

**2020**

**MUHIMBILI UNIVERSITY OF HEALTH  
AND ALLIED SCIENCES**



**RESEARCH POLICY AND GUIDELINES**

**August, 2020**

## **LIST OF ABBREVIATIONS**

ACUC	Animal Care and Use Committee
DRP	Directorate of Research and Publications
GDP	Gross Domestic Product
ICT	Information Communication Technology
SDGs	Sustainable Development Goals
MUHAS	Muhimbili University of Health and Allied Sciences
SRPC	Senate Research and Publications Committee
UDSM	University of Dar es Salaam
WMA	World Medical Assembly

## **TABLE OF CONTENTS**

<b>LIST OF ABBREVIATIONS .....</b>	<b>i</b>
<b>EXECUTIVE SUMMARY .....</b>	<b>iv</b>
<b>1.0 INTRODUCTION.....</b>	<b>1</b>
1.1. Background .....	1
1.2. MUHAS Research Administrative Structure .....	1
<b>2.0 OBJECTIVES OF THE MUHAS RESEARCH POLICY GUIDELINES.....</b>	<b>2</b>
<b>3.0 RESEARCH POLICY GUIDELINES.....</b>	<b>3</b>
3.1 Research Priorities .....	3
3.2 Research Planning and Administrative Capacity Building .....	4
3.3 Sourcing and Management of Research Funds.....	4
3.4 Procedures for Approval, Control and Monitoring of Research Process .....	6
3.5 Research Training and Capacity Building .....	7
3.6 Collaborative Research .....	8
3.7 Staff Remuneration .....	9
3.8 Research Performance Rewarding .....	9
3.9 Institutional Administrative Overheads .....	9
3.10 Sharing of Research Resources.....	10
3.11 Research Support Environment .....	10
3.12 Dissemination of Research Results.....	11
3.13 Ethical Considerations .....	12
3.14 Bio-hazardous Agents .....	14
3.15 Intellectual Property Rights .....	15
3.16 Use and Disposal of Research Project Resources.....	15
3.17 Impact of Research .....	15
3.18 Research Culture .....	16
3.19 Application and Review of the Research Policy.....	16
<b>4.0 STRATEGY FOR IMPLEMENTING THE RESEARCH POLICY GUIDELINES.....</b>	<b>16</b>
4.1 Principal Strategy .....	16
4.2 Managing Research.....	18
4.3 Development of Comprehensive Implementation Strategy – Way Forward .....	20
4.4 Research Process tools/instruments .....	20
<b>5.0 POLICY STATUS .....</b>	<b>20</b>
<b>6.0 KEY STAKEHOLDERS.....</b>	<b>20</b>
<b>7.0 APPROVAL DETAILS.....</b>	<b>21</b>

<b>8.0</b>	<b>ENDORSEMENT DETAILS</b> .....	21
<b>9.0</b>	<b>RELATED LEGISLATION</b> .....	21
<b>10.0</b>	<b>RELATED POLICIES</b> .....	21
<b>11.0</b>	<b>RELATED DOCUMENTS</b> .....	21
<b>12.0</b>	<b>EFFECTIVE DATE FOR THE POLICY</b> .....	22
<b>13.0</b>	<b>NEXT REVIEW DATE</b> .....	22
<b>14.0</b>	<b>POLICY OWNER</b> .....	22
<b>15.0</b>	<b>POLICY AUTHOR</b> .....	22
<b>16.0</b>	<b>CONTACT PERSON</b> .....	22

## **EXECUTIVE SUMMARY**

Since its establishment in 2007 Muhimbili University of Health and Allied Sciences (MUHAS) has sustained its rank as a state of the art Health Sciences institution. One of its top priority responsibilities is to undertake comprehensive and inclusive Health related research in various domains. Major areas of concentration include Clinical, Biomedical, Public health, Pharmaceutical, Traditional Medicine researches. This notwithstanding it is recognized that research resources- infrastructure, financial and human- remain visibly inadequate. The national support in this area has remained at a mere minimum. In an attempt to overcome this challenge MUHAS has strived with reasonable success to seek external and internal collaboration to concentrate on seminal areas guided by the MUHAS Rolling Strategic Plan, Health Sector Strategic Plans, the National Health Policy, National Research Policy, National Research Agenda and other important documents including Vision 2025, the Sustainable Development Goals (SDGs) and the current National Five Year Development Plans.

All members of faculty; MUHAS associates; MUHAS research partners and collaborators; graduate and undergraduate students who are involved in research on or off campus at MUHAS are obliged to conform to these guidelines.

In undertaking research, it is fundamental that required capacity is acquired. This worldwide and time tested phenomenon is applicable to all Research institutions including the Universities in African countries including Tanzania. MUHAS is not an exception to this. It is obliged by the establishing Charter to put in place a functioning and sustainable operational mechanism of conducting research of national interest and priority. MUHAS shall therefore see to it that its staff is well aware of the national research agenda and actively participate in translating and integrating it into research agenda of their respective academic disciplines. In tandem adopt a common operational framework in preparation, processing and approval that gives priority to projects within the University research agenda when approving research funding.

Capacity building including training or infrastructure strengthening represents some of the most significant areas of national investment in research and development, and that research students who are a major future resource are helped to excel in this field. For the University to develop and assimilate indigenous and foreign technologies it has a duty to identify and promote special talents among its members of staff and students. To this end, MUHAS shall ensure that all researches undertaken target meaningful capacity building at all levels as one of its main missions. MUHAS recognises the need to hasten strategic partnerships and collaboration within and between the University, the Government, other research institutions and the private sector

in the country and abroad. In this spirit, the University shall promote external and internal multidisciplinary collaborative research where there are potential benefits to the University.

Funding remains the single most critical bottleneck in research performance. It is recognized that for sustainability and relevance, main source of research funds shall be the Government of Tanzania. Despite the recognition of the need to invest in research, and the government allocating at least 1% of the GDP to research programmes, national funding has continued to be extremely low and research activities are largely development partner-driven or collaboration based. There is therefore a need to ensure that the government decision to substantially increase research funds is reciprocated by enhanced research at MUHAS and elsewhere.

In order to motivate research and reward productivity all funded research projects should include researcher's motivation such as a budget item on research allowance and other remuneration for all investigators according to the existing guidelines. The allowances and remunerations must be attractive, comparable and competitive in order to retain quality staff. MUHAS shall sustain and continuously improve existing transparent criteria/indicators to measure research excellence and reward research performance at individual, academic unit and research teams each year. It shall also be ensured that, research output continues to constitute a major criterion in the promotion of academic staff. Subject to the Intellectual Property Policy, MUHAS shall continue to encourage the incorporation of the dissemination of research results in the research proposals.

MUHAS shall maintain its requirement that research projects contribute at least 15% of the total project research costs to the institutional overheads. MUHAS requires that Schools, Institutes, Directorates and Departments have transparent and objective criteria of making research opportunities known to members of staff and for allocating such opportunities. It encourages sharing of research project resources among all University researchers in order to utilize fully the research resources available. A database to enable students and staff to access the research inventory is a standing requirement.

MUHAS has done its best and will continue to as far as feasible manage, coordinate and make attractive a research support environment. Areas that deserve specific attention will include the provision and continuous improvement of modern management information systems and facilitated access to international literature and databases, provision of research administration allowance, maintenance of equipment, support for purchase of basic consumables, provision of support for publication and distribution of the MUHAS Research Bulletin. The University

regularly reviews and monitors the undergraduate and postgraduate curricula to inculcate a research culture among the students.

MUHAS ensures that all research involving human participants conform to the recommendations guiding researchers in research involving human beings as adopted by the 18th World Medical Assembly (WMA), Helsinki, Finland, June 1964, and amended by the 59<sup>th</sup> WMA, Seoul, October 2008.

MUHAS has ensured and will continue to see to it that sponsored project agreements include the terms and conditions for the disposition of tangible properties (e.g. equipment, vehicles, reports, theses or dissertations) or intangible properties such as rights in data, copyrights, and inventions. Except as otherwise expressly provided, all equipment purchased within a research project shall be the property of MUHAS. National laws, policies and procedures governing the disposal of University property (obsolete or otherwise) have been applied and will continue to be applied. On completion or termination of the project/programme the University retains and continue to retain the title to all equipment purchased for the project or programme. The unit/researcher that had these resources will be given priority in disposal of research resources when the project is completed.

## **1.0 INTRODUCTION**

### **1.1. Background**

The Muhimbili University of Health and Allied Sciences (MUHAS) was established by a Charter of Incorporation Article One in 2007; in line with act no 7 of 2005. Within the Charter part ii - objects and functions- (k) Research is explicitly emphasized. It is stated “To promote research into Scientific, technological, economic, political, social, cultural and other matters of interest of Tanzania and mankind in general”. The University has three inter-related core functions. The first is to transmit, through teaching, knowledge from one generation to another, and to meet the high-level health human resources needs for the Tanzanian society. The second is to produce knowledge through research; and the third is to provide services which address the country’s existing and future health problems, through consultancy and community outreach programmes.

The three functions above are implicit within the University’s vision of becoming ‘a centre of excellence for training health professional, quality research and public service, located in a spacious area with a state of the art university hospital, conducive learning and working environment and sustainable resource generation’.

The MUHAS research policy agenda is further underlined by the Mission of the University which is ‘to seek for quality health through education, training, research and health services for attainment of equitable socio-economic development`.

MUHAS occupies a unique position in Tanzanian society generally, but in higher education in particular. The outputs of MUHAS over the last half century have offered distinguished services to Tanzania and beyond. Research results emanating from research by MUHAS staff are used to formulate many of the health policies in Tanzania. Recent examples being those related to Malaria, HIV/AIDS management and Health care financing.

### **1.2. MUHAS Research Administrative Structure**

The Directorate of Research and Publications established in 2003 has administered and coordinated research including external linkages on all matters related to research. Since its establishment, the Directorate has had a number of achievements based on the Research Strategic Plans (2003/04 – 2007/08; 2008/09 – 2012/13; and 2014/2015 – 2023/2024) prepared



by the directorate. These documents have been widely circulated and have guided the preparation and management of research activities at MUHAS.

Since 2007 a University Senate Research and Publications Committee (SRPC) was established. It is a sub-committee of the MUHAS Senate which is responsible for advising the Director of Research and Publications (DRP) on all the research and dissemination activities at MUHAS. Research outputs are critical for the development of the relevant local content and advancing frontiers of knowledge. The Committee receives proposals and reports from respective schools, institutes and directorates. Proposals are submitted for funding and/or ethical clearance. They are peer reviewed and the decision for funding or ethical clearance is made based on their scientific and ethical merit. In order to avoid delays in the pre-processing of proposals, the SRPC has an Expedited Review Committee that reviews proposals with minor amendments and renewal of ethical clearance. This enhances efficiency in the approval mechanism of research proposals.

Schools and Institutes have established their respective Research and Publications Committees. These committees are responsible for coordinating research and dissemination of research results at the unit levels. The chairpersons of the schools and institutes Research and Publications Committees are members of the University SRPC and are therefore responsible for reporting implementation and progress of the Schools` and Institutes` research activities to the University SRPC. In supporting research, the Directorate responsible for Research has continued to play a central role in sourcing and management of research funds at the University.

## **2.0 OBJECTIVES OF THE MUHAS RESEARCH POLICY GUIDELINES**

In line with the National Research Policy, the National Health Policy, Current Five Year Development Plan, Sustainable Development Goals (SDGs), Vision 2025, the current Five Year Development Plan, the University Research Policy aims at inculcating a research culture among staff and students by:

- 2.1 Providing a mechanism of ensuring that research conducted in the University: Is in line with national health priorities; address local, regional and global health problems of public health importance; aims at solving scientific questions identified in different branches of the health sciences at the University and Nationally.
- 2.2 Providing attractive terms and conditions of service for researchers so as to motivate research and reward productivity.

- 2.3 Strengthening the research infrastructure in the University by placing due emphasis on institutional development and improving logistical and technical support to research operations.
- 2.4 Identifying, promoting and developing special talents among its members of staff and students with a view to developing a critical
- 2.5 Critical mass of Research Scientists in the University. Encouraging collaborative research between scientists within MUHAS and researchers in other institutions within and outside the country, to promote a multidisciplinary approach.
- 2.6 Improving the linkage between research and the application of research results in guiding policy and action in the health sector.
- 2.7 Encouraging and rewarding individual initiatives in securing research funds.
- 2.8 Establishing research quality assurance system
- 2.9 Facilitating repackaging of research information to ensure dissemination of user-friendly research findings within and outside MUHAS.

### **3.0 RESEARCH POLICY GUIDELINES**

#### **3.1 Research Priorities**

Tanzania faces the challenge of achieving equitable coverage of effective services in the face of severe resource limitations and privatization. Because of these limitations and new economic and political developments, the University has had to find an acceptable way of identifying priority areas and partners for research. The University has therefore agreed to set out its research priorities in line with the national development documents, including Vision 2025, The Health Sector Strategic Plans, the SDGs and the current National Five-Year Development Plans. The priorities should be on health problems that could cause a large ill health and diseases burden for which cost-effective interventions are available.

In view of limited resources, it is imperative for the University to establish priorities. To that end:

- i. The Schools, Institutes and Directorates shall define relevant research priorities which shall come to constitute the University's research agenda.
- ii. The University shall fund or support funding of research programmes and projects that are within University priorities.
- iii. The University shall encourage research that aims at solving national health problems and advancing knowledge.

- iv. The University shall encourage collaboration within and across all units as well as national and international institutions. However international collaborative proposals should have the input of the University researchers.
- v. The directorate responsible for research shall, from time to time, identify emerging priority areas of national and international interests for research within the University. This aspect has been attended to by the Reviewed Research Agenda 2020. These would be areas in which research could have a major impact on the society, leading to poverty reduction and developmental change.
- vi. The University recognizes the freedom of its staff, students and persons working under its umbrella to initiate and pursue research consistent with the University's vision and mission.
- vii. The University shall develop and review the research agenda every five years with the objective of ensuring its relevance.

### **3.2 Research Planning and Administrative Capacity Building**

Research has to be performed within a clear framework with targets, responsibilities, indicators and outputs. To maximize the use of available scarce resources and avoid duplication, MUHAS shall therefore:

- i. Continue to strengthen the infrastructure in the directorate responsible for research.
- ii. Sustain the current endeavour to establish and maintain environment to facilitate research planning among staff.
- iii. Strengthen further the current critical mass of research administrators who have qualifications in Research Management.
- iv. Leverage more resources and emphasize strengthening the capacity for research planning at all levels.
- v. Invigorate further the current mechanism by which academic staff members can be motivated to conduct research.
- vi. Continue to ensure that funding of research by major development partners is coordinated centrally and sanctioned by MUHAS.
- vii. Sustain the current arrangements of multidisciplinary approach to research

### **3.3 Sourcing and Management of Research Funds**

It is recognized that for sustainability and relevance, main source of research funds should be the Government of Tanzania. Despite the recognition of the need to invest in research, and the

government stated allocation of at least 1% of the GDP to research programmes, national funding has continued to be extremely low and research activities are largely development partner-driven. Available data indicate that research funding to research institutions to support research programmes has continuously very low. Consequently, there is limited research addressing the national development agenda. In addition, contribution to research funding by the private sector continues to remain dismal.

3.3.1. There is therefore a need to make use of the government allocation of 1% GDP. In this regard, MUHAS shall:

- i. Timely disseminate information to staff members and students about the budget allocated by the government for research. - Create conducive environment for staff members and students to write research proposals to get funding from the Government.
- ii. Continue to solicit funds from development partners and the private sector to support a central research fund for members of staff and students.
- iii. Strengthen further the separate budget line for research funding for all academic units from departmental level coordinated and presented by the directorate responsible for research to higher organs within the University;
- iv. Sustain sourcing and provision of general information on possible sources and modes of research funding both within and outside the University on regular basis.
- v. Strengthen the current establishment of professorial research chairs.

### 3.3.2. Disbursement of Research Funds

The management of research fund in a transparent manner is important for the successful implementation of research projects. MUHAS shall therefore continue to:

- i. Ensure that Disbursement of funds follows approved accounting procedures.
- ii. Ensure all research funds are deposited in a University account.
- iii. Ensure that funds are disbursed by instalments as imprests, the management of which shall be decided by the relevant University organs.
- iv. Ensure that funds are disbursed according to the approved budgetary and time allocation. Re-budgeting among major cost categories will not be allowed unless prior approval is obtained from the funding agency.
- v. Require that recipient of Research Funds produce both technical and financial reports.

### **3.4 Procedures for Approval, Control and Monitoring of Research Process**

3.4.1. MUHAS needs to put in place an operational mechanism of conducting research such that there is uniformity in the process. MUHAS shall therefore emphatically sustain a process to:

- i. Ensure that staff is well aware of the national research agenda and participate in translating it into research agenda of their respective academic disciplines.
- ii. Give priority to projects within the University research agenda when approving research funding.
- iii. Follow one general framework guiding the preparations and approval of research projects. The framework addresses the following issues/ processes:
  - Initiation of a research project;
  - Formats of research proposals; Scrutiny and approval process for research proposals shall focus on quality, relevance, need, soundness and resource requirements (including financial resources). This will clearly spell out the roles and powers of different units within the relevant University administrative hierarchy;
  - Planning and budgeting guidelines, including applicable rates for cost estimates;
  - Financial regulations governing financing of research;
  - Procurement of equipment and consumables. These have to be within relevant University and national procurement policies and procedures. In principle all equipment procured for research is the property of MUHAS;
  - Registration of research projects - whether internally or externally funded; Standard contracts between the funding agency, the University and the researcher(s); Progress reporting requirements, control and monitoring; Regulations regarding employment within research projects. These have to be within approved Human Resource Management policies;
  - Formats for final research reports;
- iv. Ensure that all research proposals are subjected to MUHAS approval process before being accepted for funding.
- v. Enter into a research contract with the researcher when the project has been approved irrespective of the source of funding.

- vi. Where there is an interest of joint ownership of research results/output, the contract shall be between the researcher as one party and joint financiers as the other party.
- vii. Scrutinize all contractual requirements after a proposal has been funded.

3.4.2. Management of research has to ensure that the research is well planned so as to provide reliable research output. In this regard, MUHAS shall continue to:

- i. Develop and disseminate research quality guidelines.
- ii. Ensure that applications for research funds are in line with the guidelines.
- iii. Ensure that approval of applications for research funds takes into considerations the relevant research quality checklists.
- iv. Monitor quality and number of publications resulting from research done by staff;
- v. Monitor the dissemination of research results.
- vi. Conduct surveys to obtain feedback on quality and value of research results.
- vii. Conduct peer review of MUHAS research outputs at intervals of not more than five years.

3.4.3. There shall be Institutional Review Board/Ethics Committee whose functions shall sustain:

- i. Preparing and reviewing appropriate formats for research proposals.
- ii. Ensuring that humans involved in research are treated with dignity and that their well-being is not compromised.
- iii. Ensuring that animals involved in research are treated humanely.
- iv. Reviewing and approving research proposals and protocols, and ensuring that the research will be in the spirit of promoting health, preventing disease and disability and curing disease.
- v. Monitoring approved proposals to ensure compliance with the guiding ethical standards.
- vi. Ensuring research conforms to generally accepted scientific principles, and is based on adequately tested procedures.

### **3.5 Research Training and Capacity Building**

Training represents one of the most significant areas of national investment in research and development, and research students are a major resource. For the University to develop and

assimilate indigenous and foreign technologies it has a duty to identify and promote special talents among its members of staff. To this end, MUHAS will therefore continue:

- i. Ensure that all funded projects have components to facilitate research capacity building and technology transfer.
- ii. Facilitate training by encouraging programmes rather than projects.
- iii. Endeavor to ensure that each research plan demonstrates ways in which capacity building has been or is being addressed.
- iv. Make provision for mentoring as an essential component of every research project.
- v. Strengthen and emphasize research training both at undergraduate and postgraduate levels through instituting appropriate research methodology courses.
- vi. Facilitate the writing of fundable proposals.
- vii. Advocate for increased government funding for students and junior staff research
- viii. Updating and expanding researcher skills continually through strategic international exposure and linkages.

### **3.6 Collaborative Research**

There is a need to forge strategic partnerships and collaboration within and between the University, the Government, other research institutions and the private sector in the country. Therefore, the University will continue to:

- i. Promote collaborative research where there are potential benefits to the University.
- ii. Promote external collaboration within and outside Tanzania.
- iii. Require that a full-time employee of the University serve as the Principal or Co-Investigator.
- iv. Encourage internal collaborative projects to be multi-disciplinary in nature.
- v. Ensure that multi-disciplinary research projects are hosted in the academic unit where the principal researcher belongs.
- vi. Require that the hosting department also be the department where the majority of the research activities will be conducted.
- vii. Require that multi-disciplinary research projects be approved by the unit of the Principal Investigator.
- viii. Demand that if the implementing units are not in the same School, Institute or Directorate, approval shall only be necessary in the hosting unit, but shall be reported to the relevant organs in the non-hosting unit.

- ix. Ensure that staff participating in the multi-disciplinary collaborative research project report progress to their own department, and also report to the hosting department through the Principal Investigator.
- x. Ensure that the collaborating academic units agree on sharing administrative costs.
- xi. Promote equal partnerships in collaborative research.

### **3.7 Staff Remuneration**

In order to motivate research and reward productivity:

- i. All funded research projects should include a budget item on research allowance and other remuneration for all investigators.
- ii. Where per diem allowances are paid, these should be paid at not less than the Government of Tanzania Daily Subsistence Allowance rates.
- iii. Negotiations for contracted research should be done through the University. Otherwise laid down procedures should be followed to ensure that the University benefits from the research.

### **3.8 Research Performance Rewarding**

MUHAS having experienced phase one of these guidelines shall:

- i. Establish transparent criteria/indicators to measure research excellence.
- ii. Evaluate research performance of individuals, academic units and multi-disciplinary research teams on an annual basis.
- iii. Reward research performance at individual, academic unit and research teams each year.
- iv. Ensure that research output constitutes a major criterion in the promotion of academic staff.

### **3.9 Institutional Administrative Overheads**

To create conducive research environment, in the post phase one of the guidelines MUHAS shall require that research projects contribute at least 15% of the total project research costs to the institutional overheads.



### **3.10 Sharing of Research Resources**

3.10.1. MUHAS having learnt from phase of these guidelines shall:

- i. Require that Schools, Institutes and Departments have transparent and objective criteria of making research opportunities known to members of staff and for allocating such opportunities.
- ii. Encourage sharing of research project resources among all University researchers in order to utilise fully the research resources available.
- iii. Encourage and coordinate sharing of information and information sources of academic value. Such sources shall include books, journals, electronic information, (e.g. CD-ROMS) and sources of such electronic information through the INTERNET (e.g. electronic databases).
- iv. Set up mechanisms/procedures for utilising and sharing resources and facilities across departments/schools/institutes/directorates.
- v. Establish mechanisms for assisting researchers to obtain equipment and supplies and to prepare financial reports.
- vi. Establish a database to enable students and staff to access the research inventory and provide data handling facilities.

3.10.2. Staff and students may not use University resources, including facilities, personnel or equipment, except in a purely incidental way as part of their outside consulting activities or for any other non-University purposes, without the approval of the heads of respective departments.

### **3.11 Research Support Environment**

MUHAS having picked lessons from the past ten years of these guidelines shall:

- i. Through the Directorates of Research and Publications, Information Communication Technology (ICT) and Library Services provide research support services that include the provision and continuous improvement of modern management information systems and facilitate access to international literature and databases.
- ii. Work towards the creation of a stable and conducive internal research environment. This shall include the provision of research administration allowance and maintenance of equipment and support for purchase of basic consumables.

- iii. Provide basic financial management support and training to research coordinators as well as personnel in key research administrative units.
- iv. Ensure that validated research outputs database will be used for all matters relating to staff research activities.
- v. Publicize its research activities and seek ways to make its research findings available to the wider community.
- vi. Provide support for publication and distribution of the MUHAS Research Bulletin.
- vii. Provide support for publication and distribution of student research.
- viii. Review and monitor the curricula to inculcate a research culture among the students.
- ix. Establish effective mechanisms for assisting researchers to obtain equipment and supplies and the preparation of financial reports through in-house training on research project reporting.

### **3.12 Dissemination of Research Results**

Dissemination of research results may entail sharing research findings with research peers, sponsors and the larger community through publications, seminars and conferences. Subject to the Intellectual Property Policy, MUHAS shall continue to:

- i. Encourage the incorporation of a specific section on dissemination of research results in the research proposals. In the proposal, the plan for dissemination of research results shall be included. Different ways of sharing research results should be through departmental seminars, workshops, annual research meetings, school's/institutes research seminars etc.
- ii. Require that research proposals include at least one local seminar/ workshop to ensure local 'ownership' of research findings. For large research projects, local conferences/symposia shall be organized.
- iii. Ensure that research reports are produced according to the agreed format. Depending on the level of research and the funding agency, research reports may be reviewed at the departmental, School/ Institute or Directorate levels.
- iv. Subject all research reports to peer-review before depositing them in the data bank. Require that each School/Institute conduct at least one research workshop annually to review research plans, progress and outputs. Annual research workshops shall also include presentations of academic papers, to which key stakeholders shall be invited.

- v. Prepare and submit to policy makers research abstracts/policy briefs for the purpose of informing policy.
- vi. Encourage and support dissemination of research results through regular local and international fora.
- vii. Encourage and support the inclusion of research findings/publications in accessible electronic databases, at the departmental, School/Institute or University level.
- viii. Encourage the publication of popular versions of research findings in the local media with the permission of the University management, including some in Kiswahili.
- ix. Popularize research findings in languages that people can understand.
- x. Disseminate research findings through national/international exhibitions in line with National Research Ethics Policy.

### **3.13 Ethical Considerations**

3.13.1. All research involving human participants should continue to conform to the recommendations guiding biomedical research involving human beings as adopted by the 18th World Medical Assembly (WMA), Helsinki, Finland, June 1964, and amended by the 59th WMA, Seoul, October 2008. Those recommendations include the following:

- i. Research must conform to generally accepted scientific principles, and should be based on adequately tested procedures.
- ii. The design of the study should be scientifically formulated.
- iii. The study must be conducted by scientifically qualified persons and under the supervision of competent persons.
- iv. The importance of the objectives must be proportional to the inherent risk to the participant.
- v. Concern over the interest of the study participant must always prevail over the interests of science and society.
- vi. Privacy of the individual must be respected.
- vii. The Researcher should refrain from carrying out the study unless he/she is satisfied that the hazards involved are believed to be predictable.
- viii. In publishing results, the researcher is obliged to preserve the accuracy of the results.
- ix. Each potential research participant must be adequately informed of the aims, methods, anticipated benefits, and potential hazards.

- x. The researcher should obtain participants freely-given Informed Consent, preferably in writing.
- xi. The research protocol should always contain a statement of ethical considerations.

3.13.2. The statement of ethical considerations should inclusively maintain emphasis on the following:

- i. The risk to the study participant.
- ii. The anticipated benefits to the study participants and others.
- iii. The importance of the knowledge that may reasonably be expected to be obtained.
- iv. The informed consent process to be employed. This should include what the participation of the research participants will entail, including any possible risks. The provisions to protect the privacy of study participants.
- v. The additional safeguards for study participant likely to be vulnerable to coercion or undue influence including foetuses, pregnant women, children, prisoners, mentally disabled persons, or economically or educationally disadvantaged persons.
- vi. Compensation for research-induced injury, time and inconvenience.

3.13.3. All research involving human participants shall require Ethical Clearance by the University Senate Research and Publications Committee, regardless of whether the research is cleared by other institutions outside the country, if the research:

- i. Is sponsored by MUHAS, or
- ii. Is conducted by or under the direction of an employee of MUHAS.
- iii. Is conducted by, or under, the direction of an employee of the University using any property or facility of the University, or
- iv. Involves the use of the University's name to identify or contact study participants or prospective participants, or
- v. Involves human participants within the University.
- vi. Involves undergraduate, postgraduate and elective student researchers.

3.13.4. In addition to MUHAS clearance for research involving external collaborators, additional review by the National Ethics Committee may be needed in case of specific reasons such as major clinical trials, research with significant risk and investigation of new drugs/ vaccines.

### 3.13.5. Research on Animals

- i. All research, research training, experimentation, biological testing, and related protocols involving live, vertebrate animals conducted in the University, or at another institution as a consequence of sub-granting or subcontracting, shall comply with internationally acceptable standards on humane care and use of laboratory animals.
- ii. MUHAS will make reasonable effort to ensure that all individuals involved in the care and use of laboratory animals understand the applicable laws and regulations pertaining to animal care and use. The university will also monitor and ensure compliance at individual and collective levels.
- iii. All research on laboratory animals must be reviewed and approved by the Animal Care and Use Committee (ACUC) responsible for overseeing the institution's animal programme, facilities, and procedures.
- iv. The ACUC shall inspect, at least once every 12 months, all of the institution's animal facilities, compile facility inspection reports and present the reports for discussion at a meeting of the SRPC.
- v. The university and all individuals involved in animal care and use must comply with occupational health and safety procedures for personnel who work in laboratory animal facilities or have frequent contact with animals.
- vi. Personnel actively working with non-human primates must be screened annually for tuberculosis, and participate in training specific for the prevention of illness/injury to the species. Also, each nonhuman primate housing area must be equipped with injury/exposure kits.

### 3.14 Bio-hazardous Agents

- i. The appropriate University committee will be designated to review the institution's teaching projects, research activities and facilities involving the acquisition, use, storage and disposal of bio-hazardous agents.
- ii. The University shall endeavour to provide appropriate training in the safe handling and management of biological and chemical hazard agents used in research studies.
- iii. Research proposals involving use of bio-hazardous agents shall include a section on handling of bio-hazardous materials.

### **3.15 Intellectual Property Rights**

All participating researchers including students and visiting scholars must follow the MUHAS Intellectual Property Policy and procedures. For researchers wishing to send study samples abroad, either for analysis or other research purposes, they should sign the MUHAS Material Transfer Agreement Form, and adhere to the Data Transfer Agreement Policy and the relevant Material and Data Transfer Agreements by the National Health Research Ethics Sub-Committee.

### **3.16 Use and Disposal of Research Project Resources**

- i. Sponsored project agreements must always include the terms and conditions for the disposal of tangible property (e.g. equipment, vehicles, reports, theses or dissertations) or intangible properties such as rights to data, copyrights, and inventions. Except as otherwise expressly provided, all equipment purchased within a research project is the property of MUHAS. National laws, policies and procedures governing the disposal of University property (obsolete or otherwise) should be applied.
- ii. During the life of a project, all equipment or goods purchased with research funds will not be sold, ceded, exchanged or otherwise disposed of without the prior approval of the University.
- iii. On completion or termination of a project/programme, the University will retain the title to all equipment purchased for the project or programme. The unit/researcher that had these resources should be given priority in the disposal of research resources when the project is completed.

### **3.17 Impact of Research**

For research that has direct impact on the society, MUHAS shall:

- i. Establish a feedback/follow-up mechanism to assess research impact in solving societal problems.
- ii. Utilise the feedback mechanism to foster continued refinement of the research agenda.

### **3.18 Research Culture**

MUHAS shall:

- i. Instil a research culture through training of undergraduate and postgraduate students in research methodology.
- ii. Contribute towards fostering and enhancement of research culture both within and outside the University.
- iii. Promote and encourage research teamwork among MUHAS staff and other institutions.
- iv. Educate MUHAS staff on the research policy and procedures.

### **3.19 Application and Review of the Research Policy**

- i. The Research Policy shall apply to all members of staff, graduate and undergraduate students who are involved in research on or off campus at MUHAS. It shall also apply to all MUHAS research partners and collaborators.
- ii. The MUHAS Research Policy shall be subject to review every five years.
- iii. The policy statements are to guide the general conduct of research involving MUHAS staff. It is necessary for the specific policy intentions to be operationalized by relevant offices within the University. A general set of operational procedures is necessary in order to kick-start the streamlining of research management. The strategies and some of the core operational procedures are presented in Chapter 4.0.

## **4.0 STRATEGY FOR IMPLEMENTING THE RESEARCH POLICY GUIDELINES**

The University aims to provide a Research Policy Implementation Strategy that will promote a comprehensive and high standard of professional conduct of its researchers, and a culture of research practice that is ethical, competent, transparent, safe and accountable.

### **4.1 Principal Strategy**

The principal strategy in carrying out the MUHAS research policy lies in the strengthening of the directorate in charge of research, followed by the consolidation of the research sustained administrative infrastructure from department to University level. The roles, duties, and responsibilities of the Directorate will have to reflect its obligations in implementing this Policy. The following actions are necessary for the successful implementation of the Research Policy:

- i. Enhancement of the capacity of the Directorate to manage, administer and coordinate research. This will need trained human resources, establishment of a

more effective structure, equipment and some initiation funds. The Directorate will have the responsibility of coordinating internal and external linkages on all matters related to research.

- ii. Within MUHAS, the Directorate shall coordinate the process of implementation of the policy through setting up of internal administrative links with other relevant offices at the same University level (horizontal linkages) as well as with researchers in schools, institutes, directorates and departments (vertical linkages). The Directorate shall focus on the following specific actions with respect to establishing horizontal linkages:
  - Hands-on work on university level policies to ensure that research interests are safeguarded.
  - Establishment of a close working cooperation with other relevant offices to implement the MUHAS Corporate Rolling Strategic Plan as well as the Strategic Plan of the Directorate.
  - Clear description of excellence in research and coordination of the process of identification and rewarding of excellence as guided by the HRM policy.
- iii. A strong focus shall be established by the Directorate on the following specific actions with respect to establishing vertical linkages:
  - Involving MUHAS researchers and other stakeholders in evolving the research agenda;
  - Standardizing internal research administrative mechanisms
  - Ensuring that research funds from public, private and external sources are secured.
  - Actively assisting in the dialogue between researchers and research clients.
  - Ensuring and supporting marketing of research results where appropriate.
  - Acting and serving as a custodian of research outputs on behalf of the University by keeping a register of all R&D activities and acquisition of patents.
  - Publishing of regular Research Bulletins and Research Annual Reports on the status of research activity within MUHAS.
- iv. The overall responsibility for coordination of the implementation of the Research Policy including review of the same will lie within the Directorate.



## **4.2 Managing Research**

Management of Research will be enhanced at all levels at MUHAS in order to address the following issues.

- i. Identification of sources and management of research resources:
  - Identify possible sources of research resources – national and international - and strategies for mobilization/accessing the same;
  - Ensure that pertinent information relating to specific research opportunities is passed on to relevant University Unit(s);
  - Make widely and continuously available general information on possible sources and modes of research funding on regular basis. This information shall be available in hard and web based e-format. A mechanism shall be put in place to make sure that e-format is only accessible by MUHAS staff;
  - Hold regular research resources mobilization workshops in which new opportunities for research funding shall be presented and discussed;
  - Assist the liaison process with research donors where such donors have been identified through the directorate;
  - Set up liaison relationships with other national stakeholders to form pressure/lobbying groups to contend for an increased share of research funding from government, the private sector and the international donor community;
  - Collaborate closely with potential researchers in preparing research proposals for submission to potential donors;
  - Compiling relevant reports of various research projects for onward transmission to the donors by the directorate;
  - Proposing specific operational modalities in line with MUHAS Research Policy for the various research funding sources for approval of the MUHAS Research and Publications Committee;
  - See to it that a research budget sufficient to carry out planned priority research is submitted to the government and other sources that adequate funds are allocated for such research activities and are effectively utilised for the purpose;
  - Exploit fully the potential for multi-disciplinary research projects, and initiate the formation of such teams which once formed, shall be left to

operate under the approved modalities of multi-disciplinary research teams;  
and

- Annually compile the MUHAS Annual Research Report that shall summarise annual activities performed under all research grants in a standard format to be approved by the MUHAS Senate Research and Publications Committee.

ii. Dissemination of Research Results and Research Data Bank

- Sustain and continuously update a MUHAS research activity database. In this respect selected information shall be published on regular basis onto a MUHAS Research Web Page;
- Set up and maintain an accessible electronic research output database that shall contain abstracts and full texts of the research reports and other related publications;
- Sustain compilation and organization of printing a hard copy of the research bulletin containing abstracts of research projects on annual basis; and
- Produce a brochure to market MUHAS research services.

#### 4.2.1. Research Quality Management

The directorate shall develop and institute a process of monitoring and reporting on the following research quality indicators at MUHAS on regular basis:

- i. Research planning;
- ii. Research training;
- iii. Research degree completion rates;
- iv. Research publications per academic staff;
- v. Peer reviewed research reports;
- vi. Facilities and access to information resources;
- vii. Research students' assessment of supervision;
- viii. Proportion of staff having published research output in the last three years;
- ix. Proportion of staff directly doing research;
- x. Time duration of research degrees.
- xi. Indicators that measure society perceptions on the research that MUHAS staff do;
- xii. Number of clients continuously using MUHAS research services;

- xiii. Number of local/international research assignments that MUHAS wins in a competitive environment;
- xiv. Collaboration with regional and international institutions – establishment of active research networks; and
- xv. Subsequent availability of funds for the research following completion and dissemination of a phase of the research.

The directorate for research shall recommend to the Senate Research and Publications Committee or similar committee, on what benchmarks of these indicators should be for MUHAS.

### **4.3 Development of Comprehensive Implementation Strategy – Way Forward**

Various new policy statements have been incorporated in the revised MUHAS Research Policy. A comprehensive implementation strategy that has a wider University and external stakeholder participation shall be prepared by the Directorate responsible for research.

### **4.4 Research Process tools/instruments**

In order to standardize and harmonize research process within MUHAS, the Directorate shall provide clear guidelines in form of guiding documents.

These guiding documents shall be reviewed regularly to accommodate developments in the operating environment. The directorate responsible for research within MUHAS 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' expectations.

## **5.0 POLICY STATUS**

This is a revised MUHAS Research Policy and Guidelines.

## **6.0 KEY STAKEHOLDERS**

- A. The stakeholders who were consulted during revision of this policy include the following: The Vice Chancellor and Deputy Vice Chancellors; Deans and Directors; Students and Staff; Principal Investigators (PIs); and collaborators.

- B. The main stakeholders of this policy are: All MUHAS staff and students, other researchers, all partners, collaborators, and funders of research at MUHAS; Deans and Directors; Heads of Departments, and Administrative units; the entire research and academic community at MUHAS and collaborating institutions.

## **7.0 APPROVAL DETAILS**

The policy was approved by the University Council at its 57<sup>th</sup> meeting held on 7<sup>th</sup> August 2020.

## **8.0 ENDORSEMENT DETAILS**

The University Council approved the policy at its 57<sup>th</sup> meeting held on 7<sup>th</sup> August 2020.

## **9.0 RELATED LEGISLATION**

MUHAS Charter of Incorporation, February 2007;

## **10.0 RELATED POLICIES**

- i. MUHAS Research Policy (2011)
- ii. MUHAS Intellectual Property Rights Policy (2019)
- iii. MUHAS Institutional Repository policy (2017)
- iv. MUHAS Biorepository Policy (2020)
- v. MUHAS Information Communication Technology Policy (2017)
- vi. MUHAS Gender Policy (2013)
- vii. MUHAS Human Resources Training and Development Policy (2012)
- viii. MUHAS HIV/AIDS Policy (2008)
- ix. MUHAS Library Policy and Procedures (2013)
- x. MUHAS Research Chairs Policy (2019)
- xi. MUHAS Data Sharing Policy (2020)
- xii. MUHAS Institutional Overhead Policy and Procedures for Sponsored Projects (2017)
- xiii. MUHAS Effort Reporting and Time Compensation Policy and Procedures (2020)
- xiv. MUHAS Institutional Animal Care and Use Policy (2020)

## **11.0 RELATED DOCUMENTS**

- i. MUHAS Cooperate Strategic Plan (2013/14 – 2017/18)
- ii. MUHAS Charter (2007)

- iii. DRP Strategic Plans (2013/14 – 2017/18)
- iv. MUHAS Students By-laws (2013)
- v. MUHAS Annual Reports
- vi. MUHAS Office of Sponsored Projects Standard Operating Procedures (2020)

## **12.0 EFFECTIVE DATE FOR THE POLICY**

Unless otherwise determined by the approving body, the policy shall become effective from the date it is approved by the University Council.

## **13.0 NEXT REVIEW DATE**

The MUHAS Research Policy and Guidelines will be reviewed after every FIVE years or when deemed necessary to assess the effectiveness of its implementation and determine policy areas that need to be revised. The periodic review will ensure the policy is in line with the University, national and international changes that might have taken place.

## **14.0 POLICY OWNER**

The University Council shall own the MUHAS Research Policy and Guidelines.

## **15.0 POLICY AUTHOR**

The Directorate of Research and Publications of the University.

## **16.0 CONTACT PERSON**

The contact person for issues related to the MUHAS Research Policy and Guidelines shall be:

The Deputy Vice Chancellor - Academic Research and Consultancy,  
Muhimbili University of Health and Allied Sciences,  
P.O. Box 65001,  
United Nations Road, Dar es Salaam, Tanzania.

The image shows the front cover of a document. The cover has a light cream or off-white background with rounded corners. On the left and right sides, there are vertical decorative elements. On the left, there's a blue geometric shape that looks like a stylized 'L' or a corner piece. On the right, there's a solid blue vertical bar. The year '2020' is printed in a large, bold, dark grey sans-serif font in the center. Below it, the words 'RESEARCH POLICY AND GUIDELINES' are printed in a smaller, all-caps, black serif font.

# 2020

RESEARCH POLICY AND GUIDELINES