

**Civil Engineering, Programme Management or related technical field**



**United Nations Children's Fund (UNICEF)**

**Vientiane, Lao PDR**

**National Individual Consultancy: Development of Flood Resilient Designs for School and Health Centers WASH Facilities, UNICEF Vientiane, Lao PDR**

## **Terms of Reference**

### **1. Background:**

Annual floods in Lao PDR cause displacement of tens to hundreds of thousands of people, some permanently, but most short-term. The floods damage properties, farmlands and infrastructure, including homes, roads, bridges, schools, hospitals, water supplies and health centers.

The Post-Disaster Needs Assessment following the 2018 flooding identified several key strategic recommendations for Water, Sanitation and Hygiene (WASH) in severely affected provinces, including building capacity for design and implementation for resilience measures in the sector and the construction of climate resilience WASH facilities in communities and institutions (schools and health centers) based on Build Back Better (BBB) principles.

Notably, climate change forecasts suggest that the frequency and intensity of flooding in Laos is likely to increase. The 2019 floods also highlighted the need for focused efforts on the most remote communities – those not accessible by road.

Two key principles of Lao PDR disaster response and development are to BBB and to Build to Last. Both approaches reflect a desire to ensure that infrastructure is designed and built to be sustainable and to improve resilience. The 2018 PDNA highlighted the need for more resilient designs and for better planning for school toilet and health center WASH facilities. This consultancy looks to address the need for more resilient WASH facility designs for institutions, whilst other consultancies are reviewing planning guidelines and household sanitation facility designs.

### **2. Purpose:**

A consultant will be engaged to develop appropriate flood resilient, climate sensitive toilet facility designs for schools and health centers, working closely with relevant government staff to ensure that all service requirements are identified and considered. The facility designs will be demonstrated in areas where resilient community water supplies have been developed. Documentation will then be developed to enable appropriate design(s) and/or design principles to be replicated nationally in flood-prone areas. This consultancy will cover design development and technical input into the pilot of the new design and documentation development.

### **3. Work Assignments:**

The design development will be undertaken through desk review, consultation with partners, field visits and include a demonstration trial. The final design concept will be endorsed jointly with relevant government partners for application in flood affected areas.

The assignment will include the following key tasks:

- 1) Conduct desk review of flood resilient, climate sensitive school toilet and health centers WASH facility designs available in country, in the region and globally, including conducting discussions with key

stakeholders and government at national level on appropriate school toilet and health centers building designs in the Lao context.

- 2) Conduct field visits to the south of Lao PDR to interview affected communities in flood prone areas to gain insights on school toilet and health centers WASH facilities used and its challenges and constraints.
- 3) Develop resilient school toilet and health center WASH facility designs in Lao PDR for piloting in UNICEF supported target primary schools and health centres.
- 4) Develop guidelines on resilient school toilet and health centers WASH facility designs for use by the government partners and contractors to facilitate school toilet construction and WASH construction in health centers in flood prone areas.
- 5) Submit final report to UNICEF upon completion of all the above tasks.

#### **4. Qualifications or Specialized Knowledge/Experience Required:**

##### Qualifications and Experience

- A Master's Degree in Civil Engineering or related technical field
- Minimum 8 years of relevant experience at the national or international level in sanitation and development
- Proven experience with national governments
- Experience with UN agencies is an asset.

##### Knowledge and Skills

- Demonstrated extensive understanding of principles, approaches associated with sanitation

##### Competencies

- Demonstrated capacity to work across all stakeholders and with national governments

##### Languages

- Fluency in English, including excellent written and verbal English communications skills
- Knowledge of Lao or ethnic languages in Lao PDR an advantage

#### **5. Location:**

The desk review will be undertaken in Vientiane capital and field visits largely undertaken in-person in two districts (one river valley, one hills) in southern Lao PDR. It is anticipated that all work will be completed in 3½ months.

#### **6. Duration:**

It is anticipated that the assignment will involve 3 months' work over a 3½ month period. The indicative starting date for this work is 3 April 2023, with completion by 14 July 2023.

#### **7. Deliverables:**

The following key deliverables are expected:

- 1) Desk review and consultation report with key stakeholders at national level.
- 2) Field mission report to the south on school toilet and health centres WASH facility in flood prone areas.
- 3) Resilient school toilet and health centers WASH facility designs including Bill of Quantities (BoQ), to be ready for trial in primary schools and health centres.

- 4) Resilient school toilet and health centers WASH facility guidelines with Step-by Step instruction for building the facilities developed.
- 5) Final report summarizing designs, specifications, and indicative costing, including trial and recommendations.

### 8. Reporting Requirements:

Reports will be prepared according to the UNICEF Style Guide (to be shared with the awarding company). All deliverables must be in professional level standard English.

UNICEF will receive and consolidate comments received from Government and sector partners into a response matrix for the draft report and request the Consultant to indicate actions taken against each comment in the production of the final report. Response periods for Government and sector partners will be finalized during the inception stage.

Copyright of all the deliverables to be produced through this assignment will rest with the Ministry of Health (MoH) and UNICEF.

### 9. Payment Schedule linked to deliverables:

The assignment is deliverable based as per below table on the summary of key deliverables and timeline.

<i>Deliverables</i>	<i>Payment</i>	<i>Timeframe</i>	<i>Reporting Requirements for each deliverable</i>
1. Conduct desk review of flood resilient, climate sensitive school toilet and health centres WASH facility designs available in country, in the region and globally, including conduct discussions with key stakeholders and government at national level on appropriate school toilet and health centres building designs in the Lao context	30%	11 working days	Desk review and consultation report with key stakeholders at national level.
2. Conduct field visits to the south of Lao PDR to interview affected communities in flood prone areas to gain insights on school toilet and health centres WASH facilities used and its challenges and constraints.		10 working days	Field mission report to the south on school toilets and health centres WASH facility in flood prone areas.
3. Develop resilient school toilet and health centres WASH facility designs in Lao PDR for trial in UNICEF supported target primary school and health centre where the schools and health centre received support for their water supply.	30%	21 working days	Resilient school toilet and health centres WASH facility designs completed and to be ready for trial.
4. Develop guideline on resilient school toilet and health centres WASH facility designs for use by the	40%	12 working days	Resilient school toilet and health centres WASH facility design guidelines with step-by-step instruction for building the facilities developed.

<i>Deliverables</i>	<i>Payment</i>	<i>Timeframe</i>	<i>Reporting Requirements for each deliverable</i>
government partners and contractors to facilitate school toilet construction and WASH construction in health centres in flood prone areas.			
5. Submit final report to UNICEF upon completion of all the above tasks.		9 working days	Present findings to Government and revise designs and guidelines based on comments. Final report summarizing designs, BoQ, specifications and indicative costing, including recommendations.

#### **10. Administrative Issues:**

- If required, UNICEF can provide the consultant access to internet, printer and office space. As part of the assignment, the consultant will need to travel to the provinces and travel costs (a lump sum) will be included in the contract as per consultant proposal and calculated based on economy class.
- Medical Insurance: the cost of medical insurance, including Medical Evacuation while working in Lao PDR should be included in the proposal.
- Field mission/Travel: The consultant to travel to at least two districts (one river valley, one in hills) to visit at least schools and health centres in flood prone area in the southern part of Lao PDR as agreed with UNICEF.

#### **11. Contract supervisor:**

The assignment will be managed by the UNICEF WASH Specialist who will be responsible for the day-to-day oversight and management of the assignment. The Consultant will ensure the quality and work independently.

#### **12. Nature of 'Penalty Clause' to be Stipulated in Contract:**

Unsatisfactory performance: In case of unsatisfactory performance the contract will be terminated by notification letter sent five (5) business days prior to the termination date in the case of contracts for a total period of less than two (2) months, and ten (10) business days prior to the termination date in the case of contracts for a longer period

Performance indicators: Consultants' performance will be evaluated against the following criteria: timeliness, quality, and relevance/feasibility of recommendations for UNICEF Lao PDR.

#### **13. Submission of applications:**

Interested candidates are kindly requested to apply and upload the following documents to: <http://www.unicef.org/about/employ/>

- Letter of Interest (cover letter)
- CV or Resume
- Performance evaluation reports or references of similar consultancy assignments (if available)
- Financial proposal: All-inclusive lump-sum cost including travel and accommodation cost for this assignment as per work assignment

The deadline for applications is 29 March 2023

#### **14. Assessment Criteria:**

A two-stage procedure shall be utilized in evaluating proposals, with evaluation of the technical proposal being completed prior to any price proposal being compared. Applications shall therefore contain the following required documentation:

1. Technical Proposal: including a cover letter, updated CV, and copies of 2 relevant evaluations performed earlier by the consultant or copies of relevant past work produced by the consultant.
2. Financial Proposal: Lump-sum offer with the cost breakdown: Consultancy fee, living allowance, medical insurance covering medical evacuation for the whole duration of the assignment, and travel costs shall be based on the most direct and economy fare.

No financial information should be contained in the technical proposal.

For evaluation and selection method, the Cumulative Analysis Method (weight combined score method) shall be used for this recruitment:

a) Technical Qualification (max. 100 points) weight 70 %

- A Master's Degree in Environment, Civil Engineering, technical field (20 points)
- Experience at the national or international level of sanitation design (50 points) experience working with the United Nations will be an advantage
- Quality of past work based on evaluations of past work or copies of relevant work (20 points)
- Good demonstrated English writing skills (10 points)

b) Financial Proposal (max. 100 points) weight 30 %

- The maximum number of points shall be allotted to the lowest Financial Proposal that is opened /evaluated and compared among those technical qualified candidates who have attained a minimum 70 points score in the technical evaluation. Other Financial Proposals will receive points in inverse proportion to the lowest price.
- The applicants should provide medical insurance covering medical evacuation for the whole duration of the assignment as part of the financial proposal submission.

The Contract shall be awarded to candidate obtaining the highest combined technical and financial scores, subject to the satisfactory result of the verification interview and/or reference checks.