

INTERNATIONAL CONSULTANT

Development of structured integrated sample referral and transport network across all levels of health laboratories in Nepal

PR204529

Terms of Reference (ToR)

Background on Save the Children

Save the Children is the leading global independent organisation for children. Save the Children believes every child deserves a future. Around the world, we work every day to give children a healthy start in life, the opportunity to learn and protection from harm. When crisis strikes, and children are most vulnerable, we are always among the first to respond and the last to leave. We ensure children's unique needs are met and their voices are heard. We deliver lasting results for millions of children, including those hardest to reach.

We do whatever it takes for children – every day and in times of crisis – transforming their lives and the future we share.

Our vision: A world in which every child attains the right to survival, protection, development and participation.

Our mission: To inspire breakthroughs in the way the world treats children, and to achieve immediate and lasting change in their lives.

Our values: Accountability, ambition, collaboration, creativity and integrity.

We are committed to ensuring our resources are used as efficiently as possible, in order to focus them on achieving maximum impact for children.

Background information/context

Laboratories are an essential building block for an appropriately functioning health system. Accurate and timely diagnosis is the cornerstone of disease management and prevention. Laboratories are crucial for early detection and control of outbreaks and epidemics. The Government of Nepal recognizes the importance of laboratory services for public health and clinical care. As today, there are more than 3100 health laboratories in Nepal¹ which include both public and private laboratories in different levels. National Public Health Laboratory (NPHL) is national apex laboratory responsible for development national-level policies and guidelines for strengthening national laboratory system, ensuring quality of health laboratory services across the country and providing specialized laboratory services. Similarly, Provincial Public Health Laboratory (PPHL) has been established in each province to strengthen laboratory system at provincial level. Most of the other public health laboratories in Nepal are situated with the health facilities providing different levels of healthcare. There are other private health laboratories which have been categorized from A to E levels and are either situated within the private healthcare facilities or working as standalone laboratories.

¹ <https://nphl.gov.np/covid19/lab-mapping/> (accessed February 3, 2022)

In Nepal, there is no structured and integrated mechanism for referral and transportation of diagnostic specimens across different levels of health facilities. Some parallel sample transportation systems are being used for some specific diseases. Currently, with the support from the Global Fund, in 42 districts, sputum specimens are being transported to nearby TB diagnostic centres by outreach workers hired by NGOs. Similarly, sputum samples for TB culture and DST are being transported to TB reference laboratory through commercial couriers. Plasma samples for HIV viral load testing are also being transported to Viral load testing laboratories through commercial couriers. Other than these few examples, there is no structured and harmonized mechanism for collection and transportation of diagnostic samples to referral health facilities or laboratories. In most cases, patients need to travel to the laboratories or health facilities on their own and this may lead to delayed or sometimes absence of disease diagnosis.

National Tuberculosis Program can be taken as an example to explain the need for a structured sample transportation system within the country. National TB prevalence Survey (2018-19) has estimated that around 69,000 people develop new TB cases annually. However, in 2021, only 28,677 TB cases were notified to the National Tuberculosis Program. Clearly, a large proportion of annual TB cases in Nepal remains undiagnosed and untreated each year. National Tuberculosis Management Guideline 2019 has recommended GeneXpert testing as the primary diagnostic tool for diagnosis of tuberculosis for all presumptive TB cases. Currently, there are more than 100 GeneXpert sites under the NTP for diagnosis of tuberculosis. However, in 2021, only about half of the Pulmonary Bacteriological Confirmed TB cases were diagnosed by GeneXpert testing. Many healthcare facilities in Nepal still rely on sputum smear microscopy for diagnosis of TB but not all microscopy centres are quality assured. In this context, with the sputum smear microscopy, there are clear possibilities of missing TB cases as the sensitivity of microscopy in detecting tuberculosis is poorer compared to GeneXpert testing. On one hand, not all healthcare facilities have access to GeneXpert testing. On the other hand, the utilization of existing GeneXpert machines is quite low.² Similarly, previous reviews have also estimated that about 70% of the TB patients first access private sector which have varying capacity and quality of TB diagnostics.³ There is a strong need for strengthening collection of good quality sputum samples and transportation to the quality assured diagnostic centres including GeneXpert sites.

There is a need for a comprehensive situational assessment of existing diagnostic and sample referral networks, quality of samples being collected, existing sample collection and storage procedures, sample packaging procedures, transportation mechanisms and reporting of test results. Based on the findings of such assessment, a system for specimen referral should be designed and recommended for piloting in some geographical areas. Based on the results of the piloting, the system can be scaled up for strengthening structured sample transportation system throughout the country. Having a structured sample referral and transportation system ultimately help increase access to diagnostic services and improve case finding and treatment.

An international firm or individual having substantial experience of carrying out assessment and developing structured sample referral and transportation network in similar countries is required for conducting this important assignment.

^{2,3} National Tuberculosis Control Center (2019). Report of the joint monitoring mission for tuberculosis.

Objective

The objective of assignment is to support National Public Health Laboratory (NPHL) and national disease control programs for TB, HIV and other infectious diseases in developing structured and integrated sample referral and transport network across all levels of health laboratories.

Specific objectives:

1. Conduct a comprehensive situational assessment of existing diagnostic and sample referral networks, sample collection and storage procedures, sample packaging procedures and transportation mechanisms.
2. Design a structured and harmonized sample referral and transportation system and guidelines for its implementation.

Location and official travel involved

The supplier will be required to travel to Nepal. In addition, the supplier will also need to travel to various geographical locations within the country. Any required travel will need pre-approval by SCI in accordance with SCI's Travel Policy.

Services the supplier will provide

The consultant will closely work with the National Public Health Laboratory (NPHL), Epidemiology and Disease Control Division (EDCD) and relevant national disease control programs including National Tuberculosis Program (NTP), National HIV Program and other relevant disease control programs.

The consultant will

1. Develop a protocol for carrying out a comprehensive assessment of existing diagnostic and sample transportation networks. The protocol should also include a stepwise timebound plan for conducting the assessment.
2. Conduct a comprehensive situational assessment of existing diagnostic and samples transportation networks. The evaluation will assess the strengths, weaknesses, opportunities and threats for the following system components:
 - Management, policies, and governance
 - Financing, budgets and costing
 - Data availability, flow and use, information systems, monitoring and evaluation (M&E)
 - Results return
 - Human resources, training and sensitization
 - Transportation, safe packaging, and cold chain
 - Network design, logistics, mode of transportation
 - Disease integration, specimen-types referred
 - Confidentiality of patient information
 - Sustainability

The assessment will comprise but not limited to the following.

- Landscape analysis (involves government entities, stakeholders, disease programs, relevant policies, strategic plans, guidelines and standard operating procedures)
 - Laboratory network and infrastructure
 - Laboratory network organization
 - Services provided by private health facilities or laboratories
 - Mapping or database of health laboratories
 - Communications and information
 - Existing referral systems
 - Cost considerations
 - Multi-sector engagement
3. Design an integrated specimen referral system and guidelines for its implementation based on the gaps, overlaps, duplications and opportunities for improvement identified by the situational assessment (more than one system may need to be designed based on differences in geographic regions).
 4. Conduct workshops and meetings at national and subnational levels to develop and finalize the specimen referral system and implementation guidelines.
 5. Develop all required forms, formats and standard operating procedures required for implementation of the specimen referral system.
 6. Closely work with a local consultant which will be recruited to provide support to the international consultant to carry out activities listed above.

Experience and skill set required

Essential

- At least 7 years of experience in laboratory system strengthening, disease control programs or other relevant areas of public health.
- Experience in designing and strengthening integrated specimen referral system and conducting a situational assessment of sample transportation network.

Preferred

- Strong knowledge on disease control programs and public health laboratory issues in low- and middle-income countries, preferably national TB programs.
- Skills in other relevant areas such as cost analysis and GIS.
- Experience in designing and strengthening integrated specimen referral system and conducting a situational assessment of sample transportation network in low- and middle-income countries.
- Demonstrated ability of planning, reviewing, analyzing and report writing.
- Excellent written and verbal communication skills in English.
- Working knowledge of Nepali language will be an added advantage.

Education

- A minimum of post-graduate degree or other advanced university degree in the field of health laboratory sciences, public health or related field. PhD in related field preferred. A consulting firm can propose a group of two or more individuals with different expertise required for the assignment.

Expected Deliverables

The consultant will be responsible to provide the following documents to the Director of National Public Health Laboratory (NPHL) and SCI

1. A protocol for conducting the comprehensive situational assessment of existing diagnostic and sample transportation network.
2. A detailed report on the situational assessment of existing diagnostic and sample transportation network.
3. A guideline for national integrated specimen referral and transportation system
4. All forms, formats and standard operating procedures required for implementation of integrated specimen referral and transportation system.

Timeline

Estimated Commencement Date: 2nd January 2023

Estimated End Date: 30th April 2023

Acceptance

All deliverables to be accepted by SCI Project Lead and NPHL director within a month of delivery date.

Payment information

20% of the total cost payable after satisfactory completion of deliverable 1

30% of the total cost payable after satisfactory completion of deliverable 2

50% of the total cost payable after satisfactory completion of deliverable 3 and 4

The Fees are inclusive of all costs, overheads, and expenses, including travel, subsistence, and accommodation to and from Nepal. The travel costs in country (e.g., vehicle hire, domestic airfare, accommodation will be managed and paid by SCI)

Note for foreign bidders: The consultancy fees are subject to withholding tax of 15% as per Nepal tax rules.

Other

Bidder can propose for local (Nepalese) consultant to be included in its team if it wishes to do so. A separate Terms of Reference for local consultant can be referred to.

How to apply for the services

Proposal Submission Guideline/Required Documents

- Proposal Submission Deadline- **14th December 2022, 11:45pm Nepal Time**
- Required Documents-
 - Filled out Consultancy Proposal Form (enclosed with this ToR)
 - CV(s) of the proposed consultant(s) with full date of birth in dd/mm/yyyy format.

- For firms (National): Copies of- Firm registration certificate, VAT registration certificate, Tax clearance certificate (for FY 2078/079) or extension letter from IRD.
- For firms (International): Copies of Firm registration certificate as per the prevailing act of the country, latest tax clearance certificate as per country rules.
- For Individuals (Foreign Nationals): Copies of passport and a valid visa/permit to work in Nepal.

If an individual is a full-time staff member of another organization, a no objection/consent letter signed by the organization head must be submitted along with the proposal. This is not applicable for proposals sent through a firm.

Proposals should be submitted via email to nepal.proposals@savethechildren.org

The email subject should indicate “Proposal for PR204529 International Consultant”.

Proposals submitted in another email addresses will not be considered in the process. (Please note that, bidder must not cc / bcc / forward proposals to any other email addresses).