphoma	F	University of Cape Town	South Africa	60,000	Pending Thesis
	Assessment of selected culturable pathogenic bacteria in street vended ready-to-eat meats in Windhoek, Namibia.	F	UNAM	Namibia	60,000	Pending Thesis
	A phytochemical investigation of *Acanthosicyos horridus* (!nara)	F	Stellenbosch University	South Africa	55,000	Pending Thesis
Energy	Investigating electronic pedestals of the analogue front end-boards of the upgraded high-energy stereoscopic system (HESS) cameras	M	University of Namibia	Namibia	40,000	Thesis Accepted Masters Achieved
Environment	The impacts of fuelwood on natural forest. A case study of Etayi Constituency in Omusati Region	F	Cape Peninsula University	South Africa	79,000	Pending Thesis
	An assessment of impact and control of alien Proteaceae invasions in the Western Cape	F	University of Western Cape	South Africa	56,652.28	Pending Thesis
	Ecological niche partitioning, home-range overlap and resource utilisation in sympatric lacertid lizard species *Meroles anchietae* and *M. cuneirostris* from the Namibi Desert, Namibia	F	University of Pretoria	South Africa	110,000	1 Publication Pending Thesis
Geoscience	Concentrating Solar Power	M	University of Stellenbosch	South Africa	75,500	Pending Thesis
	Urban structural rocks mechanics in Namibia: An approach using Abaqus and ArcGis	M	China Geoscience University	China	77,000	Pending Thesis
Health	Monitoring of PM2.5 at Major Road Intersections in Mysore City, India	M	Jagadguru Sri Shivarathreeswara University	India	40,000	Thesis Published

Health	Extraction and identification of Bioactive compounds with health benefits from natural marine organisms, Coastline of southern Africa	F	Rhodes University	South Africa	120,000	Pending Thesis
	Detection and identification of psychoactive compounds with CNS-effects from Medicinal plants used to treat mental disorders in Kavango East region.	F	University of Namibia	Namibia	120,000	Pending Thesis
	Formulation of a Nutraceutical product to reduce micronutrient malnutrition in children in Namibia	F	University of Namibia	Namibia	120,000	Pending Thesis
	MicroRNA-127 expression levels in HIV-Positive and HIV negative Diffuse Large B-Cell Lymphoma	F	University of Cape Town	South Africa	120,000	Pending Thesis
ICT	Compressive direction-finding antenna array	M	University of Pretoria	South Africa	60,000	Pending Thesis
	Innovation Diffusion in Informal Communities	F	Namibia University of Science and Technology	Namibia	114,000	Pending Thesis
IKS	Screening of anti-hyperglycaemic characteristics of Ethnomedicinal plants in Namibia	F	University of Namibia	Namibia	120,000	Pending Thesis
	Isolation and Characterization Of The Major Metabolites From Roots, Leaves And Stems Of Tephrosia Lupinifolia To Be Used As Templates In The Synthesis Of Potential Antimalarial Analogues	M	University of Namibia	Namibia	120,000	Pending Thesis
Social Sciences	Technological Innovation and integration: enhancement of citizen sciences for delivery of WASH services in Southern Africa	M	Rhodes University	South Africa	86,100	Pending Thesis
	Men engaged: Exploring help-seeking for mental health in a corporate wellness programme	F	UNISA	South Africa	60,000	Pending Thesis
	Food Security and Quality of Life In Informal Settlements Of Katutura, Windhoek, Namibia.	F	University of Namibia	Namibia	120,000	Pending Thesis
	Disarmament, Demobilisation and Reintegration of Combatants in Namibia: War Veterans' Perceptions on Compensation	F	University of Witswatersrand	South Africa	91,800	Thesis Published Masters Achieved
Water	Does fog contribute to the biogeography and biology of Arthraerua leubnitziae in the central Namib Desert, Namibia?	F	University of Cape Town	South Africa	56,800	Pending Thesis
	Electrospun nanofibers loaded with Boehmite nanoparticles for removal of lead ions from contaminated water	M	Jagadguru Sri Shivarathreeswara Univeristy	India	50,000	Pending Thesis
	Electrospun Nano fibres for removal of microbes from contaminated water	F	Jagadguru Sri Shivarathreeswara Univeristy	India	50,000	Pending Thesis
	Assessment of Water quality and quantity monitoring systems along with bio-indecators with special reference to Phytoplankton diversity in Karanji Lake, Mysore City, India	F	Jagadguru Sri Shivarathreeswara Univeristy	India	57,030	Thesis Published
	Underground water quality assessment in Mysore City	M	Jagadguru Sri Shivarathreeswara Univeristy	India	48,000	Thesis Published
					TOTALS	6 Thesis 1 Publication 6 Masters Obtained 25 Pending Thesis

PART IV:
GOVERNANCE AND INTERNAL CAPACITY OF THE COMMISSION

12. INTERNAL AUDIT AND RISK MANAGEMENT

As part of its strategy execution, the NCRST strives to institute policy & risk management requirements to ensure consistency of Internal Governance. To this end specific intervention were instituted during the period under review. Our efforts is aimed at ensuring consistency of Internal Governance resulted the formulation of policy and processes to cover critical areas update and developed. During the period under review, the risk-based audit plan was developed and approved by the Commission. In terms of the implementation of the audit plan, the audit plan executed and audit reports presented. The Commission has a Risk Management Framework and Policy in place aimed at creating the required governance framework for the management of risk organisation wide and to ensure that risk management was entrenched across the organisation. In line with Risk Management Framework and Policy, the NCRST risk register was updated and approved during the year under review.

13. LEGAL COMPLIANCE

The NCRST is committed to ensure that compliance to applicable statutory requirements. In this connection, the NCRST has conducted a Legislative review workshop of the RST Act to facilitate amending of the Act. In terms of compliance with the RST Act, the NCTST has initiated the process of drafting the Compliance Risk Management Plan for the NCRST based on the audit conducted during the year under review. With the adoption of the Code of Conduct and Ethics Policy during 2014/15 financial year, it is imperative that its implementation becomes a reality. For this reason, the NCRST conducted a workshop for its staff in order to initiate process to implement the Code of Conduct and Ethics Policy. All NCRST management team members have also signed the declaration of outside interest in line with the Code of Conduct and Ethics Policy.

14. OPERATIONAL EXCELLENCE

The NCRST is committed to ensure that it develops internal capacity in terms of establishing key delivery processes & supporting systems to meet service & efficiency standards.

The above mentioned where achieve as a result of the following initiatives:

- Internal and External Stakeholder Survey and Finalization of Reports- in order to assess whether the NCRST is meeting its stakeholder expectations, it conducts a both internal and external stakeholder satisfaction survey.
- Development of Measures for Performance Management 2016/17 finalized-In order to ensure effective strategy implementation, the NCRST conducts periodic strategy review and performance

measurements. With regards to strategy review and performance measurement, the measures for the organisation performance for 2016/17 were completed.

- Management of Documents and Records Framework and Associated Templates was Approved.
- Facilitated and organized ISO 9001 Management Team Training on PDCA and Root Cause Analysis
- NCRST have been Admitted as an Organizational Member of the Quality Council of India (QCI) Professional Membership Scheme

15. STAKEHOLDER RELATIONS

The NCRST is committed to ensure that it fulfils its mandate related to public understanding of STI through an effective stakeholder engagement strategy. In this connection, the Stakeholder Engagement Plan to coordinate our deliberate efforts with our stakeholders has been formulated. The stakeholder engagement that were conducted during the year under review include various media campaigns and events to boost NCRST media based awareness.

16. HUMAN RESOURCES

In order for the NCRST to realise its overall strategic goals, it ensures that its human capital is poised to deliver superior results. A number of initiatives related to human resources and organisational development include the realignment of organisational structure to the Strategic Plan, implementation of Performance Management and recruitment were undertaken. These activities are elaborated in detailed in the sections below.

- Implementation of Occupational Health & Safety (OHS) activities.
- Training of the entire management and the Performance Management Committee on the Principles of the Balanced Scorecard, which led to the review of Strategy.
- Staff development efforts, specifically regarding in-house training interventions organised that saved the Commission a lot of money, as well the various employees who attended PDP trainings
- Funding of sixteen (16) employees towards their further studies.
- NCRST signed a recognition agreement with Namibian Public Workers' Union (NAPWU) for the employees in the bargaining unit
- Membership with the Namibian Employer Federation, will safeguard the Commission's interests as an employer.
- Review of the employees' funeral benefit.
- Effective and consistent implementation of various HR systems
- The employee satisfaction survey carried out and finalised
- Training policy and Procedures were revised and approved
- Performance Management Committee members appointed
- The Business Processes for HR & OD has been developed and approved
- Affirmative Action committee was established and trained

17. Fund and Financial Management

The NCRST is committed to the development of instrument to mobilising funds and to the effective management of financial resources to support Research and Development and Innovation activities in Namibia.

Highlight major achievement during 2016/17 financial year.

- Improved controls on procurement and payment processes for goods and services.
- Improved accounting processing and financial reporting.
- The Business Processes for corporate finance has been developed and approved
- Improved accounting processing and financial reporting.
- Improved completion of monthly management accounts
- Improved physical security around NCRST premises
- Enhanced Financial Reports Templates have been designed
- The Business Process for Fund Management and Investments developed and approved
- Business Case for the NRST Fund Regulations drafted

While the above-mentioned achievements are worth celebrating, the financial sustainability of the National Research, Science and Technology Fund (NRSTF) remains as challenge. As shown in Figure 11, the income for the NCRST based on the Medium-Term Expenditure Framework Allocation has decreased since 2014/15 while the NCRST expenditure continues to raise. The Commission is engaging the line Ministry and other key stakeholders to ensure the funds required are mobilised to enable to the Fund to honour its commitments, especially for the R&D and innovation Grants already awarded.

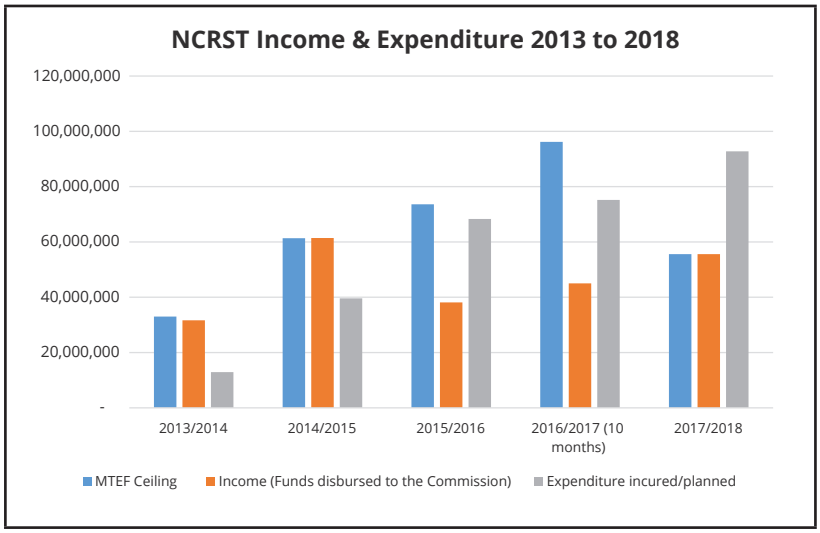


Figure 12. Funds allocation for the current financial year, 2013/14 - 2017/18

18 INFORMATION TECHNOLOGY

ICT Policies and Procedures and related administration. The following ICT related activities were performed during the period under review:

- The Business Process for ICT has been approved.
- Installation of network and PABX in new Headquarters
- Training for all approved ICT policies and procedures was conducted
- Developed ICT service catalogue and governance charter
- Improved ICT security
- Introduced SharePoint and provided training to employees
- Improved turnaround times on ICT services

PART V:
FINANCIAL REPORT

National Research, Science and Technology Fund (Administered by National Commission on Research,Science and Technology)
Annual Financial Statements for the year ended 31 March 2017

AUDIT COMPLIANCE CERTIFICATE ON THE ACCOUNTS

OF THE NATIONAL COMMISSION ON RESEARCH, SCIENCE AND TECHNOLOGY

FOR THE YEAR ENDED 31 MARCH 2017

The documentation as compiled by the firm Grand Namibia of Windhoek which is registered in terms of the Public Accountant's and Auditor's Act, 1951, who was appointed by the National Commission on Research, Science and Technology, has been examined by officials of the Office of the Auditor-General.

In terms of Section 26 & 27 of the Research, Science and Technology Act, 2004 (Act 23 of 2004), I certify that the above-mentioned audit of the annual financial statements for the year ended 31 March 2017 has been carried out to my satisfaction.

WINDHOEK, December 2017

JUNIAS ETUNA KANDJEKE
AUDITOR-GENERAL

GENERAL INFORMATION

Country of incorporationand domicile	Namibia
Nature of business and principal activities	To coordinate, facilitate and develop research science and technology in Namibia
Commissioners	Dr. Johannes Shoopala - Chairperson Ms. Elly Hamunyela - Deputy chairperson Ms. Josephine /Haubas Mr. Johannes Aipanda Mr. Uda Nakamhela Mr. Franz /Uirab Ms. Vicky Do cabo Dr. Martha Kandawa- Schulz Mr. Moses Molatendi Mr. Maitjiuavi Kavetu Ms. Graça D'Almeida
Business address	Platinium Street Prosperita Windhoek
Postal address	Private Bag 13253 Windhoek NAMIBIA
Bankers	First National Bank of Namibia Standard Bank
Auditors	Grand Namibia Registered Accountants and Auditors Chartered Accountants Namibia

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The reports and statements set out below comprise the annual financial statements presented to the shareholder:

Commissioners' Responsibilities and Approval

The Commissioners are required in terms of the Research,Science and Technology Act (Act No. 23 of 2004) to maintain adequate accounting records and are responsible for the content and integrity of the annual financial statements and related financial information included in this report. It is their responsibility to ensure that the annual financial statements fairly present the state of affairs of the Fund as at the end of the financial year and the results of its operations and cash flows for the period then ended, in conformity with International Financial Reporting Standards. The external auditors are engaged to express an independent opinion on the annual financial statements.

The annual financial statements are prepared in accordance with International Financial Reporting Standards and are based upon appropriate accounting policies consistently applied and supported by reasonable and prudent judgements and estimates.

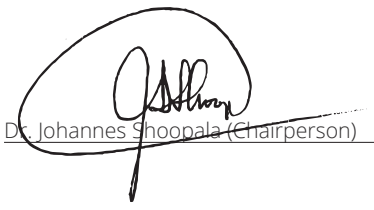
The Commissioners acknowledge that they are ultimately responsible for the system of internal financial control established by the Fund and place considerable importance on maintaining a strong control environment. To enable the Commissioners to meet these responsibilities, the sets standards for internal control aimed at reducing the risk of error or loss in a cost effective manner. The standards include the proper delegation of responsibilities within a clearly defined framework, effective accounting procedures and adequate segregation of duties to ensure an acceptable level of risk. These controls are monitored throughout the Fund and all employees are required to maintain the highest ethical standards in ensuring the Fund's business is conducted in a manner that in all reasonable circumstances is above reproach. The focus of risk management in the company is on identifying, assessing, managing and monitoring all known forms of risk across the company. While operating risk cannot be fully eliminated, the Fund endeavours to minimise it by ensuring that appropriate infrastructure, controls, systems and ethical behaviour are applied and managed within predetermined procedures and constraints.

The Commissioners are of the opinion, based on the information and explanations given by management, that the system of internal control provides reasonable assurance that the financial records may be relied on for the preparation of the annual financial statements. However, any system of internal financial control can provide only reasonable, and not absolute, assurance against material misstatement or loss.

The Commissioners have reviewed the Fund's cash flow forecast for the year to 31 March 2018 and, in the light of this review and the current financial position, they are satisfied that the Fund has or has access to adequate resources to continue in operational existence for the foreseeable future.

The external auditors are responsible for independently reviewing and reporting on the Fund's annual financial statements. The annual financial statements have been examined by the Fund's external auditors and their report is presented on page 4.

The annual financial statements set out on pages 5 to 21, which have been prepared on the going concern basis, were approved on 20 December 2017 and were signed on its behalf by:



Dr. Johannes Shoopala (Chairperson)

Dr Eino Mvula (Chief Executive Officer)

Independent Auditor's Report

To the Commissioners of National Commission On Research, Science and Technology

We have audited the annual financial statements of the National Research, Science and Technology Fund, as set out on pages 7 to 19, which comprise the statement of financial position as at 31 March 2017, and the statement of comprehensive income, statement of changes in equity and statement of cash flows for the year then ended, and the notes, comprising a summary of significant accounting policies and other explanatory information.

Commissioners' Responsibility for the Financial Statements

The Fund's Commissioners are responsible for the preparation and fair presentation of these annual financial statements in accordance with International Financial Reporting Standards, and requirements of the Research,Science and Technology Act (Act No. 23 of 2004), and for such internal control as the Commissioners determines is necessary to enable the preparation of annual financial statements that are free from material misstatements, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these annual financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance whether the annual financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual financial statements. The procedures selected depend on the auditors' judgement, including the assessment of the risks of material misstatement of the annual financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the annual financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the annual financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the annual financial statements present fairly, in all material respects, the financial position of the National Research, Science and Technology Fund as at 31 March 2017, and its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards, and the requirements of the Research,Science and Technology Act (Act No. 23 of 2004).

Emphasis of Matter

Without qualifying our opinion we draw attention to the note on going concern in the Commissioners Report. The Fund is dependent on grants from the Ministry of Higher Education Training and Innovation and it's ability to continue as a going concern is dependent on procuring funding from the Ministry. Unless, the Fund secures adequate funding from the Government to finance it's operational needs, a material uncertainty exists regarding the ability of the Fund to operate as a going concern in the foreseeable future.

GRAND NAMIBIA
Per: R Beukes (Partner)
Registered Accountants and Auditors
Chartered Accountants Namibia Windhoek
20 December 2017

The Commissioners submit their report for the year ended 31 March 2017.

1. Establishment of the National Research, Science and Technology Fund

The National Research, Science and Technology Fund has been established in terms of section 23 of the Research, Science and Technology Act (Act No. 23 of 2004).

The National Commission on Science, Research and Technology is responsible for the management of the Fund in terms of Section 24(2) of the said Act.

2. Review of activities

Main business and operations

Deficit of the Fund was N$ 14,654,272 (2016: N$ 25,259,089 deficit) for the year under review.

3. Going concern

We draw attention to the fact that at 31 March 2017, the Fund incurred a deficit of N$14 654 272 (2016: N$25 259 089 deficit).

The ability of the Fund to continue as a going concern is dependent on a number of factors. The most significant of these is that the Commissioners continue to procure funding for the ongoing operation of the Commission from the Ministry of Higher Education, Training and Innovation.

4. Events after the reporting period

The Commissioners are not aware of any matter or circumstance arising since the end of the financial year that has a material impact on the annual financial statements.

5. Commissioners

The Commissioners of the Fund during the year and to the date of this report are as follows:

Name	Appointment and Termination
Dr. Norton Titus (Chairperson)	Appointed 12 October2017
Ms. Josephine //Haubas (Deputy Chairperson)	Re-appointed 12 October 2017
Dr. Riaan SteenKamp	Appointed 12 October2017
Mr. J. M. Ashipala	Appointed 12 October2017
Dr. Tshali Iihete	Appointed 12 October2017
Ms.MirriamSezuni	Appointed 12 October2017
Mr. Joshua Kaumbi	Appointed 12 October2017
Ms. Sylvia Demas	Appointed 12 October2017
Mr. Benjamin Katjipuka	Appointed 12 October2017
Ms. Elly Hamunyela	Re-appointed 12 October 2017
Ms. Graça D'Almeida	Re-appointed 12 October 2017
Ms. Patience Saushni	Appointed 12 October2017
Ms. Johanna F. Andowa	Appointed 12 October2017
Mr. Johannes Aipanda	Terminated 11 May 2017
Dr. JohannesShoopala (Chairperson)	Terminated 11 May 2017

Mr. Uda Nakamhela	Terminated 11 May 2017
Mr. Franz! Uirab	Terminated 11 May 2017
Dr. Vicky Do Cabo	Terminated 11 May 2017
Dr. Martha Kandawa-Schulz	Terminated 11 May 2017
Mr. Moses Molatendi Moses	Terminated 11 May 2017
Mr. Maitjituavi Kavetu	Terminated 11 May 2017

6. Secretary

Ms Enid Keramen was appointed as secretary on 06 January 2014.

7. Auditors

Grand Namibia
Registered Accountants and Auditors
Chartered Accountants Namibia.

STATEMENT OF FINANCIAL POSITION

	2017 N$	2016 N$
Assets		
Non-Current Assets		
Property, plant and equipment	21,782,987	3,667,714
Intangible assets	209,058	30,309
	21,992,045	**3,698,023**
Current Assets		
Cash and cash equivalents	4,114,565	32,408,021
Total Assets	**26,106,610**	**36,106,044**
Equity and Liabilities		
Equity		
Retained income	13,884,637	28,538,909
Liabilities		
Non-Current Liabilities		
Deferred income	5,872,017	4,304,410
Current Liabilities		
Trade and other payables	5,490,706	2,423,521
Provisions	859,250	839,204
	6,349,956	**3,262,725**
Total Liabilities	**12,221,973**	**7,567,135**
Total Equity and Liabilities	**26,106,610**	**36,106,044**

STATEMENT OF COMPREHENSIVE INCOME

	2017 N$	2016 N$
Revenue	13,870	-
Other Income	58,736,109	41,465,288
Operating expenses	(73,796,359)	(68,290,475)
Operating (deficit)	**(15,046,380)**	**(26,825,187)**
Investment revenue	406,847	1,569,686
Finance costs	(14,739)	(3,589)
(Deficit) for the year	**(14,654,272)**	**(25,259,090)**

Statement of Changes in Equity

	Retained income N$	Total equity N$
Balance at 1 April 2015	**53,797,999**	**53,797,999**
Deficit for the year	(25,259,090)	(25,259,090)
Other comprehensive income	-	-
Total comprehensive Loss for the year	**(25,259,090)**	**(25,259,090)**
Balance at 1 April 2016	**28,538,909**	**28,538,909**
Deficit for the year	(14,654,272)	(14,654,272)
Balance at 31 March 2017	**13,884,637**	**13,884,637**

Statement of cash flows

	2017 N$	2016 N$
Cash flows from operating activities		
Cash receipts from Government and other sundry sources	60,317,587	41,182,259
Cash paid to suppliers and employees	(67,542,956)	(64,356,249)
Cash generated from (used in) operations	(7,225,369)	(23,173,990)
Interest income	406,847	1,569,686
Finance costs	(14,739)	(3,589)
Net cash from operating activities	**(6,833,261)**	**(21,607,893)**
Cash flows from investing activities		
Purchase of property, plant and equipment	(21,249,549)	(817,763)
Purchase of other intangible assets	(210,646)	-
Net cash from investing activities	**(21,460,195)**	**(817,763)**
Total cash movement for the year	**(28,293,456)**	**(22,425,656)**
Cash at the beginning of the year	32,408,021	54,833,677
Total cash at end of the year	**4,114,565**	**32,408,021**

1. Presentation of Annual Financial Statements

The annual financial statements have been prepared in accordance with International Financial Reporting Standards, and the Research,Science and Technology Act (Act No. 23 of 2004). The annual financial statements have been prepared on the historical cost basis, and incorporate the principal accounting policies set out below. They are presented in Namibia Dollars.

1.1 Property, plant and equipment

The cost of an item of property, plant and equipment is recognised as an asset when:

- it is probable that future economic benefits associated with the item will flow to the company;and
- the cost of the item can be measured reliably.

Property, plant and equipment is initially measured at cost.

Property, plant and equipment is carried at cost less accumulated depreciation and any impairment loss.

Property, plant and equipment are depreciated on the straight line basis over their expected useful lives to their estimated residual value.

The useful lives of items of property, plant and equipment have been assessed as follows:

Item	Average useful life
Furniture and fixtures	7 years
Motor vehicles	5 years
Office equipment	5 years
Computer equipment	3 years
Leasehold improvements	3 years (Lease period)
Laboratory Equipment	3 years

The depreciation charge for each period is recognised in profit or loss unless it is included in the carrying amount of another asset.

1.2 Intangible assets

An intangible asset is recognised when:

- it is probable that the expected future economic benefits that are attributable to the asset will flow to the Fund;and
- the cost of the asset can be measured reliably.

Intangible assets are initially recognised at cost.

Amortisation is provided to write down the intangible assets, on a straight line basis, to their residual values as follows:

Item	Useful life
Computer Software	3 years

1.3 Financial instruments

Initial recognition and measurement

The Fund classifies financial instruments, or their component parts, on initial recognition as a financial asset, a financial liability or an equity instrument in accordance with the substance of the contractual arrangement.

Financial instruments are measured initially at fair value, except for equity investments for which a fair value is not determinable, which are measured at cost and are classified as available-for-sale financial assets.

For financial instruments which are not at fair value through profit or loss, transaction costs are included in the initial measurement of the instrument.

Subsequent measurement
Financial instruments at fair value through profit or loss are subsequently measured at fair value, with gains and losses arising from changes in fair value being included in profit or loss for the period.

Trade and other receivables
Trade receivables are measured at initial recognition at fair value, and are subsequently measured at amortised cost using the effective interest rate method. Appropriate allowances for estimated irrecoverable amounts are recognised in profit or loss when there is objective evidence that the asset is impaired.

Trade and other receivables are classified as loans and receivables.

Trade and other payables
Trade payables are initially measured at fair value, and are subsequently measured at amortised cost, using the effective interest rate method.

Cash and cash equivalents
Cash and cash equivalents comprise cash on hand and demand deposits, and other short-term highly liquid investments that are readily convertible to a known amount of cash and are subject to an insignificant risk of changes in value. These are initially and subsequently recorded at fair value.

1.4 Provisions and contingencies

Provisions are recognised when:
- the Fund has a present obligation as a result of a past event;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation;and
- a reliable estimate can be made of the obligation.

The amount of a provision is the present value of the expenditure expected to be required to settle the obligation.

1.5 Government grants

Government grants are recognised as income over the periods necessary to match them with the related costs that they are intended to compensate.

Government grants related to assets, including non-monetary grants at fair value, are presented in the statement of financial position by setting up the grant as deferred income or by deducting the grant in arriving at the carrying amount of the asset.

1.6 Revenue

Revenue from the sale of goods is recognised when all the following conditions have been satisfied:

- the Fund has transferred to the buyer the significant risks and rewards of ownership of the goods;
- the Fund retains neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the Fund;and
- the costs incurred or to be incurred in respect of the transaction can be measured reliably.

When the outcome of a transaction involving the rendering of services can be estimated reliably, revenue associated with the transaction is recognised by reference to the stage of completion of the transaction at the end of the reporting period. The outcome of a transaction can be estimated reliably when all the following conditions are satisfied:

- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the transaction will flow to the company;
- the stage of completion of the transaction at the end of the reporting period can be measured reliably;and
- the costs incurred for the transaction and the costs to complete the transaction can be measured reliably.

When the outcome of the transaction involving the rendering of services cannot be estimated reliably, revenue shall be recognised only to the extent of the expenses recognised that are recoverable.

Revenue is measured at the fair value of the consideration received or receivable and represents the amounts receivable for goods and services provided in the normal course of business, net of trade discounts and volume rebates, and value added tax.

Interest is recognised, in profit or loss, using the effective interest rate method.

Notes to the Annual Financial Statements

	2017 N$	2016 N$

2. New Standards and Interpretations

2.1 Standards and interpretations not yeteffective

The institution has chosen not to early adopt the following standards and interpretations, which have been published and are mandatory for the institution accounting periods beginning on or after 01 April 2015 or later periods
:

New and revised as at 31 March 2017

The following table contains effective dates of IFRS's and the recent IAS's, which have not been early adopted by the Commission and might affect future financial periods:

New standards

IAS/IFRS	Pronouncement	Effective Date
IFRS 15 *Revenue from Contracts from Customers*	New standard that requires entities to recognise revenue to depict the transfer of promised goods or services to customers in an amount that reflectsthe consideration to which the entity expects to be entitled in exchange for those goods or services. This core principle is achieved through a five step methodology that is required to be applied to all contracts with customers.	01 January 2018
IFRS 16 *Leases*	New standard that introduces a single lessee accounting model and requires lessee to recognise assets and liabilities for all leases with a term of more than 12 months, unless the underlying asset is of low value	01 January 2019
IFRS 9	Classification and measurement of financial assets. Incorprating revised requirements for the classification and measurement of financial liabilites, and carrying over the existing derecognition requirements from the IAS 39 Financial Instruments: Recognition and Measurement.	01 January 2018

Amendments in International Accounting Standards ("IAS") and IFRS

IAS/IFRS	Pronouncement	Effective Date
IFRS 7 *Statement of Cash Flows*	Amendments requiring entities to disclose information about changes in their financial liabilities.The additional disclosures will help investors to evaluate changes in liabilities arising from financing activities, including changes from cash flows and and non-cash changes (such as foreign exchange gains or losses).	01 January 2017

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

	2017 N$	2016 N$

3. PROPERTY, PLANT AND EQUIPMENT

	2017			2016		
	Cost / Valuation	Accumulated depreciation	Carrying value	Cost / Valuation	Accumulated depreciation	Carrying value
Furniture and fixtures	2,349,285	(719,109)	1,630,176	1,764,943	(435,215)	1,329,728
Motor vehicles	1,415,127	(1,189,109)	226,018	1,415,127	(906,716)	508,411
Office equipment	132,480	(80,644)	51,836	132,480	(53,896)	78,584
Computer Equipment	3,282,733	(2,501,914)	780,819	3,103,526	(1,352,535)	1,750,991
Leasehold improvements	4,498,475	(1,289,274)	3,209,201	-	-	-
Laboratory Equipment	1,881,769	(102,588)	1,779,181	-	-	-
Work in progress	14,105,756	-	14,105,756	-	-	-
Total	**27,665,625**	**(5,882,638)**	**21,782,987**	**6,416,076**	**(2,748,362)**	**3,667,714**

Reconciliation of property, plant and equipment - 2017

	Opening balance	Additions	Depreciation	Total
Furniture and fixtures	1,329,728	584,342	(283,894)	1,630,176
Motor vehicles	508,411	-	(282,393)	226,018
Office equipment	78,584	-	(26,748)	51,836
Computer Equipment	1,750,991	179,207	(1,149,379)	780,819
Leasehold improvements	-	4,498,475	(1,289,274)	3,209,201
Laboratory Equipment	-	1,881,769	(102,588)	1,779,181
Work in progress	-	14,105,756	-	14,105,756
	3,667,714	**21,249,549**	**(3,134,276)**	**21,782,987**

Reconciliation of property, plant and equipment - 2016

	Opening balance	Additions	Depreciation	Total
Furniture and fixtures	1,297,352	275,360	(242,984)	1,329,728
Motor vehicles	791,436	-	(283,025)	508,411
Office equipment	88,436	14,797	(24,649)	78,584
Computer Equipment	2,148,968	527,606	(925,583)	1,750,991
	4,326,192	**817,763**	**(1,476,241)**	**3,667,714**

Work in progress is a building under construction for the Fund.

4. INTANGIBLE ASSETS

	2017			2016		
	Cost / Valuation	Accumulated amortisation	Carrying value	Cost / Valuation	Accumulated amortisation	Carrying value
Computer software, other	455,476	(246,418)	209,058	244,830	(214,521)	30,309

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

	2017 N$	2016 N$

Reconciliation of intangible assets - 2017

	Opening balance	Additions	Amortisation	Total
Computer software	30,309	210,646	(31,897)	209,058

	Opening balance	Amortisation	Total
Computer software	111,918	(81,609)	30,309

5. CASH AND CASH EQUIVALENTS

Cash and cash equivalents consist of:		
Bank balances	4,114,565	32,408,021

6. TRADE AND OTHER RECEIVABLES

VAT Receivable	-	3,342,666
Provision for write off-VAT Receivable	-	(3,342,666)
	-	**-**

7. TRADE AND OTHER PAYABLES

Trade payables	4,722,840	2,404,831
Payroll Accruals	759,181	18,690
Deposit received	8,685	-
	5,490,706	**2,423,521**

8. PROVISIONS

Reconciliation of provisions - 2017

	Opening balance	Additions	Total
Leave Provision	839,204	20,046	859,250

Reconciliation of provisions - 2016

	Opening balance	Additions	Total
Leave Provision	605,980	233,224	39,204

Leave pay is only paid out when the employee resigns. Leave pay is paid out based on the days accumulated.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

	2017 N$	2016 N$

9. DEFERRED INCOME

Grants related to assets:		
Carrying Value of Motor vehicles financed by the Ministry of Education	226,017	508,410
Development Grant - 2014	3,796,000	3,796,000
Development Grant - 2017	1,850,000	-
Closing balance	**5,872,017**	**4,304,410**
Opening balance	4,304,410	45,787,436
Additions	1,850,000	-
Release from deferred income	(282,393)	(283,026)
Closing balance	**5,872,017**	**4,304,410**

Deferred Revenue includes Development Grant of N$ 3 796 000 received in 2014 but not yet utilised. An amount of N$ 1 850 000 was received during the year.

10. OPERATING (DEFICIT)

Operating (deficit) for the year is stated after accounting for the following:

Operating lease charges		
Premises		
• Contractual amounts	3,378,746	1,977,680
Amortisation onintangible assets	31,897	-
Depreciation on property, plantand equipment	3,134,276	1,557,820
Employee costs	29,456,702	26,305,396
Research and development	761,296	1,482,861

11. REVENUE

Registration fees	13,870	-

12. OTHER INCOME

Government Grant	55,280,000	38,139,950
Sundry income	203,502	281,256
Deferred Income Recognised	282,393	283,025
Government Grant- Rental	1,356,981	1,233,619
Resource Mobilisation Funds	1,613,233	1,527,437
Total other income	**58,736,109**	**41,465,288**

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

	2017 N$	2016 N$

13. INVESTMENT REVENUE

Interest revenue		
Bank	406,847	1,569,686

14. RELATED PARTIES

Relationships

Related party transactions		
Commissioners Fees	1,247,449	967,135
Government Grants		
Ministry of Higher Education, Training and Innovation (operating lease grants is paid for by the Ministry of Works and Transport)	56,636,981	39,373,569
Key Management		
Salaries	3,751,515	3,370,632

15. CASH GENERATED FROM (USED IN) OPERATIONS

(Deficit)/Surplus for the year	(14,654,272)	(25,259,090)
Adjustments for:		
Depreciation and amortisation	3,166,173	1,557,820
Interest received	(406,847)	(1,569,686)
Finance costs	14,739	3,589
Movements in provisions	20,046	233,224
Release of deferred income	(282,393)	(283,028)
Trade and other receivables	-	1,346,231
Trade and other payables	3,067,185	796,949
	(7,225,369)	**(23,173,990)**

16. RISK MANAGEMENT

Liquidity risk

The company is reliant on government funding and the absence of adequate alternative sources of funds implies that the Fund could potentially be exposed to liquidity risk in the event that the government struggles financially or there is a delay in the disbursements of grants.

Interest rate risk

The Fund is exposed to interest rate risk as a result of excess cash holdings invested at variable rates.

Credit risk

Credit risk consists mainly of cash deposits. The Fund only deposits cash with major banks with high quality credit standing.

NOTES TO THE ANNUAL FINANCIAL STATEMENTS

	2017 N$	2016 N$

17. FINANCIAL ASSETS BYCATEGORY

The accounting policies for financial instruments have been applied to the line items below:

2017

	Loans and receivables	Total
	4,114,565	4,114,565

2016

	Loans and receivables	Total
	32,408,021	32,408,021

18. FINANCIAL LIABILITIES BY CATEGORY

The accounting policies for financial instruments have been applied to the line items below:

2017

	Financial liabilities at amortised cost	Total
	5,490,706	5,490,706

2016

	Financial liabilities at amortised cost	Total
	2,423,521	2,423,521

DETAILED INCOME STATEMENT

		2017 N$	2016 N$
Revenue			
Registration fees		13,870	-
Other income			
Sundry Income		1,816,735	1,808,693
Government Grant-Operating lease		1,356,981	1,233,619
Deferred Income Recognised		282,393	283,025
Interest received	13	406,847	1,569,686
Government grants		55,280,000	38,139,951
		59,142,956	**43,034,974**
Expenses (Refer to page 21)		**(73,796,359)**	**(68,290,474)**
Operating (deficit)/surplus	10	**(14,639,533)**	**(25,255,500)**
Finance costs		(14,739)	(3,589)
(Deficit)/Surplus for the year		**(14,654,272)**	**(25,259,089)**

DETAILED INCOME STATEMENT

	2017 N$	2016 N$
Operating expenses		
Advertising	(3,400,421)	(1,387,976)
Air travel costs	(2,570,302)	(3,116,014)
Astrio Quiz	(1,057,088)	(463,211)
Auditors remuneration	(78,450)	(56,000)
Bad debts	(711,935)	(3,342,666)
Bank charges	(59,427)	(40,606)
Bilateral and Multilateral	(548,132)	(1,865,396)
Board and Councils Meetings	(30,162)	(40,488)
Cleaning	(268,379)	(160,820)
Computer expenses	(1,723,803)	(1,948,728)
Consulting fees	(226,679)	(3,241,945)
Depreciation, amortisation and impairments	(3,166,173)	(1,557,820)
Electricity and Water	(273,779)	(412,877)
Employee cost	(29,456,702)	(26,305,396)
Estate Repairs and Maintenance	(627,397)	(2,086,549)
General Expense	(458,199)	-
Grants on Requests	(4,941,496)	(4,386,687)
ICGEB Membership Fees	(13,083)	(39,840)
IST Africa	(23,330)	(14,477)
Insurance	(265,265)	(341,872)
Lease rentals on operating lease	(3,378,746)	(1,977,680)
Leasing and Hiring	(26,390)	(244,140)
Local Travel and Accomodation Cost	(1,564,490)	(1,452,513)
Magazines, books and periodicals	(10,200)	(26,503)
National Biotechnology Programme	(459,187)	(320,000)
National IKS and Plato Project	(505,023)	(294,132)
National Science Fair	(2,955,455)	(5,323,522)
Office Expenses	(275,764)	(280,267)
Pearl Millet Project	(77,142)	(294,131)
Petrol and oil	(121,639)	(153,767)
Platform for linkage creation	(1,327,038)	(587,121)
Postage	(27,358)	(13,063)
Printing and stationery	(771,953)	(550,482)
Project Management Expense	(1,044,206)	(260,068)
QMS Programme	(857,938)	-
Relocation Expenses	(431,402)	34,349
Research and development costs	(761,296)	(1,482,861)
STI Capacity, legal and policy	(2,363,052)	(1,070,926)
Security	(341,176)	(234,910)
Software expenses	(215,010)	-
Space Science Project	(364,448)	(144,715)
Staff welfare	(149,350)	(447,559)
Survey and Benchmarking	(720,025)	-
Telephone and fax	(678,964)	(578,632)
Training and Workshops	(4,330,467)	(1,662,901)
Vehicle repairs and Maintenance	(138,438)	(115,562)
	(73,796,359)	**(68,290,474)**