Kingdom of Cambodia Nation Religion King

Ministry of Agriculture Forestry and Fisheries Ministry of Education Youth and Sport

Royal University of Agriculture

Higher Education Improvement Project (HEIP) IDA-Credit No. 6221-KH

Terms of Reference for "Research assistance for For Sub-project: Identification and application of Lactic Acid Bacteria to improve quality and safety of Cambodian fermented fish and vegetables SGA02"

I. Background

The Higher Education Improvement Project (HEIP) was approved by the Board of Directors of the World Bank on April 26, 2018 and became effective on 17 September 2018. The HEIP activities are funded by an International Development Association (IDA) Credit of US\$ 90.0 million equivalent and US\$2.5 million from the Royal Government of Cambodia. The project is expected to be implemented over a 6-year period – starting in July 2018 and ending in June 2024.

The project main beneficiaries include: support activities in five targeted public Higher Education Institutions (HEIs), relevant departments in the Ministry of Education, Youth and Sport (MoEYS), and selected private HEIs. The public HEIs include three within Phnom Penh - the Institute of Technology Cambodia (ITC), the Royal University of Agriculture (RUA), the Royal University of Phnom Penh (RUPP), and other two in the provinces – the Svay Rieng University (SRU) and the University of Battambang (UBB). The Phnom Penh-based public HEIs were selected because they represent the top institutes in the areas of Science, Technology, Engineering and Mathematics (STEM) and Agriculture education and research in the country. The two provincial HEIs, one in the northwest bordering on Thailand and the other in the southeast bordering on Vietnam, were selected because of their geographical proximity to Special Economic Zones and economic corridors that have a high volume of cross-border trade, thus increasing HEI-industrial linkages and graduate's labor market participation. In addition, since private HEIs enroll one-third of students in STEM and Agriculture, this project will support selected private HEIs that mainly provide courses in STEM, Agriculture, and other priority subjects in line with the Industrial Development Policy (IDP) 2015-2025. These private HEIs will be competitively selected through a call for proposals.

The direct beneficiaries of HEIP include approximately 16,356 students (5,070 females: 31.0 percent) in the relevant departments at targeted HEIs who will enhance learning from: (a) improved teaching; (b) additional research opportunities; (c) more learning materials; and (d) upgraded facilities. Other beneficiaries include academic staff at targeted HEIs who will benefit from the higher education partnership programs and research funds. In addition, MoEYS staff members from selected departments and HEIs will benefit from sectoral governance activities

supported by the project. Female students will in particular benefit from the building of dormitories, increasing access and retention in the program.

This project also aims to strengthen the system of higher education through the improvement of quality assurance mechanisms; expansion of information systems; and support the development of legislation for autonomous HEIs. These activities will be implemented by Directorate General of Higher Education (DGHE) and the Accreditation Committee of Cambodia (ACC).

II. Project Development Objectives

The Project Development Objective (PDO) of HEIP is to improve the quality and relevance of higher education and research mainly in STEM and Agriculture at targeted HEIs and to improve governance in the sector.

III. PDO-Level Results Indicators

The PDO Indicators are:

- a) Number of HE partnership programs evaluated as modest or higher by expert panels (to measure quality)
- b) Number of research projects in collaboration with industry completed (to measure relevance)
- c) Number of HEIs that completed accreditation process (to measure governance and quality).

This position supports PDO indicator "Number of research projects in collaboration with industry completed (to measure relevance)"

IV. Project Components

There are four main components as follows:

- 1. Component 1: Improving Teaching and Learning Capacity
- 2. Component 2: Improving Research in STEM and Agriculture
- 3. Component 3: Strengthening Sectorial Governance and Project Management
- 4. Component 4: Contingent Emergency Response

This position supports component "Improving Research in STEM and Agriculture"

V. Objective of the Assignment

The selected staff expected to provide assistant to support Research PI conducting Research: Identification and application of Lactic Acid Bacteria to improve quality and safety of Cambodian fermented fish and vegetables. which will be based at the Faculty of Agro-Industry, Royal University of Agriculture. It is expected that the assistant will at all times observe the highest standard of professional ethics and integrity, and promote a results-oriented approach in the area of his/her responsibility and accountability.

VI. Scope of Work

The successful candidate will work under supervision of the PI Research SGA 02: Identification and application of Lactic Acid Bacteria to improve quality and safety of Cambodian fermented fish and vegetables. Tasks will include, but not be limited to:

- 1. To support that arrangement for prepare sample collection and stakeholder meeting,
- 2. To assist the laboratory work such as prepare culture media for growing bacteria, bacterial isolation, monitor all physiological and morphological characteristics and identify microorganisms, test antimicrobial susceptibility and antibacterial activity of Lactic acid bacteria against hazardous bacteria.

- 3. Be responsible for data entry
- 4. Support sub project manager to prepare report and other administrative task
- 5. To do other task given by sub project manager within the research activities

VII. Location

The selected candidate is expected to be based at Faculty of Agro-Industry, RUA. She/he is required to participate occasionally in meetings, training programs, and others, organized at provinces.

VIII. Qualifications and Experience:

- 1. Bachelor degree in Agro-Industry, Food Science, Biology, Agriculture, or related fields;
- 2. One year experience in microbiology laboratory work is preferable;
- 3. Proficient in using Microsoft Offices, Internet and email;
- 4. Good English proficiency;
- 5. Honest, able to work with less supervision, and good communication and team-work skills;
- 6. Willing to learn new things;

IX. Term

The position will start as early as possible, with 3 month probation, 1 year contract, and possible to renewed.

Interested applicant should submit:

- 1. Cover letter
- 2. Up-to-date CV with two referees
- 3. Copy of any obtained degrees, and other related certificates

not later than 28th November 2021 by delivering to

Ms. Nhim Sopheap HEIP Project Office, sending email to the address below E-mail: heippr@rua.edu.kh cc_nsopheap@rua.edu.kh, schandareach@rua.edu.kh

With the subject stated as "Research Assistant for SGA 02"

Any information, please contact: schandareach@rua.edu.kh,.Tel. 061 467363