

## **Term of Reference**

### **Short Term Consultant for conducting technical water assessment for 12 village in Long district, Luang Namtha Province**

#### **1. Project Background**

CARE International has been operating in Lao PDR since 1992, working to reduce poverty and strengthen the resilience of women, vulnerable populations, and marginalized communities to the impacts of climate change. Over the past three decades, CARE has partnered with rural and urban communities, particularly ethnic minority groups, to promote inclusive and sustainable development outcomes. Through collaborative engagement with government institutions, civil society organizations, community-based groups, and private sector actors, CARE supports locally led solutions that advance gender equality, climate resilience, and sustainable livelihoods. CARE currently implements programs across seven provinces: Vientiane Capital, Phongsaly, Luang Namtha, Luang Prabang, Salavan, Champasack, and Sekong.

As part of its long-term commitment in supporting community resilient to climate change, CARE Laos is implementing a 3-year project, “Empowering communities through participatory climate actions phase II - (We-ACT2)” funded by Bread for the World and Botstiber Foundation. The project aims to strengthen climate resilience, water resilience, and adaptive capacity of vulnerable and marginalized communities. The intervention promotes integrated and climate-resilient development approaches, with a focus on livelihood resilience, strengthen local leadership in climate adaptation and financial inclusion.

The project implementation is focusing on three key specific objectives of:

1. Climate resilience, water resilience, and adaptive capacity of vulnerable and marginalized communities
2. Specific objective 2: Strengthen local leadership in climate adaptation
3. Specific objective 3: Financial inclusion and community resilience have been strengthened.

#### **2. The purpose of this consultancy service**

The purpose of this consultancy is to undertake a comprehensive technical assessment of water supply systems in the target villages to identify feasible, cost-effective, and climate-resilient solutions for improving sustainable access to safe water. The assessment will evaluate the adequacy, reliability, and long-term sustainability of existing and potential water sources, considering both current needs and future water demand.

The assessment is expected to generate evidence-based recommendations for the construction, rehabilitation, and maintenance of village water systems, including

technical designs and cost estimates. The findings will provide a sound basis for investment planning and decision-making, contributing to improved year-round water access and enhanced resilience of community water systems to climate-related challenges.

### 3. Target villages

The water assessment will be conducted in 12 target villages in Long district, Lunag Namtha Province as detailed in table below:

| No            | Village       | Number of Families | Population   | Ethnicities           |
|---------------|---------------|--------------------|--------------|-----------------------|
| 1             | Jakeotai      | 91                 | 401          | Akha                  |
| 2             | Jajanam       | 117                | 486          | Akha & Muser          |
| 3             | Meungkhan     | 135                | 578          | Akha                  |
| 4             | Sompankao     | 130                | 636          | Akha                  |
| 5             | Sompanmai     | 72                 | 341          | Akha                  |
| 6             | PhaNgua       | 121                | 568          | Akha, Kuilahu         |
| 7             | Namhe         | 113                | 431          | Akha                  |
| 8             | Nambo         | 85                 | 544          | Hmong, Kuilahu        |
| 9             | Pheenhor      | 58                 | 311          | Hmong                 |
| 10            | Jongka        | 53                 | 242          | Akha, Khmu, Tai Daeng |
| 11            | Pakouaymai    | 52                 | 229          | Akha                  |
| 12            | Phayaluangbor | 24                 | 91           | Akha                  |
| <b>Total:</b> |               | <b>1,051</b>       | <b>4,858</b> |                       |

### 4. The scope of work

Under this consultancy service, the consultant is expected to carry out, but not limited to, the following tasks:

1. Desk review and inception report
  - Conduct a comprehensive review of project donor requirement criteria to ensure the finding of the water assessment meet the donor requirement.
  - Conduct a comprehensive review of national water supply policy, regulations and guidelines to ensure the recommendation for water systems construction follows relevant government regulations and guidelines.
  - Prepare a detailed assessment workplan including technical methodologies for conducting water assessment.
2. Conduct water assessment in the target villages
  - Conduct a comprehensive technical assessment of water quantity and quality of at least 3 sources per community during the wet and dry seasons in 12 target communities.
  - Estimate long term water demand (next 10 years) based on population growth estimation and other village development factors.
3. Design village water system and estimate construction costs.

- Use the findings of the technical water assessment to design an appropriate water system for each target village to ensure the year-round water access, align with relevant government regulations and guidelines and the ability of poor households to sustain access. This section is very important to ensure that water can reach each village according to technical.
- Technical Design Cover.
  - # Calculate daily water demand.
  - # Hourly water supply schedule to calculate side of Tank.
  - # TOPOGRAPHIC SURVEY by Abney level.
  - # Hydraulic Grade Line. (This section will show whether water can flow through the water pipe to the village or not).
- Construction design section.
  - # Intake: Plan, sector, detail, and 3D and with filter system.
  - # Sedimentation: Plan, sector, detail, and 3D
  - # Service Tank: Plan, sector, detail, and 3D and with filter system.
  - # Cable crossing the river: Plan, sector, detail
  - # Use the GI pipe to cross the small stream or channel.
  - # Break-pressure tank: Plan, sector, detail, and 3D and with filter system.
  - # Air valve: Plan, sector
  - # sediment valve: Plan, sector
  - # water meter and tap: Plan, sector
  - # Layout of village. Highlight the color of each PE pipe.
- All pipes use for water system is use the PE pipe, PVC pipe and not allow use the GI pipe with the water system as the policy of Namsa-at center.
- All water system is design by use the water meter at the HH
- Should consider the exiting water system in target village to improvement and use with new water system.

## Timeline and deliverables

This assignment is expected to be implemented between September 2026 and March 2027. The products are expected from consultant service.

1. Inception report for the water assessment including methodology, appraisal tools to be used and FGD guidelines
2. Undertake 2 physical bases assessments of 12 target villages and provide recommendations for cost effective construction water systems that ensure year-round water access for communities.
3. Full technical assessment report
4. Full technical water system design for 12 target villages
5. Final report submitted and online presentation of findings to internal CARE staff

## Roles and Responsibility

1. The lead consultant takes full responsibility for managing the assignment contract and collaboration with CARE Laos.

2. CARE is responsible for supporting the consultant for travelling in project areas for data collection to perform as committed within the scope of work.
3. All tasks under this assignment have to be carried out in a participatory manner and gender- sensitive and following all relevant CARE Laos policy including safeguarding policies.
4. Any data collection done within this scope of work should be disaggregated by **age, sex and disability** and **Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, and more (LGTBQIA+)** and their participation in the water system management.
5. All raw data shall be cleaned and submitted with the summary of findings.

## Selection Criteria

|   |                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|---|------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | Qualification and Experience | <ul style="list-style-type: none"> <li>Relevant post graduate qualifications.</li> <li>At least 8 years' experience on <b>water supply</b> in Lao PDR ideally with <b>programming</b> and <b>gender</b> experience</li> <li>Strong in social research methods, gender mainstreaming, ethnicity, Social Behavioural Change and Communication, etc.) are required.</li> <li>Demonstrated good understanding of gender issues, community dynamics and role of Naam Saat in Laos.</li> </ul> |
| 2 | Technical skills             | <ul style="list-style-type: none"> <li>Demonstrated strong water supply system technical research, design and construction.</li> <li>Demonstrated strong capacity in community mobilisation and engagement in design, creation and maintenance of village and household water solutions.</li> <li>Excellence in using KOBO, Microsoft Office and other online communication platform such as Google Meet, Team and Zoom.</li> </ul>                                                      |
| 3 | Language                     | <ul style="list-style-type: none"> <li>Excellent written and spoken English language skills.</li> <li>Experience in Lao PDR and Lao language skills are desirable.</li> </ul>                                                                                                                                                                                                                                                                                                            |
| 4 | References                   | <ul style="list-style-type: none"> <li>A minimum of two referee contacts who have managed the proposed consultant previously.</li> </ul>                                                                                                                                                                                                                                                                                                                                                 |

As a matter of course, all consultants are subject to the following policies:

- CARE Laos safeguarding and Child Protection Policy.
- Terrorist Check Safety and Security Management Plan.
- CARE Code of Conduct.

## Application

Any interested individual or firm consultant, please submit 1) responsible consultant's CV and consultant team's CVs, (2) cover letter, (3) two references, (4) Consulting proposal and (5) cost quotation to: [Lao.contracts@careint.org](mailto:Lao.contracts@careint.org) by 23 August 2026, **please include the text: "Application for technical water assessment consultancy"** in the subject of your email.

Note that the cost quotation should include the consultant's daily rate as well as any materials and travel costs required for the consultant to complete the analysis outlined above.

- *CARE is an equal opportunity employer committed to a diverse workforce. Women, ethnic minorities and people with disabilities are strongly encouraged to apply.*
- *CARE Laos has zero tolerance for sexual misconduct within or external to the organization and imbed child protection in all they do*
- *CARE Laos participates in the Inter-agency Misconduct Disclosure Scheme (MDS). CARE USA reserves the right to seek information from job applicants' previous employers about incidents of sexual exploitation, sexual abuse and/or sexual harassment, and/or child abuse. The applicant may have been found guilty to have committed or about which an investigation was in the process of being carried out at the time of the termination of the applicant's employment with that employer. By submitting the application, the job applicant confirms that s/he has no objection to CARE USA requesting the information specified above; and*
- *As well as pre-employment checks, CARE Laos will use the recruitment and reference process to ensure potential new staff understand and are aligned with these expectations.*

*This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of CARE International in Lao PDR and do not necessarily reflect the views of the European Union.*