# SOKOINE UNIVERSITY OF AGRICULTURE



# GUIDELINES AND PROCEDURES FOR APPLICATION OF THE SUA RESEARCH AND INNOVATION SUPPORT (SUARIS)

#### 1.0 INTRODUCTION

Sokoine University of Agriculture (SUA) is a Public University established by Act of Parliament No. 6 on 1<sup>st</sup> July 1984, which was repealed by the Universities Act No. 7 in 2005. Following the enactment of the Universities Act, SUA was granted the SUA Charter of 2007. The Vision of SUA is to be a Leading University in the Provision of Quality knowledge and skills in Agriculture and Allied sciences, which is guided by its Mission which is to Promote Development in Agriculture and Natural Resources through Training, Research and Delivery of Services. Today, SUA is one of the leading agricultural universities in Africa with an international reputation reflected in its diverse students' body, academic staff and international partnerships for teaching, research, outreach and consultancy.

The mandate of SUA is to advance knowledge, wisdom and understanding through teaching, research, outreach, and consultancy. SUA's power and function is to assist in preservation, transmission, dissemination and enhancement of knowledge in the fields of agriculture and allied sciences. The institution core functions also include initiating and conducting basic and applied research to generate knowledge and innovations to respond to contemporary and emerging issues.

The research mandate of the University continues to draw much inspiration from the inaugural speech of the Father of the Nation and the first Chancellor of SUA, Mwalimu Julius Kambarage Nyerere which states that "the University should endeavor to answer the needs and solve the problems of Tanzania's agriculture and rural life, manage natural resources on a sustainable manner and to contribute to improved production and therefore improving living standards of the people".

SUA is committed to enable her researchers to contribute to Tanzania national development by providing high quality and innovative research evidences as per SUA Corporate Strategic Plan (CSP) 2021-2026. SUA research output continues to inform National policies for effective implementation of the Tanzania's Development Vision 2050, Zanzibar Development Vision 2050, the Third Five-year Development Plan 2021 – 2026, the 5<sup>th</sup> Government's industrialization agenda and other National development priorities. In Cognisant of the above, since 2020 SUA has been allocating budget from internal revenues to support researchers to undertake research and innovation, and this is the fifth cycle of the support and implementation.

In line with the Research Policy 2025, SUA Research and Innovation Support (SUARIS) is coordinated by the Directorate of Postgraduate Studies, Research, Technology Transfer and Consultancy (DPRTC).

#### 2.0 AIMS OF SUARIS

SUARIS aims at providing sustainable funding to support SUA members of staff to conduct inter-disciplinary and multi/trans-disciplinary research and innovation initiatives. It is envisaged that the staff, especially early career/emerging researchers, will write and submit competitive research proposals under multidisciplinary research groups for possible funding by SUA. The call for proposals is issued annually.

#### 3.0 JUSTIFICATION FOR SUARIS

SUA's Cooperate Strategic Plan 2021-2025 Objective is to increase the volume and quality of research, publications and innovations, while objective No. 3 is to enhance outreach, publicity, linkages and partnerships. Thus, in order for the two objectives to be realised, sustainable funding is inevitable.

Much of the support for SUA researchers is dependent on external funding. However, donor support has been declining over time while demand to facilitate research is on the increase. International competition and stringent donor requirements make it difficult for young, early career and emerging scientists to compete for funding.

Furthermore, moving up the academic ladder requires scientific publications from research and innovations, as stipulated in the Scheme of Service for Academic Staff in Public Universities and SUA's Up the Ladder 6<sup>th</sup> Edition of 2023.

# 4.0 RESEARCH CLUSTERS AND FOCUS AREAS

SUA's research focus areas indicated in Research Agenda 2025 complement the national development efforts. They are aligned to SUA Vision and Mission, the SUA Corporate Strategic Plan 2021/2022–2025/2026, the SUA Research Policy (2025), National Research Priorities 2021/22–2025/2026, Tanzania Development Vision 2050, Zanzibar Development Vision 2050, and the 2030 Sustainable Development Goals (SDGs) of the United Nations.

According to the Tanzania Development Vision 2050 and related policies, the focus is on good governance, peace, security and stability through the pillars of Strong, Inclusive and Competitive Economy, Human Capabilities and Social Development, Environmental Integrity and Climate Change Resilience. Going forward, SUA is determined to develop innovations and technologies that are relevant to the communities and transform research commercialization and establish research-led spinoff companies in driving the national industrialization agenda.

In view of the above, the following are the clusters and their respective research focus areas. The focus areas may be revised from time to time.

# **4.1 Cluster 1:** Agriculture

The Research Focus Areas include but not limited to: Plants protection, Seed technologies and systems; Sustainable agriculture, Agro ecology and organic farming; Post harvest technologies and bioprocessing; Farm power, automation, machinery and mechanization; Soil health and fertilizer technologies; Land surveys and monitoring systems. Water systems, irrigation technologies improvement, optimization and innovation; Human nutrition and lifestyle diseases; Food systems, food and nutrition security and food safety; Crop improvement and biotechnology.

# **Cluster 2:** Environmental Integrity and Climate Change Resilience

The Research Focus Areas include but not limited to: Sustainable management of natural resources, biodiversity and ecosystems conservation; Inclusive natural resource governance, Indigenous knowledge, technologies and socio-economic development; Clean energy and green technologies; Circular economy, Pollution and waste management; Carbon trading, Green economy, Forestry and tree improvement; Blue economy and sustainable management

of water resources; Wildlife conservation, utilization, trade and ecotourism; Climate science, and Meteorology; Resource economics and valuation of ecosystem services.

# **4.2 Cluster 3:** Animal Production and Public Health Management

The Research Focus Area includes but not limited to: Epidemiology and Control of Endemic and Emerging Diseases; Development of Pharmaceuticals, Vaccines and Biologicals; Indigenous knowledge and Technologies, Ethnoveterinary and Phytomedicine Practices; One health, disease interaction between humans and animals; Pasture and forages, feeds and feeding systems; Aquatic resources health and diseases; Animal and aquaculture breeding technologies, and genetic engineering; Pest Management; Animal welfare and farming structures.

# **4.3 Cluster 4:** Information Management, Dissemination and Communication

The Research Focus Areas include but not limited to: Knowledge management systems; Innovative and inclusive extension services; Innovation, technology transfer and commercialization; Cybersecurity and digital governance; Artificial Intelligence (Machine learning, deep learning); Information resources for development; Software design and development application; Systems modelling and simulations; Internet of Things (interoperability and scalability). Application of ICT in education, governance, agriculture, manufacturing, and tourism;

### 4.4 **Cluster 5**: Education and Human Capital Development

Research Focus Areas include but not limited to: Innovative curriculum for age specific human capital development; Educational Technology; Equity in education, Education for sustainable development; Educational leadership and administration, Psychology and counseling; Language science; Global emerging issues on education system; Science, Technology, Engineering and Mathematics (STEM) related research.

# **4.5 Cluster 6:** Agribusiness and Inclusive Economic Growth

Research Focus Areas include but not limited to: Agricultural productivity and commercialization; Agribusiness, public-private sector linkages, Financial inclusion; Inclusive agricultural trade development; Entrepreneurship, innovation and business development; Marketing and consumer behaviors; Digital agricultural economies, Market systems, industries and services.

#### **4.6 Cluster 7:** Policy Analysis and Crosscutting issues

Research Focus Areas include but not limited to: Socio-Economic and Policy Related Factors Influencing Agricultural Transformation; Good Governance; Advocacy, Gender equality and Social inclusion; Demographic Surveillance; HIV/AIDS; Indigenous Knowledge and Technologies; Livelihoods and community development; Conflict resolution and peacebuilding; Institutional analysis; Ethics.

### **5.0 FUNDING CATEGORIES**

The Fifth cycle of SUARIS (SUARIS-5) has three main categories of Funding as follows:

#### **5.1 Small Grants**

This grant will be awarded to a group of the early career researchers/ junior member of staff who would like to carry out innovative research which is in-line with SUA's research focus areas outlined in this call. This grant will have a ceiling of Tanzanian Shillings Twenty Million (TZS 20,000,000.00/=).

#### **5.2 Standard Grants**

This grant will be awarded to multidisciplinary research teams led by the early career researcher/junior staff supported by mid-career or senior researchers who would like to undertake innovative and scalable research projects which are in-line with SUA research focus areas outlined in this call. This grant is recommended for mentorship purposes for multidisciplinary research teams comprising of at least one senior researcher of the rank of Senior Lecturer/Senior Research Fellow and Associate or Full Professor. Individual research project proposals and/or those developed by research teams comprising of individuals from the same/one discipline are discouraged under this category. This grant will have a ceiling of Tanzanian Shillings Thirty Million (TZS 30,000,000.00/=).

#### **5.3** Commissioned Grants

This is intended for a commissioned Research that addresses the emerging community problems/challenges. The grant will be awarded to multidisciplinary research teams led by the early career researcher/junior staff and supported by senior researchers to undertake innovative research leading to commercialization and that has a wide impact to local communities. This grant will have a ceiling of Tanzanian Shillings Eighty Million (TZS 80,000,000,000,00)=).

#### 6.0 ELIGIBILITY

- 6.1 Researchers and academic members of staff of Sokoine University of Agriculture not older than 45 years with a Master or PhD qualification are eligible to apply.
- 6.2 Preferably the support shall be granted to teams led by early career or junior researchers.
- 6.3 Research teams should adhere to Gender Equality, Equity and Social Inclusion (GEESI) since SUA promotes gender equality and gender mainstreaming in research and innovation.

# 7.0 BUDGET

The budget preparations will be guided by the SUA Research Regulations and Guidelines, Fourth Edition of 2019. All funds awarded and disbursed to researchers shall be spent within the project duration in-line with the approved budget and in accordance with the SUA Financial Regulations of 2018 and Procurement Laws, Rules and Regulations. The grant funding will not include salaries, honoraria and institutional overhead.

# 8.0 PROJECT DURATION

The maximum project period will be twenty-four (24) months from the date of signing the agreement. Justification for no-cost extension will be granted should one require consideration for longer duration after the expiration of the agreement/contract.

#### 9.0 APPLICATION PROCEDURES

- 9.1 The process of application for SUARIS-5 will be in two stages, including Concept Note and Full Proposal.
- 9.2 Staff who wish to apply for the research support shall fill and submit a Concept Note Application form provided as part of this call.
- 9.3 Upon approval of the Concept Note, applicant shall be invited to develop a full proposal. Forms for preparing a full proposal will be provided at the time of invitation.
- 9.4 The review of the Concept Notes and Full Proposals shall be carried out by a panel of independent SUA and/ or External experts in relevant research focus area.
- 9.5 Each reviewer shall be required to sign a Non-Disclosure Agreement.
- 9.6 Upon completion of the review, applicants shall be notified of the outcome.

#### 10.0 EVALUATION CRITERIA

The Format for Evaluation of Research Concept Notes and full proposals is as stipulated in the SUA Research Regulations and Guidelines (2019). Criteria shall include but not limited to the following:

- 10.1 Novelty and originality
- 10.2 Innovativeness of the project idea
- 10.3 Scientific and technical merit
- 10.4 Relevance to the selected cluster and research focus area
- 10.5 Quality and clarity of project proposal (problem, objectives, methodology, expected results)
- 10.6 Relevance to Institutional, National and Global goals
- 10.7 Potential for publication and/or innovation
- 10.8 Cost-effectiveness
- 10.9 Research team composition

#### 11.0 MONITORING AND EVALUATION

- 11.1 The grantee shall be required to submit quarterly progress reports both technical and financial to DPRTC through the Research and Publications Documentation System (RPDS), in accordance to SUA Research Policy (2025), SUA Research Regulations and Guidelines (2019) and the Intellectual Property Policy (2020).
- 11.2 The evaluation of the project shall be done twice within the project cycle encompassing mid- and end-term evaluations.
- 11.3 Expected deliverables of the research and innovation projects shall include but not limited to one or more of the following:
  - i. Publications in form of books, papers in peer reviewed journals of acceptable quality.
  - ii. Innovative products or processes.
  - iii. Commercialisable products or processes.
  - iv. Discoveries, new and improved materials, species, technologies or practices.
  - v. Working prototype, artefact or process.
  - vi. Computer software and applications.
  - vii. Registered intellectual property (patent, copyright, etc.).
  - viii. Policy briefs, manuals and other dissemination/communication materials.