

UNIVERSITY OF DAR ES SALAAM
OFFICE OF DEPUTY VICE CHANCELLOR - RESEARCH



**CALL FOR PROPOSALS FOR COMPETITIVE RESEARCH AND INNOVATION
GRANTS FOR YEAR 2020/2021**

1.0 INTRODUCTION

The University of Dar es Salaam has a noble obligation to contribute to the national development through teaching, research, innovation and public services. Guided by its grand Vision 2061, the University seeks to become a leading center of intellectual wealth spearheading the quest for sustainable and inclusive development. This Vision is coupled with an aspiration of becoming a world-class university that is competitive, relevant and responsive to the national, regional and international needs and challenges of the 21st century. In achieving all these, the University sets out to conduct inter-disciplinary and multi/trans-disciplinary research by providing research funding to academic staff members. This requires a comprehensive and dynamic Research Agenda that can guide researchers to solicit funds to facilitate their research activities. The UDSM Research Agenda 2018/19 - 2028/29 therefore aims at promoting research projects designed to find practical solutions to societal needs and emerging challenges.

One of the challenges that the University of Dar es Salaam seeks to address through research is the global pandemic of COVID-19, which has led to massive loss of lives worldwide accompanied with serious negative repercussions to the economy, politics and social fabric of many countries in the world. The negative impacts of COVID-19 will likely be more pronounced in developing countries including Tanzania. It is on this basis that the University of Dar es Salaam is setting some funds aside to support research projects that aim at investigating the dynamics of COVID-19 including its epidemiological aspects as well as its socio-economic impacts and mitigating measures.

In the 2020/2021 financial year, the University of Dar es Salaam through the Office of the Deputy Vice Chancellor – Research has set aside research and innovation grant amounting to **TZS 1,500,000,000/=** for University of Dar es Salaam Main Campus. In same line, Dar es Salaam University College of Education and Mkwawa University College of Education have set aside **TZS 200,000,000/=** each for the grant. It is envisaged that members of academia from various disciplines will jointly prepare research proposals as multidisciplinary research groups for possible funding by the University of Dar es Salaam.

2.0 CATEGORIES OF THE CALL FOR COMPETITIVE GRANTS

The 2020/21 Call for Competitive Research Grant Proposals is divided into three main categories, namely;

2.1 Commissioned (Contracted) Research

Under this category, the University shall identify specific research themes depending

on the emerging needs and select individual groups of researchers to carry out research on its behalf. This category provides an avenue for the University of Dar es Salaam to make targeted interventions in solving particular societal problems. This category is by a separate call for invitation of certain staff members based on their expertise to address the issue at hand.

2.2 Performance-Based Research

Under this category, the University invites researchers in a separate call who would like to continue and/or scale up their already existing completed research projects. Performance of earlier projects shall be assessed based on the quality of research done, potentiality for scaling up as well as quantity and quality of publications already published from the research findings. The earlier research projects must have been registered in the University of Dar es Salaam Research Repository.

2.3 Multidisciplinary Research

Under this category, UDSM invites researchers from various disciplines to submit their research proposals intended to solve societal problems using multidisciplinary research approach. Individual research project proposals are discouraged and may only be considered under very exceptional circumstances.

3.0 COMPOSITION OF MULTIDISCIPLINARY RESEARCH TEAMS

It is recommended that for mentorship purposes, multidisciplinary research teams should preferably comprise of at least one senior researcher at a rank of senior lecturer and above and at least one junior staff member. Gender balance should equally be considered in the composition of the research teams.

4.0 ELIGIBILITY

Eligible applicants of the 3rd Call for Research and Innovation Grants are all bonafide academic staff members of the University of Dar es Salaam. Applicants who have previous research grants, whose duration has elapsed, and have not submitted final reports, including proper accounting of the grants' funds will not be considered in this call.

5.0 RESEARCH CLUSTERS AND AREAS

The research areas covered include all the seven (7) research clusters as described in the University of Dar es Salaam Research Agenda 2018/19 - 2027/28 of 2018 (copies could be downloaded from the UDSM Website). The clusters are defined as follows:

Cluster 1: Science, Technology and Innovation (STI), ICT and Industrial Development

Research Areas: *Commercialization, enterprise development and marketing of agricultural, livestock and fisheries products; Technologies for improved food quality, quantity and storage and reducing postharvest losses; Natural products (pesticides, fertilizers etc.) that are environment-friendly; Creation of off-farm employment opportunities in rural areas; Road infrastructure and other forms of communication; New and emerging technologies (ICT, nanotechnologies, material sciences, bioinformatics) and production processes in fields such as, industry, agriculture and agribusiness; Innovations, applications and commercial value-addition advantages; and Earth sciences (physical, chemical and biological processes) that shape the earth's surface and enable future predictions through modelling.*

Cluster 2: Education, Agriculture, Food Security and Health

Research Areas: *Educational access and equity; Health intervention / Health care promotion in schools; Modelling for development; Teacher professionalization, professional development and professional efficacy; Tanzania Development Vision 2025 and school curricula; Education and training for (in anticipation of) a middle-level national economy; The United Nations SDG No. 4 and implications for higher education curricula for industrialization; Communicable and non-communicable diseases; Biomedical and product safety; Increased productivity through technological optimisation in agriculture, livestock, fisheries and marine resources for food security; Food quality, safety and nutrition; Educational management, policy and planning; The financing of education; Educational information management systems; and User information seeking behaviour patterns.*

Cluster 3: Governance, Industrial Policy and Cleaner Production

Research Areas: *Effects of reforms on the built-environment; Mining and conservation; Land use, conservation of natural resources and governance; Value addition to natural resources through manufacturing capabilities; Alternative energy sources; Geology and mineral resources; Geo-technical sciences; and Effects of policies, legislation and regulations on conservation of natural resources and industrial development.*

Cluster 4: Gender, Professional Development, Policy Development and Policy Implementation

Research Areas: *Gender inequality and promotion of gender equality; Empowerment of women and minority; Gender equity in access to educational opportunity; Gender mainstreaming policies and practice in education; Educational transformation and school renewal; Professional education and service; Basic and continuing education and industrialisation; Education and self-employment; Effective use of un-utilized ICT capacity and infrastructure (Distance learning, Tele-medicine, e-health, e-learning), learning management systems; Application of ICT in education, governance, agriculture, manufacturing, tourism and banking; and University-community engagement (UCE).*

Cluster 5: History, Culture, Language, Heritage and Sustainable Tourism

Research Areas: *History and cultural heritage, heritage promotion and tourism development; Sustainable tourism development and management; Accounting and taxation in tourism and creative arts; Preservation, coordination of heritage sites, restoration of historic buildings as well as archival materials; Intangible cultural heritage and devise mechanisms for preservation; Indigenous knowledge and national advance (Socio-cultural and economic applications); Creative arts, performing arts and cultural tourism; The interaction of Kiswahili with other languages; Language and cultural identity and unity; Language and literature development and ICT; and The role of the arts in industrial economy.*

Cluster 6: Natural Resources, Environment and Technology

Research Areas: *Natural products, science and technology; Climate change and ecosystems; Challenges in the forest sub-sector (Deforestation, degradation and unsustainable practices); Biodiversity conservation, plantation forestry, agro-forestry and woodlots technology, forest utilisation and socio-economic and forestry management; Solar energy and technology; Sustainable livelihoods; Climate change and environmental impacts; Climate change and environmental adaptation and resilience; Environmental engineering*

and production patterns; Pollution (Traffic, ocean, lakes, rivers air) and development; and Biotechnology in waste management and ecological maintenance.

Cluster 7: Law and Integrated National Development

Research Areas: *Human rights and good governance (Labour law, gender, child protection, accountability, corruption and integrity, local government, international criminal law and transitional justice); Law in development (e.g. Mining and oil and gas laws, maritime law) Constitutional and public law; Intellectual property rights (IPR); Regional integration; Land, environmental and natural resources laws.*

NOTE: Research proposals on the impacts of COVID-19 along the seven clusters above are strongly encouraged.

6.0 BUDGET

The proposal should include projected expenses per budget category such as capacity building, equipment, laboratory facilities/consumables, per-diems, transport, publication etc. The maximum budget for each proposal from multidisciplinary research category should not exceed the amounts stated below for a research proposal submitted by a research group:

- | | |
|--|-------------------|
| (a) Innovation and Commercialization of Technology | TZS 300,000,000/= |
| (b) Natural and Applied Sciences | TZS 30,000,000/= |
| (c) Information and Communication Technologies | TZS 20,000,000/= |
| (d) Business, Law, Education, Social Sciences and Humanities | TZS 15,000,000/= |

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 pertinent financial and procurement laws, rules and regulations. The grant funding will not include salaries, honoraria and institutional overheads.

7.0 PROJECT DURATION

The maximum project duration will be twelve (12) months from the date of signing the contract. Longer duration may be allowed under special circumstances.

8.0 APPLICATION DETAILS

The Format for Application of Research Grants as stipulated in the UDSM Research Policy and Operational Procedures, Third Edition of 2015 (Annex III) shall be followed. Applicants shall be required to submit their proposals in MS Word or PDF format (A4 paper size, 1 inch margin all round, 12 points Times New Roman fonts, single line spacing):

- (a) Cover page (not exceeding 1 page) with the following information
 - (i) Title of the Research Project
 - (ii) Cluster/Research Area
 - (iii) Name of the Principal Investigator(s) with emails and mobile telephone numbers
 - (iv) Department
 - (v) College/School/Institute
- (b) The proposal (not exceeding 6 pages), which includes the following information:
 - (i) Objectives
 - (ii) Methodology
 - (iii) Expected outputs
 - (iv) Sustainability measures
 - (v) Project management structure

- (vi) Project Implementation Plan
- (c) Budget summary (not exceeding 1 page), detailing major anticipated expenses and sources of funds (other than this grant if any).

9.0 DELIVERABLES

Successful applicants will be required to submit to the Director of Research and Publication progress reports on a quarterly basis and the Final Research Report, in accordance with the UDSM Research Policy and Operational Procedures, Third Edition of 2015 (Annex VII and VIII respectively). The reports shall include Financial Statements of Income and Expenditure for the periods covered by the reports. Expected deliverables of the research and innovation projects shall include one or more of the following:

- (a) Commercialised product or process.
- (b) Discovery; new and improved materials, species, technologies or practices.
- (c) Working prototype or process.
- (d) Computer software and applications.
- (e) Publications in form of published book, papers in referred journal of acceptable quality as prescribed by UDSM.
- (f) Registered intellectual property (patent, copyright, etc.).
- (g) Policy briefs, manuals and dissemination materials.

10.0 EVALUATION CRITERIA

The Format for Evaluation of Research Proposals as stipulated in the UDSM Research Policy and Operational Procedures, Third Edition of 2015 (Annex IV) shall be followed. The main criteria for evaluation of proposals are the potential for solving societal problems and contributing to national development, with a special emphasis on industrialization. The other evaluation criteria include the following:

- (a) Scientific and technical merit
- (b) Focus on the selected cluster and research area
- (c) Novelty and originality
- (d) Quality and clarity of project presentation
- (e) Clear methodology
- (f) Relevance and feasibility
- (g) Multidisciplinary and gender aspect inclusion
- (h) Potential for commercialization including intellectual property protection, up-scaling and application to advance knowledge
- (i) Potential for publications
- (j) Potential for evidence-based policy advice

All submitted proposals shall be evaluated by teams of independent internal and external reviewers.

11.0 DEADLINE FOR APPLICATION

Monday, **15th June 2020** at 23:59 hours (E.A.T)

All proposals should be submitted electronically through Research Information Management Systems at <http://rm.udsm.ac.tz>

ISSUED ON 11TH MAY 2020