TERMS OF REFERENCE (TOR)

Strengthen Geo-data quality in MIS and Develop tool for Producing the Maps of Malaria risk and intervention

Background

The National Center for Parasitology, Entomology and Malaria Control (CNM), has been implementing a strengthened and comprehensive malaria program since 2004 through a series of grants received from the Global Fund for HIV/AIDS, TB, and Malaria (GFATM). The UNOPS as the Principal Recipient for the Regional Artemisinin Initiative 3 Elimination (RAI3E) Grant received funding from the Global Fund to collaborate closely with CNM in the malaria fight. CNM is designated as the Principal Implementing Partner (PIP) for the program of Regional Artemisinin Initiative 3 Elimination in Cambodia. CNM in collaboration with UNOPS and other partners, endeavours to ensure more effective decentralized malaria control operations at provincial and operational district levels and bring down the malaria related morbidity and mortality in the country.

Objective and Justification:

Check and validate the household, village and health centre coordinates in the MIS system in order to strengthen the spatial data quality in the system.
Develop tool for plotting malaria risk by household on the map in the MIS system.
Develop tool in MIS to plot mosquito data collection sites with Foci village.
Develop tool for pro-active village intervention map after conducting the reactive case detection.
Update and test village risk stratification method with using api of local transmission data.

Scope of Work

The selected contractor will develop and build a working integrated MIS system based on Arc-GIS software; that can generate risk household map and pro-active village map for intervention to interrupt the malaria transmission. They will work closely with CNM Technical Bureau and Data Management team to execute the specific tasks described below.

Specific Tasks

1. Check and validate the household, village and health centre coordinates in the MIS system in order to strengthen the spatial data quality in the system.

    i. Checking the villages/HF that are missing coordinates and the village/HF that has wrong coordinates in the MIS
    ii. Checking the household coordinates that are missing and wrong coordinates
    iii. Create the list of household, village and health facility for updating and correcting the data

2. Develop tool for plotting malaria risk by household on the map in the MIS system.
    i. Create household map with number of malaria cases to indicate the status of malaria transmission risk

3. Develop tool in MIS to plot mosquito data collection sites with Foci village.
    i. Create the occurrence of primary and secondary vector map in Foci villages and non-foci villages

4. Develop tool for pro-active village intervention map after conducting the reactive case detection.
    i. Create map to guide which village should apply pro-active intervention after conducting reactive case detection village.

Expected outputs

The consultant shall;

- Provide the list of household, village and health facility coordinates that need to be updated in Malaria Information System
- Map of household with status of malaria risk
- Map of vector status with foci village
- Map and list of villages that need to be conducted pro-active intervention

Table of Deliverables, Schedules and Payment plan

#	Tasks	Deliverables	Estimated timing
1	Check and validate the household, village and health centre coordinates in the MIS system in order to strengthen the spatial data quality in the system.	Provide the list of household, village and health facility coordinates that need to be updated in Malaria Information System	8 days
2	Develop tool for plotting malaria risk by household on the map in the MIS system.	Map of household with status of malaria risk	5 days
3	Develop tool in MIS to plot mosquito data collection sites with Foci village.	Map of vector status with foci village	6 days
4	Develop tool for pro-active village intervention map after conducting the reactive case detection	Map and list of villages that need to be conducted pro-active intervention	12 days
		Total Duration	**31 days**

Note; Payment shall only be made after submission of a report (to be approved by the National Malaria Program) for each of the milestones

Qualifications:

- The contractor should have the following minimum qualification:
  - Master 's or above degree in in GIS, Geography, or other related field
  - At least 10 years' professional experience in designing spatial databases and conducting spatial analysis and modelling with ESRI ArcGIS technology
  - Experience in preparing GIS-related training materials and conducting GIS trainings
  - Ability to lead a team of professionals

  - Knowledge of database development skills using MySQL and Ms SQL server
  - Familiarity with the health system in Cambodia is desired
  - Experience in Malaria or public health is desired

Reporting:

The contractor shall be expected to submit activity reports in line with the set deliverables and these reports shall be submitted for review and acceptance by the National Malaria Program before any payment is made.

Schedule of Payments

Payment will be done in several instalments as communicated in the table above.

Period

The work is to be concluded within 31 working days from the date of signing the contract.
The contractor shall share their proposed implementation schedule in line with the set deliverables