THE UNITED REPUBLIC OF TANZANIA

MINISTRY OF AGRICULTURE

TANZANIA AGRICULTURAL RESEARCH INSTITUTE

Ref. No. AB.166/288/01D/22 **2st December, 2025**

TO ALL TARI STAFF

Tanzania Agricultural Research Institute (TARI) is one of the implementing partners of the World Bank funded Programme called Tanzania Food Systems Resilience Program (TFSRP). The overall objective of TFSRP project is to support food systems resilience by strengthening agricultural service delivery, the adoption of climate resilient technologies, and fiscal performance in the agricultural sector. The TFSRP result areas (RA) are: RA1 - improving service delivery in research, extension, and seed; RA2 – developing resilient rural infrastructure; and RA3 - strengthening fiscal performance to enable delivery on priority investment areas. One of the deliverables of the project is to build capacity of highly talented TARI employees at National Universities.

The institutes recently advertised 85 scholarships for postgraduate studies for applicants interested in undertaking studies in domestic higher learning institutions. Therefore, the Management is pleased to announce the selected candidates for TFSRP Postgraduate scholarships.

Furthermore, some scholarships are readvertised for application. Candidates who were not successful in the previous application are allowed to apply. **Please read carefully instructions for application**

A: SELECTED TARI STAFF FOR POSGRADUATE STUDIES UNDER TFSRP SCHOLARSHIPS

SN	AREA/THEME	FULL NAME	APPLIED MSC/PHD	PROPOSED TOPIC	PROPOSED MSC/PHD	RECOMMENDATIONS
1	Applied Biostatistics/ biological statistics	1. Mr. Adam Songoro	Master of Science in Agriculture Statistics	Integrated Digital Platform for Monitoring and Reporting of Research and Seed Multiplication Activities.	**Master of Science in Agriculture Statistics**	
2	Pest Management and Entomopathogenic agents	2. Ms. Sarah Gerald Nzaro	**Master of Science in Crop Science and Technology**	Evaluation of entomopathogenic nematodes (EPNs) for sustainable management of scarabs affecting beans and tomato production in Southern Highlands of Tanzania	**Master of Science in Crop Science and Technology**	**Subject to Discussions to change degree program to Crop Science (Plant Protection)**
		3. Mr. Emmanuel David Katamba	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding)***	Antagonism and effects of *Bacillus subtilis* on *Fusarium oxysporum* f. sp. Lycopersici on disease Severity, and Growth of Tomato (Solanum lycopersicum).	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding)***	**Subject to Discussions to change degree program to Crop Science (Plant Protection)**
		4. Mr. Mwichande Ahmed Mwichande	**Master of Crop Protection**	Investigate Entomopathogenic Fungi for the Control of False Codling Moth (Thaumatotibia leucotreta) on Tanzanian Avocado Orchards.	**Master of Crop Protection**	
		5. Mr. Thomas Noel Ponera	**Master of Crop Protection**	Characterization and management of scarabid beetles using entomopathogenic fungi towards improved Sugarcane production in Tanzania	**Master of Crop Protection**	
		6. Mr. Faida Daud Kinoja	**Master of Science in Crop Science and Technology**	Efficacy of selected microbial based control measures against rhinoceros beetles attacking oil palm in Tanzania	**Master of Science in Crop Science and Technology**	
		7. Ms. Beatrice Engles Kashando	**PhD, Crop Science**	Evaluating the effectiveness of locally available entomopathogens in managing white grub affecting sugarcane in Tanzania	**PhD, Crop Science**	

3.	Molecular Biology and Pathology	8. Ms. Afua Juma Omary	**Master of Science in Integrated food Science**	Advancing Genetic Characterization of Fungal Pathogens Affecting Oil Palm (Elaeis guineensis) in Unexplored Production Zones of Tanzania	**Master of Science in Integrated food Science**	**Subject to Discussions change degree program to Molecular Biology and Biotechnology (UDSM)**
		9. Mr. Hosiana Winston Ulula	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology)***	Integration of Molecular Pathology Techniques in the Control of Smut Disease in Sorghum (Sorghum bicolor L.) in semi-arid areas of Tanzania	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology)***	**Subject to Discussions to change degree program to Crop Science (Plant Protection)**
		10. Mr. George Mende Kairo	**Master of Crop Protection**	Assessing the Effectiveness of Bee Venom on Selected Fungal Diseases on Common Beans in Southern Highlands of Tanzania.	**Master of Crop Protection**	
		11. Mr. Masam Malimu Sudi	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology)***	Molecular Characterization and the Survival Mechanism of Bacterial Leaf Blight pathogen (*Xanthomonas oryzae* pv. Oryzae) in Rice Residues and Soil in eastern zone (Morogoro and Pwani regions) Tanzania	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology***	
		12. Ms. Mwinshaha Athuman Mwinshaha	**Master of Science in** Biotechnology	Characterization, Screening and Evaluation of Plant Growth Promoting Activities of Endophytes of Tea (*Camellia Sinensis*)	**Master of Science in** Biotechnology	
		13. Mr. Chona Msafiri Mahushi	**Master of Crop Protection**	Characterization of sugarcane smut (Sporisorium citamineum) in the major sugarcane growing areas of Tanzania	**Master of Crop Protection**	
		14. Ms. Rahma Chiboba Mkangwa	**Master of Science in Microbiology**	Management of Major Sunflower Virus Disease using Biotechnology in	**Master of Science in Microbiology**	**Subject to Discussions - change degree program to Molecular Biology and**

				Tanzania		**Biotechnology (UDSM)**
		15. Mr. Shiwa Luhende Joseph	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology)***	Genetic Diversity of the Causal Agent of Banana Xanthomonas Wilt in Tanzania	**Master of Science in Sustainable Agriculture *(Molecular Plant Pathology)***	
4.	Application of AI and ICT in Agriculture	16. Mr. Jiday Lucas Muya	**MSc In Soil Science and Land Management**	Enhancing round potato productivity through developing an Integrated AI and ICT framework for predictive soil health analysis and targeted intervention in the Southern Highlands of Tanzania	**MSc In Soil Science and Land Management**	
		17. Mr. Khalifan Shabani Machemba	**MSc In Soil Science and Land Management**	Integration of GNSS and artificial intelligence for predicting soil nutrient depletion resulted from climate change in Moshi District, Kilimanjaro Region, Tanzania	**MSc In Soil Science and Land Management**	
		18. Mayala Masanja Thobias	**Master of Science Crop Protection**	Application Of Convolutional Neural Networks for Automated Detection of Diseases and Nutrient Deficiencies in Tanzanian Tea Crops	**Master of Science Crop Protection**	
		19. Mr. Peter Daud Masatu	**Master of Science in Geographical Information Systems**	AI-GIS Integration for crop monitoring and improved Rice Yield: A Case Study of Dakawa, Morogoro	**Master of Science in Geographical Information Systems**	
		20. Mr. Petro Christopher Maziku	**PhD in Hydrology and Water Resources Engineering *(Water Resources Engineering and Management)***	Development of an edge AI-powered irrigation decision engine for precision water management under variable climate conditions	**PhD in Hydrology and Water Resources Engineering *(Water Resources Engineering and Management)***	

5.	Crop Biogeography	21. Ms. Zawadi Wile Kilangara	**Master of Science in Geographical Information Systems**	Application of Remote Sensing and GIS in Reclassification of Agro-Ecological Zones in Tanzania	**Master of Science in Geographical Information Systems (GIS)**	
		22. Floramanka Patrick Ndakidemi	**PhD in Sustainable Agriculture *(Molecular Plant Pathology)***	Ethno botanical, Molecular, and Bioactive Evaluation of *Ocimum* Species in Northern Tanzania for Sustainable Agricultural Applications	**PhD in Sustainable Agriculture *(Molecular Plant Pathology)***	**Subject to Discussions – change degree program to Biodiversity and ecosystems Management**
6.	Management of invasive weeds in Tanzania	23. Ms. Bakina Obadia Msalilwa	**Master of Science in Sustainable Agriculture *(Agricultural System Management)***	Integrated management strategies for Parthenium hysterophorus to enhance crop productivity and rangeland health in Semi-Arid zones of Tanzania	**Master of Science in Sustainable Agriculture *(Agricultural System Management)***	
		24. Mr. Said Hassan Lujenje	**MSc in Crop Science**	Evaluation of the Effectiveness of Various Management Practices for Kongwa Weed (*Astripomoea hyoscyamoides*) in Cropland and Rangeland Ecosystems of Central Tanzania	**MSc in Crop Science**	
7.	Studies in plant nutrition and Crop Physiology	25. Mr. Emmanuel Eliya Senge	Masters of science in Sustainable Agriculture	Enhancing Soil Fertility and Plant Nutrition for Sustainable Agricultural Productivity	Masters of science in Sustainable Agriculture	Subject to change – Degree program Master of Science in Agronomy (crop physiology)
		26. Mr. John Sindano Kitati	MSc In Soil Science and Land Management.	Nutrient Uptake and Physiological Responses of Maize (Zea mays L.) Under different Soil Types and Environmental Conditions in Tanzania	MSc In Soil Science and Land Management.	
8.	Molecular and conventional plant breeding	27. Mr. Augustino Dismas Mrema	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding)***	Multi-trait improvement in potato (*Solanum tuberosum* L.) for enhanced productivity, disease tolerance, and	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding)***	Subject to change – Degree program Master of Science in Crop Science Plant Breeding (SUA)

				market competitiveness		
		28. Mr. Musa Alphonce Mwijarubi	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding)***	Developing climate-resilient varieties through molecular breeding for Tea production in Tanzania	**Master of Science in Sustainable Agriculture *(Plant Molecular Breeding***	
		29. Ms. Rehema Samuel Elias	**Master of Science in Seed Technology and Business**	Integrating Conventional and Basic Molecular Approaches for Identifying Coconut (*Cocos nucifera* L.) Varieties Resistant to Lethal Yellowing Disease in Coastal Tanzania	**Master of Science in Seed Technology and Business**	
		30. Mr. Hamza Nassoro Msangi	**PhD in Sustainable Agriculture *(Plant Molecular Breeding)***	Genetic improvement for resistance to coconut lethal disease (CYLD) on Tanzanian coconut genotypes	**PhD in Sustainable Agriculture *(Plant Molecular Breeding)***	**Subject to Discussions**
		31. Ms. Beata Paul Khafa	PhD in Sustainable Agriculture (Plant Molecular Breeding)	Study of Genetic and Phenotypic Diversity of Sunflower (*Helianthus annus* L.) Genotypes for Yield Improvement in Tanzania	PhD in Sustainable Agriculture (Plant Molecular Breeding	
9.	Application of mutational atomic breeding for development of crop varieties	32. Mr. Kinguye Masamaki Magomere	**PhD in Crop Science and Technology**	Integrating Mutation Breeding and Genomics Tools to Improve Drought Tolerance in Rice (Oryza Sativa L.) In Tanzania	**PhD in Crop Science and Technology**	
10.	Application of nanotechnology for precision agriculture	33. Mr. Theobald Stephano Chagga	**PhD in Sustainable Agriculture *(Molecular Plant Pathology)***	Nanotechnology-Based Approaches for Precision Detection and Sustainable	**PhD in Sustainable Agriculture *(Molecular Plant Pathology)***	

				Management of Plant Diseases in Tanzania		
11.	Plant biodiversity studies for domestication of wild plants	34. Mr. Alhaji Abed Said	**Master of Science in Applied Botany**	Mapping and Assessment of Threats to Priority Wild Edible Vegetable Species in Tanzania:	**Master of Science in Applied Botany**	
		35. Ms. Thereza Fabias Deus	**Master of Science in Sustainable Agriculture**	Assessing the Genetic Diversity and Conservation status of *Sclerocarya birrea* (Marula) population in Tanzania for Sustainable Use and Domestication	**Master of Science in Sustainable Agriculture**	**Subject to Discussions**
		36. Ms. Magreth Daudi Lupembe	**PhD in Crop Science and Technology**	Conservation of edible Wild Fruit Plants with Nutritional and Medicinal Properties in Tanzania: Integrating the use of Starch-Based Nanocomposite to Enhance Seed Longevity	**PhD in Crop Science and Technology**	
13.	Socio-economics-state of adoption of agricultural technologies, impact and impediments	37. Mr. Issaya Godwin Marijan	**PhD in Agricultural Economics**	Perception and impacts assessment on adoption of improved agricultural technologies among smallholder potato farmers in Tanzania	**PhD in Agricultural Economics**	
		38. Ms. Stella Massawe Andrea	**PhD in Agricultural Education and Extension**	State Of Adoption, Impact and Impediments to The Uptake of Agricultural Technologies in Tanzania	**PhD in Agricultural Education and Extension**	
14.	Management of pesticides and other agricultural	39. Ms. Elice Deogratius Makungu	**Master of Science in Sustainable Agriculture**	Characterization of Pesticide Residues in Soils, Water, and Tomatoes from Major Vegetable-	**Master of Science in Sustainable Agriculture**	

	chemicals		***(Agriculture system mgt)***	Growing Areas in Tanzania.	***(Agriculture system mgt)***	
		40. Mr. Joseph Adonia Leonard	**PhD in Sustainable Agriculture *(Plant Molecular breeding)***	Management of Pesticides (*Chlorpyrifos, Endosulfan Metabolites, Pyrethroids* and *Mancozeb*) Residues: A Case Study of Tomato Production in Tanzania	**PhD in Sustainable Agriculture *(Plant Molecular breeding)***	**Subject to Discussions – change degree program and topic**
15.	Development and dissemination of climate smart agriculture	41. Mr. Venance Honest Mrema	**Master of Science in Sustainable Agriculture *(Agricultural System Management)***	Economic Viability of Climate-Smart Agriculture Practices: A Case of Smallholder Legume Cultivation in selected Districts in Northern Tanzania	**Master of Science in Sustainable Agriculture *(Agricultural System Management)***	
		42. Mr. Kelvin Atuganile Mwakasege	**MSc In Soil Science and Land Management.**	Impact of Sunn Hemp and Integrated Approaches on Soil Properties and Sunflower Production in Semi-Arid Dodoma, Tanzania	**MSc In Soil Science and Land Management.**	
		43. Eva athias Otaru	**Master of Science in Sustainable Agriculture *(Agricultural System Management***	Evaluation of Climate-Smart Agriculture Technologies for Water Use Efficiency and Cost-Effectiveness in Semi-Arid Tanzania	**Master of Science in Sustainable Agriculture *(Agricultural System Management***	
		44. Ms. Leila Mohamedy Lwiza	**PhD in Natural Resources Assessment and Management**	Evaluating the Effectiveness and Economic Viability of Climate-Smart Agriculture (CSA) Practices in Semi-Arid Tanzania for Sustainable Land and Water Resource	**PhD in Natural Resources Assessment and Management** (Natural Resource Management in	

				Management	Agriculture,)	
16.	Development of biopesticides/botanicals for management of pests	45. Ms. Judith Robert Setebe	**Master of Science in Integrated Food Security**	Assessing the efficacy of *Azadirachta indica*, *Solanum incanum*, and *Tephrosia vogelii* in controlling aphids affecting Solanum lycopersicum cultivated by small-scale farmers in Mvomero district, Tanzania	**Master of Science in Integrated Food Security** **Master of Science in food Science and Technology**	**Subject to Discussions – change degree program to Crop Science and Technology**
		46. Ms. Rebecca Ambokile Mwakapala	**Master of Science in Crop Science and Technology**	Botanical Control of the White Rice Stem Borer (*Maliarpha seperatella*) in Tanzania: Evaluating the efficacy and economic viability of indigenous plant-based formulations	**Master of Science in Crop Science and Technology**	
		47. Mr. Festo Frank Masisila	**PhD in Crop Science and Technology**	Development of Climate Resilient Pests and Diseases Management Strategies for Improving Livelihood Standards of Cashew Growers in Tanzania	**PhD in Crop Science and Technology**	
17.	Agricultural and bioprocessing engineering and technologies	48. Mr. Joseph Nakomolwa Joseph	**Master of Integrated Water Resource Management**	Development and Optimization of a Smart Irrigation System for Enhancing Water Use Efficiency under Climate Variability in Tanzania.	**Master of Integrated Water Resource Management**	
		49. Ms. Elesia Ahobwile Mkumbwa	Master of Science jn Hydrology and Water Resources Engineering (Water Resources Engineering)	Sustainable Water Resources Management For Climate Resilient Agriculture At Mbarali, Tanzania	Master of Science jn Hydrology and Water Resources Engineering (Water Resources Engineering)	
19.	Deliberate funding for on-going studies previously under	50. Ms. Fatma Hussein Kiruwa	**PhD in Sustainable Agriculture *(Molecular***	Genetic Diversity, Host Range, and Integrated Management of Banana	**PhD in Sustainable Agriculture *(Molecular***	

	USAID		***Plant Pathology)***	Bunchy Top Virus (BBTV) in Tanzania	***Plant Pathology***	
20.	Dynamics of gender in agricultural research and development	51. Mr. Deogratias Robert Shirima	**MSc. Agricultural Extension**	Mainstreaming Gender in Agricultural Research and Development	**MSc. Agricultural Extension**	
21.	Science Communication	52. Mr. Kalwinze Joseph Kiyenze	**MSc. Agricultural Extension**	Enhancing Agricultural Innovation Through Mobile Applications: A Digital Pathway for Technology Storage, Access, and Utilization at Tanzania Agricultural Research Institute (TARI)	**MSc. Agricultural Extension**	
22.	Information, knowledge Mgt. and communication	53. Mr. Julius Boniphace Butindi	**Master in Information and Knowledge Management**	Leveraging Information and Knowledge Management to Enhance Agricultural Research and Extension Services in Tanzania	**Master in Information and Knowledge Management**	
		54. Mr. Rukundo Joseph Bwire	**Masters Of Science in Agricultural Statistics**	Designing a Centralized Data Management System for agricultural research datasets	**Masters Of Science in Agricultural Statistics**	
23.	Data Management					
		55. Mr. Hassan Ally Kasimu	**Masters Of Science in Agricultural Statistics**	Influence of access to climate information on farmers adoption of climate smart agricultural practices. A case of maize smallholder farmers in Mufindi district – Iringa region, Tanzania	**Masters Of Science in Agricultural Statistics**	
24.	Other cadres	56. Mr. Ezra Nicas Kamanija	**Master of Information and Communication Systems and Engineering *(Information Technology Systems Development***	Integrating Artificial Intelligence and Internet of Things for Smart Soil Health Monitoring to Enhance Maize Production: A Cost-Effective Approach for maize	**Master of Information and Communication Systems and Engineering *(Information Technology Systems***	

			and Management)	production in Tanzania	***Development and Management) OR*** **Master's Degree in Information Technology**	
25.		57. Mr. Frank Fulgence Chaki	Master degree in Human resource Mgt	The impact of technology on organizational culture, with a focus on digital transformation and artificial intelligence in decision-making.	**Master degree in Human resource Mgt**	
		58. Ms. Teonesia Moses Gushema	**Master of Science in Procurement and Supply Management**	Determinants Influencing Performance of Fruits and Vegetables Supply Chain in Tanzania: A Case of Tanzania Agricultural Research Institute	**Master of Science in Procurement and Supply Management**	
		59. Mr. Zachary Eligius Ngatunga	**Master of Arts in Economics**	Impact of Agricultural Research-Driven Interventions on Poverty Reduction and Livelihood Improvement in Tanzania	**Master of Arts in Economics**	
		60. Ms. Martha Thomas Magesa	**Master of Science in Procurement and Supply Management**	Evaluating Procurement System Effectiveness in Supporting timely and Cost-Efficient Delivery at TARI Centre's	**Master of Science in Procurement and Supply**	
		61. Mr. Mugini Adam Singira	**Master of Arts in Mass Communication**	The Role of Local Radio in Communicating the impact of Climate Change to Rural farming Communities	**Master of Arts in Mass Communication**	
		62. Mr. Shadrack Simon Kaganga	Master Of Human Resource Management	The Impact of Employee Mobility on Organizational Performance In Tanzania	**Master Of Human Resource Management**	
		63. Ms. Rahma Ramadhan Mtulya	**Master of Science in Procurement and Supply**	Assessment of Adoption and Functionability of E-	**Master of Science in Procurement and**	

			chain Management	Procurement Systems on Cost Reduction in Supply Chain Management: A Case Study of a Government Institution	**Supply chain Management**	
		64. Ms. Grace Nyasoro Sylivester	PhD in Business Administration	Strategic HRP for Advancing Women leadership in Agricultural Institutions in Tanzania	**PhD in Business Administration**	

B: RE- ADVERTISEMENT OF TFSRP SCHOLARSHIPS

1. STUDY AREAS OF INTEREST FOR POSTGRADUATE STUDIES

1.1 Applied biological statistics and Data science

Description and focus for research topics*:* The research topics should relate to testing experimental designs, data analysis methods, and testing theories in agricultural statistics. We will give high priority to researchers interested in developing models. Preferably, the candidate should apply and get admission for **MSc. in Agricultural Statistics**.

Number of scholarships: **2 MSc.**

1.2 Application of Artificial intelligence and ICT in agriculture

Description and focus for research topics: TARI is keen to capitalize on the use of artificial intelligence and ICT in advancing agricultural research in Tanzania. AI has many uses in agriculture, including but not limited to detection of diseases, aiding in collection of data for plant breeding, yield prediction and planning, and automated farming tasks. Expression of interest is invited for any topic that aims at application of artificial intelligence in agriculture, including for precision agriculture, pathology, entomology, soil health, and crop breeding. Applicants demonstrating use of data science in their studies will be given high priority.

Number of scholarships: **1 MSc**

1.3 Management of invasive weeds in Tanzania

Description and focus research topics*:* Noxious weeds such as *striga spp*. and invasive species, namely Kongwa weed (*Astripomoea hyoscyamoides*) and Parthenium (*Parthenium hysterophorus*), are significant threats to agriculture, pastoralism, and biodiversity because they reduce crop yields, limit grazing land, and displace native vegetation. The applicants are expected to demonstrate their readiness to develop management strategies for any of these weeds. One MSc. applicant may be considered to study weeds in water bodies as long as the candidate can demonstrate how important is the weed to agriculture.

Number of scholarships: **1 MSc 1 PhD**

1.4 Application of Mutational atomic breeding for development of crop varieties

Description and focus research topics: The applicant should be ready to use mutational atomic breeding techniques in the development of crop varieties. The crops of interests are cotton, rice, and maize. The applicants may take advantage of experience and advances from ongoing activities regarding mutational breeding at TARI Dakawa, TARI Selian, and TARI Ukiriguru.

Number of scholarships: **2 MSc**

1.5 Application of nanotechnology for precision agriculture

Description and focus research topics: Nanotechnologies are emerging agricultural technologies in our country. In the agricultural sector, nanotechnology can be applied in crop production, food processing and packaging, food security and water purification, environmental remediation, crop improvement, and plant protection. Any topics related to the application of nanotechnology in agriculture are okay, but applicants demonstrating use of nano fertilizers and pesticides in Tanzanian settings will be given high priority.

Number of scholarships: **2 MSc**

1.6 Agricultural and bioprocessing engineering and technologies

This theme is now re-advertised as soil sciences

Description and focus research topics*:* The candidate will do post-graduate studies in soil sciences and is expected to acquire skills in soil classification and assessing land suitability.

Number of scholarships: **2 MSc**

1.7 Management of pesticides and other agricultural chemicals

Description and focus research topics: We live in an era of unprecedented use of chemicals in form of fertilizers and pesticides. Unfortunately, these chemicals have been implicated to have effect on human health as well as in contaminating environments. In some instances, pesticides are thought to be deliberately sprayed onto vegetables, including tomato a few hours or days before harvesting. As research institute, TARI ought to generate evidence to show the magnitude of this problem in the country so as to be able to provide evidence-based advice to policy makers. The candidates may generate information on extent of use of the problematic fertilizers/pesticides and establish residues in water bodies, soils and plants (tomatoes). The candidate may develop models to predict/simulate persistence of pesticides and fertilizers in Tanzanian soils. Applicants interested in models will be required to identify the supervisor prior to being sponsored

Number of scholarships: **1 MSc**

1.8 Nutritional profiling in plants and human nutritional benefits of crop varieties

Description and focus research topics: In developing countries most people consume foods from plants that they grow. Thus, growing nutrient dense crop varieties could translate into reduced malnutrition in smallholder farmers' households. The challenge has remained to be a lack of data about levels of nutrients in crop varieties developed by TARI and how these levels are affected by growing plants in diverse environments. Postgraduate studies under this category will be focused on how selected nutrients of a given crop vary across agro-ecological zones. The studies may as well investigate accumulation of toxic compounds in a given crop across zones and may seek to answer a question do varieties with certain compounds translate to reduced malnutrition in children or pregnant and lactating women?

Number of scholarships: **1MSC 1 PhD**

1.9 Science Communication (Mass Communication Major)

Effective communication of research and innovations is essential for ensuring that scientific knowledge reaches policymakers, stakeholders, and the public in a clear and actionable way. This field focuses on translating complex scientific concepts into engaging messages using media, journalism, education, and marketing. Staff applying for this scholarship are expected to have or develop skills in simplifying complex scientific information, designing communication strategies, using media and digital platforms, and producing content that promotes awareness and adoption of TARI's researched technologies. They are also expected to develop materials such as articles, policy briefs, press releases, videos, and social media content that enhance understanding and application of TARI innovations.

Number of scholarships: 2 MSc

1.10 Agricultural practices and technologies for management of conflicts between pastoralists and farmers.

Description and focus research topics: Conflicts between livestock keepers and farmers have been experienced in different areas of our country. Scarcity of land for grazing due to increased human population and climate change which results into less and less pasture for grazing are some of the causes of conflicts. A study is needed to unravel and document underlying causes of conflicts between farmers and livestock keepers and recommend evidence-based strategies for management of conflict – what agricultural practices and technologies will reduce conflicts and misunderstanding between the two communities; informing the policy is key to this.

Number of scholarships: **1 PhD**

2. SUGGESTED DEGREE PROGRAMMES

The applicants are reminded to have already been admitted for degree programs at higher learning institutions in Tanzania prior to applying for the scholarships. The applicants for scholarships can be enrolled in any of the degree programs shown below but may also enroll in other degree programs because what matters is the development of a topic or committing to do research in research areas listed above. However, the degree programs pursued must be those that are acceptable under TARI Schemes of Service. The conditions are the same for aspirants of PhD studies. Therefore, no study leave will be granted to applicants who pursue degree programs not contained in the Schemes of Service.

- MSc. in Agricultural Statistics
- MSc. in Molecular Biology and Biotechnology
- MSc. in Crop Science
- MSc. in Life Science
- MSc. in Sustainable Agriculture
- MSc. in Botany
- MSc. in Bioinformatics

- MSc. in Agricultural Data Science
- Master in Information and Knowledge Management
- Masters in Agricultural Robotics and Automation
- Masters of Public Relation and Mass Communication
- Master's Degree of Management Information System
- Master's Degree in Cybersecurity

3. GENERAL CONDITIONS

- All candidates must be TARI employees;
- Not more than 45 years old;
- All candidates must attach a letter of motivation and Concept Note research; **in motivation letter please specify the theme under which your application is submitted**
- Candidates must attach an up-to-date Curriculum Vitae (CV);
- Candidates must attach their certified copies of academic qualifications;
- All applicants must attach College/University admission documents **but may as well indicate they are certain to obtain admission letter after selection for a specified degree programme**;
- Women are highly encouraged to apply;
- Deadline for application is **five days (5)** from the date of this announcement.

Please apply to the following address:

Director General,
Tanzania Agricultural Research Institute,
Makutupora, Arusha Road,
P. O. Box 1571,
DODOMA.
E-Mail: application@tari.go.tz

Dr. Thomas Bwana
DIRECTOR GENERAL