

TANZANIA COMMISSION FOR SCIENCE AND TECHNOLOGY



**CALL FOR PROPOSAL ON UPGRADING OF RESEARCH RESULTS OR
PROTOTYPES INTO PRODUCTS FOR COMMERCIALIZATION**

GUIDELINES FOR APPLICANTS

This Call applies only for submission of full proposals. All Proposals and their Annexes MUST be submitted through COSTECH online system <http://crweb.costech.or.tz>

INTRODUCTION

The Tanzania Commission for Science and Technology (COSTECH) is a government institution established by the Parliament Act. No. 7 of 1986 (Revised 2002). It is responsible for coordination and promotion of research, technology and innovation activities in the United Republic of Tanzania. The Commission advises the government on scientific research and technology transfer and development for sustainable development. The Commission hosts the National Fund for Advancement of Science and Technology (NFAST), which supports research and development activities in Tanzania. The Commission intends to advance research capacity building through uptake of research results and prototypes to the end products to ensure are linked directly with industry for mass production or commercialized for public use.

OBJECTIVE OF THE CALL

The main objective of the call is to support research projects which have developed prototypes that could promote systematic uptake of those findings into routine practice or mass production in industries. This call intends to promote uptake of research findings to facilitate interventions of existing societal challenges with focus to agriculture (livestock, fisheries/aquaculture, crops), health, wildlife, forest, environment and blue economy (***With specific consideration of addressing challenges and harnessing opportunities in Zanzibar***) hence to improve the quality and effectiveness of services to the public. The call is in line with the Tanzania Development Vision (TDV 2025) and National Five Years Development Plan III (FYDPIII) that seek to enable the country to more effectively use her geographical opportunities and resources for production and economic growth, while, ensuring that the outcomes benefit all citizens in line with the Vision's goals of a high quality of life.

It has been noted that some of the research projects with potential impact in various sectors in the country have generated results or prototypes that need further development to be translated into final product for industrial production, commercialization or provision of public services. Inadequate funds and lack of appropriate technologies are among major factors that hinder translation of prototypes or other research results into the final products for commercialization.

Therefore, this call intends to advocate for implementation science to ensure researches with potential results are supported to generate final products that can be commercialized or linked with industry for mass production or provide public services in the country.

ELIGIBILITY CRITERIA

Full research with potential results or prototypes from eligible and competent candidates who fulfil the criteria below are invited to submit a proposal for translation of research results/prototypes into final products;

- i. Researchers and technologists who are citizens of the United Republic of Tanzania.
- ii. Main applicant (PI) must be an active researcher affiliated as a full-time employee in higher learning Institutions/University or Research and Development Institutions (R&D institutions) legally registered in Tanzania Mainland and Zanzibar.
- iii. Researchers **MUST** have research results in publications/authorized report with potentials for being developed into final products or mass production into the industry and has proven impact to the community.
- iv. In order to ensure linkage with industry, each proposal research team **MUST** compose two sides i.e. from Universities/Higher Learning Institutions, R&D (one side) and private sector or industry (the other side) with clear roles/responsibilities.
- v. Main applicant (PI) must demonstrate how his/her research results or prototypes will be developed to final products and linked with industry for production.
- vi. Main applicant (PI) must demonstrate a strong and realistic practical linkage between intended research idea to business and or the market or indicate how Tanzanian communities are likely to benefit as consumers out of the applied area.
- vii. Applications should consider gender inclusivity.
- viii. Application should consider capacity building to MSc research
- ix. Technologies from indigenous/ traditional knowledge should be given priority.
- x. Collaboration between R&D and HLI in designing and implementation of the project is highly encouraged

REQUIREMENTS

The Proposal should be written in English following the format provided in our online submission template which can be accessed at COSTECH Research Management System) available at www.costech.or.tz. To be considered for funding, the applicant must meet the following primary requirements:

- i. The project is in line with the call and seek to address societal challenges to ensure that the developed prototypes have potential of being developed into final product, that ensures value addition, technology development and transfer and commercialization for public use.

- ii. Evidence of the previous research findings available in reports/publications and potential of being taken for routine practice/use in industry for mass production.
- iii. The project has high impact on the achievement of the objectives of the call with minimal risk.
- iv. The project has a niche market for application with a competitive advantage.
- v. The project has a high degree of innovation, technology development and promotes new applied knowledge.
- vi. Have a clear Intellectual Property right plans.
- vii. Evidence of collaboration with Universities and higher learning Institutions and manufacturing industry, Research and Development Institutions (R&D institutions) legally registered in Tanzania mainland and Zanzibar.
- viii. Evidence of institutional capacity to manage research projects.
- ix. All proposal related submissions including collaboration commitments must be attached with official endorsement letter(s) from the host and collaborating institutions.

PROPOSAL REQUIREMENTS

The proposal shall include following:

- a) Title of the Project; the title should be scientifically valid and sufficiently descriptive to reflect the nature of the proposed work.
- b) Summary of the Project; a summary of the proposed project considering the importance of the project, the objectives, research type and design, methodology, expected outputs, result dissemination, the total budget required and duration.
- c) Objectives of the project; a clear statement of the general problem (s) and gap in transforming the end result projects and prototypes to the final product that can be produced in the industry or issue(s) at hand should be given. Specific objectives and targets must be clearly stated. Should also justify why the project is important in solving industrial or society challenges.
- d) Background and Literature Review; the applicant must show the interrelationship of prior research and development in the field and a product to be generated by the intended study. It should reflect a thorough survey of the existing state of knowledge and how the intended work is going to contribute to the advancement of knowledge about the problem to be solved or addressed.
- e) Methodology (Project description, research design); the researcher should clearly and thoroughly spell out the research and development plan for the project. The plan should identify and describe the different phases of the project. It should also indicate the

proposed methods, analytical techniques and their appropriateness, as necessary. This section should also describe the facilities and equipment to be used. It should also describe the study type, research design, technology development and innovation, place, intended population to benefit from the innovation, sampling frame and methods *-where applicable and as necessary*. The section should also clearly indicate a novel technology that will be developed or improved during the course of this research.

- f) Management Plan; the applicant should provide a description of the project management and supervision plan and the role of the Principal Investigator (PI) and the research team.
- g) Work schedule and division of tasks; the details and rationale for manpower needs, work schedules, tasks to be accomplished and responsible persons for each task of the project should be given here. GANTT charts may be used for this purpose.
- h) Anticipated Output and Utilization Plan; anticipated contribution to the specific problem(s) or issue(s) that are planned to be addressed by the research project should be clearly described. These outputs must tally with the objectives spelt out for meeting this call's theme. In this section, steps planned to be taken to utilize the anticipated products (or the developed technology) should be clearly described.

Note: *The requirements above should be filled and submitted through R&D Results scale-up fund application form attached.*

BUDGET

Research funding will be granted for a maximum of 24 months. The maximum amount per grant totals is up to TZS 120,000,000/=

Please note:

- The budget should include specifications and justification for each cost item in the budget.
- The ***grant will not cover research salaries and institutional overheads.***

6.0. EVALUATION CRITERIA

The assessment will be mainly adhered to the COSTECH Research and innovation grants manual.

- i. Relevance to the call (Up scaling of the potential research results and prototypes to the final product).

- ii. Strength/ merit of the Principal Investigator and the research team members.
- iii. Making impact to the manufacturing sector in the country.
- iv. Having niche contribution to the sector.
- v. Scientific quality of the proposal.
- vi. Feasibility of the proposed project.
- vii. National interest in the manufacturing sector including enhancing value addition, productivity and competitiveness.
- viii. Public demand for enhancing value addition, productivity and product quality.
- ix. Potential for up-scaling
- x. Potential for innovative products/processes
- xi. Gender consideration in the research team and in project implementation
- xii. Involvement of private sector/industry

7.0. UPLOADING DOCUMENTS

- Budget in the prescribed form enclosed to the call.
- Project Working table (RBM matrix template) enclosed to the call
- Supporting and collaboration letters
- Supporting letters from the head of Institution or Ministry
- Collaboration letter
- Project risk management registry (enclosed to the call)
- Project procurement plan template (enclosed to the call)
- Project Work Plan (enclosed to the call)

8.0. IMPORTANT TIMELINES

- Saturday 14th August: Call opening.
- Friday 14th September, 2021: Call closing