

# UNIVERSITY OF DAR ES SALAAM

P.O. BOX 35091 DAR ES SALAAM, TANZANIA



## PRESS RELEASE


### RESULTS OF THE 5<sup>TH</sup> CALL FOR COMPETITIVE RESEARCH AND INNOVATION GRANTS 2022/2023

The University of Dar es Salaam is pleased to announce selection results of the 5<sup>th</sup> call of proposals for competitive research and innovation grants (2022/2023), which was announced on the 25<sup>th</sup> October 2022. The University has allocated **TZS 3,155,000,000/= for the 5<sup>th</sup> call**, out of which, TZS 2,450,000,000/- will fund research projects and TZS 705,000,000/- are for innovation projects. Statistics of submitted proposals and selected ones are summarized in the table below and details of successful applications are posted at <https://www.udsm.ac.tz>

	Research Proposals			Innovation Proposals		
	Applications	Selected	Winning (%)	Applications	Selected	Winning (%)
UDSM Main Campus	190	68	36%	18	2	11%
DUCE	46	9	20%	3	1	33%
MUCE	38	11	29%	3	1	33%
<b>Total</b>	<b>274</b>	<b>88</b>	<b>32%</b>	<b>24</b>	<b>4</b>	<b>16%</b>

Principal Investigators (PIs) of all successful applications are requested to contact the **Directorate of Research and Publication (DRP)** with effect from **Tuesday, 28<sup>th</sup> February 2023** to collect their award letters and contracts to commence the activities.

Congratulations to all applicants who applied for this year's Competitive Research and Innovation Grants.

  
PROF. NELSON M.K. BONIFACE  
ACTING DEPUTY VICE CHANCELLOR - RESEARCH  
24<sup>th</sup> February, 202

**APPENDIX 2A:**

*List of selected Research and Innovation Proposals Recommended for the Award of 5<sup>th</sup> UDSM Research and Innovation Grants 2021/2022 for Mwalimu Julius Nyerere Main Campus*

**UNIVERSITY OF DAR ES SALAAM**

OFFICE OF THE DEPUTY VICE CHANCELLOR – RESEARCH

FIFTH CALL FOR COMPETITIVE RESEARCH PROPOSAL GRANTS

LIST OF SELECTED PROPOSALS FOR THE AWARD OF THE 5<sup>TH</sup> UDSM RESEARCH AND INNOVATION GRANT 2022/23 FOR MWALIMU JULIUS NYERERE MAIN CAMPUS

**I. SELECTED INNOVATION PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selection Decision
1	Smart Fishing Innovative Solutions for Effective Conservation and Sustainability of Tanzania Blue Economy	Abdi Abdalla	Angelina Misso Baraka Maiseli Ellen Kalinga Eva Shayo Kwame Ibwe Moses Mchome Rahab Mwang'amba Rukia Kitula	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoICT	Electronics and Telecommunications Engineering	198,880,000	81.67	Selected for Award
2	Cost-effective digital fiscal solution for efficient revenue collection and management by Tanzania Revenue Authority	Alfred Mwambela	Thomas Luca Bahati Dickson Godwin Nazayoel Arnold Sylvester Lyimo Peter Thomas Muniko Antony Assey Baraka Maiseli Libe Massawe Tobias Swai	Cluster 1: Science, Technology and Innovation (STI), ICT and Industrial Development	CoICT	Electronics and Telecommunications Engineering	200,000,000	86.67	Selected for Award

**II. SELECTED RESEARCH PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selected for Award
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1.	Nutritional assessment of a beekeeping waste (slumgum) for the formulation of broiler chicken feed	Christopher Mduda	Ibrahim Kinyoro Juma Mmongoyo Masoud Muruke Namtero Newa Robert Katikiro Wilbert Gaudence Mitao Huruma Julius Mbonea	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoAF	Crop Sciences and Beekeeping Technology	30,000,000	79.32	Selected for Award
2.	Cooperative Organization as An Engine of Market Participation Among Smallholder's Farmers in Tanzania	Franco Mbegallo	Jackson Elias Joyceline Gonslaves Swaumu Hassan	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoAF	Agricultural Economics and Business	19,960,000	69.20	Selected for Award
3.	Macroalgae based bio-stimulants production for improving agricultural productivity and environmental adaption and mitigation.	Charles Joseph	Anold Towo Innocensia John Victor Matabura Enitha Michael	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoAF	Crop Sciences and Beekeeping Technology	30,000,000	76.63	Selected for Award
4.	Honeybee pollination for improving sunflower oil production and livelihoods in Singida, Tanzania	Shibonage Mashilingi	Beatrice Tonola Charles Joseph Ibrahim Kinyoro Mkabwa Manoko samora Andrew	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoAF	Crop Sciences and Beekeeping Technology	30,000,000	71.91	Selected for Award

5.	Evaluation Of The Effect Of Absence Of Proper Career Guidance To Youth In Tanzania And Development Of Career Guidance And Counselling Program Guide For Secondary School Students	Mapesa Luhasile	Abraham Temu Adela Syikilili Eugenia Kafanabo	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoET	Chemical and Mining Engineering	19,980,000	62.69	Selected for Award
6.	Surveillance of Giraffe Skin Disease using the Convolution Neural Network: A Case Study of Ruaha National Park	Aviti Mushi	Ally Bitebo Anitha Byabato Fred Chibwana Jestina Katandukila Mussa Daniel Budeba	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoET	Electrical Engineering	30,000,000	64.04	Selected for Award
7.	Rethinking parent-child sexual and reproductive health (SRH) communication: A case of Morogoro and Dodoma districts in Tanzania	Zilpah Ombijah	Egidius Rwezahula Paschal Mdukula Mr. Benedicto Luvanda Prof. Adedayo Abah	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoHU	Centre for Communication Studies	19,950,000	61.66	Selected for Award
8.	A Critical Discourse Analysis of Social Media Posts expressing Public Sentiment and Discourse on Intimate Partner Violence in Tanzania	Rose Upor	Brighton Msagalla Lulu Mahai Thomas Ndaluka Selina Wayimba (DUCE)	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	CoHU	Foreign Languages and Linguistics	19,430,000	78.37	Selected for Award

9.	An Exploration of the Conflicts and Tensions in the Governance of Cultural Heritage Sites in Tanzania	Elgidius Ichumbaki	Catherine Joseph Bhoke Felix Nyella	<b>Cluster 5:</b> History, Culture, Language, Heritage and Sustainable Tourism	CoHU	Archaeology and Heritage Studies	19,500,000	73.17	Selected for Award
10.	The State And Fire Fighting In The Plantation Forestry In Tanzania: An Historical Interrogation With A Case Of Mufindi District, 1984-2022	Hezron Kangalawe	Digna Mlengule Imani Majenda Yustina Komba Joseph Sondi	<b>Cluster 5:</b> History, Culture, Language, Heritage and Sustainable Tourism	CoHU	History	20,000,000	59.35	Selected for Award
11.	Data-Driven Artificial Intelligence System for Recording and Managing Students' Attendance During Lectures and University Examinations	Shililiandumi Naiman	Baraka Maiseli Diana Rwegasira Ellen Kalinga Leonard Peter Libe Massawe JOHN PAUL KUNDY	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoICT	Electronics and Telecommunicati ons Engineering	20,000,000	80.13	Selected for Award
12.	Integrated information system for empowerment of street children under resource-limited settings in Tanzania	Eva Shayo	Diana Rwegasira Fred Chibwana Jestina Katandukila Respicius Damian	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoICT	Electronics and Telecommunicati ons Engineering	20,000,000	78.90	Selected for Award

13.	Minimizing Fish Mortality in Aquafarms through Proper Monitoring of Water Quality Parameters using Internet of Things	Godfrey Chugulu	Abdi Abdalla Angelina Misso Baraka Maiseli Eva Shayo Fatuma Simba Kwame Ibwe Libe Massawe Mercy Mbise Samwel Limbu Shamte Kawambwa	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoICT	Electronics and Telecommunications Engineering	19,590,000	77.50	Selected for Award
14.	Analysis of Violence against Women and Children in East Africa Drawing Insights from Publications and Social Media Conversations	Ruthbetha Kateule	Hashimu Iddi Hellen Maziku Jacqueline Damas Lilian Mtasingwa	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	CoICT	Computer Science and Engineering	19,680,000	70.72	Selected for Award
15.	Development and Commercialization of Electrical Conversion Kit for Electrifying Internal Combustion Engine Motorcycle (ICEM) in Tanzania	Anthony Kigombola	Angelina Misso Diana Rwegasira Jackson Justo Moses Mchome Zainab Katima	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoICT	Computer Science and Engineering	29,359,000	66.47	Selected for Award

16.	Efficiency plastics recycling for sustainable environments using blockchain technology	Diana Rwegasira	Ellen Kalinga Moses Mchome David Machuche	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoICT	Computer Science and Engineering	19,950,000	56.47	Selected for Award
17.	Investigations on acrylamide levels in selected fried foods, its mitigation strategies and membrane permeability studies	Geradius Deogratias	Geradius Deogratias LILIAN Kaale Stephen Nyandoro	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoNAS	Chemistry	26,960,000	82.88	Selected for Award
18.	Development of Field-Deployable Immuno-Biosensor for Detection and Quantification of Aflatoxin B1 in Foods	Nuru Mlyuka	Ally Mahadhy Daniel Maeda Grace Kinunda J Phillip Margaret Samiji	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoNAS	Physics	30,000,000	82.42	Selected for Award
19.	Biomechanical and Kinetic Specificity Properties of Lactobacillus-Derived Extracellular Vesicles: A prospect for Bio-cargo and Drug Nano-Carrier for Cancer Therapy	Ginena Shombe	Cyprian Mpinda Grace Kinunda Nuru Mlyuka Sai Ngassa	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoNAS	Chemistry	30,000,000	78.68	Selected for Award



20.	Accelerating Natural Products Antimalarial Drug Discovery using Artificial Intelligence and Atomistic Simulations	Grace Kinunda	Geradius Deogratias Lucas Luchemba Michael Ryoba Olivia Kalokora Stephen Nyandoro	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	CoNAS	Chemistry	29,225,000	76.70	Selected for Award
21.	Epidemiological Study of Zoonotic Bacteria in Human and Animal Interfaces in Southern Lowlands	Angelamercy Baltazary	Anitha Byabato Fred Chibwana Jestina Katandukila Respicius Damian Victor Makene	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Zoology and Wildlife Conservation	29,900,000	83.87	Selected for Award
22.	Agrivoltaic System as a Climate Smart Agriculture-Energy Approach for Small-Scale Farmers in Tanzania	Paul Limbu	B Kazimili Esther Mvungi Exavery Makula Lwitiko Mwakyusa Margaret Samiji Nuru Mlyuka Rajabu Mangara Talam Kibona	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Physics	30,000,000	80.52	Selected for Award
23.	Investigation of the role of small mammals in the transmission of Leptospirosis a zoonotic disease in Lindi and Mtwara regions, Tanzania	Amoni Ulime	Alex Mujuni Florence Tarimo Kija Nghabi Leticia Musese Monica Shilereyo Amoni Ulime	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Zoology and Wildlife Conservation	29,930,000	77.40	Selected for Award



24.	Evaluation of pharmacological potentials of polysaccharides and peptides extracted from native medicinal mushrooms found in Tanzania	Bhoke Nyaisaba	Cyprian Mpinda Esther Mvungi Rose Masalu	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Molecular Biology and Biotechnology	30,000,000	77.33	Selected for Award
25.	Exploration of Potentials bioactivity of Mangrove Endophytic Fungi from Selected Tanzanian Mangroves Ecosystems for and Therapeutic Application	Juma Hussein	Donatha Tibuhwa Flora Stephano Hawa Myovela	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Molecular Biology and Biotechnology	30,000,000	75.62	Selected for Award
26.	Investigation on Bioavailability of Iron from Rice Bran in Prevention of Iron-deficiency Anaemia	James Lugata	Chacha Nyamkinda Flora Stephano LILIAN Kaale Rose Masalu	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Zoology and Wildlife Conservation	30,000,000	75.33	Selected for Award
27.	Control of A. flavus and A. parasiticus growth and subsequent Aflatoxin B1 production in maize and groundnuts by using microbial extracts as binder	Daniel Maeda	LILIAN Kaale	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Molecular Biology and Biotechnology	30,000,000	72.83	Selected for Award

28.	Development of Antibigram Regime for Inflammatory response Associated with Septicaemia in Patient Admitted in Tertiary Care Hospital	Modester Nkungu	Cyprian Mpinda Rose Masalu Abdilahi H. Kiula Sai Ngassa	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Molecular Biology and Biotechnology	30,000,000	72.82	Selected for Award
29.	A Survey on the Impacts of Tungiasis on School Children's social life in Kigoma and Kagera Regions, Tanzania	Alex Mujuni	Alex Mujuni Chacha Nyamkinda Fred Chibwana Ignasia Mbatia Jestina Katandukila Lucius Mugisha	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Zoology and Wildlife Conservation	29,900,000	71.81	Selected for Award
30.	Epidemiological Survey on plague a zoonotic disease among Rodents in East Usambara mountains, Morogoro Tanzania	Leticia Musese	Alex Mujuni Felista Mwingira Monica Shilereyo	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	CoNAS	Zoology and Wildlife Conservation	29,990,000	71.72	Selected for Award
31.	Valorization of marine beach wrack for production of value-added products, a circular bioeconomy approach.	Esther Mvungi	Daniel Mwaikambo Daniel Shilla Emmanuel Sangu Theresia Marijani	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Botany	30,000,000	71.21	Selected for Award

32.	Investigation of agroforestry systems for enhanced biodiversity conservation and ecosystem services in Kagera (shortened as InvesTAFS)	Samora Andrew	Chacha Nyamkinda Leonie Raphael Joyceline David Gonsalves	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Botany	30,000,000	71.05	Selected for Award
33.	Clean cooking for all: A novel application of Fresnel lens for a solar cooker	Exavery Makula	B Kazimili Lwitiko Mwakyusa M Mtelela Margaret Samiji Nuru Mlyuka Paul Limbu Rajabu Mangara Theresia Marijani	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Physics	30,000,000	70.78	Selected for Award
34.	Efficacy of Neem Leaf and Aloe Vera gel Extracts on controlling of Colletotrichum species causing Anthracnose Disease in Avocado Fruits.	Daniel Mwaikambo	Chonga Nassoro Esther Mvungi Joyceline Gonslaves Stephen Nnunu Stoweka Sanga	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Botany	27,805,000	69.95	Selected for Award
35.	The structure, diversity and function of gut microbiome in honeybees and stingless bees of Tanzania	Aneth Mwakilili	Christopher Mduda Masoud Muruke Namtero Newa Sylvester Lyantagaye	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Molecular Biology and Biotechnology	29,570,000	65.37	Selected for Award

36.	Assessment of plant and fauna species diversity in Derema corridor, East Usambara Mountains, Tanzania	Mohamed Kibaja	Chacha Nyamkinda Christopher William Jasson John Mecklina Michael Monica Shilereyo Samora Andrew	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Zoology and Wildlife Conservation	29,830,000	64.62	Selected for Award
37.	Diversity of marine microalgae and their bioactive metabolites for industrial applications	Aneth Mwakilili	Aneth Mwakilili James Lusana Sylvester Lyantagaye Dr. Vincent Rwehumbiza Dr. Stela Temu	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoNAS	Molecular Biology and Biotechnology	30,000,000	62.21	Selected for Award
38.	Implementation sustainability variation in youth-led crime control and prevention initiatives in informal settlements in Dar es Salaam: Exploring the drivers, impact, and acceptability	Respicius Damian	Ahimidiwe Munuo Estelia Alfred Mwambene	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	CoSS	Political Science and Public Administration	19,980,000	80.88	Selected for Award
39.	Business Intelligence Capabilities and Informed Marketing Decisions among Women-Owned Mining Enterprises in Tanzania	Pilly Silvano	Emmanuel Elia (COSS -UDSM)) Erasto Kabalo (COSS-UDSM)) Zacharia Gerald Mwakila (UDBS-UDSM)) Winnie Nguni	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	CoSS	Geography	20,000,000	77.88	Selected for Award

40.	Digitalization and Gender Based Violence n Tanzania	Verdiana Tilumanywa	Aklan Majaliwa Faustine Sambaiga Jonas Kinanda Victoria Makulilo Jerry Mangena	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	CoSS	Geography	20,000,000	74.48	Selected for Award
41.	Application of GIS and Remote Sensing in Enhancing Community Adaptive Capacity to Flood Disasters in Lower Rufiji Floodplain, Tanzania	Zahor Zahor	Evelyn Mcharo Johnstone Andrea Rosemarie Mwaipopo	<b>Cluster 6:</b> Natural Resources, Environment and Technology	CoSS	Geography	19,955,400	62.98	Selected for Award
42.	Women's Autonomy in Decision Making in Health Care Seeking: The Case of some selected Higher Learning Institutions in Tanzania.	Paul Japhet	Cecylia Mgombere Chakupewa Mpambije	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	IDS	IDS	20,000,000	59.19	Selected for Award
43.	Rural-Urban-Linkages: Exploring the Diversity of Household Livelihoods and Climate Change Resilience in Rural Tanzania.	Gelas Rubakula	Colman Msoka Sophia Mgoba Theresia Busagara	<b>Cluster 3:</b> Governance, Industrial Policy and Cleaner Production	IDS	IDS	20,000,000	67.70	Selected for Award

44.	Assessment of Vulnerability and Preparedness to Climate Related Hazards among Coastal Local Communities in Pangani, Tanzania	John Msinde	Esther Mvungi Heriel Moshi Samora Andrew Olipa Simon	<b>Cluster 6:</b> Natural Resources, Environment and Technology	IDS	IDS	26,000,000	73.93	Selected for Award
45.	Kamusi ya Uhandisi Madini na Nishati Kiingereza – Kiswahili	Michael Mashauri	Adventina Buberwa Edista Abdallah George Mrikaria	<b>Cluster 5:</b> History, Culture, Language, Heritage and Sustainable Tourism	IKS	TATAKI Kiswahili Language and Linguistics	20,000,000	67.25	Selected for Award
46.	40 Years Without Ujamaa Villages: Assessing their Legacy fCrom Ujamaa Villagers' Perspective	Angelus Mnenuka	Nives Ngullu	<b>Cluster 5:</b> History, Culture, Language, Heritage and Sustainable Tourism	IKS	TATAKI Literature, Communication and Publishing	18,280,000	66.95	Selected for Award
47.	Replenishment of Potential Marine Ecosystems for Artisanal Fishing in Tanzania	Barnabas Tarimo	Batuli Yahya Patric Ndaki Patric Ndaki	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	IMS	IMS	30,000,000	72.83	Selected for Award

48.	Geochemical Characterization and Correlation of Oil Seeps: Contributing to the Search for Oil in the Coastal Tanzania	Rachael Sabuni	Emily Kiswaka Evelyne Mbede John Gama Habibu Mohamedi Momboli	<b>Cluster 3:</b> Governance, Industrial Policy and Cleaner Production	IMS	IMS	30,000,000	72.43	Selected for Award
49.	Inclusion of Women women-owned SMEs in Innovation and Knowledge Systems in Tanzania	Kelefa Mwantimwa	Debora Mbilinyi Mesia Ilomo	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	Library	UDSM Library	20,000,000	78.44	Selected for Award
50.	Re-framing the rise of Connections; a look at internet-based non-consensual sharing of sexually explicit materials through Internet Disinhibition Effect lens	Emmanuel Mkhai	Sophia Seleman Elias Mwabungulu	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	Library	UDSM Library	17,840,000	74.75	Selected for Award
51.	Characterization of HPV genotypes in Paired Urine and Cervical swabs Among Women attending Cervical Cancer Screening clinic in Tanzania.	Mkunde Chachage	Daniel Maeda Brenda Bashekera	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	MCHAS	MCHAS	30,000,000	85.12	Selected for Award



52.	Evaluating the usability of mHealth app on HIV prevention services in Tanzania	Christopher Mbotwa	Elia J Mmbaga Emmy Metta Elia Magwaja	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	MCHAS	MCHAS	30,000,000	77.87	Selected for Award
53.	Genetic Analysis of Cancer Predisposition Genes among the Hadza Ethnic Group of Tanzania	Linus Paul	Christopher Mbotwa Lucy Namkinga Fatmahan Atalar	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	MCHAS	MCHAS	30,000,000	77.72	Selected for Award
54.	Assessment of acceptability and drivers of COVID-19 vaccines among adults aged 18 years and above attending outpatient clinics in Mbeya rural district council	Bernard Ngowi	Christopher Mbotwa Mwajabu Possi	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	MCHAS	MCHAS	20,000,000	64.64	Selected for Award
55.	Tackling post-harvest losses in marine dagaa' fishery: A Blue growth hub to boost the livelihoods and food security of coastal communities in Tanzania	Lydia Gaspare	Daniel Shilla Innocensia John Siajali Pamba	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	SoAF	Aquatic Sciences and Fisheries Technology	30,000,000	80.77	Selected for Award

56.	Assessing the Relevance of Primary Schools' Curriculum on Environmental Education in Addressing Climate Change towards Achieving Tanzania's Development Vision 2025	Thaudensia Ndeskoi	Albert Chagula Aurelia Kimaro Noah Pauline	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	SoED	Educational Foundation Management and Lifelong Learning SoED (EFMLL-SoED)	20,000,000	70.56	Selected for Award
57.	Research Project Title: Addressing the Predicament of Poor Mathematics Teaching and Learning in Tanzania: Its Scope and Pedagogical Solutions Model (MATELE Solutions)	George Kahangwa	Fortunatha Mathias Matiba Morwo Likinjiye Mollel Said Athumani Sima Theresia Marijani	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	SoED	Educational Foundation Management and Lifelong Learning SoED (EFMLL-SoED)	20,000,000	62.06	Selected for Award
58.	Rethinking about subject Specialisation for Primary School Teachers in Tanzania: A road map to Quality Education relevant for 4th Industrial Revolution	Septimi Kitta	David Koloseni Silvester Rugeihyamu Zubeda Mussa Rose Kisusi	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	SoED	Educational Psychology and Curriculum Studies SoED (EPCS)	19,995,000	61.51	Selected for Award
59.	An Investigation on the Perceived Impact of Teacher Characteristics on Students Performance in Mathematics among ordinary Secondary School Students	Albert Tarmo	David Koloseni Septimi Kitta Silvester Rugeihyamu Zubeda Mussa	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	SoED	Educational Psychology and Curriculum Studies SoED (EPCS)	20,000,000	61.09	Selected for Award

60.	Are we doing it right? Examination of Gender Trans-formative Education Practices in Secondary Schools in Igunga District, Tabora Region.	Eugenia Kafanabo	Albert Chagula Sophia Mgoba	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	SoED	Educational Foundation Management and Lifelong Learning SoED (EFMLL-SoED)	19,986,000	72.62	Selected for Award
61.	Source Rock Evaluation of Rukwa Rift Basin, Sw Tanzania: Implication of Hydrocarbon Potential	John Gama	Evelyne Mbede Rachael Sabuni George Bernard	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	SoMG	Petroleum Science and Engineering (PSE)	29,983,200	83.32	Selected for Award
62.	Hydrogeological Assessment of Groundwater Quality at Mzakwe Well- field, Dodoma Municipality, Tanzania	Simon Melchioly	Clarah Kimani	<b>Cluster 6:</b> Natural Resources, Environment and Technology	SoMG	Geosciences (GY)	30,000,000	66.13	Selected for Award
63.	Contract farming inclusiveness and its impact on the welfare of smallholder farmers of Vegetable in the Arusha Region in Tanzania	Judith Iddy	Ranger Kanani Victor Matabura	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	UDBS	General Management	19,955,000	65.10	Selected for Award

64.	“Strengthening rural women’s innovative capacities to climate change adaptation for sustainable rural agripreneurship in rice subsector in Tanzania”	Mohamed Semkunde	Aloyce Hepelwa Jackson Sawe Nelly Maliva Winnie Nguni	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	UDBS	Accounting (UDBS)	20,200,000	60.52	Selected for Award
65.	Social enterprising potentials in e-waste management: analysis of drivers and barriers among informal e-waste dealers in Tanzania	Juma Masele	Ruthbetha Kateule Hamisi Fintan	<b>Cluster 3:</b> Governance, Industrial Policy and Cleaner Production	UDBS	General Management	19,717,000	75.20	Selected for Award
66.	The Role of Governance Practices on Performance of Women’s Village Community Banking	Omari Mbura	Selela Shadrack Mwakalila Swaumu Hassan	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	UDBS	Marketing	19,512,000	78.02	Selected for Award
67.	Assessing the Impact of Entrepreneurial Ecosystem on Graduates’ Self-Employment in the Agricultural Sector in Tanzania	Tumsifu Thomas	Amelia Buriyo John Sanga Musa Shelembi	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	UDBS	General Management	20,026,000	75.15	Selected for Award

68.	Exploring Linkages between Household Food Production, Food Security, Nutrition and Health in Tanzania	Wilhelm Ngasamiaku	Innocensia John	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	UDSoEC	Economics	20,000,000	62.16	Selected for Award
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**APPENDIX 2B:**

*List of selected Research and Innovation Proposals Recommended for the Award of 5<sup>th</sup> UDSM Research and Innovation Grants 2022/2023 for Dar es Salaam University College of Education (DUCE)*

**UNIVERSITY OF DAR ES SALAAM**

OFFICE OF THE DEPUTY VICE CHANCELLOR – RESEARCH

FIFTH CALL FOR COMPETITIVE RESEARCH PROPOSAL GRANTS

LIST OF SELECTED PROPOSALS FOR THE AWARD OF THE 5<sup>TH</sup> UDSM RESEARCH AND INNOVATION GRANT 2022/23 FOR DAR ES SALAAM UNIVERSITY COLLEGE OF EDUCATION (DUCE)

**I. SELECTED INNOVATION PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selection Decision
1	Development Of Poultry Feed From Under-Utilized Food Wastes: A Strategic Step Towards Value Added Food Wastes And Improved Public Health In Tanzanian Cities	James Zacharia	David Kacholi Halima Amir Rita Lyatuu	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	DUCE	Department of Chemistry.	100,000,000.00	51.67	Recommended for the Award of Innovation and Commercialization Grant to reduce budget Shs. 196 million to Shs. 100 million

**II. SELECTED RESEARCH PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selection Decision
1	Computational Investigation of Structural, Vibrational and Thermodynamic Properties of K <sub>2</sub> MgX <sub>4</sub> and K <sub>2</sub> AlX <sub>5</sub> (X = F, Cl, Br, I) Supersalts	Sixberth Mlowe	Ebenezer Ngowi Fortunatus Jacob Geradius Deogratias Grace Kinunda James Mgaya Lucas Luchemba Silvia Mushi	<b>Cluster 1:</b> Science, Technology and Innovation (STI), ICT and Industrial Development	DUCE	Chemistry DUCE	24,402,000	82.17	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster

2	Screening of phytochemicals, toxicity, antimicrobial and antioxidant activities of the mostly used plants for treatment of respiratory disorders in Tabora region	Halima Amir	David Kacholi Stephen Nyandoro	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	DUCE	Biological Sciences DUCE	29,999,650	77.83	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
3	Turning domestic and agro waste into nutritious animal feeds	Lucas Luchemba	Alice Isibika Deokary Joseph Ebenezer Ngowi James Mgaya Lilian Kaale Silvia Mushi Sixberth Mlowe	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	DUCE	Chemistry DUCE	28,570,500	75.59	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
4	Strengthening Stakeholders' Participation in the Implementation of Primary School Feeding Programme in Tanzania	Patrick Kavenuke	Grace Ulomi	<b>Cluster 2:</b> Education, Agriculture, Food Security and Health	DUCE	Educational Foundations, Management and Lifelong Learning DUCE (EFMLL)	20,000,000	66.36	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
5	Web-based System for Examination Invigilation Timetable Generation in Higher Learning Institutions	Michael Ryoba	Cecilia Swai Elimboto Yohana Linus John	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	DUCE	Physics, Mathematics and Information of DUCE (PMI DUCE)	20,000,000	66.36	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster



6	Parenting in the Digital Age: Experiences from Tanzania (Cyberparentproject_Tz)	Cresencia Massawe	Hezron Onditi Salmin Singano Issakwisa Mwakyula	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	DUCE	History, Political Science and Development Studies DUCE	20,000,000	81.37	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
7	Experience and Perception of Sexual Harassment among DUCE Students	Ikupa Moses	Cresencia Masawe Hezron Onditi Ibrahimu kisinda Neema Komba	<b>Cluster 4:</b> Gender, Professional Development, Policy Development and Policy Implementation	DUCE	NULL	15,000,000	76.10	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
8	An Ethno-Linguistic Survey of Datooga Plant Names and their Usage in Treatment of Human and Cattle Diseases	Kuria Mdoe	Amani Mwamakombe Halima Amir	<b>Cluster 5:</b> History, Culture, Language, Heritage and Sustainable Tourism	DUCE	Languages and Literature DUCE (LL)	20,000,000	77.00	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster
9	Integrated GIS and Remote Sensing Technology for Modelling the Potential Groundwater zones and Optimum Location for Water Supply Tanks in reducing water stress in Dar es Salaam	Evelyn Mcharo	Zahor Zahor Daniel Sabai Johnstone Andrea	<b>Cluster 6:</b> Natural Resources, Environment and Technology	DUCE	Geography and Economics DUCE (GE)	19,995,400	66.70	Recommended for the Award of Multidisciplinary Research Grant based on high score and available fund in the respective cluster

**APPENDIX 2C:**

*List of selected Research and Innovation Proposals Recommended for the Award of 5<sup>th</sup> UDSM Research and Innovation Grants 2021/2022 for Mkwawa University College of Education (MUCE)*

**UNIVERSITY OF DAR ES SALAAM**

OFFICE OF THE DEPUTY VICE CHANCELLOR – RESEARCH

FIFTH CALL FOR COMPETITIVE RESEARCH PROPOSAL GRANTS

LIST OF SELECTED PROPOSALS FOR THE AWARD OF THE 5<sup>TH</sup> UDSM RESEARCH AND INNOVATION GRANT 2022/23 FOR MKWAWA UNIVERSITY COLLEGE OF EDUCATION (MUCE)

**I. SELECTED INNOVATION PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selection Decision
1	Compositing of disposable diapers: Empowering women on management of Disposable Diapers for economic and environmental health improvement	Shakila Mteti	Ashura Ngoya Chakupewa Mpambije Lewis Mtashobya Pasiens Nazary Nyoni	Cluster 6: Natural Resources, Environment and Technology	MUCE	History, Political Science and Development Studies MUCE	85,000,000.	51.67	Selected for Award

**I. SELECTED RESEARCH PROPOSALS**

S/N	PROJECT TITLE	PRINCIPAL INVESTIGATOR	TEAM MEMBERS	CLUSTER	COLLEGE	DEPARTMENT	BUDGET	Final Score	Selected for Award
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1	Effectiveness of Pesticidal Plants in Reducing Pre and Post-harvest losses in Stored Maize: A case study of Songea Rural District, Ruvuma	Washa Washa	Saada Mbepera Shaabani A. Mshamu	Cluster 1: Science, Technology and Innovation (STI), ICT and Industrial Development	MUCE	N/A	30,000,000	77.40	Selected for Award
2	Promoting Mathematics Teachers' Understanding and Implementation of Jigsaw Strategy in Teaching and Learning of Mathematics in Tanzania	Chacha Chacha	Mariana Manyusi Mhewa	Cluster 2: Education, Agriculture, Food Security and Health	MUCE	Physics, Mathematics and Informatics MUCE	20,000,000	65.92	Selected for Award
3	Predicting and Understanding Excessive Use of Alcohol Using Machine Learning Algorithms: Case of Rombo District in Kilimanjaro	Ubaya Msemwa	Joyce Kalistus Ndauka Livini Donath Tesha	Cluster 2: Education, Agriculture, Food Security and Health	MUCE	N/A	30,000,000	52.50	Selected for Award
4	Biogas generation from fish wastes as energy source in enhancing resource recovery for environmental conservation	Jovine Emmanuel	Flaviana Ngabala Godlisten Shao Lewis Mtashobya Jonas Gervas Philimon Nganyira	Cluster 3: Governance, Industrial Policy and Cleaner Production	MUCE	Chemistry MUCE	30,000,000	76.33	Selected for Award

5	Land Use Conflicts in tree planting surge: Manifestation and Mechanisms for Conflict Resolution in the Southern Highlands of Tanzania	Sospeter Charles	Esther Dungumaro Justin Lusasi	Cluster 3: Governance, Industrial Policy and Cleaner Production	MUCE	Geography and Economics MUCE (GE)	20,000,000	63.57	Selected for Award
6	Enhancing the Use of ICT among Mathematics Teachers to Improve Students' Academic Performance in Tanzanian Secondary Schools	Willy Kasuga	Chacha Chacha Doris Mosha Hassan Iddy Upendo Jeremia	Cluster 4: Gender, Professional Development, Policy Development and Policy Implementation	MUCE	N/A	20,000,000	84.28	Selected for Award
7	Gender and Perceptions of Legitimacy and Inheritance: A Comparison between Matrilineal and Patrilineal Societies in Tanzania	Helena Myeya	Livini Tesha Michael Mgonja	Cluster 4: Gender, Professional Development, Policy Development and Policy Implementation	MUCE	Geography and Economics MUCE (GE)	15,000,000	68.41	Selected for Award
8	Promoting Endogenous Knowledge through Oral tales in Tanzania Primary Schools: A Case of Sangu People in Mbarali District	Michael Kalenge	Selina Thomas Mkimbili	Cluster 5: History, Culture, Language, Heritage and Sustainable Tourism	MUCE	N/A	20,000,000	69.87	Selected for Award

9	Reconstructing Ecological Footprints of Diverse Human Activities in the Western Serengeti Ecosystem over the Last 500 Years	Titus Ombori	Sinyati Robinson Mark	Cluster 6: Natural Resources, Environment and Technology	MUCE	N/A	30,000,000	64.51	Selected for Award
10	Climate Change and Food Security Nexus in Tanzania: Enhancing Smallholder Farmers' Adaptation Strategies for Improving Household Crop Production in Dodoma Region	Tiemo Haule	Chakupewa Mpambije Masolwa Pima	Cluster 6: Natural Resources, Environment and Technology	MUCE	Geography and Economics MUCE (GE)	20,000,000	64.32	Selected for Award
11	Enhancing modern beekeeping practices to increase productivity and income among beekeepers in Uyui and Sikonge Districts of Tabora region Western Tanzania	Michael Mgalula	Amos Majule	Cluster 6: Natural Resources, Environment and Technology	MUCE	Geography and Economics MUCE (GE)	30,000,000	58.45	Selected for Award