

TERMS OF REFERENCE FOR INDIVIDUAL CONSULTANTS

International Consultant to finalise secondary CDHS analysis, report and publications for child and maternal mortality and malnutrition.	Funding Code	Duty Station: Phnom Penh, Cambodia
<p>Purpose of Activity/Assignment:</p> <p>Over the past decade, Cambodia has seen improvements in child and maternal mortality, with significant reductions in under-5, infant, and neonatal mortality. However, maternal mortality has decreased more slowly, and the proportion of newborn deaths remains high. Chronic undernutrition has declined, but wasting rates have stagnated and breastfeeding practices have worsened.</p> <p>UNICEF seeks to understand the factors contributing to the decline in child mortality and stunting, as well as the slower progress in maternal mortality and child wasting. This consultancy aims to conduct a cross-sector and multi-sectoral secondary analysis of the main drivers of maternal and child mortality and malnutrition and understand these trends. The analysis will focus on young children, adolescent girls, and pregnant women, seeking to better understand factors and barriers in order to inform Government policy decision making as part of the national Universal Health Coverage (UHC) roadmap and country efforts to strengthen equitable Primary Health Care (PHC).</p> <p>Secondary CDHS analysis on child mortality, maternal mortality and malnutrition has been initiated in Cambodia by UNICEF and Government partners, but more in-depth and cross sector analysis is required, along with the need for additional stakeholder consultations to validate and publish findings, strengthen interpretation and the development of policy recommendations. The consultant will also work closely with the T4D team to strengthen data visualization of findings with digital tools and mapping.</p> <p>The assignment will be conducted over 97 working days, remote home-based outside of Cambodia.</p>		
<p>Scope of Work:</p> <p>The work will be conducted in 4 steps within a 6-month period (starting August 1) after signing of the contract, the steps are:</p> <ol style="list-style-type: none"> 1. Additional literature review and peer review of MODA and equity analysis in Cambodia <ol style="list-style-type: none"> a. Literature review on child stunting and wasting, child mortality and maternal mortality in Cambodia and in the SEA region, reviewing the latest IHME GBD mortality estimates available from 2023. b. Review and integration of findings from the multi-dimensional overlapping deprivation analysis (MODA) for children and the trends/equity gap analysis across time from 2000 to 2021-22 for key nutrition and MNCH outcomes. 2. Additional database review/quality assurance for DHS 2000, 2005, 2010, 2014 and 2021/22 and supportive datasets <ol style="list-style-type: none"> a. Conduct external quality assurance on developed indicators for the five DHS surveys and ensure both consistency and quality of developed indicators and ecological indicators. 		

- b. Find and assess supportive datasets from MoH, MAFF, WFP, UNICEF, FAO, CSES and other partners to determine if they have supportive ecological indicators for analysis.
- c. Support MOP/NIP statistician to develop key indicators for analysis from the DHS 2000, 2005, 2010, 2014 and 2021 datasets from the child recode and birth recode datasets. Provide an overview list of indicators required from each dataset and review work of the MoH statistician to ensure quality.

3. Analysis:

A) Improve descriptives and multivariate analysis for child mortality, maternal mortality and child nutrition status using the IHME GBD, IGME and DHS datasets for Cambodia and comparison countries in southeast Asia.

- a. Child mortality will be assessed using the updated IGME 2022 dataset, IHME GBD 2019 dataset and the five DHS datasets for Cambodia.
 - i. Descriptives analysis will be conducted for trend assessment using IGME 2022 dataset, detailed assessment of causal factors to child mortality broken into age groups (0-6 days, 7-27 days, 28-364 days, 1-4 years and total under 5 child mortality) using the IHME GBD 2019 dataset and equiplot analysis using the DHS datasets from 2000, 2005, 2010, 2014 and 2021. The Lives Saved Tool will be utilized to project cost effective interventions to address neonatal mortality which will support formulation of policy recommendations from this analysis.
 - ii. Multivariate analysis will be conducted to assess key factors associated with child mortality as measured by a three-year recall in the five DHS surveys. Multivariate logistic regression will be conducted inclusive of key variables for ANC, delivery, demographic and socioeconomic status. Oaxaca Binder Decomposition analysis will be conducted to compare the contribution of key associated factors to child mortality between 2000 and 2021.
- b. Maternal mortality trend assessment using IHME GBD 2021 dataset and data generated from the Maternal Mortality Estimation Inter-Agency Group. Using these datasets, descriptive analysis of the causal factors to maternal mortality assessed by change from 2000 to 2021, age category of the woman and comparison with countries in southeast Asia will be conducted. The Lives Saved Tool will be utilized to project cost effective interventions to address maternal mortality as well as low birth weight and sub optimal birth outcomes.
- c. Child nutrition status will be assessed using the DHS surveys from 2000, 2005, 2010, 2014 and 2021.
 - i. Descriptives equity analysis will be provided by estimation of CIX, SII, Equiplot assessment by key bivariate disaggregation, Victoria curves for HAZ and WHZ and Kernal Plots for HAZ and WHZ. The IHME GBD will be utilized to visualize the change in prevalence of stunting and wasting by 5x5 km area from 2000 to 2019. The Lives Saved Tool will be used to model the potential impact of cost-effective interventions to reduce stunting in Cambodia.
 - ii. Multivariate analysis will be conducted using the five DHS surveys to assess key factors associated with child HAZ and WHZ. Multivariate linear regression analysis will be conducted inclusive of key variables for children aged 0-5 months, 6-23 months, 24-59 months and 0-59 months. Oaxaca Binder Decomposition analysis will

be conducted to compare the contribution of these key factors to low HAZ and WHZ between 2000 and 2021.

B) Conduct further key informant interviews at national level to strengthen interpretation of findings of quantitative analysis and understand trends.

- d. The KIIs will include 4-6 Government officials, 4-6 development partners or experts in maternal and child health and nutrition.
- e. All the KIIs will be conducted in Phnom Penh or virtually if needed. UNICEF, NIS and MOH will support the identification of the KII participants and arranging the KII sessions for the consultant.

C) Using provided data on coverage of key interventions, update the Lives Saved Tool for neonatal mortality, 1- 59-month child mortality, maternal mortality, low birth weight, suboptimal birth outcomes, and stunting.

4. Reporting and writing of the full analytical report, with summary policy briefs and two manuscripts

A). Write and produce one full analytical report, building upon existing draft reports where relevant - summarizing the methodology used for the analysis, the determinants of malnutrition in Cambodia and the analysis of child and maternal mortality in Cambodia (max 50 pages of narrative excluding Annexes, Graphs, Tables)

B). Develop summary policy briefs (10 pages) and PowerPoint Presentations presenting the findings where senior policy makers and officials and DPs are target audiences.

- Why do we see a relatively strong decline stunting but not wasting?
- Why is neonatal mortality still a large proportion of under 5 mortality?
- Why is improvement in maternal mortality slow?

C). Lead the drafting of peer reviewed manuscripts with UNICEF and MOH on key predictors of child malnutrition in Cambodia and detail cost effective interventions to address child and maternal mortality in Cambodia.

- The consultant will collaborate closely with UNICEF and NIS, MOH stakeholders on the report, taking a leading in writing. UNICEF and stakeholders will take a lead on formulating policy recommendations based on analytical findings along with key development partners.
- The consultant will support the submission and publishing process for journals.

Child Safeguarding

Is this project/assignment considered as “[Elevated Risk Role](#)” from a child safeguarding perspective?

YES NO If YES, check all that apply:

Direct contact role YES NO

If yes, please indicate the number of hours/months of direct interpersonal contact with children, or work in their immediately physical proximity, with limited supervision by a more senior member of personnel:

Child data role YES NO

If yes, please indicate the number of hours/months of manipulating or transmitting personal-identifiable information of children (name, national ID, location data, photos):

More information is available in the [Child Safeguarding SharePoint](#) and [Child Safeguarding FAQs and Updates](#)

Budget Year: 2024 and 2025	Requesting Section/ Issuing Office: Health and Nutrition	Reasons why consultancy cannot be done by staff: The consultancy requires an advanced level and specialized skills in data analysis and especially statistics and peer reviewed journal writing experience, and dedicated time for analysis to meet the objectives and deliverables for this assignment. The skills and the time required cannot be met within current CO resources. The consultant will work closely with CO teams who will learn and build their statistical analysis and data interpretation skills as part of this process.
Included in Annual/Rolling Workplan: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No, please justify: <i>Health output 001, Key result 1. 0660/A0/07/881/001/001</i> <i>Key Intervention 1.1: Strengthening Policy Development and Health Systems for Primary Health Care</i>		
Consultant sourcing: <input type="checkbox"/> National <input checked="" type="checkbox"/> International <input type="checkbox"/> Both Competitive Selection: <input checked="" type="checkbox"/> Advertisement <input type="checkbox"/> Roster <input type="checkbox"/> Informal competitive (Low Value Contract) Single Source Selection <input type="checkbox"/> (Emergency - Director's approval)		
If Extension, Justification for extension: 		
Supervisor: <i>Health Specialist</i>	Start Date: <i>1 September 2024</i>	End Date: <i>31 January 2025</i>

Work Assignments Overview	Deliverables/Outputs	Delivery deadline	Estimated Budget (Percentage of payment)
1. Additional literature review and peer review of MODA and equity analysis in Cambodia	<ul style="list-style-type: none"> Additional literature review conducted with list of references and resources that will be used as part of the final secondary CDHS analysis and report. Additional data sets and relevant reports submitted with a summary of how these will be used and incorporated into strengthening the secondary CDHS analysis 	<ul style="list-style-type: none"> 4 working days By Aug 31, 2024 	3%
2. Additional database review/quality assurance for DHS 2000, 2005, 2010, 2014 and 2021/22 and supportive datasets	<ul style="list-style-type: none"> Updated, completed database (do. files) with the expected multi-sector variables which is free of weighting, syntax, variable errors is submitted and approved by UNICEF 	<ul style="list-style-type: none"> 5 working days By Aug 31, 2024	4%
3. In-depth analysis and stakeholder validation completed on updated database integrating latest global child and maternal mortality estimates from 2021/2022	<ul style="list-style-type: none"> Updated descriptive and multi-regression analysis submitted (in the form of a detailed ppt slide deck with graphs, figures and summary findings and key notes) for child and maternal mortality and analysis on all forms of malnutrition. Report submitted summarising 4 KIIs completed and two partner stakeholder consultations completed. The Lives Saved Tool for neonatal mortality, 1-59-month child mortality, maternal mortality, low birth weight, suboptimal birth outcomes, and stunting is updated. 	<ul style="list-style-type: none"> 36 working days 4 working days 3 working days By September 30, 2024	45%
4. Reporting and writing of the full analytical report, with summary policy briefs	<ul style="list-style-type: none"> Full analytical report completed (max 50 pages of narrative excluding Annexes, Graphs, Tables) 3 policy briefs submitted jointly with key partners, and approved by UNICEF (one on nutrition, one on child mortality and one on maternal mortality) 	<ul style="list-style-type: none"> 5 working days 6 working days By October 31, 2024	12%
5. Develop two peer-reviewed manuscripts for journal submission (this deliverable is contingent upon UNICEF's approval of the	<ul style="list-style-type: none"> 1 peer reviewed manuscript written and developed on child and maternal in collaboration with MOH, and submitted to journal 1 peer reviewed manuscript written and developed on child and maternal in 	<ul style="list-style-type: none"> 17 working days 17 working days 	36%

quality and completeness of the analysis and previous deliverables #1-4 above)	collaboration with MOH, and submitted to journal	By January 31, 2025	
	TOTAL NUMBER ESTIMATED DAYS:	97 days	100%

<p>Minimum Qualifications required*:</p> <p><input type="checkbox"/> Bachelors <input checked="" type="checkbox"/> Masters <input type="checkbox"/> PhD <input type="checkbox"/> Other</p> <p>Master’s degree in Public Health, Nutrition, Statistics, Epidemiology, health research or any other related disciplines.</p> <p><i>*Minimum requirements to consider candidates for competitive process</i></p>	<p>Knowledge/Expertise/Skills required *:</p> <ul style="list-style-type: none"> • Minimum of 10 years work experience in relevant areas with and proof of previous experience conducting similar DHS, MICS and other secondary data analysis in health and nutrition from surveys and large data sets. • Past reports, manuscripts and other publications of similar scope and nature to the assignment is an asset. • High competency in statistical analysis (such as linear multivariable regression analysis, difference in difference analysis, and regression-based decomposition analysis, time-series analysis) and relevant software. Software skills required in STATA, R, Python, or other statistical computing software. • Previous work with UNICEF on DHS/MICS analysis and secondary analysis for health and nutrition an asset. <p><i>*Listed requirements will be used for technical evaluation in the competitive process</i></p>
<p>Submission of applications:</p> <ul style="list-style-type: none"> ▪ Letter of Interest (cover letter) ▪ CV or Resume ▪ Performance evaluation reports or references of similar consultancy assignments ▪ Financial proposal: All-inclusive lump-sum cost including consultancy fee and health insurance for this assignment. 	
<p>Evaluation Criteria (This will be used for the Selection Report (for clarification see Guidance))</p> <p>A two-stage procedure shall be utilised in evaluating proposals, where the evaluation of the technical proposal will be completed prior to any price proposal being reviewed and compared. The Cumulative Analysis Method (weight combined score method) will be used for evaluation and selection in this process. 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 reference checks.</p> <ul style="list-style-type: none"> ▪ Technical Qualification (max. 100 points): weight 70 % ▪ Master’s degree in Public Health, Nutrition, Statistics, Epidemiology, health research or any other related disciplines (25 points) ▪ Demonstrated past experience on secondary analysis of DHS, MICS and other national surveys in the specific areas of child malnutrition and/or mortality. Relevant analytical work with UNICEF country offices is an asset. (35 points) ▪ Quality of past work (e.g past secondary analysis reports in countries as the primary author, published journal articles as the primary author) (30 points) ▪ Program and policy experience in health and/or nutrition with UNICEF or relevant agency (10 points) ▪ Financial Proposal (max. 100 points): weight 30 %. <p>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.</p>	
<p>Administrative details:</p> <p>Visa assistance required: <input type="checkbox"/></p>	<p>If office based, seating arrangement identified: <input type="checkbox"/></p> <p>IT and Communication equipment required: <input type="checkbox"/></p> <p>Email/O365 access required: <input checked="" type="checkbox"/></p>

Home Based Office Based:

Internet access required:

¹ Costs indicated are estimated. Final rate shall follow the “best value for money” principle, i.e., achieving the desired outcome at the lowest possible fee. Consultants will be asked to stipulate all-inclusive fees, including lump sum travel and subsistence costs, as applicable.

Payment of professional fees will be based on submission of agreed deliverables. UNICEF reserves the right to withhold payment in case the deliverables submitted are not up to the required standard or in case of delays in submitting the deliverables on the part of the consultant

Text to be added to all TORs:

Individuals engaged under a consultancy will not be considered “staff members” under the Staff Regulations and Rules of the United Nations and UNICEF’s policies and procedures and will not be entitled to benefits provided therein (such as leave entitlements and medical insurance coverage). Their conditions of service will be governed by their contract and the General Conditions of Contracts for the Services of Consultants. Consultants are responsible for determining their tax liabilities and for the payment of any taxes and/or duties, in accordance with local or other applicable laws.

The selected consultant is solely responsible to ensure that the visa (applicable) and health insurance required to perform the duties of the contract are valid for the entire period of the contract. Selected consultant are subject to confirmation of fully-vaccinated status against SARS-CoV-2 (Covid-19) with a World Health Organization (WHO)-endorsed vaccine, which must be met prior to taking up the assignment. The vaccine mandate, does not apply to consultants who will work remotely and are not expected to work on or visit UNICEF premises, programme delivery locations or directly interact with communities UNICEF works with, nor to travel to perform functions for UNICEF for the duration of their consultancy contracts.

UNICEF offers [reasonable accommodation](#) for consultants with disabilities. This may include, for example, accessible software, travel assistance for missions or personal attendants. We encourage you to disclose your disability during your application in case you need reasonable accommodation during the selection process and afterwards in your assignment.