

TERM OF REFERENCE (TOR) FOR CONSULTANCY TO REVIEW AND UPGRADE THE MOSQUITO DATABASE MANAGEMENT SYSTEM (MOSQUITODB).

Background

Population Services International (PSI) is a non-profit social marketing organization with programs in over 60 countries making it easier for all people to lead healthier lives and plan the families they desire. Funded by USAID-PMI, and implemented by Population Services International, the PMI DHIBITI(CONTROL) MALARIA project supports the Government of Tanzania (GOT) to reduce the burden of malaria and move towards malaria elimination. PMI DHIBITI(CONTROL) MALARIA provides technical and implementation support for malaria case management through quality improvement initiatives and malaria surveillance. PMI DHIBITI(CONTROL) MALARIA interventions aim at contributing to four result areas: (1) Improved case management and malaria in pregnancy (MIP) services; (2) Improved ability of individuals to practice positive healthy behaviors'; (3) Enhanced enabling environment; and (4) Improved entomological monitoring.

Zanzibar Malaria Elimination Program: Entomological Surveillance

Vector surveillance is critical in guiding the program in the selection of appropriate vector control interventions for malaria elimination. ZAMEP has maintained ten entomological monitoring sites for over ten years, distributed per district (6 in Unguja and 4 in Pemba). These sites are visited twice a month by field technicians for mosquito collection. The collected mosquitoes are then sent to the ZAMEP laboratory for sorting and morphological identification. All Anopheles vectors are subsequently sent to the PCR lab for molecular identification, including species, infection rate, and analysis of blood meal in fed mosquitoes.

The data is initially collected on paper-based forms before being transferred to an Excel file in the computer system. ZAMEP has plans underway, with the support of PMI and the Pan-African Mosquito Control Association (PAMCA), to adopt the Mosquito Database Management System (MosquitoDB) available at www.mosquitodb.io. This system can easily integrate with other data systems, including DHIS2

Consultancy objective:

The consultant is expected to review the Mosquito Database Management System (MosquitoDB), add any new functionalities, and integrate it with DHIS2. Additionally, the consultant should ensure that the entomological team is trained and supported in implementing MosquitoDB. Moreover, the consultant will be expected to reformat historical entomological data and upload

it into MosquitoDB. The consultant will work closely with ZAMEP's responsible staff members under the supervision of PMI Dhibiti(Control) Malaria Project of PSI.

Scope of Work:

On behalf of ZAMEP, PSI is seeking applications from individuals, teams of consultants, or companies to review and upgrade the Mosquito Database Management System (MosquitoDB). The goal is to ensure its successful implementation by ZAMEP for the electronic management of entomological data. This call is open to local consultants or companies with local registration in Tanzania.

The consultant will complete the following main tasks:

- I. Upgrade MosquitoDB.
- 2. Implement MosquitoDB.
- 3. Develop and implement a mounted screen with an interactive dashboard.
- 4. Reformat and upload entomological historical data.
- 5. Provide technical support as part of system maintenance.
- 6. Prepare a report

Consultant Deliverables:

The following are the expected deliverables:

- I. A report on the conducted review of MosquitoDB.
- 2. MosquitoDB upgraded with new features, such as the inclusion of human behavior data, ensure larvae source management (Larviciding) quality implementation and new dashboard features.
- 3. Demonstration of the linkage between MosquitoDB and DHIS2.
- 4. Preparation of training materials.
- 5. Training of the entomological team on the use of MosquitoDB.
- 6. Implementation of MosquitoDB by ZAMEP.
- 7. Upload of entomological historical data into MosquitoDB.
- 8. Development and implementation of a mechanism for Program management to interact with the dashboard.
- 9. Provision of system maintenance support for at least six months.
- 10. At the end, a consultant should provide ZAMEP with fully access to the system
- II. Submission of a report summarizing the performed work.

Qualifications & Experience:

- At least MSc in data science, entomology, computation sciences, statistics, or related field
- Experience in data system development
- A minimum of 5 years working with entomological data
- Experience supporting National Malaria Control Program with data management and analysis and/or similar assignment is plus
- Experience working with MosquitoDB is a plus

• Must have an experience developing APIs to link data systems with DHIS2

Skills and attributes;

- Ability to engage others through training
- Team player, self-starter, and enthusiastic
- Great interpersonal skills
- Creative and analytical thinker
- Excellent in Swahili and English written communication skills

Consultancy terms:

- The consultant could work remotely during the system upgrade but will be expected to have regular meetings with ZAMEP and PMI Dhibiti (Control) Malaria in Zanzibar and Dar es salaam to discuss and share the progress.
- The consultant would be expected to travel to both Islands in Zanzibar to ensure that the system is properly implemented.
- The final deliverables schedule (timeline) will be finalized between ZAMEP, PMI Dhibiti (control) Malaria and successful applicant.

Assignment commencement and payment schedule:

This assignment is expected to start on 11th April 2024. The consultant will propose a plan that will maximized the use of allocated number of days. Payment will be for two installments-50% upon signing of the contract and 50% paid within a month after successful completion of all deliverables

How to apply

Interested, eligible consultants should send their consultancy proposals comprising a detailed Curriculum Vitae, and application letter to PMI Dhibiti (Control) Malaria Project of PSI through: procurement@psi.or.tz The deadline for submission of applications in on Wednesday, 4th April, 2024, 00:00 AM.

Contracting process:

Selection of the consultant will follow the PSI/Tanzania procurement policies and procedures. Upon submission of CVs, only shortlisted consultants will be contacted for further process.