



*Republic of the Philippines*

*Department of Agriculture*

**PHILIPPINE FIBER INDUSTRY DEVELOPMENT AUTHORITY**

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## **TERMS OF REFERENCE**

For the Engagement of Project Consultant (Instrument Designer and Developer) for the DA-BAR funded Project “LAMP Packaging for Abaca Viruses and Field Validation”.

### **I. RATIONALE**

In connection with the implementation of the Project entitled “Loop Mediated Isothermal Amplification (LAMP) for Abaca Viruses: Packaging and Field Validation’, a 3-year (December 2019 to December 2022) project being funded by DA-BAR through the DA-Biotech Program Office (BPO), PhilFIDA will start conducting its Program Component 1: Packaging of LAMP technology into a portable and field applicable kit. The expected output of this Program Component is a packaged LAMP detection kit containing the lyophilized LAMP components, sample extraction tubes and **portable waterbath/incubator**.

### **II. OBJECTIVE**

To provide expertise in the design and fabrication of **portable waterbath/incubator** for use in virus detection in the field

### **III. DURATION OF SERVICES**

The engagement shall be for the period of six (6) months from November 2020 to April 2021.

### **IV. QUALIFICATION OF THE INSTRUMENTATION DESIGNER AND DEVELOPER**

The Instrument Designer and Developer must at least meet the following minimum qualifications:

1. Familiar with design and configuration of laboratory & field instruments such as portable laminar flow, incubator, water bath.
2. Familiar with integrated circuits and micro sensor, and knowledgeable on management system of data/ information.

3. With at least a doctoral degree in any field of sciences, technology, engineering and mathematics (STEM)
4. Must comply with the documentary requirements stated in page 6 of Resolution No. 21-2017 of the 2016 Revised Implementing Rules and Regulations (IRR) Republic Act No. 9184:
  - a. Mayor's Permit or BIR Certificate of Registration  
(For individuals engaged under Sec. 53.6, 53.7 and 53.9 of the IRR of RA 9184, only the BIR Certificate of Registration shall be submitted in lieu of Mayor's Permit)
  - b. Professional License
  - c. PhilGEPS Registration Number

## **V. RESPONSIBILITIES OF THE PARTIES**

### **a) The Instrumentation Designer and Developer shall:**

1. Design portable waterbath/incubator;
2. Fabricate the designed portable waterbath/incubator;
3. Participate in field/pilot testing of developed portable incubator;
4. Modify and adjust field tested incubator and come up with a final model, if necessary; and
5. Assist in the development of data management system.

### **b) The PhilFIDA shall:**

1. Provide the expert with the needed materials and data/ information to enable him to give sound guidance/advice for the effective implementation of the program;
2. Shoulder the cost of transportation, food and accommodation of the expert during official travel;
3. Provide the supplies & material needed in the fabrication of the prototype and at least six (6) units of the improvised waterbath/incubator;
4. Pay the Project Expert the amount of Forty-Seven Thousand Four Hundred Forty-Eight Pesos (PhP 47,448.00) per month.
5. Withhold the monthly payment until the submission of documentary requirements as specified in page 6 of Resolution No. 21-2017 of the 2016 Revised Implementing Rules and Regulations (IRR) Republic Act No. 9184.

## **VI. APPROVED BUDGET FOR THE CONTRACT**

An amount of Two Hundred Eighty- Four Thousand Six Hundred Eighty- Eight Pesos (PhP 284,688.00) is allotted for the payment of Professional fee of the Instrument Designer and Developer chargeable against the DA BIOTECH FUND R-1904 (December 2019 to December 2022) .

Prepared by:



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Approved by:



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