

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of Agriculture (SUA) is a Public University established by Act of Parliament No. 6 on 1st July 1984, which was repealed by the Universities Act No. 7 in 2005.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. SUA's 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 endeavour 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) 2016-2021 (now under revision). SUA research output continues to inform national policies for effective implementation of the Tanzania's Development Vision 2025, the Second Five-year Development Plan 2016 – 2021 and the forthcoming 2021-2026, the 5th Government's industrialization agenda and other National development priorities. In this regard, SUA has since the year 2020 decided to set aside an annual budget from her internal revenues to support young and emerging researchers to undertake research and innovation.

In line with the Research Policy and Strategies 2018, SUA Research and Innovation Support (SUARIS) shall be supervised by the Directorate of Postgraduate Studies, Research, Technology Transfer and Consultancy (DPRTC).

2.0 AIMS OF SUARIS

SUARIS aims at providing sustainable funding for research to support SUA academic members of staff to conduct inter-disciplinary and multi/trans-disciplinary research. It is envisaged that the academic 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 shall be issued annually by the DPRTC.

3.0 JUSTIFICATION FOR SUARIS

SUA's Cooperate Strategic Plan Objective No. 2 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 5th Edition of 2016.

4.0 RESEARCH CLUSTERS AND FOCUS AREAS

SUA's research focus areas have been selected with due consideration to the national development efforts and are expected to have significant impact to the society. This means the research agenda needs to be based on carefully selected focus areas that are aligned to: SUA's vision and mission, the National Development agenda and the Global Sustainable Development Goals (SDGs). According to the National Development Vision 2025 and related policies, the focus is on achieving eradication of poverty, food security, environmental sustainability, good governance and empowerment. Going forward, SUA is determined to develop innovations and technologies that are relevant to the communities and transform research innovations to commercialization and establish research-led spinoff companies in driving the national industrialization agenda.

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

4.1 Cluster 1: Agriculture and Engineering

The Research Focus Area includes but not limited to: *Improvement, Optimization and Innovation of Irrigation Technologies; Development and Promotion of Good Land Husbandry Practices; Pre and Post-Harvest Handling and Value Addition; Marketing and Commercialization; Crop, livestock, and fisheries improvement, Human Nutrition and Food Security; Increased productivity through technological optimisation in agriculture, livestock, fisheries and marine resources for food security; Machinery and Mechanization; Post harvest Engineering and Management; enhancing market access for agricultural products; bio-fertilizer; food fortification technologies; development of low cost affordable irrigation technologies; development of recycling techniques; seed breeding.*

4.2 Cluster 2: Natural Resources Management, Environment, Resource Use Conflicts and Integration Governance

The Research Focus Area includes but not limited to: *Environmental conservation; Conflicts and Natural Resources Management; Management of Land Resources; Range management;*

Crop-livestock interaction; Resource Assessment; Development of Technologies for Management of Natural Resources; Ecosystem Governance and Biodiversity Conservation for Sustainable Development; Wood Energy Resources; Non-Timber Forest Products; Environmental Pollution Prevention and Control; Aquatic ecosystems and water quality; Technological advancement and risk assessment; Climate change and ecosystems; Challenges in the forest sub-sector (Deforestation, degradation and unsustainable practices); Plantation forestry, agro-forestry and woodlots technology, forest utilisation and socio-economic and forestry management; Climate change mitigation and adaptation; Ecosystem-based adaptation (EbA); Biotechnology in waste management and ecological maintenance; Ecotourism; Sustainable Tourism; Agri-tourism; Nature-based Tourism; and tree seed breeding.

4.3 Cluster 3: Vector and Pest Management, Animal and Public Health Management

The Research Focus Area includes but not limited to: *Epidemiology and Control of Endemic and Emerging Diseases; Development of Pharmaceuticals and Biologicals; Indigenous Ethnoveterinary and Phytomedicine Practices; Health and disease interaction between humans and animals; vaccine development.*

4.4 Cluster 4: ICT for Information Management, Documentation, Dissemination and Communication

The Research Focus Area includes but not limited to: *Application of Information and communication Technologies for Communicating Research Results; Access to and Effective Use of Information Resources for Development; Knowledge management; Systems Modelling and Simulation; Innovation Adoption and Impact Assessment Studies; Technology Transfer, Up-scaling and Out-scaling; Effective use of un-utilized ICT capacity and infrastructure (Distance learning, e-learning, m-learning), learning management systems; Application of ICT in education, governance, agriculture, manufacturing, and tourism; software development.*

4.5 Cluster 5: Policy Analysis, Good Governance, Education, Language, Crosscutting and Strategic Studies

Research Focus Areas include but not limited to: *Socio-Economic and Policy Related Factors Influencing Agricultural Transformation; Good Governance; Advocacy, Gender and Development; Agricultural Support Services (including financing and marketing) and Producers Organizations; Demographic Surveillance; HIV/AIDS; Indigenous Knowledge and Technology, languages, language teaching and Translation, Education psychology, philosophy and curriculum.*

4.6 Cluster 6: Basic Sciences

The Research Focus Area includes but not limited to: *Biology, Chemistry, Mathematics, Physics and Statistics.*

5.0 FUNDING CATEGORIES

The SUA Research and Innovation Support has three main categories as follows:

5.1 Small Grants

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

5.2 Standard Grants

This grant will be awarded to multidisciplinary research teams led by the early career researcher/junior member of academic staff and 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. This grant is recommended for mentorship purposes, multidisciplinary research teams must preferably comprise of at least one senior researcher of the rank of Senior Lecturer/Senior Research Fellow and above (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. SUA promotes gender equality and gender mainstreaming in research and innovation. Research teams should adhere to Gender Equality, Equity and Social Inclusion (GEESI). This grant will have a ceiling of Tanzanian Shillings Thirty Million (TZS 30,000,000/=).

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 member of academic staff and supported by senior researchers to undertake innovative research leading to commercialization and that has wide impact to local communities such as vaccine development, bio-fertilizer development, food fortification technologies, low-cost affordable irrigation technologies, recycling technologies, crop and tree seed breeding. This grant will have a ceiling of Tanzanian Shillings Eighty Million (TZS 80,000,000/=).

6.0 ELIGIBILITY

- 6.1 The support shall be granted to researchers and academic members of staff of Sokoine University of Agriculture
- 6.2 The support shall be granted to early career researchers/junior academic members of staff not older than 45 years with a Master or PhD qualification acquired not more than three years.

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 have to 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 overheads.

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 time extension will be granted should one require consideration for longer duration after the expiration of the agreement/contract.

9.0 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:

- 9.1 Potential for publications
- 9.2 Scientific and technical merit
- 9.3 Focus on the selected cluster and research focus area
- 9.4 Novelty and originality
- 9.5 Innovativeness of the project idea

- 9.6 Quality and clarity of project presentation
- 9.7 Clear methodology
- 9.8 Relevance to National goals
- 9.9 Consideration of relevant cross-cutting issues (Gender, Climate change)
- 9.10 Contribution to SDGs
- 9.11 Cost-effectiveness
- 9.12 Policy relevance
- 9.13 Research team composition

10.0 MONITORING AND EVALUATION

- 10.1 The grantee shall be required to submit quarterly progress reports both technical and financial to DPRTC through the Research and Publications Documentation System (RPDS).
- 10.2 The evaluation of the project shall be done twice a year for small grants and annually for standard grants whereby the DPRTC shall among other things visit project sites with a view of assessing the grantee's compliance with the grant contract and SUA Research Policy and Guidelines.
- 10.3 Expected deliverables of the research and innovation projects shall include but not limited to one or more of the following:
 - 10.3.1 Publications in form of published book, papers in peer reviewed journals of acceptable quality.
 - 10.3.2 Innovative product or process
 - 10.3.3 Commercialised product or process.
 - 10.3.4 Discovery, new and improved materials, species, technologies or practices.
 - 10.3.5 Working prototype, artefact or process.
 - 10.3.6 Computer software and applications.
 - 10.3.7 Registered intellectual property (patent, copyright, etc.).
 - 10.3.8 Policy briefs, manuals and other dissemination/communication materials

11.0 APPLICATION PROCEDURES

- 11.1 Staff who wish to apply for the research support shall fill and submit a Concept Note Application. The Concept notes shall be provided with the call.
- 11.2 Upon approval of the Concept Note, staff shall be required to develop a full proposal. Forms for preparing a full proposal document will be provided at the time of invitation.
- 11.3 The review of the concept notes and full proposals shall be carried out by a panel of independent (SUA and External) experts in relevant research focus area.
- 11.4 Each reviewer shall be required to sign a Confidential Statement.
- 11.5 Successful applicants shall be required to submit to the Directorate of Postgraduate Studies, Research, Technology Transfer and Consultancy progress reports on a quarterly basis and the Final Research Report through the Research and Publications Documentation System (RPDS), in accordance to the SUA Research Policy and Strategies (2018), SUA Research Regulations and Guidelines (2019) and the Intellectual Property Rights (IPR) Policy (2020). The reports shall include Financial Statements of Income and Expenditure for the periods covered in the reports.