



UNIVERSITY OF DAR ES SALAAM

**RESEARCH POLICY AND
OPERATIONAL PROCEDURES
2015**



Revised Edition 2025



University OF DAR ES SALAAM

**RESEARCH POLICY AND
OPERATIONAL PROCEDURES 2015**

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ABBREVIATIONS AND ACRONYMS

| | |
|----------------|--|
| AJOL | African Journals online |
| BRILL | Brill Publishers |
| COSTECH | Tanzania Commission for Science and Technology |
| DIEN | Directorate of Innovation and Entrepreneurship |
| DPDI | Directorate of Planning, Development and Investment |
| DPS | Directorate of Public Services |
| DRP | Directorate of Research and Publication |
| DUP | Dar es Salaam University Press |
| DVC - PFA | Deputy Vice Chancellor, Planning, Finance and Administration |
| DVC – Academic | Deputy Vice Chancellor, Academic |
| DVC – Research | Deputy Vice Chancellor, Research |
| EBSCO | Elton. B. Stephens Company |
| GDP | Gross Domestic Product |
| GIS | Geographic Information System |
| HLI | Higher Learning Institutions |
| ICT | Information and Communication Technology |
| IP | Intellectual Property |
| IPR | Intellectual Property Rights |
| MoU | Memorandum of Understanding |

| | |
|--------|--|
| ORCID | Open Researcher and Contributor ID |
| PDSRA | Postdoctoral Scholars and Research Associates |
| PhD | Doctor of Philosophy |
| RIMS | Research Information Management System |
| STI | Science, Technology and Innovation |
| STISA | Science, Technology and Innovation Strategy for Africa |
| TCU | Tanzania Commission for Universities |
| THE | Times Higher Education |
| TZS | Tanzanian Shillings |
| UDSM | University of Dar es Salaam |
| UNESCO | United Nations Educational, Scientific and Cultural Organization |

FOREWORD

The University of Dar es Salaam (UDSM) is obliged to contribute to the national social and economic development through research, teaching and other allied services to the society. The University is recognized as one of the most capable research institutions in Tanzania with relevant skills, requisite research and teaching facilities and the mandate to generate new knowledge through research. Despite its competent human and physical resources, UDSM is confronted with a number of challenges that have to be overcome. One such challenge relates to the limited capacity to maintain the required state-of-the-art research infrastructure and environment due to limited availability of funds. Nevertheless, the University has continued to rise to these challenges by increasing its share of research budget from both internal and external sources. The second major challenge is to effectively utilize the available human and physical resources to maximize research impact at national and international levels.

It is essential that UDSM research activities focus on areas of priority for national development in an effective manner. This requires coordination with other stakeholders at national and regional level. Hence UDSM continues to be proactive in the process of defining national development objectives, direction and processes. Effective contribution in the national development initiatives call for an increased efficiency in research management. This calls for clear mechanisms for performing research as well as efficient and effective research administration processes.

It is the objective of the Fourth Edition of the UDSM Research Policy and Operational Procedures (2025) to continue refining the existing research regulatory frameworks for better management practices. The policy addresses a number of important issues including those related to the identification of research priorities and matching them with internal capabilities, funding sources and mechanisms, planning and management of the research process, quality assurance, research collaboration, interdisciplinary research, ethical issues in research, dissemination of research outputs, intellectual property and the monitoring of research effectiveness. The policy draw lessons and experiences from previous

editions and best research management practices of other reputable research institutions across the world. It has also considered new developments in science and technology as well as the University's new structure.

This policy addresses the needs of internal and external stakeholders including research collaborators, funding agencies and research clientele thereby enhancing research performance. By so doing, it is hoped that UDSM will significantly improve its research landscape and play the role of ensuring that Tanzania keeps pace with the global revolution in knowledge production, exchange and utilization. Accordingly, the University will continue to be among the leading research institutions in Africa, which is trusted to set pace in the production of breakthrough knowledge and in offering training and mentorship to the current and future generation of researchers.

Prof. William A. L. Anangisye
Vice Chancellor

CHAPTER ONE

OVERVIEW, POLICY ENVIRONMENT AND RATIONALE

1.1 An Overview

The University of Dar es Salaam developed the first edition of its research policy and operational procedures in 1998. The policy has undergone two revisions prior to this current edition. It was revised and published as Second Edition in 2008. The third edition of the policy (2015) was necessitated by a number of reasons; 1) to align the University's research activities with the National Research and Development Policy (2010); 2) to incorporate relevant developments at national and international levels, and; 3) to accommodate changes in organizational set-up at the University which had introduced the office of Deputy Vice Chancellor, Research.

This fourth edition of the policy responds to national and global demands to build strong, dynamic, resilient and competitive universities with impact on national economies and humanity. As such, the Tanzania Vision 2025, the Research and Development Policy (2010) and subsequent National Research Priorities (2021/22 – 2025/26) call for innovation-driven and skills-based knowledge economy. The policy is therefore designed to arrive at the objective of becoming a world-class University capable of influencing social and economic transformations.

In line with the Tanzania's Vision 2025, the National Research and Development Policy (2010) recognises the essential role of research in the national development. The policy acknowledges that scientific advances and technological innovations are the driving forces for economic growth and sustainable development, and that there is need for adopting multidisciplinary approaches in research and development. This is reflected in the UDSM research agenda (2018/19 – 2028/29), which embraces multidisciplinary and aligns with national research priorities. The agenda is clustered around seven major disciplines that reflect national research priorities in the following areas:

- Cluster 1:** Science, Technology and Innovation (STI), ICT and Industrial Development;
- Cluster 2:** Education, Agriculture, Food Security and Health;
- Cluster 3:** Governance, Industrial Policy and Cleaner Production;
- Cluster 4:** Gender, Professional Development, Policy Development and Policy Implementation;
- Cluster 5:** History, Culture, Language, Heritage and Sustainable Tourism;
- Cluster 6:** Natural Resources, Environment and Technology; and
- Cluster 7:** Law and Integrated National Development.

Beyond the national priorities, the University adheres to international and regional policies and instruments that guide developments in research, knowledge production and dissemination including, for example, the UNESCO's Declaration on Science and use of Scientific Knowledge and the Science Agenda – Framework for Action (1999), Universal Declaration on Bioethics and Human Rights (2005) and the Africa's Unions Science, Technology and Innovation Strategy for Africa (STISA – 2024). These instruments call upon the scientists of the world to acknowledge the urgency for building capacity for knowledge production in all fields of science and the use of that knowledge in a responsible manner to address human needs and aspirations.

In the current competitive world, the government and universities have to make highly strategic choices about where and how to foster research capabilities with limited resources. In particular, capacity building in research has been recognised as a fundamental element for revitalizing African universities. This is to enable universities to generate new knowledge for themselves, produce a stream of academic staff necessary to sustain University enterprises and equip students with essential analytical and problem-solving skills. Neglecting the need to strengthen University research capacity may undermine future economic and social growth at the individual, institutional and national levels.

As stated at the outset, UDSM has a key national role to play in advocating for a strong research and development system that meet the international standards hence the current move towards the internationalization of research environment to support production of knowledge that addresses needs of the growing higher learning institutions and society in general. Being one of the premier research institutions and role model with regards to the generation of both basic and applied development research in the country, UDSM is obliged to enhance performance of its research portfolio, invest in new scientific innovations and align these with national, regional and international research development objectives.

1.2 Policy Environment

Tanzania's Five-Year Development Plan 2011/12 – 2015/16 and that of 2021/22-2025/26 have both emphasized embracing research that fosters science, technology and innovation for improved productivity and quality. The plans set standards for inclusiveness, advanced equipment and methods for releasing the latent growth potentials that can enable Tanzania to achieve its vision and other related national development objectives. The priorities are therefore set in the following sectoral areas:

- i. Infrastructure, particularly large investments in energy, transport infrastructure (port, railway, roads, air transport), water and sanitation and ICT;
- ii. Agriculture, focusing on the transformation of agriculture for food self-sufficiency and export, development of irrigation particularly in selected agricultural corridors, and high value crops including horticulture, floriculture, spices, and vineyards;
- iii. Industrial development, specifically targeting industries that use locally produced raw materials such as textiles, fertilizer, cement, coal, iron and steel; development of special economic zones using public-private partnerships; as well as the use of emerging technologies, embracing the fourth industrial revolution;
- iv. Human capital and skills development, with an emphasis on science, technology and innovation;

- v. Tourism, trade and financial services;
- vi. Mineral and other natural resources development; and
- vii. Health services development.

Efficient and effective pursuit of the set priorities is dependent on having in place and using well-trained and skilled human capital in all relevant fields. As envisaged in the National Research and Development Policy (2010), research has an important role of advancing and refining knowledge, providing solutions to problems that face the society and ensuring competitiveness not only in the local but also in the wider international context.

Historically, UDSM has played an essential role for national capacity building and further development of Tanzania through training, research and consultancy. The recognition of this role led to the establishment of the Research and Publications Committee of the University College of Dar es Salaam in 1964 at the time when the College was part of the University of East Africa. The committee then maintained good research that enriched the College. Thus, one of the main responsibilities of the committee was to initiate fundamental research into East African and particularly Tanganyikan topics. The college then realized that subject syllabuses were not likely to be taught properly until the results of the research were made available; academicians were likely to be effective if they were allowed to conduct research into topics with direct relevance to what they were teaching. In addition, the college was not likely to attract new qualified staff if it did not offer them opportunities to conduct research. The committee resolved that research at the college was to be carried out by its own staff members, academic visitors, research fellows appointed by the college and who proposed their own research topics, and research fellows appointed to pursue a particular research project sponsored by the college.

In 1998, the University of Dar es Salaam established a Directorate for Research and Publication as part of the Institutional Transformation Programme (ITP) to administer and coordinate research including external linkages on all matters related to research. This establishment was in

line with the first edition of the UDSM Research Policy and Operational Procedures that was approved by the Council in the same year. The policy guided preparations and management of research activities that have national and international significance. In the current structure of UDSM, the Office of DVC - Research has the mandate to oversee all UDSM research activities, including the Operational Procedures of this policy.

1.3 Rationale for the Policy

The 3rd Edition of UDSM Research Policy and Operational Procedures (2015) has been in operation for over five years. The policy was instrumental in guiding the research portfolio in different areas. However, since 2015, new developments at the global, national and institutional levels have overtaken the policy hence the need for this review. Specifically, motivations for the review of the 2015 Policy are as follows:

- i. Globally, academic institutions have acquired new strategies and technological interventions to improve quality and quantity of research outputs as a way to enhance their competitiveness in the global ranking of universities. Owing to advancements and use of ICT, research institutions have invested in commercialization and marketing of research outputs with particular focus on maintaining the required visibility;
- ii. A number of new initiatives at national and institutional level have changed research practices. One of such practices is the standards that are set by Tanzania Commission for Science and Technology (TCU, 2019) that require postgraduate students to contribute to scientific relevance through publication of articles;
- iii. Alignment with newly formulated national policies, including National Research Priorities (2021/22 – 2025/26), National Research Integrity Framework (2020), National Research and Innovation Monitoring Framework (2021) as well as National Post-doctoral Research Framework (2020) and National Framework for Research Chairs (2021);

- iv. Alignment with newly approved University policies which have direct implications on research and publication matters. These include the Research Agenda (2018/19 – 2028/29) of 2018, Guidelines and Procedures for Management of Research Projects and Activities Funded from External Sources (2020); Scholarly Publication and Dissemination Policy and Guidelines (revised 2023), Internationalization Policy (2022), ICT Policy (2022), Intellectual Property Rights Policy (2022), guidelines for collaboration on applied research and innovation (2023) and guidelines for outreach program (2023);
- v. Restructuring of the office of DVC-Research, which necessitated dissolving of the Directorate of Knowledge Exchange to form Directorates of Public Services, and Innovation and Entrepreneurship.

The changes outlined above have meant that the current policy should recognize, streamline and provide guidance in cases where the third edition was silent or otherwise inadequate to support recent developments. In this fourth edition of the policy, the following areas have been considered as new strategic policy issues:

- i. Research competitiveness and international relevance;
- ii. Professionalization of research administration and management;
- iii. Internationalization of research environment;
- iv. Application of ICT in as a tool for research implementation and management;
- v. Commitment to financial investments in research implementation and management;
- vi. Recognition of emerging research areas;
- vii. Linking the current focus on research innovations with societal and industrial impacts;
- viii. Recognition of the greater role of research databank for reuse and continuity;

- ix. Enhancement of the link between teaching and research;
- x. Recognition of postgraduate publications for increased research output; and
- xi. Fitting the policy in the newly approved University policy format.

1.4 Guiding Principles of the Policy

The policy is guided by the principles of compliance and competitiveness in scientific knowledge production, dissemination and utilization for the betterment of humanity.

1.5 Policy Goal

The fourth edition of the Policy will address core strategic issues to enhance the University's relevance in accordance to the principles of compliance and competitiveness.

1.6 Policy Objectives

1.6.1 General Objective

The main objective of the fourth edition of the policy is to foster a competitive high-quality research, publication practices and management while promoting knowledge dissemination in accordance with relevant national and international standards.

1.6.2 Specific Objectives

The 4th edition of the University of Dar es Salaam Research Policy and Operational Procedures (2025) aims to:

- i. increase quality and quantity of research output for a better University visibility and ranking;
- ii. build capacity for efficient research management and service delivery;
- iii. foster a positive culture in research and publications;
- iv. increase accessibility of research data;

- v. create a link between academia and industry/society;
- vi. provide guidance on sound research management and good research practice;
- vii. provide a mechanism of ensuring that the research programmes address the University vision, mission, objectives and functions, as well as to address national development objectives and priorities;
- viii. provide modality of research coordination system that complies with national requirements and international standards;
- ix. enforce research quality assurance mechanism;
- x. ensure adequate budgetary allocation and/or funding for research activities and to set and strengthen mechanisms for increased funding share from other sources other than the government;
- xi. strengthen institutional capacity for strategic, technical and operational planning, budgeting and control for research;
- xii. establish a mechanism to ensure that academic staff attain the desired mix of output – research, teaching and consultancy;
- xiii. encourage internal, national, regional and international research collaboration and networks;
- xiv. enhance marketing skills of the University and its academics so as to make full utilization of the research expertise to address the needs of both the public and private sectors;
- xv. ensure dissemination of research results through regular participation in relevant fora at national/regional and international levels; and
- xvi. commercialize research results, including intellectual property rights (IPR).

1.7 Scope of the Policy

This policy sets the roles, responsibilities and requirements for promoting good quality research practices and management at the University of Dar es Salaam.

1.8 Definition of Key Terms

For the purpose of this policy, the following definitions will be adopted:

- i. **Donor funded/externally funded research** is any research activity that receives funding from outside the University, including grants, capacity building, technical services, contracts, fellowships and any other externally sourced income.
- ii. **Internationalization** is a transformation of research-related environment and services to support and reflect international standards, including integration with other institutions, international joint research, and visiting international scholarships.
- iii. **Professionalization of research administration and management** is the process of accoring research activities a professional qualification that involves increasing training or raising required qualifications for research administration and management.
- iv. **Data management** means the administrative process by which the data is acquired, validated, stored, protected, and processed throughout its lifecycle; and by which its accessibility, reliability, and timeliness is ensured to satisfy the needs of the data users.

CHAPTER TWO

SITUATION ANALYSIS

2.1 Current Institutional Setup and Research Performance

The current organisational structure of UDSM comprises three DVC Offices, two constituent colleges, seven campus colleges, seven schools, six institutes, fourteen directorates, and four units. The infrastructure of these entities is distributed across five administrative regions in Tanzania, namely Dar es Salaam, Dodoma, Iringa, Mbeya and Mjini Magharibi (Zanzibar). In these compounds, the University owns research infrastructure such as science laboratories, GIS laboratories, computer laboratories, engineering workshops, and libraries scattered all-over. Also, while research activities are executed in each of these campuses, there have been efforts to consolidate all research-based facilities for better utilization.

The office of the Deputy Vice Chancellor – Research centrally handles all matters related to research and innovation. Research activities are managed by the Directorate of Research and Publication (DRP); commercialisation of innovation products are handled in the Directorate of Innovation and Entrepreneurship (DIEN); while consultancy and continuing education are handled by the Directorate of Public Services (DPS). In the current setting, the management of these directorates is overseen by qualified academic staff with the assistance of administrative staff. It is important to note that, these staff are not necessarily professionally trained in research management. With proliferation of outstanding research activities, professionalization of research management will be needed if the University is to reach its full potential where efficient and effective research management will be the institutional pride.

The University has a significant number of researchers in different scientific disciplines in its constituent colleges and academic units within the main campus. As elsewhere, PhD holders form an important pillar for research development and management through grant applications, postgraduate supervision, innovations and commercialization, publications and dissemination. However, not every member of academic

staff is engaged in research activities. As such, the rate of research output suggests that a limited number of researchers at UDSM are actively engaged in research activities. The ongoing efforts to improve online presence suggests, for example, that there is a significant number of staff members who do not own accounts in research databases such as Google Scholar, SCOPUS and ORCID.

Although UDSM is yet to utilize its critical mass and available outlets to its full potential, it recognises the importance of setting aside research funds from internal sources. When the Research Policy and Operational Procedures was adopted in 2015, internal sources of research funds were minimal. The University relied much on funding from donor agencies. However, the University started allocating funds for competitive research and innovation incrementally from 2018/2019 when TZS 1 billion was set aside followed by TZS 1.4 billion in 2019/2020, TZS 1.9 billion in 2020/2021 – and TZS 3.15 billion consecutively in 2021/2022 –and 2022/2023. Given the large number of applicants for the past five years, the funds have been significantly important for supporting staff research activities and for demonstrating the institutional capacity for self-financing. It is also envisaged that these efforts will increase research output.

Meanwhile, postgraduate research has produced a wealth of research output in the form of dissertations and theses that have, nevertheless, remained on library shelves where they are inaccessible online. For the purpose of visibility, universities across the world have invested in web-based databases for postgraduate research output that is produced annually.

Research output for academic staff go through different channels including journal and book publications in international and local outlets. In particular, UDSM runs 25 journals which are an important channel for dissemination of research findings. By the time this Policy and Guidelines was developed, two journals (*The African Review* and *Utafiti*) were in SCOPUS, the remaining journals are indexed other databases. Overall, most journals are categorised as local and their contents cannot be captured by international databases. This is also attributed to the fact

that the Dar es Salaam University Press (DUP) has no strong presence in the publishing industry compared to others such as Oxford University Press, Cambridge University Press, Cornell University Press and others.

2.2 National Policy and Regulatory Framework

The Research and Development Policy (2010) seeks to address the challenges of limited contributions of research to the development of the country. In addition, issues of enhancement of research capacity in ICT, commercialization and dissemination of research results, collaboration, partnership and networking have not yet been fully realised. The use of ICT in research is therefore prioritised in the National Research and Development Policy (2010) parallel to the National Information and Communications Technology Policy (2016), which emphasizes that the Ministry responsible for ICT should design monitoring and evaluation system to meet information needs of research and academic institutions. The National Research and Innovation Framework (2020) stipulates that since 2005 the Government of Tanzania devoted at least 1 percent or utmost 3 percent of Gross Domestic Product (GDP) for research. Furthermore, the National Research and Innovation Framework (2020) acknowledges Higher Learning Institutions (HLIs) as the main source of research outputs and technological products and services.

This fourth edition of UDSM Research Policy and Operational Procedures aligns different activities with national policy and regulatory frameworks including, for example, setting aside competitive research and innovation funds from internal resources, harmonization of research monitoring systems, research internationalization, professionalization of research management and capacity building among other things.

2.3 Regional and International Trends

Research priorities in the Eastern African region have dominantly been in the areas of agriculture and food security, engineering and technology, health and applied sciences, climate change, social sciences, and education. To strengthen research base, UDSM has recently expanded towards increasing disciplines related to agriculture, health

and architecture. Indeed, UDSM has, over the past five years, promoted research and innovation projects that are designed to find practical solutions to societal needs and emerging challenges. Nevertheless, based on research outputs, the global share of UDSM has not been impressive.

The recent report of the world universities ranking (2023) by Times Higher Education (THE) shows that UDSM has been improving in terms of research performance but still competing unfavourably for higher position in the rank partly due to the increasing competition to the extent that in 2023, the University dropped in the world ranking by approximately 25%. This significant drop is caused by low performance in research and citation scores, which calls for more efforts in ensuring that local journals gain the required reputation while also encouraging staff to publish in international journals. Because THE uses bibliographic information from databases such as SCOPUS and Web of Science to extract citations, UDSM will be ranked higher by THE if staff publishes in the indexed journals.

2.4 Benchmarking

The UDSM Vision 2061 aspires for the University to become a research hub. Benchmarking of best practices in world-class universities was done in different institutions, including University of Cape Town (South Africa), Lund University (Sweden), University of Minnesota (United States), and University of Bradford (England). In the East African region, benchmarking of best practices in relation to publication and dissemination practices was done in Makerere University in Uganda and Sokoine University of Agriculture in Tanzania.

It is established that the best practices in research and innovation requires storage and sharing of research data. World-class universities such as the University of Cape Town maintains Research Data Management Policy (2018) which stipulates that research databank should be made openly available. This practice is also supported by European Union, which advocates for open science and open access to publications. The open data allows validation of research results and reduce duplication of efforts, which leads to more efficient research practice. The lesson

learnt is that, although UDSM maintains research output repositories, it should strive to establish a research (raw) databank to encourage sharing of research data.

In Sweden and elsewhere, teaching is informed by research. The University of Lund's Research Strategy (2017-2022) provides for a period of five years in which the curriculum should be reviewed to make sure that teaching is informed by research. While UDSM recognizes the importance of this link, the volume of research output suggests that the existing policies have not required teaching curricula to embed research components.

Likewise, UDSM acknowledges the need to cultivate research culture among its academic members of staff. However, in the recent years, this culture has eroded compared to other universities in the region. For example, the Makerere University Research and Innovation Policy (2008) stipulates that staffs shall spend 20 percent of their time in research and dissemination of findings. This, and perhaps higher percentage, should be adopted to encourage staff to contribute substantially to the University research output.

CHAPTER THREE

SWOC ANALYSIS

3.1 Introduction

This chapter evaluates the internal research strengths and weaknesses, the existing opportunities, and challenges in the institution's research environment. The chapter focuses on issues related to financing, management, research capacity, infrastructure, regulatory frameworks, collaboration, and linkages.

3.2 Strengths

The UDSM aspires to become a competitive global research institution by increasing the quantity and quality of research outputs. Consequently, the University continues to improve its research environment through financial, technology, management, and regulatory frameworks and guidelines. The following are some of the areas that have been strengthened:

- i. Availability of UDSM research repository for dissemination of local content research outputs;
- ii. Increased access to research funds particularly UDSM Competitive Research and Innovation Grant;
- iii. Existence of the Directorate of Research and Publication (DRP) with the responsibility for overseeing and regulating all research activities;
- iv. Existence of different research guidelines and regulatory frameworks with the aim of guiding and regulating research activities and practices;
- v. Existence of the Directorate of Innovation and Entrepreneurship (DIEN) with the responsibility for overseeing and commercializing innovation emanating from research activities;
- vi. University management's willingness to support research activities;

- vii. Establishment of the UDSM Research and Innovation Week for the dissemination of research and innovation outputs;
- viii. Subscriptions to different scholarly research databases;
- ix. Improved library infrastructure with the aim of enhancing research activities;
- x. Increased enrolment of postgraduate students in different academic and research disciplines; and
- xi. Establishment of the UDSM Research Information Management System (RIMS).

3.3 Weaknesses

Regardless of concerted efforts taken by the University, the research productivity remains low compared to other universities globally. This is an indication that the UDSM is not immune to various factors that hold back its efforts in enhancing research productivity. The following are some of the setbacks:

- i. Insufficient research infrastructure and un conducive research environment;
- ii. Limited research capacity for increased research productivity;
- iii. Insignificant contribution of research outputs from postgraduate students;
- iv. Low visibility of UDSM research outputs;
- v. Low level of awareness amongst staff on different research guidelines;
- vi. Inadequate research support services at the University for staff, students, and external community members;
- vii. Unreliable internet connectivity to facilitate access to scholarly research databases;
- viii. Lack of integrated and comprehensive research management systems to facilitate effective research management;

- ix. Paucity of multi-disciplinary research groups at the University;
- x. Inconsistency of research budget allocation for disciplines in the UDSM Competitive Research and Innovation Grants;
- xi. Lack of research databank;
- xii. Low motivation amongst researchers at the UDSM;
- xiii. Lack of consistent use of UDSM identification information, such as UDSM emails, in publications correspondences; and
- xiv. Low enforcement of research guidelines and frameworks.

3.4 Opportunities

To improve the research environment, the University has to harness the available opportunities such as ICTs, collaboration, and MoUs. Therefore, the University can:

- i. Maximize utilization of the available ICT infrastructure in supporting research management and professionalisation;
- ii. Increase the number of research collaboration agreements and MoUs with other institutions nationally and internationally;
- iii. Harness potential research opportunities from agencies that align with the national research policy and agenda;
- iv. Increase efforts to index local journals in international databases
- v. Increase publications in reputable open scholarly research databases; and
- vi. Subscribe to different research funding agencies.

3.5 Challenges

Over the years, the University of Dar es Salaam has experienced a significant increase in the number of MoUs on research collaborations and output. However, there are various research challenges that undermine the UDSM research productivity and visibility. Notable examples include the following challenges:

- i. Limited uptake of research output from the University by the industry and society;
- ii. Limited access to national research funds to support research activities;
- iii. High dependency on external research funding sources;
- iv. High cost of advanced technologies to support research activities;
and
- v. Inadequate employment opportunities for researchers.

CHAPTER FOUR

POLICY ISSUES, STRATEGIES AND OPERATIONAL PROCEDURES

4.1 Introduction

This chapter provides policy areas, issues, statements, strategies and operational procedures. The Policy is therefore drawn based on the following key research areas:

4.2 Research Planning

4.2.1 Policy Issue

Limited skills in research planning.

Notwithstanding efforts of the University in strengthening research administration in its units through the appointment of research coordinators, it is apparent that there is a wide gap in research planning. Research performance is widely considered to be a major factor in a country's economic output and national innovation system. Therefore, the role of research planning cannot be understated in the generation of knowledge for the development of both the institution and the country at large.

4.2.2 Policy Statements

UDSM shall:

- i. ensure existence and implementation of the UDSM research agenda;
- ii. ensure resource allocation for research support aligns with the UDSM Vision 2061;
- iii. build capacity for research fund mobilization; and
- iv. ensure that ICT forms the backbone of all research planning and management activities.

4.2.3 Strategies

In response to the policy issue and statements herein, the University needs to:

- i. ensure review of the research agenda from time to time as needs arise;
- ii. strengthen collaboration with international research funding agencies and institutions;
- iii. allocate 6% of internally generated fund for research support, including, but not limited to, proposal writing, data collection, publication/dissemination and commercialization of research output;
- iv. strengthen capacity building in research fund mobilization;
- v. inculcate ICT usage in all research management and planning functions to alleviate bottlenecks to administration, staff-student engagement, transparency and distribution of resources;
- vi. increase the capacity in research planning through the establishment and engagement of staff in research workgroups; and
- vii. create research centres in each academic unit.

4.2.4 Operational Procedures

- i. The office of the DVC-Research shall ensure that the research agenda is reviewed after every five years, strengthen collaboration with international research funding agencies and institutions, and strengthen capacity building in research fund mobilization and planning;
- ii. The office of the DVC-PFA shall allocate 6% of internally generated fund for research support;
- iii. The Directorate of ICT shall infuse ICT usage in all research management and planning functions; and
- iv. Principals, Deans and Directors shall establish research centers in their units.

4.3 Professionalization of Research Management

4.3.1 Policy Issue

Lack of professionalization of research management.

Notwithstanding efforts of the University in strengthening research administration in its units through the appointment of research coordinators, it is apparent that there is a lack of professionalization of research management. Yet, research performance depends on professional planning and management of research activities. Therefore, the importance of research professionalization cannot be understated.

4.3.2 Policy Statement

The University shall strive to ensure professionalism in research management.

4.3.3 Strategies

UDSM shall:

- i. employ and deploy professionally trained staff in research management for each academic unit;
- ii. support mechanisms for research administration at the unit and University levels;
- iii. strengthen continuing education programmes in research management; and
- iv. ensure that ICT forms the backbone of all research management activities.

4.3.4 Operational Procedures

- i. The Office of DVC-PFA shall employ and deploy research management professionals for each academic unit.
- ii. The Directorate of Research and Publication shall support mechanisms for research administration at the unit and University levels and ensure that ICT forms the backbone of all research management activities.

- iii. The Directorate of Public Services shall strengthen continuing education programmes in research management.

4.4 Research Support Environment

4.4.1 Policy Issue

Inadequate support environment for realization of the envisaged research excellence.

Research requires a conducive environment for its smooth execution. Advances in science and technology necessitate the provision of appropriate equipment and facilities including reliable internet connectivity for conducting research. Research also requires well-trained discipline-specific supporting staff in research related activities in tandem with provision of ample time for researchers to conduct research. Such research supportive environment is currently inadequate. Therefore, provision of such a conducive environment for the academic community to enhance research and its output is unavoidable.

4.4.2 Policy Statements

UDSM shall:

- i. create a conducive research environment that includes cutting-edge equipment and facilities for both basic and applied research;
- ii. strengthen research support services to ensure a comprehensive management of research information; and
- iii. create mechanisms to allow researchers with major research projects to obtain the required time for project accomplishment.

4.4.3 Strategies

UDSM should

- i. allocate funds for the purchase and maintenance of research equipment and facilities;
- ii. increase the bandwidth and improve other internet infrastructure;

- iii. provide institutional email to each postgraduate student during admission into the University;
- iv. improve and maintain comprehensive research information management systems; and
- v. set regulations and conditions for time buy-out to researchers with major collaborative projects.

4.4.4 Operational Procedures

- i. The Directorate of Planning, Development and Investment (DPDI) shall set aside funds for the purchase and maintenance of research equipment and facilities;
- ii. The Directorate of ICT shall increase the bandwidth and improve other internet infrastructure;
- iii. The Directorate of Research and Publication shall improve and maintain comprehensive research information management systems; and
- iv. The Office of DVC-Research shall set regulations and conditions for time buy-out to researchers with major collaborative projects.

4.5 Internal Procedures for Approval, Control and Monitoring of Research Process

4.5.1 Policy Issue

Lack of a comprehensive information management system for approval, control and monitoring of research process

The existing research information system contains isolated subsystems that do not exchange data. Therefore, there is a need to integrate the subsystems that comprehensively support all research processes.

4.5.2 Policy Statements

UDSM shall:

- i. provide one general framework which guides the preparations and approval of research projects; and
- ii. ensure that all research processes (application, approval, control, and monitoring) go through information management systems.

4.5.3 Strategies

UDSM shall:

- i. ensure compliance with the general framework for guiding preparation and approval of research projects as recommended in Annex I;
- ii. ensure compliance with the research information management systems; and
- iii. ensure regular update of the research information management system.

4.5.4 Operational Procedures

DRP shall ensure compliance with the general framework for guiding preparation, registration and approval of research projects, compliance with the research information management systems, and regular updates of the research information management system.

4.6 Collaborative Research and Knowledge Co-creation

4.6.1 Policy Issue

Lack of effective and sustainable structures and mechanisms for supporting collaborative research and knowledge co-creation among academia, industry, community, and government.

Collaborative research and knowledge co-creation is key in achieving the UDSM Vision 2061. However, there is still a gap between research and innovation outputs of the University and the needs of industry and society.

4.6.2 Policy Statements

UDSM shall:

- i. encourage staff and students to undertake inclusive research that provides practical solutions with societal impact;
- ii. support research and innovation activities that promote effective interaction among academia, industry, community, and government; and
- iii. encourage collaborative and multidisciplinary research with potential benefits to the University;
- iv. ensure participation in regional and international organizations to expand research networks and enhance potentials for collaborative funding.

4.6.3 Strategies

UDSM shall:

- i. establish rewarding mechanisms for motivating staff and students to conduct collaborative research and knowledge co-creation;
- ii. fund research and innovation activities with practical results that engage the University, industry, community, and government;
- iii. establish well-equipped laboratories for undertaking advanced collaborative research involving cutting-edge technologies;
- iv. ensure compliance with the UDSM guidelines for externally funded projects;
- v. ensure sustainability in regional and international organizations;
- vi. encourage industries to collaboratively build or improve research laboratories in the University premises for the common good; and
- vii. require that the Chief Corporate Counsel and Secretary to Council vet collaborative research agreements.

4.6.4 Operational Procedures

- i. DVC-Research shall establish rewarding mechanisms for motivating staff and students to conduct collaborative research and knowledge co-creation, fund research and innovation activities;
- ii. DVC-PFA shall establish well-equipped laboratories for undertaking advanced collaborative research involving cutting-edge technologies;
- iii. DVC-Research shall allocate a budget for annual membership in relevant regional and international organizations;
- iv. DRP shall ensure compliance with the UDSM guidelines for externally funded projects;
- v. DVC-Research shall initiate collaborations with industries to build or improve research laboratories in the University premises for the common good;
- vi. The Chief Corporate Counsel and Secretary to Council shall vet collaborative research agreements.

4.7 Research Capacity Building

4.7.1 Policy Issue

Inadequate trained human resource for planning, developing, conducting, and reporting research activities.

The UDSM Vision 2061 aspires for highly trained researchers to meet world-class University standards. This is in line with the National Research and Development Policy (2010) that recognizes the demand for highly trained manpower to conduct research activities. Although the University has trained quality manpower, their number is inadequate. More human resources trained to curb this demand are needed.

4.7.2 Policy Statement

The University shall build the required research capacity for the academic staff members to foster adequacy and efficiency in conducting and disseminating research activities.

4.7.3 Strategies

UDSM shall:

- i. ensure capacity building through re-tooling and continuing educational programmes of academic staff;
- ii. integrate and mainstream research in the teaching and learning curriculum for both undergraduate and postgraduate levels;
- iii. create and promote research opportunities for postdoctoral scholars and research associates within academic units;
- iv. encourage research mentorship in each research project;
- v. facilitate staff in writing fundable proposals;
- vi. make a case for increased government funding of research at the University;
- vii. devise an allocation of research training scholarships to different academic units on the basis of performance and demand; and
- viii. streamline the use of ICT and online training facilities.

4.7.4 Operational Procedures

- i. DVC-Academic shall ensure capacity building of academic staff in matters related to research;
- ii. DVC-Academic shall integrate and mainstream research in the teaching and learning curriculum for both undergraduate and postgraduate levels;
- iii. Principals, Deans and Directors shall create and promote research opportunities for postdoctoral scholars and research associates within academic units, encourage research mentorship in each research project, and facilitate staff in writing fundable proposals;
- iv. DVC-PFA shall engage government for increased research funding at the University;

- v. Principals, Deans and Director shall allocate research training scholarships on the basis of performance and demand; and
- vi. DICT shall facilitate the use of ICT and online training facilities.

4.8 Research Quality Assurance

4.8.1 Policy Issue

Inadequate enforcement of research quality assurance.

Research quality assurance, despite its importance, has not been adequately enforced. Yet this is imperative since it guarantees high quality research processes.

4.8.2 Policy Statement

UDSM shall strive to support and achieve high quality research processes and outputs.

4.8.3 Strategies

UDSM shall:

- i. maintain and disseminate research quality guidelines;
- ii. set a specific budget and ensure effective implementation of research quality guidelines; and
- iii. monitor and assess quality of research processes and outputs.

4.8.4 Operational Procedures

- i. Quality Assurance Unit shall monitor and assess quality of research processes and outputs; and
- ii. DVC-PFA shall set a specific budget and ensure effective implementation of research quality guidelines.
- iii. UDSM shall allocate a specific budget to ensure consistent availability of major world-class research facilities.

4.9 Research Funding

4.9.1 Policy Issue

Inadequate research funding to drive the UDSM ambition of becoming a hub for research excellence.

Research funding remains the most important factor in research performance. It is recognized that for sustainability and relevance, the main source of research funds shall still be the Government of the United Republic of Tanzania. The guiding research funding benchmark is 1% of GDP as per the National Research and Development Policy (2010). As research funding continues to shrink, the urgency of diversification of funding is apparent.

4.9.2 Policy Statements

UDSM shall:

- i. allocate funds from its internal revenue for research and make it available for all staff within the University in a competitive manner;
- ii. allocate funds for emerging research areas; and
- iii. mobilize research funds from sources other than the government.

4.9.3 Strategies

UDSM shall:

- i. allocate 6% of the University's internal revenue for research funding for a competitive research grant programme for staff;
- ii. invest in establishing strategic partnerships with mega research funding agencies;
- iii. collaborate with other research institutions for expanded funding opportunities;
- iv. make a case to secure research funding from the government;
- v. develop a cluster-based distribution of funding for the competitive grants;

- vi. develop a transparent system for handling research grants processing from departmental level to the University level;
- vii. disseminate general information on possible sources and modes of research funding from within and outside the University on regular basis;
- viii. create a conducive environment for professorial research chairs to attract research funds and improve quality of research outputs; develop a mechanism to recognize emerging research areas;
- ix. encourage and facilitate the establishment of professorial research chairs as a means of leveraging avenues of research funding for particular disciplines; and
- x. establish and fund research think tanks for soliciting and responding to highly competitive research funding opportunities.

4.9.4 Operational Procedures

- i. DVC-PFA shall allocate 6% of the University's internal revenue for research funding for a competitive research grant programme for staff, and secure research funding from the government;
- ii. The Office of the Vice Chancellor shall establish strategic partnerships and collaborations with mega research funding agencies and other research institutions for expanded funding opportunities;
- iii. DVC-Research shall develop a cluster-based distribution of funding for the competitive grants;
- iv. DVC-Research shall ensure periodic performance review of professorial research chairs;
- v. DVC-Research shall develop a mechanism to recognize and allocate fund for emerging research areas;
- vi. DRP shall develop a transparent system for handling research grants processing, including application, registration, evaluation, reporting (see Annexes I-VI), from departmental level to the University level, disseminate general information on possible

sources and modes of research funding from within and outside the University on regular basis;

- vii. Principals, Deans, and Directors shall facilitate the establishment of professorial research chairs; and
- viii. DVC-Research shall establish and fund research think tanks for soliciting and responding to highly competitive research funding opportunities.

4.10 Research Performance Rewarding

4.10.1 Policy Issue

Ineffective mechanisms for rewarding outstanding research performance.

Currently, UDSM awards outstanding researchers/innovators through Research and Innovation Week awards. The University has initiated monetary rewards for staff publications in reputable journals. Nonetheless, rewarding outstanding research performance has not received the required attention.

4.10.2 Policy Statement

UDSM shall recognize outstanding research performance at individual, academic unit and research teams.

4.10.3 Strategies

UDSM shall:

- i. establish a system with transparent criteria to measure outstanding research performance;
- ii. evaluate research performance of individuals, academic units and multi-disciplinary research teams on an annual basis; and
- iii. develop incentive plan for researchers who have excelled in various areas of research (e.g., resource mobilization, research mentorship, innovation, and societal impact).

4.10.4 Operational Procedures

DVC-Research shall:

- i. establish a system with transparent criteria to measure and evaluate outstanding research performance of individuals, academic units and research teams, and develop an incentive plan for researchers who have excelled in various areas of research; and
- ii. ensure that all researchers register into research identification systems using their UDSM identification information.

4.11 Shared Research Resources

4.11.1 Policy Issue

Restricted accessibility to duplicated research resources within the University.

The quality of research outputs depends on effective and efficient access to and use of research resources and facilities. Optimal sharing of research resources and facilities available in different departments, schools, institutes, and colleges promotes cost-effectiveness and a multidisciplinary environment.

4.11.2 Policy Statements

UDSM shall:

- i. encourage sharing of research resources for their full utilization; and
- ii. dedicate a space for shared research resources.

4.11.3 Strategies

UDSM shall:

- i. formulate guidelines on sharing research resources available in different University units;
- ii. map duplicated research resources and facilities available in different University units.

- iii. create awareness on the available research resources and facilities; and
- iv. set up mechanisms/procedures for utilizing and maintaining shared resources and facilities across colleges, schools, institutes and centres.

4.11.4 Operational Procedures

DVC-Research shall issue guidelines on sharing research resources, map duplicated research resources and facilities, create awareness on the available research resources and facilities, and set up procedures for utilizing and maintaining shared resources and facilities across colleges, schools, institutes and centres.

4.12 Research Culture

4.12.1 Policy Issue

Low motivation in active research engagement.

The UDSM staff are required to embrace research culture, which includes development of research proposals with national and international targets, motivation to conduct research, accountability in reporting, prioritizing ethical issues, and nurturing of the junior researchers within the institution.

4.12.2 Policy Statement

UDSM shall foster research culture in order to realize its vision.

4.12.3 Policy Strategies

UDSM shall:

- i. promote the research culture that informs teaching among the UDSM staff;
- ii. encourage academic staff to spare at least 30% of their working time for research;
- iii. contribute towards fostering and enhancement of research

- culture both within and outside the University;
- iv. encourage and promote research mentoring and nurturing amongst staff;
 - v. cultivate a research culture through training of undergraduate and postgraduate students in research;
 - vi. promote and encourage research teamwork through the creation of research groups, research centres and centres of excellence;
 - vii. encourage eligible staff to deliver professorial inaugural lectures and professorial valedictory lectures;
 - viii. encourage UDSM staff to utilize the available research career development opportunities such as post-doctoral position, sabbatical leave, research and visiting fellowship; and
 - ix. establish awareness programmes and protocols to inculcate values, attitudes and ethics among research stakeholders.

4.12.4 Operational Procedures

Principals, Deans and Directors shall promote a research culture that fosters and enhances mentoring and teamwork to inculcate values, attitudes and ethics among research stakeholders.

4.13 Dissemination of Research Results

4.13.1 Policy Issue

Ineffective mechanisms for ensuring that research results are disseminated.

Dissemination of research findings is needed for addressing a missing gap between academia and industry. In order to promote its visibility and increase the impact of research in the society, UDSM needs to establish a supportive environment for dissemination of the published materials, both locally and internationally, and collaborate with the community for knowledge sharing.

4.13.2 Policy Statements

UDSM shall ensure effective mechanisms are in place for dissemination of research results to the public.

4.13.3 Strategies

- i. Publishing and sharing of policy briefs with policy and decision makers, local community groups and other local stakeholders;
- ii. Issuing of press releases of striking results;
- iii. Leveraging ICT as a tool for dissemination of research outputs;
- iv. Publishing research findings in reputable national and international outlets;
- v. Organizing local and international conferences, seminars, symposium, workshops and meetings of professional associations;
- vi. Strengthening UDSM research repository, and ensure accessibility of the deposited research outputs;
- vii. Utilizing effectively both mainstream and academic social media of the University;
- viii. Creating and distributing materials, such as flyers, guides, pamphlets, short video clips entailing research findings;
- ix. Creating toolkits of training materials and curricula for various communities;
- x. Sharing research findings, including those of alumnae who have high positions, honorary professors and affiliated researchers, through social media or on an organization's website;
- xi. Empowering units of the University to conduct community-engaged research and outreach programs;
- xii. Requiring all research proposals incorporate a component for dissemination of research findings;

- xiii. Disseminating research findings through annual UDSM Research and Innovation Week;
- xiv. Subscribing to reputable scholarly databases;
- xv. Disseminating research findings in the national language, where necessary; and
- xvi. Aligning with the IP policy on commercialization of research results that have commercial value.

4.13.4 Operational Procedures

- i. Principals, Deans and Directors shall oversee publication and sharing of findings through policy briefs, research articles, flyers, guides, pamphlets, short video clips, and training manuals;
- ii. DVC-Research shall facilitate media transactions between research units and media house;
- iii. DVC-Research shall issue and share press releases of striking results through different media outlets;
- iv. DVC-Academic shall ensure availability of, and open access to, all UDSM research outputs by staff as well as full-text theses and dissertations by postgraduate students;
- v. Principals, Deans and Directors shall organize local and international conferences, seminars, symposium, workshops and meetings of professional associations, and annual UDSM Research and Innovation Week;
- vi. DRP shall facilitate subscription and maintain updated information on reputable scholarly databases;
- vii. The Directorate of Innovation and Entrepreneurship shall implement the IP policy on commercialization of research results that have commercial value.

4.14 Research Impact

4.14.1 Policy Issues

Insufficient enabling institutional systems for the uptake of research evidence and its translation into wider institutional, industrial and societal impact

UDSM occupies a better position in delivering scholarly research outputs, but the uptake of the research outputs is met with barriers from users of the research evidence, including policy makers, institutions, organizations, government, and industries.

4.14.2 Policy Statement

UDSM shall ensure that the institutional research agenda and policies are linked with national research priorities for wider institutional, industrial and societal impact.

4.14.3 Strategies

UDSM Shall:

- i. develop a mechanism where internal research procedures produce results that can be linked to national research priorities and the institutional research agenda;
- ii. increase funding for commissioned research aimed at strategic problem solving for societal impact;
- iii. provide special trainings to researchers and practitioners on how to identify opportunities for a wider impact of research evidence;
- iv. establish strategic research work groups to develop institutional responses to national and regional issues and build institutional credibility in problem solving for societal impact;
- v. install a feedback mechanism to foster continued refinement of the University research agenda in response to current matters; and
- vi. inculcate a common culture within the University to increase its credibility for more inter-sectoral collaborations and mandates and hence intensified research impact.

4.14.4 Operational Procedures

- i. DVC-Research shall develop a mechanism where internal research procedures produce results that can be linked to national research priorities and the institutional research agenda;
- ii. DVC-PFA shall increase funding for commissioned research aimed at strategic problem solving for societal impact;
- iii. DRP shall provide special trainings to researchers and practitioners on how to identify opportunities for a wider impact of research evidence;
- iv. DVC-Research shall establish strategic research workgroups to develop institutional responses to national and regional issues and build institutional credibility in problem solving for societal impact; and
- v. DVC-Research shall install a feedback mechanism to foster continued refinement of the University research agenda in response to current matters.

4.15 Cross-cutting Issues

4.15.1 Policy Issue

Inadequate consideration of cross-cutting issues in research undertakings.

Cross-cutting issues such as environment, gender, governance, accountability, innovation, entrepreneurship, inclusion, equity, and equality are important in research endeavours. However, these are not fully considered in research undertakings.

4.15.2 Policy Statements

The UDSM shall ensure compliance with cross-cutting issues in research undertakings

4.15.3 Strategies

UDSM shall:

- i. integrate and mainstream cross-cutting issues in different research aspects;
- ii. ensure that research activities comply with relevant national laws, policies and regulations on cross-cutting issues;
- iii. ensure equitable access to research resources and benefits from research results; and
- iv. clearly articulate cross-cutting research issues in different research guidelines and procedures.

4.15.4 Operational Procedures

DVC-Research shall mainstream and articulate cross-cutting issues in different research aspects, including guidelines, and ensure that research activities comply with relevant national laws, policies and regulations on cross-cutting issues.

4.16 Ethical Considerations

4.16.1 Policy Issues

Inadequate compliance with research ethics.

Research ethics form an integral component in ensuring compliance with standards and acceptable research processes and practices. Despite its importance, there have been reported cases of research malpractices that need to be addressed for the University to achieve her Vision 2061.

4.16.2 Policy Statement

UDSM shall ensure that all research projects comply with research ethics.

4.16.3 Strategy

UDSM shall:

- i. Require each research project to disclose ethical considerations

- undertaken as per the UDSM research ethics policy and operational procedures;
- ii. Update existing ICT research systems to reflect requirements of the UDSM research ethics policy and operational procedures;
 - iii. Ensure effectiveness of UDSM research ethics policy and operational procedures.

4.16.4 Operational Procedure

DVC-Research shall:

- i. Oversee Operational Procedures of the research ethics policy and operational procedures for each research project;
- ii. Harmonize the functioning of the research policy and operational procedures and research ethics policy and operational procedures.

4.17 Disposal of Research Project Resources

4.17.1 Policy Issue

Inadequate compliance with guidelines for disposal of research resources.

Externally funded research projects that require procurement of physical resources (e.g., vehicles, computers, and machines) and software resources should follow the guidelines and procedures for disposal after project completion. Once the disposal procedures are mishandled, the resources attract misappropriation.

4.17.2 Policy Statement

The University shall retain physical and software resources to foster continued research in the institution.

4.17.3 Strategies

UDSM shall:

- i. dispose physical and software resources in line with the existing policies and guidelines for externally funded projects;

- ii. ensure that all properties accumulated during the period of research remain the property of UDSM, except as otherwise provided in the research contract; and
- iii. give priority to the units which hosted the research in reallocation of research properties when the project ends.

4.17.4 Operational Procedures

Principals, Deans, and Directors shall dispose of physical and software resources and ensure that all properties accumulated during the period of research remain the property of UDSM, except as otherwise provided in the research contract.

4.18 Postgraduate Research

4.18.1 Policy Issue

Inadequate utilization of postgraduate research outputs.

Postgraduate research outputs, such as dissertations, theses, monographs, extension materials, and research papers, are important for the University standing. However, UDSM has inadequately seized this opportunity, hence missing the prospects of improved institutional visibility and ranking, online accessibility, co-creation of knowledge, career advancement, and social transformation.

4.18.2 Policy Statement

UDSM shall utilize its wealth of postgraduate research outputs for improved institutional reputation.

4.18.3 Strategies

UDSM shall:

- i. ensure postgraduate students publish in reputable outlets as required by relevant University policies;
- ii. ensure that postgraduate research outputs, including full-text theses and dissertations, are available and accessible online;

- iii. ensure that postgraduate students indicate UDSM affiliation in their research outputs, including publications;
- iv. ensure that postgraduate research demonstrates social and economic relevance to the society; and
- v. engage postgraduate students in grant proposal writing.

4.18.4 Operational Procedures

- i. DVC-Academic shall set aside funds for postgraduate students to attend at least one conference;
- ii. DVC-Research shall ensure that postgraduate publications are vetted as per the University regulations;
- iii. DVC-Academic shall reinforce the deposit and online accessibility of full-text theses and dissertations of postgraduate students in UDSM research repository;
- iv. DVC-Academic shall ensure that postgraduate regulations and guidelines have tools to assess social and economic relevance of postgraduate research to society; and
- v. DVC-Academic shall ensure that postgraduate students are engaged in grant proposal writing as part of training.

4.19 Postdoctoral Research and Career Development

4.19.1 Policy Issue

Postdoctoral and research associates have not been fully utilized to promote research career development and University promotion.

UDSM guidelines for postdoctoral and research associate programmes support local researchers. Although this is in line with the National Postdoctoral Research Framework, impactful postdoctoral research requires a sense of internationalization. This calls for the need to foster research skills and experience for both local and international scholars.

4.19.2 Policy Statements

UDSM shall:

- i. recognize postdoctoral as a prerequisite experience for academic assessment; and
- ii. make efforts to harvest experience from research associates who are affiliated with the University (through visiting scholarship and exchange programs).

4.19.3 Strategies

UDSM shall:

- i. strengthen scholarly and academic supervision of postdoctoral researchers in the University;
- ii. encourage provisions for postdoctoral funding during grant proposal writing;
- iii. set aside funds to sponsor newly graduated staff members to pursue postdoctoral positions in world-class universities;
- iv. seek special consideration for attracting international postdoctoral researchers as part of research internationalization; and
- v. create and promote postdoctoral positions in the University to attract both local and international postdoctoral researchers.

4.19.4 Operational Procedures

- i. DVC-Research shall facilitate postdoctoral research at the University;
- ii. DVC-Research and DVC-Academic shall have a joint responsibility to strengthen scholarly and academic supervision of postdoctoral researchers in the University;
- iii. DVC-Research shall oversee Operational Procedures of the guidelines for postdoctoral scholar and research associate;
- iv. Principals, Deans and Directors shall encourage staff to make provisions for postdoctoral funding during grant proposal writing;

- v. DVC-PFA shall set aside funds to sponsor newly graduated staff members to pursue postdoctoral positions in world-class universities; and
- vi. UDSM to engage the government to seek special consideration for attracting international postdoctoral researchers as part of research internationalization.

4.20 Research Databank

4.20.1 Policy Issue

Lack of research databank for archiving, sharing and reuse of research data and materials collected from different projects.

Archived data and materials are important research resources worldwide. Harnessing the archived data from different research projects, creating physical and virtual space for it, and granting access will improve experience. This will also allow re-use of data for research. However, there has not been such a space at UDSM.

4.20.2 Policy Statement

UDSM shall create a research databank for archiving, sharing and reuse of research data and materials collected from different projects.

4.20.3 Strategies

UDSM shall:

- i. create awareness among staff members on the importance of research databank;
- ii. provide guidelines for archiving and use of the research databank; and
- iii. create physical and virtual spaces for the research databank.

4.20.4 Operational Procedures

DRP shall create awareness among staff members on the importance of research databank, provide guidelines for archiving and use of the

research databank, and create physical and virtual spaces for the research databank.

4.21 Contributions to the Research Administrative Infrastructure and Services

4.21.1 Policy Issue

Insufficient funding for supporting the research administrative infrastructure and services.

Any research has indirect costs to the institution that needs to be recovered as overhead costs and effectively use such contributions to foster for improvement of research administrative infrastructure and services. Thus, research grants and research agreements have to include a provision for indirect cost recovery.

4.21.2 Policy Statement

UDSM shall assess 12% of the total project research costs as overheads.

4.21.3 Strategies

UDSM shall ensure compliance with guidelines and procedures for the management of research projects and activities funded from external sources.

4.21.4 Operational Procedure

DVC-Research shall charge 12% of the total research project costs as overheads, and ensure proper distribution to respective units as per Guidelines and Procedures for the Management of Research Projects and Activities Funded from External Sources.

4.22 Ownership of Research Outputs

4.22.1 Policy Issue

Ineffective mechanisms and machinery for claiming ownership of research outputs.

Ownership of research outputs help the University to gain visibility,

reputation and income. Despite these merits, there are ineffective mechanisms and machinery for claiming ownership of research outputs. Therefore, UDSM has to establish a system of identifying and protecting ownership of the research outputs in terms of intellectual property rights.

4.22.2 Policy Statements

UDSM shall institute effective mechanisms and machinery for claiming ownership of research outputs.

4.22.3 Strategies

UDSM shall:

- i. Ensure compliance with the UDSM policy on intellectual property and its operational procedures;
- ii. Update existing ICT research systems to reflect requirements of the UDSM Intellectual Property Policy;

4.22.4 Operational Procedures

DVC-Research shall:

- i. Oversee compliance with the UDSM policy on intellectual property and its operational procedures;
- ii. Establish ICT-based mechanism for quarterly registration of research outputs.

4.23 Internationalisation of Research

To support internationalisation agenda of the University, this policy shall comply with scholarly policy and also donor-funded research, together with journal policy.

4.23.1 Policy Issue

Inadequate supporting environment for internationalisation of research.

Internationalisation is an important agenda for universities across the globe. It requires transformation through investments in human capital,

research processes, and facilities. The current context, however, does not adequately support the required pace of internationalisation.

4.23.2 Policy Statement

UDSM shall strive to become a world-class University by internationalizing her research activities.

4.23.3 Strategies

UDSM shall:

- i. create conducive environment to attract international scholars and collaborators;
- ii. participate in research activities organized by international associations;
- iii. ensure that UDSM journals are indexed by internationally reputable databases;
- iv. Ensure availability of research statistics on the institutional website;
- v. build institutional capacity to vet potentially valuable research collaborations;
- vi. invest in seed funding to support think tanks for attracting mega research projects;
- vii. ensure that the UDSM research agenda becomes of international relevance.

4.23.4 Operational Procedures

- i. UDSM shall engage the government on employability of international scholars and collaborators to expand the pool of research experts;
- ii. UDSM shall create a conducive research environment and facilities to attract international scholars and collaborators;
- iii. DVC-Research shall ensure active membership in regional

- and international associations, including ARUA, EU, Commonwealth, and SADC;
- iv. DVC-Research shall ensure that UDSM journals are indexed by internationally reputable databases;
 - v. DVC-Research shall ensure availability of research statistics on the institutional website;
 - vi. UDSM shall facilitate DICA to vet potentially valuable research collaborations before signing of MoUs;
 - vii. DVC-Research shall invest in seed funding to support think tanks for attracting mega research projects; and
 - viii. DVC-Research shall ensure that the UDSM research agenda becomes of international relevance.

4.24 Other Operational Guidelines

Other operational guidelines can be found in form of annexes to the policy to facilitate various research procedures and activities at the University. The documents that would also constitute the operational procedures are included in Annexes I–VI of the Research Policy. These are:

- Annex I: Guidelines for Process of Approving Research Proposals
- Annex II: Format for Evaluation of Research Proposals
- Annex III: Sample Research Contract Format
- Annex IV: Research Progress Reporting Form
- Annex V: Format for the Final Research Report
- Annex VI: Guidelines for Research Rates

These operational tools shall be reviewed on a regular/continuous basis to accommodate changes in the operating environment. The office of DVC - Research shall be the custodian of the Research Policy on behalf of the University, and shall therefore bear the responsibility of ensuring that it continuously meets both the internal and external stakeholders' requirements.

CHAPTER FIVE

GOVERNANCE OF THE POLICY

5.1 Introduction

This chapter provides details about the roles and responsibilities of the University in collaboration with various internal and external stakeholders whose functions have direct or indirect link with research. Stakeholders within UDSM include the Office of DVC Research and its directorates, colleges, schools, institutes, centers, and other units, companies owned by the University. External stakeholders include relevant ministries, government agencies, authorities and commissions, non-state actors, as well as international organizations. The stakeholders shall implement the policy according to strategies and operational procedures stipulated in the policy document.

5.2 Organisation and Mandate

5.2.1 Vice Chancellor

The Office of the Vice Chancellor shall assume a strategic leadership role in matters pertaining to this policy.

5.2.2 Deputy Vice Chancellor (Research)

The Office of the Deputy Vice Chancellor (Research) shall be an overseer of the implementation of all activities stipulated in the policy. Thus, the Office of DVC- Research shall have the mandate to ensure that all those covered under this policy and the key units of UDSM comply with this policy. For the purposes of administration of this Policy, the office of DVC-Research shall ensure:

- i. implementation of the policy objectives, strategies and operational procedures;
- ii. set-up the mechanisms to institutionalize this policy at the college, institute and school levels through their corresponding research and publications committees;
- iii. policy implementation plans are in set, evaluated and tabled

- regularly at UDSM administrative organs for further actions;
- iv. governance and financial management accountability are set within its offices and those of the colleges/schools/institutes/centres in relation to research matters and functions;
 - v. establishment of a clear framework of collaboration and information flow between its directorates;
 - vi. enforcement of other guidelines related to this policy (e.g. Guidelines for Research Centres and Research Centres of Excellence at the University of Dar es Salaam (2014), Guidelines for Postdoctoral Scholar and Research Associate (PSDRA) Programmes (2015);
 - vii. budgetary provisions are aligned with the Policy objectives and implementation strategies;
 - viii. colleges/schools/institutes/centres and other units support the implementation of this policy;
 - ix. development and operationalisation of a reporting system on the implementation of this policy from colleges/schools/institutes/centres;
 - x. enactment of decisions on research issues approved by decision-making organs of the University are implemented and adhered to; and
 - xi. Provide the mechanism for evaluation of the implementation of the policy.

5.2.3 Directorate of Research and Publication

DRP shall:

- i. develop relevant tools for policy implementations and facilitate linkages with units;
- ii. facilitate communications of all matters regarding research as entailed in this policy;
- iii. facilitate creation, maintenance, and fostering of interdisciplinary

- research groups, research centers, inter-University research collaborations, preferably with scholars from outside the country;
- iv. promote and facilitate postdoctoral and research associate programmes;
 - v. facilitate engagement, creation and maintenance of collaborative research links with industry, other research institutions, local and foreign donors, and coordination of research grants;
 - vi. develop and maintain research management information systems, various database and records of all research related activities and outputs;
 - vii. facilitate soliciting and disseminating information of various opportunities for securing resources, funds and other support from major research grant agencies to enhance research activities; and
 - viii. motivate and support UDSM researchers to prepare and submit proposals for securing resources and collaborations to enhance research activities.

5.2.4 Colleges /Schools/Institutes

Academic units shall:

- i. implement policy directives and guidelines concerning research related matters;
- ii. provide appropriate research support services to researchers;
- iii. encourage its academic and technical staff to engage in research; and
- iv. integrate and mainstream research in the teaching and learning curriculum.

5.3 Roles of Other Stakeholders

5.3.1 The Roles of Ministries

Ministries shall provide guidance on policy orientation and implementable strategies, and prepare a conducive environment for sectoral coordination and integration. Specifically, the Ministry responsible for higher education shall:

- i. provide financial and policy related support for facilitation of research and expected outcomes;
- ii. provide support for establishment of National Research Centres of Excellence; and
- iii. strengthen research linkages, guidelines and support through the Tanzania Commission for Science and Technology (COSTECH).

5.3.2 Non-state agencies and international organisations

Non-state agencies and international organisations shall:

- i. provide technical, financial, and infrastructural support for research related activities at the University; and
- ii. fund and collaborate with UDSM in the research and training programs.

CHAPTER SIX

MONITORING AND EVALUATION

6.1 Purpose of Monitoring and Evaluation

The aim of monitoring and evaluation of University of Dar es Salaam Research Policy is to obtain feedback on the progress of the implementation of the policy and assess the outcomes against its original objectives and expectations. Specifically, evaluation will focus on the effectiveness, efficiency and impact of the agreed strategies. Monitoring and evaluation shall be carried out at all levels of the University. The office of the DVC-Research shall coordinate and facilitate the monitoring and evaluation of this policy.

6.2 Indicators for Monitoring and Evaluation

The Office of the DVC-Research in collaboration with the Quality Assurance Unit shall develop and institute a process of evaluation, monitoring and reporting on research quality performance and the implementation of the research policy. The evaluation shall be performed mid-term and end of term of the policy while that of research performance shall be done on an annual basis in terms of the number/amount/proportion/magnitude of:

- i. research grant proposals developed and submitted;
- ii. research training activities conducted e.g., workshops, seminars;
- iii. postdoctoral and research associate positions offered and completed;
- iv. publications per academic staff;
- v. peer reviewed research reports;
- vi. research facilities acquired;
- vii. scholarly databases subscribed;
- viii. overhead costs collected;
- ix. staff actively doing research;

- x. research grants funds collected;
- xi. societal impact of research;
- xii. clients using UDSM research services;
- xiii. local/international research assignments that UDSM wins in a competitive environment;
- xiv. collaborations with regional and international institutions – establishment of active research networks;
- xv. patents and copyrights;
- xvi. commercialized research results; and
- xvii. research results dissemination events.

The DVC-Research shall advise the Senate Research and Knowledge Exchange Committee (SRKEC) on what the benchmarks should be for these indicators.

6.3 Policy Review

The UDSM Research Policy shall be reviewed after every five (5) years to appraise its effectiveness and incorporate new developments, amendments and strategic plans within the University. The DVC Research shall constitute a review team and mandate it to undertake the review exercise, which, among other tasks, shall ensure harmony of the UDSM Research Policy with other related policies.

BIBLIOGRAPHY

- UDSM (2020). Guidelines and Procedures for Management of Research Projects and Activities Funded from External Sources. University of Dar es Salaam.
- Lund University (2023). Research Strategy 2023–2026. Lund University.
- MAK (2008). Research and Innovation Policy. Makerere University.
- URT (2010). National Research and Development Policy 2010. Ministry of Communication, Science and Technology.
- URT (2016). National Information and Communication Technology. Ministry of Works, Transport and Communication.
- COSTECH (2021). National Research Priorities 2021/22 – 2025/26. Tanzania Commission for Science and Technology.
- URT (2021). National Five-Year Development Plan 2021/22 – 2025/26. Ministry of Finance and Planning.
- COSTECH (2020). National Postdoctoral Research Framework. Tanzania Commission for Science and Technology.
- URT (2019). Tanzania Development Vision 2025. Planning Commission.
- COSTECH (2020). National Research Integrity Framework of Tanzania. Tanzania Commission for Science and Technology.
- URT (2022). Draft National Research & Monitoring Innovation Framework 2022. Ministry of Education, Science and Technology.
- COSTECH (2020). National Research & Innovation Monitoring Framework. Tanzania Commission for Science and Technology.
- COSTECH (2021). National Framework for Research Chairs. Tanzania Commission for Science and Technology.

- UDSM (2012). UDSM Vision 2061. University of Dar es Salaam.
- UDSM (2008). UDSM Intellectual Property Policy.
University of Dar es Salaam.
- UDSM (2010). UDSM Research Ethics Policy and Operational
Procedures. University of Dar es Salaam.
- UDSM (2020). UDSM Guidelines and Procedures for
Management of Research Projects and Activities.
University of Dar es Salaam.
- UDSM (2020). UDSM Scholarly Publication and Dissemination Policy.
University of Dar es Salaam.
- UDSM (2022). UDSM Information and Communication Technology
Policy. University of Dar es Salaam.
- UDSM (2020). UDSM Five-Year Rolling Strategic Plan 2020/21 –
2024/25. University of Dar es Salaam.
- UDSM (2018). UDSM Research Agenda 2018/19 – 2028/29.
University of Dar es Salaam.
- UDSM (2018). UDSM Guidelines and Procedures for Professorial
Research Chairs. University of Dar es Salaam.
- UDSM (2021). UDSM Mapping of the Research Centres, Research
Centre of Excellence 2020. University of Dar es
Salaam.
- UDSM (2014). UDSM Guidelines for Research Centers of Excellence.
University of Dar es Salaam.
- UDSM (2015). UDSM Guidelines for Postdoctoral Scholar and
Research Associate Programmes. University of Dar es
Salaam.
- UCT (2018). Research Data Management Policy.
University of Cape Town.

Annex I: Guidelines for Process of Approving Research Proposals

1.0 Initiation of a Research Project

A research proposal should be prepared by interested researchers in accordance with the format provided by the University. The proposal should then be submitted to the Departmental Research Committee (DRC).

To ensure maximum efficiency and to minimize administrative problems, a researcher is normally recommended to limit the number of research projects undertaken at any one time. The number and sizes of research projects will be dependent upon the DRC's assessment of the individual researcher's ability to handle several research projects at a time. In any case, consideration shall be given to ensure a reasonable balance between involvement in research, teaching and consultancy. However, section 4.4 of the research policy shall guide the process of research time buy-out, section 4.5.4 on preparation, registration and approval of research projects, and compliance with RIMS and section 4.8 on research quality assurance.

The approval of research proposals shall be based upon previous satisfactory performance. In general, collaborative and group research work will be given preference over individual ones. UDSM encourages international collaborative research and where funding is available, these should be given special preference.

2.0 Action by the Departmental Research Committee (DRC)

The proposal should be discussed by the DRC. Once the DRC is satisfied with the relevance, the need, soundness and the financial estimates of the submitted research proposal it will be forwarded through proper channels to the College/School/Institute Research Committee (CRC/ SCRC/IRC) with appropriate recommendations¹.

¹ Under emergency or other special circumstances, the DRC can approve the proposal for onward forwarding to a potential funding agent without approval at College/School/ Institute or University level. In any case, the department shall be required to submit a written justification for the action and submit for ratification.

However, if the departmental RC is not satisfied with the research proposal, there are three possible courses of action that it can take:

- To return the proposal to the researcher(s) for review and subsequent resubmission;
- To interview the researcher(s) and then either subject the proposal to the action above or approve it subject to minor revision. Another outcome of the interview could be approval of the proposal as it is;
- To reject it outright if the committee is sufficiently convinced that the proposal is of sub-standard nature in both the content and presentation.

In case a research proposal is rejected and the applicant is not entirely satisfied with the decision, one can appeal to the Head of Department who might choose to either return it to the DRC with recommendations or endorse the rejection. However, if the proposal is rejected by the DRC for the second time, no further appeals should be entertained. As a guideline, the DRC should limit its evaluation to a maximum of three months.

3.0 Action by the College/School/Institute Research Committee (CRC/SCRC/IRC)¹

The CRC/SCRC/IRC will scrutinize the research proposal, especially the research objectives, research methodology, time schedule, phasing etc. The CRC/SCRC/IRC shall particularly scrutinize the cost estimates and can make other specific recommendations on the area coverage and resources required although academic responsibility and evaluation lies with the departments.

If the CRC/SCRC/IRC is not satisfied with the research proposal, it is proposed that the courses of action to be taken shall be similar to those taken by the DRKC. The only exception is that, in the case of an appeal after the first rejection by the CRC/SCRC/IRC, the proposal is forwarded to the Principal/Dean or Director of the College/School/

¹ College/School/Institute Research Committee in the case of Campus College.

Institute who shall make his/her recommendations to the CRC/SCRC/IRC. As a guideline, the maximum evaluation period of a research proposal at College/School/Institute level should not exceed three months. For projects funded at College/School/Institute level, the CRC/SCRC/IRC has the final say on the approval of project (with room for appealing to the Principal/Dean/Director).

The projects shall be registered appropriately and both a copy of approved research proposal and the registration number forwarded to the Directorate of Research. For University funded research applications, the CRC/SCRC/IRC shall make recommendations for funding to the appropriate University level committee (SRC).

4.0 Action by University Research Committee (SRC)

The SRC shall receive and consider any proposal for funding after being satisfied with the relevance, need, soundness and financial estimates. The SRC shall have the following alternative courses of action:

- i. To accept the proposal for funding when the committee is satisfied;
- ii. To return the proposal to the CRC/SCRC/IRC for review and subsequent resubmission if the guidelines are not followed or if the procedures have not been adhered to;
- iii. To approve it subject to minor revisions to be made by the applicant(s);
- iv. To reject it outright if the committee is sufficiently convinced that the proposal is of sub-standard nature in both the content and the presentation.

In case a research proposal is rejected and the applicant is not entirely satisfied with the decision, one can appeal to the Chair of SRC who might choose to return it to the University SRC with recommendations.

5.0 Approval and Registration

The Directorate of Research and Publication shall coordinate research project registration. The Directorate shall also maintain an up-to-date database of all research projects within the University.

6.0 Research Contract and Funding

An approved research proposal shall only be funded once the researcher(s) has signed a contract with appropriate offices. These shall be at College/School/Institute or University level depending on where funding is sourced. Research contracts format is included in Annex III.

7.0 Quarterly Progress Reports

At the end of each phase, the researchers are required to produce quarterly progress reports giving the up-to-date research findings through the DRC as required by the University. The guidelines and format for such progress reports is given as Annex IV.

8.0 Final Research Report

At the conclusion of the research, a final research report should be submitted in the format approved by the University. This should include all the data, results and findings obtained during the execution of the research project. The quarterly progress reports will normally form the basis for the final consolidation research report. The guidelines for reviewers are given in Annex II.

Annex II: Format for Evaluation of Research Proposals

Format 1: Guideline and Format for Evaluation of Research Proposals

| Title and Investigator(s) | | | | | |
|---------------------------|--|--|--------------------|-------|----------|
| SN | Attribute | Criteria | Weighted Grade (%) | Score | Comments |
| 1 | Summary, if any (7 pts) | Short introduction | 1 | | |
| | | Goals/objectives | 1 | | |
| | | Brief Problem area | 1 | | |
| | | Brief methods | 1 | | |
| | | Expected output | 1 | | |
| | | Who (researchers), where (place of research) & when (duration) | 1 | | |
| | | Budget | 1 | | |
| 2 | Literature review: Is it comprehensive, relevant and up-to- date (15 pts) | Adequacy (# of literature cited) | 5 | | |
| | | Recent Literature Review | 5 | | |
| | | Identification of research gap(s) | 5 | | |
| 3 | Goals and objectives: Are these clearly stated and are they achievable? (10 pts) | General objective/ Specific | 2 | | |
| | | Clarity of the objectives | 4 | | |
| | | Realistic/ Achievable within 1 year? | 4 | | |

| Title and Investigator(s) | | | | | |
|---------------------------|--|--|--------------------|-------|----------|
| SN | Attribute | Criteria | Weighted Grade (%) | Score | Comments |
| 4 | Statement of the problem and rationale: Are these clearly stated? Is the proposal well-reasoned? (14 pts) | Is the problem clear | 7 | | |
| | | Is the problem significant to knowledge, society, etc. | 7 | | |
| 5 | Methodology: Is this properly designed, and is it related to all the objectives stated? (20 pts) | Is it related to objectives | 8 | | |
| | | Is it properly designed to achieve the objectives | 8 | | |
| | | Are Physical Resources available to accomplish the research outputs? | 4 | | |
| 6 | Are the applicants capable of accomplishing the research? (14 pts) | Capability (CVs) | 4 | | |
| | | Team work (Junior/ Senior) collaboration | 5 | | |
| | | Interdisciplinary | 5 | | |

| Title and Investigator(s) | | | | | |
|---------------------------|---|---|--------------------|---------------------|----------|
| SN | Attribute | Criteria | Weighted Grade (%) | Score | Comments |
| 7 | Research Outputs (10 pts) | Tangible results (e.g. prototype product, maps etc.) | 10 | | |
| | | Non-Tangible results (e.g. process, procedure, checklist, vocabulary, etc.) | | | |
| | | New body of knowledge | | | |
| 8 | Budget and justification: Is the budget realistic? (10 pts) | Realistic, well justified with Time Frame | 7 | | |
| | | Compliance with the approved rates? | 3 | | |
| 9 | Total Score (%) | | 100 | | |
| 10 | Conclusion: Do you recommend approval of this proposal? (<i>tick the appropriate box</i>) | Approved | | Not approved | |

Additional comments

.....

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.....

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Format 2: Scoring Matrix for Evaluating UDSM Research Grants

UD-PR..... **Title:**

Value (TZS).....

| SN | Attribute | Total Score (%) | Criteria | Weight | Score Obtained (%) | Points | Comment |
|----|-------------------|-----------------|--|--------|--------------------|--------|---------|
| 1 | Title | 3 | Is the title compact, precise, and reflecting general research objectives? | | | | |
| 2 | Summary | 6 | Is the summary brief and capturing salient features of the research? | | | | |
| 3 | Introduction | 12 | Is the research important, rational, and justified in line with UDSM, national, and international agenda or frameworks? | | | | |
| 4 | Problem statement | 12 | Is the problem clearly defined? Is the solution to problem likely to contribute knowledge in the field, and is broadly significant to society and nation? | | | | |

| SN | Attribute | Total Score (%) | Criteria | Weight | Score Obtained (%) | Points | Comment |
|----|-------------------|-----------------|--|--------|--------------------|--------|---------|
| 5 | Objectives | 12 | Clarity of general and specific objective. | | | | |
| | | | Are the objectives SMART (Specific, Measurable, Achievable, Realizable and Time bound) given a budget of TZS in a one-year period? | | | | |
| 6 | Literature review | 12 | Is the literature cited adequate and relevant? | | | | |
| | | | Is the literature up-to-date, 5-10 years? | | | | |
| | | | Are research gap(s) identified and authors' approach to the problem clear? | | | | |

| SN | Attribute | Total Score (%) | Criteria | Weight | Score Obtained (%) | Points | Comment |
|----|-----------------|-----------------|--|--------|--------------------|--------|---------|
| 7 | Methodology | 15 | <p>Is the methodology properly designed and in-line with objectives?</p> <p>Are the research scope, geographical limits and other boundaries clearly outlined?</p> <p>Are physical resources available to accomplish the research outputs?</p> <p>Are data collection tools, lab procedures, and techniques for data analysis clearly explained?</p> | | | | |
| 8 | Research Output | 7 | <p>Will the research produce</p> <ol style="list-style-type: none"> i. Tangible results (e.g., prototype product, and maps)? ii. Non-tangible results (e.g., process, procedure, checklist, and vocabulary)? iii. New body of knowledge? | | | | |

| SN | Attribute | Total Score (%) | Criteria | Weight | Score Obtained (%) | Points | Comment |
|----|------------|-----------------|---|--------|--------------------|--------|---------|
| 9 | Budget | 8 | <p>Is the budget realistically distributed by phases within the time frame shown in the plan of action?</p> <p>Is the budget mostly allocated to core-work rather than travel, meetings and seminars?</p> <p>Are large portions (>20%) of the budget justified including co-funding?</p> <p>Do the budget elements comply with UDSM/Government approved rates?</p> | | | | |
| 10 | Capability | 13 | <p>Researcher's publication(s) in the research area</p> <p>Team work, gender mix, junior-senior mix.</p> <p>Reflection of interdisciplinary work in composition of team and/or role of researchers</p> | | | | |

| SN | Attribute | Total Score (%) | Criteria | Weight | Score Obtained (%) | Points | Comment |
|--------------------|-----------|-----------------|----------|--------|--------------------|--------|---------|
| TOTAL SCORE | | | | | | | |
| GRADE | | | | | | | |

Researchers

1.
2.
3.
4.

Department:

College/School/Institute:

Annex III: Sample Research Contract Format

University OF DAR ES SALAAM CONTRACT FOR RESEARCH

1. Name(s) of the Researcher(s):
 - 1.1
(Principal Researcher)
 - 1.2
 - 1.3
 - 1.4
2. The Researcher agrees to undertake research under the following terms and conditions:
 - 2.1 I, the Principal Researcher mentioned above, undertake to carry out the research project, titled the details of which are contained in the attached approved proposal.
 - 2.2 The duration of doing the research will be..... Months/Years.
 - 2.3 The University of Dar es Salaam (UDSM) undertakes to provide funding for the proposal project for the total amount of TZS..... subject to availability of funds.
 - 2.4 The researcher(s) undertakes to abide with all applicable UDSM policies on finance, research, intellectual property rights and other guidelines in the conduct of research, reporting and collaboration with external researchers and or institutions.
 - 2.5 The payment will be in accordance with the approved schedule that is attached to this contract.
 - 2.6 All supporting staff, e.g. secretarial, technical and auxiliary

will be from among the UDSM staff/students. Permission to employ staff from outside UDSM, if for an extended period of time and/or on regular basis, should be obtained from the Director of Research before the appointment is made.

- 2.7 UDSM reserves the right to withhold payment partially or fully, if it is not satisfied with the progress of the project and upon failure of the researcher to rectify the anomaly within the agreed timelines. UDSM shall also have the right to recover unaccounted and unretired funds from the research staff salary and may bar such researcher from applying for similar research support.
- 2.8 In case of non-performance, except in cases of force majeure and other justifiable causes, the researcher(s) shall be required to fully or in *quantum meruit* refund the UDSM payments received for the purposes of research.
- 2.9 The Principal researcher acknowledges that he/she is aware of the University of Dar es Salaam Research and Intellectual Property Rights Policy which are to the effect that UDSM shall own all intellectual property rights arising out of the research.
- 2.10 The research project has been assigned a unified UDSM Code No.....
- 2.11 We, the undersigned, accept the above-mentioned terms and conditions.

Principal Researcher
Witness

Principal/Dean/Director,
College/School/Institute of.....
.....

Copy: Director of Research and Publication
Date:

Annex IV: Research Progress Report Format

9.0 PROJECT DESCRIPTION

SECTION A: SUMMARY OF ADMINISTRATIVE INFORMATION

1.1 Project Number & Title: _____

1.2 Principal Researcher
Name: _____
Department: _____

1.3 Period (month/year) covered by this report
From _____
to _____

1.4 Period (month/year) covered by previous progress report:
From _____
to _____

1.5 Starting date of Project: _____

1.6 Estimated duration of Project Date of estimated completion
Initial:
Latest:

1.7 Estimated cost of Project (in TZS): _____

1.8 Funds allocated to project (in TZS): _____

| Phase 1 (TZS) | Phase 2 (TZS) | Phase 3 (TZS) | Phase 4 (TZS) | Total (TZS) |
|------------------|------------------|------------------|------------------|----------------|
| | | | | |

10.0 PROJECT OBJECTIVES

Briefly state the project objectives, indicate which (if any) are changed or new, and give the reason for any revision (1) since the start of the project, and (2) since the latest progress report.

11.0 PROGRESS SINCE LAST

SECTION A: SCIENTIFIC PROGRESS

Include sufficiently detailed summaries of work carried out and results obtained to permit an *informed* critical scientific assessment of the work by the respective committees and peer reviewers. If possible, results should be presented in tabular or graphic form. Summaries should be complete in themselves and as brief as possible, consistent with clarity (a maximum of two pages is required).

SECTION B: PROGRESS TOWARDS ACHIEVING PROJECT OBJECTIVES

Describe advances and/or problems encountered towards the completion of the Plan of Work for this reporting period. Interpret new findings (both positive and negative) in terms of the objectives of the project and state if they are expected to increase (or decrease) the duration, total cost, and/or likelihood of success of the project. If findings indicate potentially fruitful alternative and/or additional lines of research, indicate so with sufficient explanatory information to ensure understanding by reviewers.

**12.0 FINANCIAL STATEMENT OF INCOME AND
EXPENDITURE DURING THE PERIOD COVERED BY
THE REPORT**

| PERIOD COVERED (DATE) FROM _____ TO _____ | | | | | |
|---|-------------------------|---|-------------------------------|--------------------------------|----------------------|
| SN | Item | Amount ¹ Brought Forward | Fund ² Received | Funds ³ Expended | Balance ⁴ |
| 1 | Direct Expenditures | | | | |
| 2 | Travel and Transport | | | | |
| 3 | Per Diem | | | | |
| 4 | Honoraria | | | | |
| GRAND TOTAL | | | | | |

1 Amount should be shown in TZS.

2 The breakdown should be as shown in the budget approved for the reporting period.

3 Includes as funds expended and those for which commitments have been made.

4 This amount is the sum of amounts in the first two columns, less the amount in the third. The balance should be reconciled with approved budget indicated in Annex IV.

Annex V: Format for the Final Research Report

1.0 Research Report Content

A research report should include the following headings:

- Abstract
- Acknowledgments
- Table of contents
- List of figures
- List of symbols (*where applicable*)
- Introduction
- Objectives
- Literature review
- Methodology
- Experimental details (*where applicable*)
- Results
- Analysis and Discussion of the results
- Conclusions and Recommendations
- References/Bibliography
- Tables
- Plates (*where applicable*)
- Figures
- Appendices

2.0 Report Format

- All headings should be left justified.
- Line spacing should be single and fonts should be 12 pts.
- Left margin should be 1.5 in and 1 in on all other sides.
- Typing should be on both sides of the A4 page.
- Report cover shall be as shown in the attached format.
- Tables, Plates and Figures should either be included in the text at the appropriate places or they should be at the end of the text, after references.
- Format for quoting reference numbers in the text and references should be standard. British Citation Standard BS 5605:1990 is recommended. Any other standard that is recommended for certain professions could also be used.

Examples

- i. Technical articles
Lembu, T. R., 2005 Informal Construction Sector Performance in Tanzania. *Tanzania Engineer, IET*, 10(3), pp. 37 - 43.
- ii. Books
Masatu, C. K., 2004. *Implementing Total Quality Management in Higher Education*. Dar es Salaam Higher Education Press, Dar es Salaam. 156 pp.
- iii. Reports
Construction Industry Development Board, 2004. *Construction Industry Sector Development Strategy - A Summary of Needs*. CIDB, Dar es Salaam. 142 pp.

3.0 Electronic Format

For purposes of inclusion in the UDSM electronic database, an electronic format of the report based on commonly used software shall also be submitted.



University OF DAR ES SALAAM
(Name of College/School/Institute)
(Name of Department)

FINAL RESEARCH REPORT

(TITLE OF THE RESEARCH PROJECT)

Research Report No: _____

Researchers

1. _____
2. _____
3. _____
4. _____

(Date –Month, Year)

Annex VI: Guidelines for Research Rates

| DIRECTORATE OF RESEARCH AND PUBLICATION | | | |
|--|--|---|---|
| SUMMARY OF PROPOSED RESEARCH RATES | | | |
| SN | ITEM | OLD RESEARCH RATES (TZS) | PROPOSED RESEARCH RATES (TZS) |
| 1 | Typing | 600 Per Page | 2,000 |
| 2 | Lunch allowance | 5000 Per Day | 10,000 |
| 3 | Photocopy | 40 Per Page | 100 |
| 4 | Local Transport | 5000 Per Day | 30,000 |
| 5 | Mileage Allowance | 456 Per KM | 1,500 Per KM |
| 6 | Payment to Research assistants | | |
| A | Non-graduates | 6000 Per Day | 20,000 |
| B | Undergraduates | 8000 Per Day | 40,000 |
| C | Graduates | 15000 Per Day | 60,000 |
| 7 | Stationaries/ Equipment and Research materials | As per applicable rates obtained at the supplies office | As per applicable rates obtained at the supplies office |
| 8 | A | Data entry charges | 1000 Per Questionnaire |
| | B | Data Analysis | 1500 Per Questionnaire |
| | | | As Per Weight of the Task |
| 9 | A | Translation | 15000 Per Page |
| | B | Transcription | 15000 Per Page |
| | | | 30,000 Per Page |

Note: Per diems will be paid as per the existing financial regulations and directives.



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