Application Guidelines for the Call for Research Proposals under Public and Private Partnership in Renewable Energy, Aquaculture and Fisheries in Malawi

Call Opening Date: 26th June, 2023

Call Closing Date: 25th July, 2023

1.0   BACKGROUND

The National Commission for Science and Technology (NCST) was established under the Science and Technology Act No.16 of 2003 with the mandate to advise the Government and other stakeholders on all science and technology matters in order to achieve a science and technology-led development. Its Mission is to promote, support, co-ordinate and regulate the development and application of research, science, technology and innovation so as to create wealth in order to improve the quality of life. By its mandate and mission, NCST has secured a research grant under SGCI Phase II-plus from the Science Granting Councils Initiative (SGCI) in Sub-Saharan Africa and Malawi Government through the Science and Technology Fund. The Grant will enable the Commission to support and manage research and innovation projects in **Renewable Energy, Aquaculture and Fisheries under the public and private partnership approach**. The SGCI is supported by a consortium of funders, namely; Canada's International Development Research Centre (IDRC), South Africa's National Research Foundation (NRF), the UK's Foreign and Commonwealth Development Office (FCDO), Swedish International Development Cooperation Agency (SIDA), NORAD and German Research Foundation.

2.0   RATIONALE

Renewable energy, Aquaculture and Fisheries are some of the national research priority areas in the National Research Agenda. The research projects to be funded under this grant will follow the public and private partnership (PPP) approach. The key defining feature of the PPP approach is its deliberate emphasis on the need to move from research to innovation. Whereas the universities and research institutes have been generating technologies and other research outputs, translating these into commercial products that could spur socio-economic development have been slow. These grants are, thus, designed to break the barriers to the uptake and application of research for socio-economic development by facilitating universities and research institutes to be the champions of the process of translating outputs of their research (e.g. new technologies, new varieties, prototypes, new business models) into products and services in the market place. To achieve this, NCST will provide grants to fund research projects that will involve collaborations between public research institutions with other actors who are not their traditional partners (**particularly, the private sector**). The grant will also promote multi-disciplinary approach for teams of experts from diverse disciplines to work together on an identified research problem in the priority areas of research. The involvement of the private sector is key to the success of this call management. The private sector will be expected to support the process through additional financing and other forms including sharing of equipment; faculty members and student placements, secondments and internships; etc. In return, the private sector will gain access to expertise within the universities and research institutions; aid in the renewal and expansion of

technology; improve access to students as potential employees and leverage internal research capabilities.

3.0 THEMATIC FOCUS

Research project proposals that demonstrate public and private partnership in the following areas will be supported;

- Renewable Energy;
- Aquaculture; and
- Fisheries.

4.0 FUNDING LEVEL

The maximum grant value for each research project proposal is **MK32,797,710.00.** Each research project will be implemented for a period not exceeding **twenty-two months (22 months) from 1st September 2023 to 30th June, 2025**. Permissible budget items include the following:

- Material costs, if they are directly linked to the research project, in particular material of enduring value, the cost of expendable items, field expenses, travel expenses or third party charges.
- Direct costs incurred through the use of research infrastructure linked to the research.
- Costs of organising conferences and workshops in connection with the funded research.
- Costs of national co-operation and networking activities directly associated with the funded research.

Note: Salaries of applicants are not eligible costs.

5.0 ELIGIBILITY

(a) Each proposal must have a principal investigator as a main applicant, based in Malawi and of Malawi origin. The Principal Investigators will bear the overall responsibility for the project, including its technical and administrative co-ordination as well as the timely delivery of scientific and financial reports.

(b) Applications are open to bona fide researchers from public and private research and higher learning institutions in Malawi.

(c) Support letters from the host institutions of the Principal Investigators are a prerequisite. Proposals without institutional approval through support letters will not be considered.

(d) The Grant will fund **only applied research projects** in the listed thematic areas. Research proposals shall need to demonstrate the application of scientific principles or basic scientific discoveries to solve real life challenges. **Basic or purely theoretical research will not be considered.**

(e) Principal Investigators at the point of application must fulfil the following requirements:

- Hold a primary appointment in a local publicly or privately funded institution (Minimum of 12 months employment with a local institution);

- Have done previous research in any of the focus thematic areas and have some results published;

- Be a Principal Investigator with a track record of leadership ability in co-ordinating research programmes; and

- Providing mentorship to research teams, as well as having productive research outcomes.

6.0   PROPOSAL PREPARATION

These guidelines are provided to researchers to develop proposals for possible funding in any of the three research priority areas named above. These guidelines must be adhered to as failure to do so will result into the proposals not being reviewed for funding. Submission of a research proposal does not guarantee funding. The complete proposals will be reviewed by a Panel of Reviewers. These reviewers may also be called upon to contribute to the assessment of the progress and performance of funded projects.

Research projects that show potential for high impact at grass root within the project time line at a reasonable cost will be given high priority. Projects that emphasise technology identification and generation, packaging and dissemination for immediate impact on investment and productivity are encouraged. Applicants are requested to use Times New Roman font, size 12, 1.5 line spacing using the Research **Proposal Template (*Annexure 1*).**

7.0   INCLUSION IN THE PROPOSAL

i)   Cross-cutting considerations

The proposal should demonstrate how ***sex, gender equality and inclusivity, public-private partnerships, risk management and intellectual property issues will be addressed in the project***. Research projects led by women Principal Investigators are strongly encouraged. More weight will be given to a team that has female co-investigators during the review and selection process of the projects.

ii) Results and Dissemination

Applicants should clearly define the major outputs expected from the research project and describe how the research findings will be disseminated or used. Who are the target audience/ beneficiaries? How will the findings be used to influence policy and practice? What media engagements plans are envisaged? Indicate how open access will be fostered. Relate the specific dissemination method/approach to the target audience and briefly explain the rationale for the choice of the approach.

iii) Team composition from applicant organizations

All individuals who make a significant contribution to the intellectual direction of the research, and who may have some responsibility for financial aspects of the project should be listed. Team members from applicant organisations should be included. It is important to include the field of expertise of each individual, as well as the percentage of their professional time committed to the project. CVs of the research team members should be included and each one

of them should not be more than 5 pages. Letters of support from the institutions of the Principal Investigator should be included.

iv) Budget

The budget should include an explanation and justification for each line item in the detailed budget spreadsheet. The maximum budget must not exceed the grant value. Presentation of detailed budgets is a must. Any allowable costs should include a clarification and a justification. All rates to be used for the budgeting purpose are the ones acceptable by the respective institutions of the Principal Investigators hosting the projects. Some of the project downstream budgetary items could include the following:

- Research specific costs including cost of equipment;
- Costs associated with human resources;
- Capacity building e.g. postgraduate;
- local travel;
- Technical monitoring and evaluation; and
- Dissemination of research results.

v) Project Governance

Briefly explain how the project will be governed. What is the composition of the research team, their qualifications and specific roles in the proposed project? Describe how any partnership is planned with other universities/ research institutes? How will the private sector or beneficiaries be involved in the design/management/execution of the project? What is the role of the university's/institute's management (if any) and how might this governance structure influence the success of the programme?

vi) Proposed Project Timeline

Provide a chart of key activities, timelines and key milestones.

vii) Ethical clearance

Where the project involves human participants and animal subjects, the Principal Investigator shall obtain ethical clearance from an appropriate NCST designated research ethics committee before any grant disbursement and implementation of the project. NCST will also ensure that the ethically cleared research projects have been inspected for ethical compliance in the field besides the ordinary monitoring and evaluation.

8.0 SUBMISSION AND PROCESSING OF PROPOSALS

The mode of application and submission of the full application package (i.e with all the required attachments) shall primarily be through the **web-based online grants management system** of NCST at www.grants.ncst.mw. Application packages submitted **via email** will also be accepted in exceptional circumstances, provided that such circumstances have been communicated to and approved by an officer responsible for handling enquiries under this call at NCST.

The deadline for submission is **25thJuly, 2023 at 16:30 Central Africa Time.** Application package shall include principal investigator's covering letter; full proposal; and letter of support from an institution of the principal investigator. Applications received after the deadline will not be included in the evaluation. When the full application package is duly completed save the document as **"last name of Principal Investigator-NCST-PPP Call for Proposals 2023".** All attachments must be in PDF.

a) The application package must be sent via email to directorgeneral@ncst.mw with a copy to Lkampira@ncst.mw with the subject heading: "*Full NCST-PPP Call for Proposals 2023*" clearly specified.

b) All proposals must be submitted in the prescribed template and will be reviewed based on their quality and merit. A full proposal outline is downloadable on www.ncst.mw/pppnewsgciphasetwo.

c) Proposals should not exceed fifteen (15) pages, using 1.5 spacing and font size 12 Times New Roman **(Refer to the proposal outline for other details)**.

d) All proposals will be received and processed in strict confidentiality and with complete acknowledgment of Intellectual Property Rights of the applicants.

e) Proposals will be screened for completeness by NCST before a rigorous review by an independent panel of reviewers.

f) Evaluation, selection, approval and communication to successful applicants by NCST Board will be by **20th August 2023**.

g) NCST decisions will be final.

9.0   CONTACT INFORMATION

Any enquiries should be directed to Mr Lyson Kampira at Lkampira@ncst.mw.

ANNEX 1: PROPOSAL FORMAT/TEMPLATE

The full proposal in any of the priority areas should be prepared in the following format and address elements therein.

1.   EXECUTIVE SUMMARY

This section provides a succinct high-level summary of the proposed project. The summary should be in plain English, avoiding the use of jargon and acronyms. Please note that this summary will be published in the SGCI Virtual Hub and partner institutions websites. The summary should be short but detailed enough to stand alone. It must not be more than one page long.

2.   BACKGROUND AND RATIONALE

Describe the problem that is to be investigated and the questions that will guide the research process. Provide a brief overview of the body of knowledge related to the problem and indicate the knowledge gaps that the proposed research will fill. To show the importance of the problem, this section should discuss: how the research relates to the country's development priorities; the scientific importance of the problem; the urgency and magnitude of the problem and how the research results will contribute to its solution; the special importance of the project for the private sector; and the need to build up research capacity in the proposed area of research.

3.   PROJECT GOAL AND SPECIFIC OBJECTIVES

The overall goal should state the development goal being pursued by the research. The specific objectives should indicate the specific types of knowledge (or other outputs) to be produced/realized, the audiences to be reached, the forms of capacity to be reinforced, and the partnerships to be established. These are the objectives against which the success of the project will be judged.

4. PROJECT METHODOLOGY/ APPROACH

Explain how each specific objective will be achieved in sufficient detail to enable an independent scientific assessment of the proposal. This section should show how the research questions will be answered in the most rigorous way possible. You must be clear about the activities envisaged to achieve each objective. The methodology (which should be justified) should discuss the following details as appropriate:

- **Conceptual and theoretical framework**. Define the frame of reference that will guide the research (for more on this see section on innovation systems).

- **User participation**. Indicate whether (and if so, how) the ultimate users of the research findings (in this case, the private sector) were involved in the design of the project and how they will participate in the execution of the project or implementation of the results.

- **Data collection.** Indicate the approaches and methods that will be used to collect data as well as how the research instruments will be developed. If the research includes studies on human populations, indicate how ethical questions relating to confidentiality will be achieved (see below). Where applicable, details must be provided with regard to the collection and handling of biological samples, and all laboratory procedures and protocols must be stipulated.
- **Data analysis.** Describe the methods of data analysis and modeling to be used, if any. This should include any statistical processes/ softwares (if necessary) as well as how the data will be secured, accessed, shared, stored and archived.

5. ANTICIPATED OUTPUTS AND OUTCOMES

Define the major outputs (e.g., publications, policy briefs, books, technologies, protocols, guidelines, etc.) expected from the research (please be **specific**.). Based on these outputs, define the outcomes expected. Outcomes are defined as changes in actions, behaviours, and relationships of the users and target audiences. What is likely to change as a result of research findings, to whom, when and where? Describe whether the project findings are likely to influence policy and at what levels (national, regional?) How will the project engage with policy and decision actors at these levels?

6. KNOWLEDGE UTILIZATION AND DISSEMINATION PLAN

Describe how the research findings will be disseminated or used. Who are the target audience/ beneficiaries? How will the findings be used to influence policy and practice? What media engagements plans are envisaged? Is open access (OA) part of your university's/institute's policy? Relate the specific dissemination method/approach to the target audience and briefly explain the rationale for the choice of the approach.

7. PROJECT GOVERNANCE

Briefly explain how the project will be governed. Describe whether the project plans to incorporate advisors to provide overall oversight. What is the composition of the research team, their qualifications and specific roles in the proposed project? Is any partnership planned with other universities/ research institutes in your country (if the focus is national); or in other countries (if the focus is regional)? How will the private sector and other beneficiaries be involved in the design/ management/ execution of the project? What is the role of the university's/institute's management (if any) and how might this governance structure influence the success of the programme?

8. SUITABILITY OF THE HOST INSTUTUION

Describe the suitability of your institution in coordinating this project by highlighting the specific factors that make it uniquely qualified. Provide an overview of the technical infrastructure, human capacity, and other resource endowments that demonstrate the existing capacity to undertake the proposed research. Explain the institution's previous/ current activities, outreach and impact in the proposed area. Describe any existing or anticipated links with the **private sector** and other actors in the country/national system. Briefly demonstrate how this project will fit into the overall design of the university's/institute's overall research strategy

9. CAPACITY BUILDING

Describe how the project plans to contribute towards both individual and organizational capacity building. How might post-graduate students (MSc. and PhD) be involved in the project? What other training activities are envisaged under the project? Are their plans to enhance the capacity of project partners (and if so, in what areas)?

10. MONITORING AND EVALUATION STRATEGY

Describe the monitoring and evaluation strategy approach that the research team will use for monitoring and evaluation of the research project

11. GENDER, ETHICS AND SUSTAINABILITY

Describe how ethical approval will be obtained, if applicable. All projects that include human subjects must ensure that their privacy, dignity, and integrity are protected. Projects that will collect corporate or personal information must detail how informed consent will be obtained and confidentiality maintained.

Carefully describe the links of the proposed project to ongoing projects within the institution (regardless of whether these projects are undertaken by the PI). If the project builds on other funded projects then provide accurate and verifiable information about the funding sources and whether the proposed activities are new. Explain how the project will be sustained beyond the project support. Are any donor partnerships anticipated, and if so, which ones? Provide details of any ongoing discussions with other funders, if applicable.

Identify the key risks that may arise during the implementation of the proposed research and how each will be addressed. For each potential risk, outline the key assumptions and a mitigation plan.

12. PROPOSED PROJECT TIMELINE

Provide a chart of key activities and timelines as below

Project Activities	Year 1				Year 2			
	Q1	Q2	Q3	Q4	QI	Q2	Q3	Q4

13. LITERATURE CITED

Include key literature/references that have been cited in the proposal