

**United Nations Children's Fund (UNICEF)
Phnom Penh, Cambodia
Vacancy N°**

Terms of Reference

**INTERNATIONAL INDIVIDUAL CONSULTANCY TO DATA MANAGEMENT AND ANALYSIS OF
UNICEF INTERGRATED EARLY CHILD DEVELOPMENT LONGITUDINAL STUDY**

Closing Date: 15 December 2019

1. Background:

Over the last decade, Cambodia has made important progresses towards improving the health of status of women and children and a laudable example is the reduction of maternal and child mortality. However, the 2014 Cambodia Demographic and Health Survey (CDHS) showed that for nutrition,

To better understand the underlying causes of the limited improvements in nutrition indicators and to be able to speed up progresses, UNICEF, in collaboration with its partners (IRD/FiA/MOH) initiated a longitudinal study in 6 districts of 3 provinces (Ratanakiri, Kratie and Phnom Penh), in 2016. This study aims to improve understanding about the determinants of health and disease in those target areas and to give timely feedback to partners on how to improve current programs.

The research conducted so far based on the data generated by this study had been proved valuable for the researchers and policy makers in the country, in region and, even, globally. The published research articles offer novelty and vital information for current dilemmas. The data collected since 2016 is a wealth of information which helped to track progress and it still has great potential to further inform policy and program decisions. Therefore, it is crucial to get a qualified and experienced consultant who can support the overall data management, analysis and reporting for a duration of one year.

2. Purposes of the Consultancy:

The aim of the consultancy is to generate knowledge in the area of health and nutrition by producing comprehensive and reliable evidence from the longitudinal study. It aims to provide up to date information on data collected through the UNICEF longitudinal study; conduct 2 in-depth analysis on Health, WASH and Nutrition and support the development of scientific, evidence-based documents; conduct dissemination of information from the UNICEF longitudinal study and conduct secondary data analysis of CDHS information collected between 2000 to 2020.

3. Scope of the Assessment and methodology

The longitudinal survey is identifying trends in major nutrition, WASH and health related indicators, with particular attention given to women 15-49 years of age and children 0–59 months of age. The survey occurs on a rolling basis throughout the year, since 2016. Multiple indicators are used to

classify populations who are most likely to be at risk of nutritional deficiencies. These include the multidimensional poverty index (MPI); the woman's dietary diversity score (DDS); anthropometric status; infant and young child feeding practices (IYCF); and water-sanitation-hygiene (WASH) and water quality.

- Methodology: The study is being implemented since March 2016 and data are being collected on the same household for morbidity and access to facilities, dietary practices, health/nutrition/wash indicators.
- Size: The sample size of a minimum 1,000 children and 1,000 women was calculated to see a reduction of stunting within the next 3-5 years from 32% to 26% with a precision of 3%. Since the baseline, more than 5,000 household were included in the study from 6 districts of 3 provinces.
- Data collection: data is collected on a regular basis, both by commune health volunteers (CHV) and by data collection teams visiting the villages on a regular basis.
- Analysis and presentation: Analysis will be done for various variables and the result will be organized in table, literature, PPT and articles for review and dissemination to inform policy and program interventions

4. Work Assignments/TOR:

The assignment will be carried out by the consultant under the oversight of Chief of Child Survival and Development. The consultant will be responsible for the following activities:

1. Reviews and analysis of relevant health, nutrition, WASH, cognitive and/or gender related data, statistics and information from the longitudinal study to support a more efficient delivery of UNICEF program projects and publications;
2. Database management: cleaning, maintaining records and updating databases. Prepare datasets for data analysis, and ensuring a clean version of the collected data
3. Preparing and improving access to specific datasets and database for users and partners of UNICEF's longitudinal study
4. Contributes to the preparation of dissemination documents related to statistical methods used within the longitudinal analysis process;
5. Assists in improving access of users to and the dissemination of UNICEF's longitudinal database;
6. Participates in statistical field monitoring visits to improve data collection within the longitudinal study.
7. Facilitate the communication between partners and other parties involved in the study
8. Prepare documents and other materials to disseminate information
9. Conduct data analysis relevant to the agreed topics based on data collected for longitudinal study
10. Conduct a secondary data analysis of data of CDHS 2000-2020
11. Contribute to the generation of other research articles through vast knowledge on project design and statistical methods.

5. Qualifications or Specialized Knowledge/Experience Required:

Advanced university degree in global public health with vast knowledge on nutrition and statistics

- Minimum two-year experience in health and nutrition data management, statistical data analysis and writing of research articles on child undernutrition
- Required: publications and conference presentations

Knowledge and Skills

- Extensive and relevant experience in applied statistics

- Strong knowledge and relevant experience in using the statistical program R and the Microsoft Office package
- Basic knowledge of other statistical programs
- Strong analytical and report writing skills;
- Excellent communication, coordination and facilitation skill
- Experience in Cambodian context and within child nutrition and health research represent an asset.

6. Competencies

- Applying technical expertise
- Analysing
- Communications
- Drive for result
- Working with people

7. Languages

- Fluency in English

8. Estimated Duration of Contract (Dates and period):

It is estimated that the assignment will require 150-person days expected to be completed during 6th January to December 15th, 2020. Please refer to the work schedule for the breakdown of days by component.

9. Work Schedule:

Deliverables	Number of days:	Timeline
I. Preparation of work plan and organization of data set	20	6th Jan – 1st Feb 2020
1. Organize dataset		
2. Prepare detail work plan		
3. Provide guidance and specific variable for nutrition interns		
4. Review analysis		
5. Prepare quarterly report		
II. Data management	30	2nd Feb – 31st March
1. Maintaining the dataset and updating the records		
2. Cleaning data		
3. Compute generally used indicators (wealth index, z-scores etc.)		
4. Preparing specific datasets for other parties		
5. Preparing datasets with information from other activities of the study (leaning development, water safety etc.)		
6. Prepare quarterly report		
III. Data analysis of longitudinal data	40	1st Apr – 31st June
1. Statistical analysis of first research topic		
2. Redacting report and manuscript for first research topic		
3. Statistical analysis of second research topic		
4. Redacting report and manuscript for second research topic		
5. Prepare quarterly report		
IV. Dissemination of information and reporting activities	20	1st July – 31st September
1. Facilitate communication between senior researchers and other parties involved in data analysis of the longitudinal study		
2. Assist other researchers involved in data analysis of longitudinal study		
3. Prepare materials for presentations for CSD department		

conducted each second month		
4. Prepare information and other materials for external presentations		
5. Prepare quarterly report		
6. Make two presentations to Government counterparts and other partners during Nutrition technical working groups meetings		
V. Secondary data analysis of CDHS data 2000-2020	40	1st October – 15 December
1. Prepare CDHS data for secondary data analysis		
2. Merging information collected in 2020		
3. Conduct data analysis and contribute to data representation		
4. Redact manuscript for research article		
5. Prepare quarterly report		

10. Payment and payment schedule:

- 20% payment upon completion of deliverables I
- 20% payment upon completion of deliverables II
- 20% payment upon submission of deliverable III
- 20% payment upon submission of deliverables IV
- 20% payment upon completion of deliverables V

11. Evaluation Criteria

A two-stage procedure shall be used 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: Consultants shall prepare a proposal on the basis of the tasks and deliverables (detailed in the ToR). The proposal shall include the approach and methodology with detailed breakdown of proposed activities and methods that will be used by the consultant. The proposal shall also include a brief explanation of data analysis and report writing and a possible dissemination plan. Draft work plan and timeline for the assessment should be included. The Technical Proposal shall also include an updated CV and Personal History Form (P11), and reference to copies of 2 relevant IT developments performed previously by the consultant.

2. Financial Proposal: An international consultant will be selected, Therefore, budget for travel expenses or daily subsistence allowance should be included. Within the contract period, there will be quarterly in country visit with a maximum of 5 days travel per quarter (total 20 days). There will be one international travel to Bangkok for result dissemination with a maximum of 7 days. Therefore, the financial proposal should consider travel expenses.

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

a) Technical Qualification (max. 70 points)

1.1 Overall Response	10
- - Understanding of scope, objectives and completeness and coherence of response	
- - Overall match between the ToR requirements and proposal	
1.2 Proposed Methodology and Approach	30
- - Quality of proposed approach/methodology	
- - Quality of proposed Implementation Plan, i.e. how the bidder will undertake each task, and maintenance of project schedules;	
1.3 Technical Capacity	30
- - Strong knowledge on economic, public health and nutrition component	
- - Experience in Cambodia and regional settings	
- - Experience in programme evaluation, including quantitative and qualitative research	
- Familiarity with the Cambodian environment.	
- Strong analytical and report writing skills.	
- Knowledge of Cambodian context on nutrition, fortification, maternal and child health, and economic	
- Range and depth of experience with similar projects/assessments	
- Desirable: publications and conference presentations experience	
Total Technical	70

b) Financial Proposal (max. 30 points)

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 50 points score in the technical evaluation. Other Financial Proposals will receive points in inverse proportion to the lowest price. The Contract shall be awarded to candidate obtaining the highest combined technical and financial scores, subject to the satisfactory result of the verification interview. Proposals not complying with the terms and conditions contained in this ToR, including the provision of all required information, may result in the Proposal being deemed non-responsive and therefore not considered further.

12. Supervision and Management Arrangements

In UNICEF, the nutrition Specialist will be the contract supervisor. Periodically, he/she may be requested to consult and update with the UNICEF Chief of Child Survival and Development.

13. Type of Supervision that will be Provided:

The supervisor will ensure proper briefing at the beginning of the consultancy and technical guidance for the consultant. In addition, compliance with the ToR and timely delivery of the expected outputs/results will be closely monitored. Upon completion of contract assignments, the supervisor will certify relevant documents; evaluate the consultant's work and process/follow-up on the payments.

14. Consultant's Work Place/Any facilities to be provided by office:

UNICEF will provide Laptop and two external discs for safe storage and management of data. The consultant will return the laptop and the external discs to UNICEF at the end of the contract.

15. Official Travel Involved (specify if yes):

- Quarterly travel to Kratie and Ratanakiri is expected to be conducted.
- One international travel to Bangkok expected for result dissemination

**16. 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 5 days prior to the termination date. In the meantime, UNICEF will initiate another selection in order to identify appropriate candidate.

Performance indicators:

Consultant's performance will be evaluated against the following criteria: meeting TOR requirements, timeliness and quality of work, work relations, initiative/drive for results, communication, and dependability/reliability in carrying out the assignments.

17. Programme area in the Rolling Work Plan 2019-2020 involved

Section Requested: Child Survival and Development

Impact:

Outcome:

- By 2023 pregnant women, mothers, newborns and children under the age of 5 years have increased equitable access to and the use of quality health and nutrition services, especially in the north-eastern provinces and among marginalized groups, including during emergencies

Output:

- Output 2: By 2023, national and sub-national health system and service providers have improved capacity to deliver quality nutrition- specific interventions.
- By 2023, national and sub-national health system and service providers capacity strengthened to equitably deliver high impact integrated MNCH interventions for women and their children, especially during emergency.

Key Activity Result:

- Prevention of stunting and other forms of malnutrition
- Treatment of severe acute malnutrition
- Early childhood development

Input:

- Financial
- Technical
- Supply
- M&E

Included in approved AWP: Yes No