

ANNEX II: TERMS OF REFERENCE

PROJECT TITLE: STRENGTHENING CLIMATE RESILIENT HEALTH SYSTEMS IN THE CARIBBEAN

FINANCED UNDER THE EUROPEAN DEVELOPMENT FUND.

CONSULTANCY FOR DEVELOPMENT OF QUICK METHODS MANUAL FOR FOOD AND WATER BORNE DISEASE ENVIRONMENTAL TESTING

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1. BACKGROUND INFORMATION

1.1 Partner country

Sixteen (16) CARIFORUM countries listed as follows: Antigua and Barbuda, Bahamas, Barbados, Belize, Cuba, Dominica, Dominican Republic, Grenada, Guyana, Haiti, Jamaica, St Lucia, St Vincent and the Grenadines, St Kitts and Nevis, Suriname, Trinidad and Tobago.

1.2 Contracting Authority

Caribbean Public Health Agency (CARPHA)

1.3 Country background

CARPHA was legally established in July 2011 by an Inter-governmental Agreement (IGA) signed by Heads of Caribbean Governments and began operations in January 2013. CARPHA's functions encompass the responsibilities of five (5) previously existing regional health institutions. Work in these areas advances the public health agenda in the Region and makes a valuable and coordinated contribution to the knowledge and resources of the international health community.

Currently, among CARPHA's top regional public health priorities is the reduction of the impact of climate change on health systems in the Caribbean. Health systems remain highly vulnerable to impacts from climate change (as a relatively new threat) both on the quality and the capacity of services themselves, as well as on the socio-economic and environmental determinants of health. These impacts have been well documented: extreme weather conditions; heat waves; more frequent strong and devastating hurricanes affecting many countries with long lasting impacts (Maria, Irma, 2017); recurring and extending periods of droughts and followed by excessive rainfall (Christmas Floods St. Lucia St. Vincent, 2013); and sea level rise. These conditions negatively affect food security, water security, and have direct negative impact on people's health and wellbeing in the form of heat strokes, respiratory illnesses (chronic and acute), cardiovascular diseases, malaria, Zika, dengue fever and many other vector borne and infectious diseases. Also negatively affected will be national socio-economic development aspects like workers' health (lost work capacity and reduced labour productivity in vulnerable populations and migration) as well as the attainment of the UN Sustainable Development Goals.

1.4 Current situation in the sector

The Caribbean continues to experience the effects of climate change. This includes an increase in the frequency of extreme weather events, such as category 4 and 5 hurricanes and storm surges, salinity of drinking water, sea level rise, excessive sargassum (seaweed) deposits on beaches that diminish the tourism product, decreased habitable and agricultural land area, disrupted fisheries, and diminished food security. The increased frequency of extreme weather events has in turn led to increases in disease (such as through the proliferation of pest and disease vectors), morbidity and damage to health and other infrastructure. The region's limited infrastructure and socioeconomic resources leave it at least partly reliant on foreign aid for climate mitigation and preparedness efforts. The economies of most Caribbean countries and the health of its population are extremely vulnerable to the impacts of climate change. Changing rainfall patterns impact heavily on agricultural production. Extreme weather conditions have destroyed years of development and infrastructural progress development and reduced countries' GDP.

The impact of climate extremes, variability and change on the social and environmental determinants of health is well documented through ever increasing bodies of scientific evidence. In the Caribbean, changing weather patterns have influenced the patterns and burden of vector, respiratory, waterborne, and foodborne disease, which are directly linked to changes in rainfall and temperature. Severe weather systems, as well as episodes of drought or extreme flooding, particularly post natural disasters compromise sanitation and freshwater drinking supplies.

1.5 Related programmes and other donor activities

2021

Other complementary initiatives currently led and managed by CARPHA in furtherance of this public health mandate include:

- 11th EDF Zika and other Mosquito Borne diseases – Strengthening of surveillance systems in country for vector borne diseases.
- CIF/IDB Pilot project for Climate Resilience (PPCR).
- IDB Tourism and Health Project

2. OBJECTIVE, PURPOSE & EXPECTED RESULTS

2.1 Overall objective

The overall objective of the project of which this contract will be a part is as follows:

Contribute to reduced mortality and morbidity from expected health consequences of climate change (CC) in Caribbean countries.

2.2 The purpose(s) of this contract are as follows:

The purpose of this contract is as follows:

To develop a manual to facilitate rapid laboratory and/or field testing for food and water borne disease pathogens.

More specifically a Consultant will be contracted to produce a diagnostics manual for the detection of select climate sensitive food and water borne disease pathogens from environmental sources that are of public health importance in the Caribbean. This procedure manual will utilise modern, currently available, and affordable technologies that can produce rapid results in a laboratory setting or even be applied in the field setting.

2.3 Results to be achieved by the contractor

The contractor is expected to deliver the following results:

Result 1: Inception Report, including a detailed Workplan, developed and submitted for approval of the Project Manager.

Result 2: Development of a Laboratory Diagnostics manual focusing on Quick methods for detection of food and waterborne pathogens from environmental sources.

Result 3: Draft Final Report developed and submitted in accordance with the reporting requirements in Section 7.1 of these Terms of Reference.

Result 4: Final Report submitted and approved in accordance with the reporting requirements in section 7.1 of these Terms of Reference.

3. ASSUMPTIONS & RISKS

3.1 Assumptions underlying the project

The assumptions associated with this contract as outlined in the Logical Framework are:

- Commitment by key stakeholders/existing international development partners to continue to support CARPHA.

3.2 Risks

- Changes in economic, social and political conditions as well as other exogenous shocks which may create difficulties for the achievement of the objectives of the project.
- The occurrence of major man-made or natural disasters which can change public health priorities and inhibit the implementation of this project.

4. SCOPE OF THE WORK

4.1 General

4.1.1 Description of the assignment

The main objective of this assignment is to develop a manual to facilitate rapid laboratory and/or field testing for food and waterborne pathogens derived from environmental sources. It is envisioned that this manual would be used to enhance the capacity of laboratories in CARIFORUM countries to be able to quickly and adequately respond to food/waterborne outbreaks which are likely to occur as one of the challenges associated with climate change.

4.1.2 Geographical area to be covered

Sixteen (16) CARIFORUM countries that are the direct beneficiaries of this project.

4.1.3 Target groups

Public health laboratory professionals working in environmental health surveillance and response.

4.2 Specific Work

Result 1: Inception Report, including a detailed Workplan, developed and submitted for approval of the Project Manager.

- 1.1 Engage in an initial briefing with the designated Project Manager and other relevant CARPHA personnel to discuss the scope of the work to be undertaken, the methodology, approach and any other issues pertaining to the Project upon the commencement of the Consultancy.
- 1.2 Conduct a desk review of similar manuals.
- 1.3 Prepare and submit for the approval of the Project Manager, an Inception Report which includes the timelines for the specific project activities and the methodology for the activities

Result 2: Development of a Laboratory Diagnostics manual focusing on Quick methods for detection of food and waterborne pathogens.

- 2.1 Research and identify rapid methods currently used for identification of indicators for Food and Water Environmental Testing
- 2.2 Ensure that the methods chosen have a level of certification / accreditation (EPA, AOAC etc.)
- 2.3 Compile methods identified into a comprehensive Laboratory Diagnostics Manual, which encompasses both surveillance and emergency response situations.

Result 3: Draft Final Report developed and submitted in accordance with the reporting requirements in Section 7.1 of these Terms of Reference.

Result 4: Final Report submitted and approved in accordance with the reporting requirements in section 7.1 of these Terms of Reference.

The contractor must also comply with the latest Communication and Visibility Manual for EU External Actions concerning acknowledgement of EU financing of the project. (See https://ec.europa.eu/europeaid/communication-and-visibility-manual-eu-external-actions_en)

4.3 Project management

4.3.1 Responsible body

The project managed will be the Surveillance Disease Development and Control Division, CARPHA St. Lucia Campus.

4.3.2 Management structure

Project management organisation will consist of the following structures:

The Laboratory Manager, Environmental Health, Sustainability and Development Unit, CARPHA, will be the Project Manager and will have overall responsibility for the Project. The Project Manager will retain oversight for the consultancy and will also be responsible for the day-to-day supervision of project activity. Additional technical oversight will be provided by the CARPHA Medical Microbiology Laboratory and Food Borne Disease Surveillance Unit, CARPHA.

The Project Manager shall be responsible for approving all reports.

4.3.3 Facilities to be provided by the Contracting Authority and/or other parties

CARPHA will provide the services that will facilitate coordination, logistics and project administrative and contract administrative support.

CARPHA will provide the Contractor with select reference diagnostic manuals and other relevant documents produced by/in use by CARPHA that may be required for the execution of the Project.

The Service Provider must provide his own office facilities and services to execute all the elements of the project.

5. LOGISTICS AND TIMING

5.1 Location

The operational base for the project is Castries, St. Lucia campus of CARPHA.

5.2 Start date & Period of implementation of tasks

The intended start date is April/May 2021 and the period of implementation of the contract will be three (3) months from this date.

6. REQUIREMENTS

6.1 Staff

Note that civil servants and other staff of the public administration of the partner country, or of international/regional organisations based in the country, shall only be approved to work as experts if well justified. The justification should be submitted with the tender and shall include information on the added value the expert will bring as well as proof that the expert is seconded or on personal leave.

6.1.1. Key experts

All experts who have a crucial role in implementing the contract are referred to as key experts. The profiles of the key experts for this contract are as follows:

Key expert 1: Team Leader

Qualifications:

- Bachelor's degree in Medical Laboratory Technology, Microbiology, Chemistry, Environmental Science, or related discipline.
- An advanced degree in one of the aforementioned areas or Public Health will be an asset.

General Experience:

- At least 3 years' experience in Laboratory Diagnostics related to food/water borne diseases
- Experience working in the Caribbean

Fluency in English written and verbal

Specific Experience:

- At least 3 years' experience working in an Environmental Health/Public Health Laboratory Diagnostic setting at the national or regional level.
- At least 3 years' experience developing manuals/protocols and Standard Operating Procedures (SOPs) for Laboratory Diagnostics.
- At least 3 years' experience working in a laboratory setting, under an established quality management system or working in an accredited laboratory.

All experts must be independent and free from conflicts of interest in the responsibilities they take on.

6.1.2 Other experts, support staff & backstopping

CVs for experts other than the key experts should not be submitted in the tender but the tenderer will have to demonstrate in their offer that they have access to experts with the required profiles. The Contractor shall select and hire other experts as required according to the needs. The selection procedures used by the Contractor to select these other experts shall be transparent, and shall be based on pre-defined criteria, including professional qualifications, language skills and work experience.

The costs for backstopping and support staff, as needed, are considered to be included in the tenderer's financial offer.

6.2 Office accommodation

Office accommodation for each expert working on the contract is to be provided by the contractor.

6.3 Facilities to be provided by the Contractor

The contractor shall ensure that experts are adequately supported and equipped. In particular it must ensure that there is sufficient administrative, secretarial and interpreting provision to enable experts to concentrate on their primary responsibilities. It must also transfer funds as necessary to support their work under the contract and to ensure that its employees are paid regularly and in a timely fashion.

The Contractor shall be required to provide his/her personal computer (e.g. laptop or tablet) and Internet connectivity for use during this project.

6.4 Equipment

No equipment is to be purchased on behalf of the Contracting Authority / partner country as part of this service contract or transferred to the Contracting Authority / partner country at the end of this contract. Any equipment related to this contract which is to be acquired by the partner country must be purchased by means of a separate supply tender procedure.

7. REPORTS

7.1 Reporting requirements

The Contractor will submit the following in English:

- **Inception Report** of maximum 12 pages to be produced after **ten (10) working days** from the start of implementation. In the report the Contractor shall describe e.g., initial findings, progress in collecting data, any difficulties encountered or expected in addition to the work programme and staff travel. The Contractor should proceed with his/her work unless the Contracting Authority sends comments on the inception report.
- **Draft final report** of maximum 20 pages (main text, including annexes. This report shall be submitted no later than **15 working days** before the end of the period of implementation of tasks.
- **Final report** with the same specifications as the draft final report, incorporating any comments received from the parties on the draft report. The deadline for sending the final report is **ten (10) working days** after receipt of comments on the draft final report. The report shall contain a sufficiently detailed description of the different options to support an informed decision on the products. The detailed analyses underpinning the recommendations will be presented in annexes to the main report. The final report must be provided along with the corresponding invoice.

7.2 Submission and approval of reports

The report referred to above must be submitted to the Project Manager identified in the contract. The Project Manager is responsible for approving the reports.

8. MONITORING AND EVALUATION

8.1 Definition of indicators

- Quick Diagnostic Methods Manual used by public health laboratory personnel for the detection of food and water borne disease pathogens in environmental samples.
- Compliance with the schedule for the submission of reports on the outputs of the Project as outlined in Section 7.1.

8.2 Special requirements

No special requirements.