

2018 ANNUAL REPORT

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ACRONYMS

AGM Annual General Meeting

ARMC Audit and Risk Management Committee

AU African Union

EMA Environmental Management Agency

FAHRC Finance Administration and Human Resources Committee

FRC Foreign Researchers Committee

GDP Gross Domestic Product

GRC Global Research Council

HAS Harare Agricultural Show

IP Intellectual Property

NRDZ National Research Database of Zimbabwe

NRPSPC National Research Prioritisation and Strategic Planning Committee

NSTIS National Science Technology and Innovation System

MHTESTD Ministry of Higher and Tertiary Education Science and Technology Development

MSU Midlands State University

NUST National University of Science and Technology

OPC Office of the President and Cabinet

R&D Research and Development

RCCC Research Control and Coordination Committee

RCZ Research Council of Zimbabwe

RIOSET Research and Intellectual Outputs, Science, Engineering and Technology Expo

RPPRMC Research Promotion, Publicity and Resource Mobilisation Committee

RRA Rapid Results Approach

RRI Rapid Results Initiative

SADC Southern Africa Development Community

SANBIO Southern African Networks on Biosciences

SARIMA Southern African Research and Innovation Management Association

SGCs Science Granting Councils

SGCI Science Granting Councils Initiative

SIRDC Scientific Industrial Research and Development Centre

SMEs Small to Medium Enterprises

STI Science, Technology and Innovation

TSP Transitional Stabilisation Programme

TRB Tobacco Research Board

TWG Technical Working Group

UZ University of Zimbabwe

ZAS Zimbabwe Academy of Sciences

ZERA Zimbabwe Energy Regulatory Authority

ZIRS Zimbabwe International Research Symposium

ZITF Zimbabwe International Trade Fair

CORPORATE PROFILE AND STRATEGIC ORIENTATION

The Research Council of Zimbabwe (RCZ) plays an intermediary and integration role across the National Science Technology and Innovation System (NSTIS). RCZ has the capacity to catalyse demand-driven Research and Development (R&D) in support of knowledge generation, research commercialisation and innovation. These efforts subsequently lead to the production of goods and services that benefit society in support of the National Vision of becoming a Middle Income Economy by 2030. RCZ derives its functions and powers relating to the promotion, direction, supervision and coordination of research from the Research Act [Chapter 10:22]

In the Strategic Plan (2019-2023), RCZ places renewed emphasis on meeting aspirations of the Country's Second Republic whose vision is for Zimbabwe to become a Middle Income Economy by 2030. RCZ would in the pursuit of this vision, promote, coordinate and direct demand-driven research aligned to the National Research Agenda. Collaborations with stakeholders which include, *inter-*alia, research institutions, academia and industry will be directed towards the production of goods and services for socio-economic development. Transformation of the country's economy is envisaged to be premised on a massive industrialisation drive in which a robust and functional National Science Technology and Innovation System (NSTIS) is critical. The framework and design of the Plan followed the Integrated Results Based Management (IRBM) System which focuses more on results than activities. IRBM was adopted by Government in 2005, as a strategy to guarantee service delivery.

In the process, four Key Results Areas (KRAs) were identified to guide effective implementation of the 2019-2023 Strategic Plan. The four KRAs for the Plan speak to i) Research Results Utilisation; ii) Research Promotion, Direction, Supervision & Coordination; iii) Information Dissemination; and iv) Organisational Capacity Development. Successful implementation of these KRAs will ultimately contribute to the realisation of the Country's Vision 2030.

Research and Development (R&D) is a critical success factor in attainment of socio-economic development with RCZ playing a leading role. Government's commitment to allocate at least 1% of the Gross Domestic Product (GDP) towards R&D should be guided by the Disbursement Framework agreed upon by stakeholders in the NSTIS. There was consensus among stakeholders that RCZ should be the dedicated institution to disburse R&D funds as the apex and competent organ of the state. RCZ has a robust R&D Management system which has been piloted and perfected to international standards. Funding of R&D will be informed by the National Research Priorities (NRPs) namely Social Sciences and Humanities; Sustainable Environment and Resource Management; Promoting and Maintaining Good Health; and National Security of Zimbabwe.

Like its predecessor, the 2019-2023 Strategic Plan was guided by the Nation's Vision, Regional and International goals. Execution of these strategic targets is anticipated to lead to rapid industrialisation. The Transitional Stabilisation Programme (2018-2020) will also be a reference point. The Research Act [*Chapter 10:22*], 2nd Science Technology and Innovation Policy of 2012 and NRPs will be the mainstay during implementation of the plan.

VISION

To be the pivotal leader steering demand-driven research for wealth creation and the sustainable development of Zimbabwe by 2030.

MISSION

To contribute to the knowledge economy through promoting, directing, supervising, and co-ordinating demand-driven research and the translation of research results into goods and services.

VALUE STATEMENT

As RCZ strives to attain its Vision and Mission, it has adopted the following values to guide the way in which the Council functions and behaves:

- 1. Innovation
- 2. Integrity
- 3. Professionalism
- 4. Unhu/Ubuntu

RCZ Board



Dr M. J. Tumbare Board Chairman



Mrs S. Muzite Executive Director



Prof. I. Sithole-Niang Board Vice Chairman



Mrs M.D. Chasi



Mr S.C. Chigwamba



Prof. H. Chimhundu



Ms. M. Chitewe



Dr D. Garwe



Mrs J. Gombe



Mr D F H Murangari



Mr S. Nyarota



Mr C.A. Samkange



Prof. S. Sibanda

Chairman's Statement

Introduction

Dear Valued Shareholders.

On behalf of the Research Council of Zimbabwe (RCZ) Board, I am pleased to present the Annual Report of the organisation for the year ended 31 December 2018. Building from efforts of the previous year, there were significant achievements realised in 2018 on enhancing functionality of the National Science Technology and Innovation System (NSTIS). RCZ re-configured by way of formulating a five year Strategic Plan 2019-2023, strengthened its role to guarantee functionality of the NSTIS and maintained its relationships with local and international collaborating partners. The year 2018 was characterised by significant strides to maintain equilibrium on the nexus between Research and Industry, a key attribute for the transformative trajectory for the economy of Zimbabwe. This was mainly achieved through RCZ key programmes and initiatives such as Research Prioritisation, Symposia, the National Research Database of Zimbabwe (NRDZ), and engagement of stakeholders within the NSTIS.

Key Milestones for the year 2018

Re-configuration of the RCZ strategic direction occurred through the formulation of a five year Strategic Plan 2019-2023 replacing the previous plan which was expiring in 2018. The framework and design of the Plan followed the Integrated Results Based Management (IRBM) System which focuses more on results than activities. This deliberate Plan was formulated against the quest of rapid industrialisation of Zimbabwe underpinned by a functional NSTIS.

In pursuit of promoting, coordinating and directing demand-driven research aligned to the National Research Agenda, RCZ in collaboration with the Zimbabwe Energy Regulatory Authority (ZERA) continued with the partnership on funding research in the Renewable Energy sector. As a strategy to harness proposals relevant to the calls, RCZ and ZERA convened a Workshop in 2018 to orient researchers to the funder's requirements. This process was to subsequently inform the 2019 Call.

Collaborations with stakeholders which include, *inter*-alia, research institutions, academia and industry were directed towards the production of goods and services for socio-economic development. Under the auspices of the Rapid Results Approach (RRA), RCZ held two Rapid Results Initiatives (RRIs) on enhancing functionality of the NSTIS. The major objective of the whole exercise from 4 October 2017 i.e. the Great Indaba up to 8 May 2018, end date of the 2nd RRI was an effort to break silos, synergise and create partnerships in the NSTIS for wealth creation. The work on functionality of the NSTIS triggered a lot of activity and responses in the System. An example was the meeting of the Chancellor and Vice Chancellors where the emphasis was on strengthening linkages between Industry and Academia for sustainable growth. The RRIs were not an end in themselves but a seed for continuous work towards full functionality of the NSTIS.

Efforts to create linkages between the National Research Database of Zimbabwe (NRDZ) and institutional repositories were continued in 2018. RCZ signed an MOU with Chinhoyi University of Technology (CUT) increasing the number of collaborating partners to seven. The NRDZ has proved to be a valuable one-stop-shop for accessing results of research projects conducted in the country. In addition, the NRDZ has provided stakeholders in the NSTIS with a platform for collaborations and partnerships.

Safeguarding national interests and facilitating capacity building of local scientists, remained a key priority as RCZ made some significant inroads towards executing the statutory requirement on

registering foreign researchers. The Research Act [Chapter 10: 22] Section 27 provides for registration of foreign researchers. In that regard, the Council strengthened its registration system by updating registration instruments and also facilitating capacitation of institutions of affiliation. Two hundred and eighty-seven (287) registration certificates were issued in the year 2018 marking a 27% increase relative to the 2017 performance where two hundred and twenty-six (226) certificates were issued. All applications received in the year were approved.

Strengthening of research management systems was achieved through continued participation in the Science Granting Council's Initiative (SGCI) jointly funded by the United Kingdom (UK) Department for International Development (DFID), Canada International Development Research Centre (IDRC), and South Africa (SA) National Research Foundation (NRF). The main objective of the initiative of strengthening the capacities of Science Granting Councils (SGCs) in sub-Saharan Africa, including RCZ has been met. RCZ has been capacitated through a number of delivery modes such as workshops and online short courses. The courses funded by the Initiative and are being run under Objective One (1) i.e. strengthening Research Management are being coordinated by the Southern African Research and Innovation Management Association (SARIMA) in partnership with the University of Witwatersrand (Wits) and Digital Campus. The courses included Fundamentals of Research Management and Administration, Research Grants and Contracts Management, Introduction to Intellectual Property, Technology Transfer and Commercialisation, Gender in Science, Technology and Innovation, Programme Evaluation, and Research Ethics and Integrity.

Outlook and Strategy

Going forward, RCZ will continue to pursue opportunities to keep abreast with the evolving dynamics of the R&D Ecosystem. In the process, RCZ will optimise its corporate strategy of creating long-term value for stakeholders through shaping the National Research Agenda and ultimately impacted positively on the country's vision of becoming an upper middle income economy by 2030.

Appreciation

I would like to take this opportunity to extend my sincere gratitude to our shareholders, stakeholders and collaborating partners for their continuous support, and thank my fellow Board Members for their concerted effort and insights throughout 2018. The growth of RCZ would not be attained without the efforts from our hardworking Executive Director and the unwavering commitment of our staff.

Ladies and Gentleman, I present to you the 2018 Annual Report.

Dr. Eng. M.J. Tumbare, Pr. Eng., CEng. Board Chairman

Executive Director's Review of 2018 Operations

Introduction

The Research Council of Zimbabwe (RCZ) recorded a number of achievements in the year 2018. Within the framework of the Zimbabwe National Geo-Spatial and Space Agency (ZINGSA) Programme being implemented under the 100 days initiative, RCZ provided an implementation framework for the seven (7) projects. The projects progressed well in 2018 and are at various stages of completion. The 12th Zimbabwe International Research Symposium (ZIRS) preparations were accomplished in 2018. This mainly comprised Organising and Sub-Committee meetings, advertising of Calls for Abstracts and Full Papers, resource mobilisation, and publicity of the symposium. An Integrated Results Based Management (IRBM) compliant Strategic Plan (2019 to 2023) was also developed.

Corporate Overview and Performance Highlights

The 12th ZIRS preparations were commenced during the first quarter of 2018. Key deliverables included constitution of the Organising Committee from which various Sub-Committees were formed. RCZ advertised the Call for Abstracts, which process was followed by a peer review process of the full papers for the symposium. In the second quarter, the Call for Award nominations was subsequently advertised. The other key activities executed included a publicity drive and resource mobilisation.

The National Research Database of Zimbabwe (NRDZ) and the RCZ website were some of the platforms used to disseminate research findings by the Council. In addition to the upgrades effected on the NRDZ, RCZ revamped its website with a view for it to be more interactive. Guidelines for conducting research in Zimbabwe, associated instruments and calls for research funding and abstracts were uploaded on the website recording a substantial increase on the traffic of online visitors. Periodic maintenance of the sites anchored on reliable internet connectivity gave stakeholders an opportunity to interact with RCZ at all hours.

Registration of Foreign Researchers in terms of Section 27 of the Research Act [Chapter 10:22] was strengthened in 2018 riding on an improved registration system premised on increased engagements with stakeholders. The Committee improved turnaround times and convened monthly meetings as planned.

RCZ fulfilled the obligation to provide its shareholders with transparent updates on its programmes through convening the 3rd Annual General Meeting (AGM). The AGM held in terms of the Public Entities Corporate Governance Act [*Chapter 10: 31*], was attended by shareholders from the Office of the President and Cabinet (OPC), and the Ministry of Finance and Economic Development (MOFED). Stakeholders from the National Economic Consultative Forum (NECF), Scientific and Industrial, Research and Development Centre (SIRDC), the Agriculture Research Council (ARC), the Medical Research Council of Zimbabwe (MRCZ), TelOne and others also attended. One key resolution of the AGM was the need for Government to allocate at least 1% of the Gross Domestic Product (GDP) towards R&D. There was consensus among the stakeholders that RCZ was the dedicated institution to disburse research funds.

The Future

In the year to come, there are many exciting developments and challenging assignments:

• Hosting of the 12th Zimbabwe International Research Symposium.

- Monitoring of research projects under the Zimbabwe National Geo-Spatial and Space Agency (ZINGSA) Programme.
- Conducting a National Research and Development (R&D) survey.
- Institutionalising IRBM in all council programmes.

I thank the Board and staff for their hard work and dedication.

Susan Muzite (Mrs) Executive Director

NATIONAL RESEARCH PRIORITISATION AND STRATEGIC PLANNING COMMITTEE

The National Research Prioritisation and Strategic Planning Committee (NRPSPC) is the strategic arm of RCZ which advises the Council on the national research policy matters. The Committee is seized with a responsibility to provide a framework for research prioritisation and recommends creation of new research councils. In the year 2018, the work of the Committee's efforts were directed towards upscaling implementation of the RRIs on functionality of the NSTIS, formulation of an IRBM-compliant Strategic Plan (2019-2023), convening an Annual General Meeting (AGM), establishment of the Zimbabwe National Geospatial and Space Agency (ZINGSA), and facilitate continued participation by RCZ in the Science Granting Councils Initiative (SGCI).

Functionality of the National Science Technology and Innovation System (NSTIS)

Building from the Great Indaba and first Rapid Results Initiative (RRI) held in 2017, there was consensus to conduct another 100 day RRI focussing on unresolved issues form the first RRI. Specifically, the second RRI conducted in 2018 focussed on Intellectual Property, Commercialisation of research output and brought to the fore more strategies on mobilising funds for R&D. All these targets were met through the efforts of three Technical Working Groups (TWGs) namely R&D Funding, Intellectual Property, and Research Commercialisation. Table 1 outlines a summary of results and recommendations from each of the three TWGs.

Table 1: Summary of Results and Recommendations from the 2nd RRI

Technical Working Group	Achievements	Outcomes
Research & Development Funding	Development of resource mobilisation strategy, Presidential Appeal to mobilise funds for R&D and Concept on the National R&D Survey	Presidential Appeal Strategy was submitted and a Position Paper on R&D Incentives was developed.
Intellectual Property (IP)	Collaborations to host IP Awareness Seminars where fifty three (53) institutions were engaged out of a targeted thirty (30)	Simplified brochures on IP Registration for Patents, Trademarks, and Industrial Design and Utility models. Three Tier pricing structure for registering IP Rights. Review of Patents, Trademarks and Industrial design laws to be more beneficial to SMEs and locals. Formulation of Utility Model laws.
Research Commercialisation	Creation of Smart partnerships	Research Commercialisation
	between Industry and Academia.	Handbook.
	TelOne and Chinhoyi University of	Commercialisation Routes

Technical Working Group	Achievements	Outcomes	
	Technology (CUT): TelOne has selected new technologies for possible commercialisation.	mapped. Incentives for commercialisation.	
	TelOne and Bindura University of Science Education: TelOne marketing the renewable energy stove developed by BUSE.	sharing).	
	TelOne and Chamber of SMEs: TelOne is developing a marketing application for SMEs.		
	SIRDC and IDCZ: Commercialisation processes for two projects completed i.e. Food processing and mill balls.		
	Stakeholder Consultative Workshop on Research Commercialisation was held.		

The RRIs created a good launch pad for continuing reform and improvement post the 200 days. As a response to the RRI efforts, the Government allocated substantial amount (0.3 % of GDP) of resources towards R&D in 2018. This gesture by Government has enabled RCZ to put a plan for RCZ to conduct a National R&D Survey to obtain complete data on research being conducted in Zimbabwe. The Survey is critical as the information will provide a vital tool to aid decision making by policy makers, particularly funding of R&D.

Simplified brochures on IP Registration for Patents, Trademarks, Industrial Design and Utility models were produced and have been uploaded on the RCZ website. The Ministry of Justice, Legal and Parliamentary Affairs have accepted the brochures. The IP Policy was subsequently launched during the third quarter of 2018.

The first edition of the Research Commercialisation Handbook was developed and posted on the RCZ website whilst hard copies were submitted to Government for information. As part of capacitating stakeholders in the NSTIS, RCZ will ensure wide distribution of the hand book at various for such as the Zimbabwe International Trade Fair (ZITF), Harare Agricultural Show (HAS) and at the 12th Zimbabwe International Research Symposium (ZIRS).

RRI in Pictures





The Strategic Leader, Mrs S Muzite, articulating the NSTIS

Seated in middle of the front row, the Results Leader, Dr M J Tumbare





IDCZ General Manager, Mr B Kumalo; NECF Executive Secretary, Mr N Chakanetsa and RCZ Board Members at the RRI Report Back Workshop

Dr J Kateera, then Secretary for Presidential Affairs, Monitoring and Implementation of Government Programmes

Formulation of an IRBM-compliant Strategic Plan (2019-2023)

RCZ Secretariat received an Integrated Results Based Management (IRBM) training session from 8 to 12 September 2018. This followed the Board's resolution to fully embrace principles of IRBM. The training was characterised by training on principles of IRBM and compilation of the 2019 to 2013 Strategic Plan, the successor to the 2014 -2018 Plan, which was drawing to an end. The Public Service Commission's Highlands Institute of Manpower Planning and Development facilitated the training sessions.

Strategic Planning Workshop Training in Pictures



The RCZ Board then received training from 17 to 18 September 2018, during which period they provided input on the Strategic Plan drafted by the Secretariat. Four Key Results Areas (KRAs) were identified to guide effective implementation of the 2019-2023 Strategic Plan. The four KRAs for the Plan are i) Research Results Utilisation; ii) Research Promotion, Direction, Supervision & Coordination; iii) Information Dissemination; and iv) Organisational Capacity Development. In their deliberations, the Board agreed that the successful implementation of these KRAs would ultimately contribute to the realisation of the Country's Vision 2030.

The Board then formulated the Strategic Plan using IRBM principles. The new Vision, Mission and Values for RCZ are as follows;

Vision

"To be the pivotal leader steering demand-driven research for wealth creation and the sustainable development of Zimbabwe by 2030"

Mission

"To contribute to the knowledge economy through promoting, directing, supervising, and co-ordinating demand-driven research and the translation of research results into goods and services"

RCZ's values were streamlined to Innovation, Integrity, Professionalism, and Unhu/Ubuntu. In a nutshell, RCZ 2019-2023 Strategic Plan identified four KRAs, five goals, fourteen objectives and associated outputs and outcomes. In the long term, RCZ efforts will ultimately improve the quality of life for its citizens and improve goods and services.



RCZ Board Members following proceedings during the Strategic Training and Planning Workshop in Kadoma

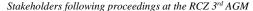
Annual General Meeting

Notwithstanding the insurmountable challenges, RCZ still managed to convene its third Annual General Meeting in 2018. Shareholders from the Office of the President and Cabinet (OPC) and the Ministry of Finance and Economic Development, were present. Amongst the topical issues discussed was the need for Government to release at least 1% of the GDP towards R&D in line with commitments espoused in various policy 2^{nd} instruments such as the Science, Technology and Innovation Policy of 2012. RCZ was urged to increase its visibility as one of the strategies to attract more resources to fund R&D from both Government and the

private sector. Stakeholders concurred that rapid industrial growth, reducing exports and growing the value addition chain, as envisioned by His Excellency, the President Cde E.D. Mnangagwa, could not be achieved without R&D. The Audited Financial Statements for the Council for the year ended 31 December 2017 and Chairman's Report, were approved and adopted. The OPC shareholder representative, commended the Board and Management for convening the 3rd AGM and for another productive year despite the difficult circumstances. There was confidence that RCZ as a key organisation, could also benefit from Government's renewed bilateral the

engagements with external organisations. The support required could not be overemphasised given the pivotal role of Council as an organisation and that of R&D in general.







Shareholders, RCZ Chairman and Executive Director at the 3rd AGM

Establishment of the Zimbabwe National Geospatial and Space Agency

Government established the Zimbabwe National Geospatial and Space Agency in 2018, following the request from the Minister of Higher and Tertiary Education, Science and Technology Development. Establishment of the Geospatial and Space Agency was built on RCZ's recommendation for Zimbabwe to be a member of the Group on Earth Observation (GEO) and on the hosting of the 1st AfriGEOSS Symposium. The multi-sectoral ZimGEO community was already benefiting from Geospatial and Space Science, albeit without regulation, promotion and coordination. Establishment of the Geospatial and Space Agency was the logical next step after membership to GEO. RCZ then operationalised implementation of the seven projects approved by Cabinet under the agency. ZINGSA projects which are being monitored by RCZ will produce a revised agro-ecological zones map, develop Geo databases for 99-year lease for allocated farms, inform fertilizer requirement research for different soil types, develop geological minerals map focusing on lithium and graphite, develop a malaria and bilharzia prevalence map, develop a solar potential map, and develop a database for wildlife tracking in Zimbabwe's national parks and wildlife conservancies.

Participation in the Science Granting Councils Initiative

RCZ maintained its momentum to enrich its research management systems by participating in capacity building initiatives under the auspices of the SGCI. To that effect, RCZ attended a training workshop in Zambia focussing on the second objective of the SGCI on effective management of research, designing and monitoring research programmes and to formulating and implementing policies based on the use of robust Science, Technology and Innovation (STI) indicators. The thrust of the workshop was to support knowledge exchange and establish partnerships within National Science Technology Innovation (NSTI) systems for African countries. RCZ was capacitated to locate Research and Development (R&D) and Innovation activities within the country-context with economic sectors disaggregated to their lowest units of economic activities. Another component of the training focused on the Impact Oriented Monitoring

(IOM) methodology for R&D projects. The IOM covered the payback model, data collection tools and the impact scoring matrix for R&D projects. The skills acquired will assist RCZ to use the IOM methodology in measuring impact in RCZ funded projects.

In light of RCZ's participation in SGCI, RCZ has made an application for Secretariat staff to be considered for enrolment to Online Short Courses. The courses being funded by the Initiative and are being run under Objective One (1) i.e. Strengthening Research Management in Science Granting Councils in Sub-Saharan Africa. The Southern African Research and Innovation Management Association (SARIMA) in partnership with Wits University are spearheading the training. Courses covered under this programme include Fundamentals of Research Management and Administration, Research Grants and Contracts Management, Introduction to Intellectual Property, Technology Transfer and Commercialisation, Gender in Science, Technology and Innovation, Programme Evaluation, and Research Ethics and Integrity.

The training has provided RCZ staff with a cost-effective and flexible learning solution that ensures improvement in the general level of skill in research management practitioners and cements the professional standards required. Other workshops and conferences attended by RCZ in 2018 include the SGCI Annual Regional Forum and the Global Research Council Workshop. The skills gained include grant-making systems and procedures; principles of scientific merit review; policy analysis and research priority setting; design and management of science and technology cooperation agreements; effective communication of research results; mapping of stakeholders and funding agencies in the NSTIS; and aligning publicly funded research with national development priorities.



Science Granting Councils Initiative delegates at the Annual Forum and Global Research Council Africa Regional Meeting 2018

RESEARCH CONTROL AND COORDINATION COMMITTEE

From a control and coordination perspective, 2018 was a very successful year for RCZ as shaping of the National Research Agenda was made easier when the council received a substantial amount (0, 3%) for R&D from Government. The Council's role to fund research was made easier by the significant allocation of funds by Government towards R&D. This enabled RCZ to perform its granting role judiciously specifically on the implementation of projects funded under the ZINGSA Programme. RCZ was able to advertise a Call for Proposals inviting research projects ready for prototyping and commercialisation. Riding on its collaboration with the Zimbabwe Energy Regulatory Authority (ZERA), RCZ ensured that funded projects were implemented to fruition in 2018.

Progress on Implementation of the RCZ-ZERA Memorandum of Understanding

Implementation of the RCZ-ZERA MOU progressed well in the year 2018 with completion of projects funded under the 2015 Call being a key highlight. Further, RCZ and ZERA convened a stakeholder engagement workshop to sensitise researchers on the expectations of funders within the last quarter of the year.

The study titled "Feasibility Study on Hydrokinetic Energy of Perennial and Non-Perennial Rivers in Zimbabwe" was successfully completed and a Final Report was submitted. The study revealed that Save, Pungwe and Mazowe River had the potential to produce 5KW per square meter for about four to six months. An average house in Zimbabwe consumed 0.5KW for lighting, heating and entertainment. Hence, 10 houses could be powered for 4 months (14MWh) using a single harvester/generator. There is potential for further engagement of the research team in the upcoming year once the due process relating to uptake of the results is done.



Determination of the Cross sectional area using an Acoustic Doppler Current Profiler (ADCP) for under water profiling



DJI Phantom 4 drone for site identification and mapping



Theodolite profiling Save



Drone mapping for Save Gorge

Another project successfully completed in 2018 was from the Tobacco Research Board (TRB) titled "In pursuit of Energy Efficiency: Development and Evaluation of a Low Cost, Energy Efficient Barn for Tobacco Curing ". The study developed a low cost and energy efficient barn for curing tobacco by modifying thirty-nine (39) conventional barns for farmers in selected provinces of the country. In addition to submitting the final report, the Research team presented study findings at the 2018 Harare Agricultural Show under a session on Energy Provision on the Agricultural Sector Value Chain. One of the major outcomes of the study was that the modified barn (KCC1) had a higher capacity for curing, than the conventional barns. Hence, the curing turnaround time improved. The modified barn also recorded the lowest Specific Fuel Consumption (SFC) and the leaf quality improved. Efforts will be made in 2019 to commercialise the results from the study.



Indigenous tress used to cure tobacco

The rocket being replaced by the modified barn

The project on **Production of Charcoal Briquettes from Agricultural Waste as an Alternative Source of Energy (HIT)** was divided into two parts. The first phase of conducting a Situational Analysis was completed and recommended upscaling of the project to the second phase on experimental on production of briquettes. The second phase of the project not implemented in 2018 due to technical challenges would be prioritised in 2019.

RCZ-ZERA 2018/2019 Call for Proposals

RCZ and ZERA made a deliberate effort to engage stakeholders before advertising the 2018/2019 Call for Proposals. Consultations were anticipated to aid in structuring the Call to ensure high quality proposals and to align research to the Energy Policy and the National Energy Plan. The exercise was also exemplary in promoting demand-driven research in the country. Building on this experience, demand-driven research projects will be funded in 2019.

RCZ-ZERA Pre-Call Stakeholders Workshop in Pictures





Collaboration with the Environmental Management Agency

Building on a Memorandum of Understanding between RCZ and the Environmental Management Agency (EMA) the two organisations explored the option of collaboratively funding post-graduate students. The effort was meant to capacitate researchers under the Theme Area Sustainable Environment and Resource Management. Funding of post-graduate students in the area resonated with mandates of both RCZ and EMA. It is anticipated that these efforts would be scaled up in 2019. For a start, only masters' students would be supported in the areas of a) Waste Management; b) Invasive alien species; c) Pollution (air, water, land); d) Wetland Management; and e) Environment Management Behavioural Change.

Implementation of the Zimbabwe National Geo-Spatial and Space Agency Research Projects

As part of the Government 100/200-day deliverable, the Ministry of Higher and Tertiary Education Science and Technology Development (MHTESTD) established in terms of the Research Act [Chapter 10:22] launched the Zimbabwe National Geospatial Space Agency (ZINGSA). The outputs of ZINGSA were being demonstrated through seven (7) geospatial and aeronautical space sciences technology projects focusing on critical national economic sectors of mining, health, agriculture, energy, and tourism. Implementing teams for the seven projects comprise scientists from different institutions of higher learning, Government departments and other research centres. Implementation of the projects is progressing well.

RESEARCH PROMOTION, PUBLICITY AND RESOURCE MOBILISATION COMMITTEE

The Research Council of Zimbabwe (RCZ) has successfully maintained its leading role in promoting research through making available research findings at various platforms such as the Zimbabwe International Trade Fair (ZITF) and the Harare Agricultural Show (HAS). Participation at these platforms gave RCZ opportunities to build networks, meet stakeholders within the NSTIS, meet policy makers face-to-face and learn new developments in the research fraternity. These initiatives increased awareness of the RCZ brand, its products and services. RCZ also executed the bulk of the preparations for the 12th Zimbabwe International Research Symposium (ZIRS) in 2018.

12th Zimbabwe International Research Symposium Preparations

Preparations for the 12th ZIRS were kick-started in the first quarter of 2018 with an inaugural meeting for the Organising Committee which led to the formation of Sub-Committees to oversee resource mobilisation, publicity of the event and facilitate the review of abstracts, papers and award nominations. The Meeting set out the roadmap to host the 12th ZIRS. Taking a cue from the visionary leadership of His Excellency the President of the Republic of Zimbabwe Cde E. D. Mnangagwa, the 12th ZIRS theme focussed on bringing together efforts from the research fraternity with industry. The Theme was "The nexus between Research and Industry: Key to innovation and sustainable development". Calls for Abstracts and Award nominations were advertised in the local press and via electronic media platforms. As per standard practice a peer review system was employed to facilitate selection of research for presentation at the symposium. Efforts to reward research excellence were fulfilled by advertising the Call during the second quarter of the year giving nominators more time. The other important preparatory initiatives implemented over the period include resource mobilisation and publicity of the symposium via electronic and print media platforms.

Participation at the 2018 Zimbabwe International Trade Fair

In order to increase visibility, RCZ exhibited at the 59th Edition of the Zimbabwe International Trade Fair (ZITF) from the 24th -28th of April 2018. The 2018 Edition, held at Zimbabwe International Exhibition Centre in Bulawayo, was run under the theme "Sustainable Industrial Development - Inclusive, Competitive, Collaborative". The theme resonated with the RCZ's thrust on breaking silos and promoting synergies within the NSTIS. RCZ secured an exhibition stand in a Hall predominantly comprising of universities, polytechnics, and parastatals. In order to maximise on this opportunity, RCZ's exhibition approach was three-pronged focusing on three areas namely RCZ's main programmes, the RRI on functionality of the NSTIS, and warming up stakeholders to the 12th ZIRS.

After taking stand visitors through RCZ's vision, the core programmes on research funding, research promotion and publicity and foreign researchers' registration were presented on. Stand visitors appreciated RCZ funding which is mainly executed through Calls for Proposals in line with National Research Priorities (NRPs). Functionality of the NSTIS was aided by a schematic diagram, emphasising on key components which are knowledge generation, knowledge exploitation and research funding. Most representatives of academia appreciated the importance of protecting their intellectual property after presentation of the NSTIS.

RCZ Executive Director participated at the International Business Conference (IBC) organised by the National Economic Consultative Forum (NECF) on 25 April 2018. The conference was an annual business forum for decision makers both in the public and private sectors, to discuss pertinent socio-

economic issues. The conference created a networking environment necessary for RCZ's thrust of placing R&D at the fore of sustainable development. RCZ interacted with policy makers, international and domestic industrialists, indigenous entrepreneurs, academics and business leaders who were interested in positively contributing to the economic development agenda.



Hon. Minister of HTES&TD. Prof A. Murwira at RCZ stand

RCZ stand at the 2018 ZITF

2018 Harare Agricultural Show

Continuing from ZITF exhibitions, RCZ showcased its programmes at the 2018 Edition of the Harare Agricultural Show (HAS) from 27 August 2018 to 1 September 2018. The Show ran under the theme **"Field to Industry: Produce. Connect. Develop"**. The Theme was coined to emphasise on the inseparable linkages between sustained agricultural productivity, industry resuscitation and increased capacity utilisation, and the resultant improved economic growth. The theme resonated with the RCZ's efforts on enhancing functionality of the NSTIS. The thrust of RCZ's exhibition was centred on warming up stakeholders for the 12th ZIRS which was fast approaching. RCZ took the opportunity to engage new and make follow ups with traditional sponsors of symposia. Stakeholders were also invited to exhibit at the 12th ZIRS. The RCZ stand was visited by stakeholders of diverse orientations ranging from students, farmers, industrialists, researchers and policy makers.

Website and National Research Database of Zimbabwe

For the year 2018, RCZ recorded significant progress to market its programmes and services through online platforms namely, the website and National Research Database of Zimbabwe (NRDZ). The website was used to disseminate important notices for the council such Calls for Abstracts and Proposals. The website was also used to share important guidelines for research foreign researchers and research funding. On the other hand, the NRDZ which is an online repository of research results, contributed to the traffic of stakeholders who interacted with the RCZ website. Coupled with a capability to harvest research articles from websites of institutions whose repositories are linked to the portal, the database provided a platform for collaboration by local and international researchers. Based on statistical reports there was evidence on steady utilisation of the RCZ database and website as shown in Fig 1 and 2.

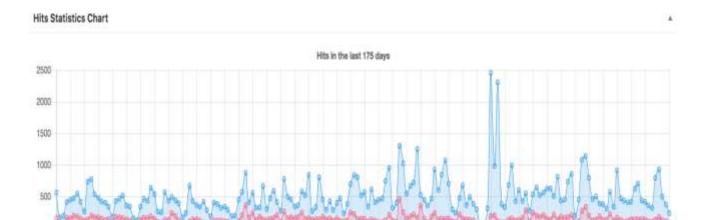


Figure 1: Hits on the RCZ Website

On average the website was accessed by 500 visitors per day whilst the number of visitors who interact with the website was around 50 per day for the period under review. This represented an average increase of about 25% when compared to the visits and visitors recorded in 2017. Most referrals for those clients who accessed the website and database used google search engine.

Visitors Visits

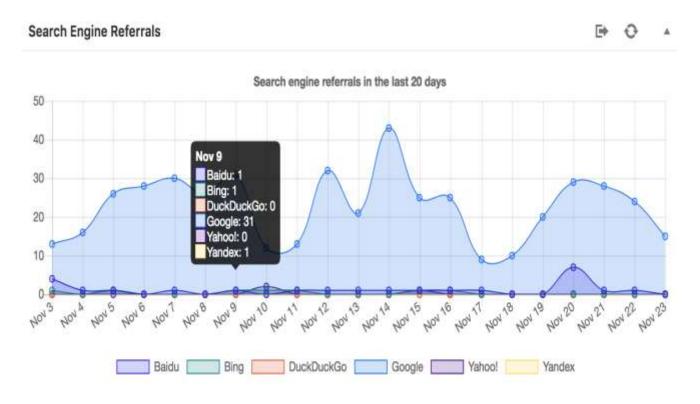


Figure 2: Search Engine Referrals

Publicity Initiatives

After formulation of the 2019-2023 Strategic Plan, banners reflecting the new vision, mission and values were procured. These banners included telescopic, tear-drop and pull-ups. The banners would be used to market RCZ at various platforms. RCZ has also installed directional signs as a strategy to increase its visibility. The directional signs are installed from Sam Nujoma Street Extension up to RCZ offices, in Mount Pleasant. The RCZ website and social media platforms were also used to reach out to stakeholders in a big way.

FOREIGN RESEARCHERS COMMITTEE

Registration of Foreign Researchers

For promoting national interest and shaping the National Research Agenda, RCZ continued to perform its role of registering foreign researchers in terms of Section 27 of the Research Act [Chapter 10:22]. Registration of foreign researchers in 2018 did not only ease research coordination and oversight, but also ensured integrity, and compliance with the set regulations. In addition, the environment and humans were protected from adverse effects arising from research activities. In that regard, the Council strengthened its registration system by updating registration instruments and also facilitating capacitation of institutions of affiliation. Two hundred and eighty-seven (287) registration certificates were issued in the year 2018 marking a 27% increase relative to the 2017 performance where two hundred and twenty-six (226) certificates were issued. All applications received in the year were approved.



Meeting with the Ministry of Health and Child Care

The Ministry of Health and Child Care (MoHCC) is a major and strategic player in the research system in Zimbabwe. The Ministry is the custodian of infrastructure across the country with capacity for hosting medical research. Since 2011, MoHCC hosted ninety (90) studies as the Institution of Affiliation. To ensure effective matching of Foreign Researchers with local counterparts for mutual benefit including capacity building, the RCZ engaged with the Ministry on funding of research studies and capacity building

for local researchers. Outcomes of the meeting included modification of application guidelines. Deliberations focussed on among other issues, unethical cessation of research funding and capacitation of local scientists.

FINANCE, ADMINSTRATION AND HUMAN RESOURCES COMMITTEE

The Finance Administration and Human Resources Committee (FAHRC) ensures that the corporate affairs of RCZ are managed well. The Committee reviews the corporate budget, financial statements and matters relating to staffing.

Financial Resources

Accounts for 2018 are yet to be audited by the Comptroller and Auditor General. Despite this position, RCZ adheres to international accounting standards and best practice in financial management.

Human Resources

RCZ retained most of its staff during the year 2018, save for one Technical Officer and the Research Prioritisation, Control and Coordination Manager, who left in June and September 2018, respectively. To cover up for the gaps, RCZ recruited one Technical Officer, Finance and Administration Manager, and a Programmes Consultant in 2018. Of the approved establishment of 33 staff, only 11 posts are currently filled leaving 22 posts unfilled. Engagements with Treasury are ongoing for concurrence to fill vacant posts.

Corporate Governance

The Board held three regular meetings as per Corporate Governance requirements while each of the six Standing Committees of Council met at least once in 2018. Table 2 shows the schedule of meetings held in the year.

Table 2: Board and Committee Meetings held in 2018

Title	Number of Meetings	Months Held
Board	4	March, May, September, December
Evtra andinamy Dagad	1	
Extra-ordinary Board	1	April
Foreign Researchers Committee	11	January to June and August
		to December
Audit and Risk Management Committee	4	March, May, June and
		September
Finance Administration and Human Resources	3	February, June and October
Committee		
Research Control and Coordination	2	May and September
Committee		
National Research Prioritisation and Strategic	-	-
Planning Committee		
Research Promotion, Publicity and resource	2	April and November
Mobilisation Committee		
Annual General Meeting	1	August

Third Annual General Meeting

The 3rd Annual General Meeting was held in the third quarter of 2018 at Holiday Inn, in Harare. The Meeting received and adopted the financial statements and Report of the Auditor General for the year

ended 31 December 2017. Shareholders from the Office of the President and Cabinet (OPC) and the Ministry of Finance and Economic Development, were present. The need for Government to release at least 1% of the GDP towards R&D in line with commitments espoused in various policy instruments such as the 2nd Science, Technology and Innovation Policy of 2012 was discussed. RCZ was urged to increase its visibility as one of the strategies to attract more resources to fund R&D from both Government and the private sector. Stakeholders concurred that rapid iindustrial growth, reducing exports and growing the value addition chain, as envisioned by His Excellency, the President Cde E.D. Mnangagwa, could not be achieved without R&D. The OPC shareholder representative, commended the Board and Management for convening the 3rd AGM and for another productive year despite the difficult circumstances. More resources were anticipated from Government in 2019 as R&D had been identified as a key success factor for socio-economic transformation.

Membership to International Bodies

RCZ is a member of the following international bodies

- 1. International Council for Science (ICS)
- 2. Group on Earth Observation (GEO)
- 3. Science Granting Councils Initiative (SGCI)
- 4. Global Research Council (GRC)

RCZ 2018 Budget Estimates

Budget item	Amount
Programmes	132 847
Human Resources	300 000
Administration	87 080
Board and Committee costs	85 495
Consultancy	44 328
Capital Expenditure	133 750
Total	783 500

AUDIT AND RISK MANAGEMENT COMMITTEE

The Audit and Risk Management Committee recommends to the Board appointment of external auditors, receives and considers on behalf of the Council, internal and external audit reports and recommend courses of action. The Committee reviews senior management processes with the express intention of improving efficiencies and compliance with organisational controls, legislative framework, policies and procedures.

Highlights for 2018

The Committee has always ensured that RCZ meet its statutory obligation to have its Accounts audited on an annual basis. Achievements for the year included submission of financial statements for the year ended 31 December 2018, to the Auditor General.

In addition, the entrance auditing meeting between auditors and management was held during the period under review.

The external audit strategy was presented to the Audit and Risk Management Committee by the Auditor General.

Three scheduled Committee meetings were held in 2018. The observations, risks and recommendations of internal and external audit reports were considered and actioned.

The unaudited 2018 financial statements are as follows.

STATEMENT OF FINANCIAL POSITION

AS AT DECEMBER 31, 2018

	31-Dec-18 US\$	31-Dec-17 US\$
ASSETS		
Non-current assets		
Property, plant and equipment	362 061	308 475
Current assets	1 988 039	179 433
Inventories	6 562	7 383
Prepayments	2 199	1 638
Cash and cash equivalents	1 979 278	170 412
Total assets	2 350 100	487 908
RESERVES AND LIABILITIES		
Reserves	2 144 993	257 246
Accumulated fund	2 085 156	197 409
Revaluation reserve	59 837	59 837
Deferred income	163 311	190 623
Current liabilities	41 796	40 039
Payables	463	789
Provisions	41 333	39 250
Total reserves and liabilities	2 350 100	487 908

STATEMENT OF COMPREHENSIVE INCOME

FOR THE YEAR ENDED DECEMBER 31, 2018

	24 Dec 40	24 Day 47
	31-Dec-18	31-Dec-17
	US\$	US\$
	3 322 578	765 267
Revenue		
Government Grant	496 565	492 099
ZINGSA Project Funds	2 600 000	0
Registration fees	152 610	184 272
Other income	46 092	61 461
Amortisation of deferred income	27 312	27 434
Less operating expenses	(1 434 831)	(652 909)
Administration expenses	(1 076 378)	(323 662)
Payroll Costs	(358 453)	(329 248)
Surplus / (deficit) for the year	1 887 747	112 357
Other comprehensive income		
*		
Surplus / (deficit)	1 887 747	112 357

STATEMENT OF CASH FLOWS

FOR THE YEAR ENDED DECEMBER 31, 2018

	Note	31-Dec-18 US\$	31-Dec-17 US\$
CASH FLOWS FROM OPERATING ACTIVITIES			
Net cash utilised by operating activities		1 908 386	107.007
Operating income before working capital			107 097
changes		1 908 451	108 599
Operating income		1 887 747	112 357
Adjustments for:		20 704	(3 758)
Increase / (decrease) in provision		2 083	(22 723)
Depreciation charge for the year		48 022	47 489
Amortised grant		(27 312)	(27 434)
Interest earned		(2 089)	(1 089)
Changes in Working Capital		(65)	(1 502)
Decrease (Increase) in inventories		821	(1 530)
Decrease/(Increase) in receivables		-	-
Increase in prepayments		(561)	
(Decrease)/Increase in other payables		(326)	(83)
			(42.244)
CASH FLOWS FROM INVESTING ACTIVITIES		(99 519)	(13 211)
		2 089	1 000
Interest received			1 089
Purchase of property, plant and equipment		(101 608)	(14 300)
CASH FLOWS FROM FINANCING		0	0
ACTIVITIES			
Government capital grant		0	0
Net increase in cash and cash equivalents		1 808 867	93 886
Cash and cash equivalents at beginning of the	year	170 412	76 526
Cash and cash equivalents at end of the year	•	1 979 279	170 412

STATEMENT OF CHANGES IN RESERVES

FOR THE YEAR ENDED DECEMBER 31, 2018

	Accumulated fund	Revaluation reserve	TOTAL
	US\$	US\$	US\$
Balance as at January 1, 2017	85 052	59,837	144 889
Total comprehensive income	112 357	-	112 357
Revaluation surplus	-	0	0
Balance as at December 31, 2017	197 409	59 837	257 246
Balance as at January 1, 2018	197 409	59 837	144 889
Total comprehensive income	1 887 747	-	1 887 747
Balance as at December 31, 2018	2 085 156	59 837	2 144 993

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