**TERMS OF REFERENCE**

**SURVEY NAME AND LOCATION**

**Submitted by:** Nutrition Section

1. BACKGROUND (Change this to match specific background information from the country)

The burden of malnutrition is high in Nepal, 41% of all under-fives are stunted and 46% are anemic (NDHS 2011). The prevalence of anemia among 6-23 months children is particularly high at 69%. The distribution of anemia prevalence varies geographically by ecological zones and by urban and rural residence. Among children 6-59 months, anemia prevalence is the highest in the terrai (50%), followed by the mountains (48%) and the hills (41%). Children in rural areas are more affected (47%) compared to their counterparts from the urban areas (41%). The majority of the population lives in the terai (48%), followed by the hills (44%), while only 7% live in the mountainous ecological zone. Nepal is predominantly rural, with 14% of the population living in urban areas in 2001; however, it is likely that the 2011 census will indicate an increased urban population. All socioeconomic groups are affected by anemia in the country; the prevalence is high even in the highest socioeconomic quintile, with over 37% of children 6-59 months affected. Among children 12-59 months who received deworming tablets in the last six months, anemia prevalence was 41% compared to 51% among eligible children who had not received treatment in the last six months. This means that additional interventions are needed to address other causes of anemia, such as iron deficiency.

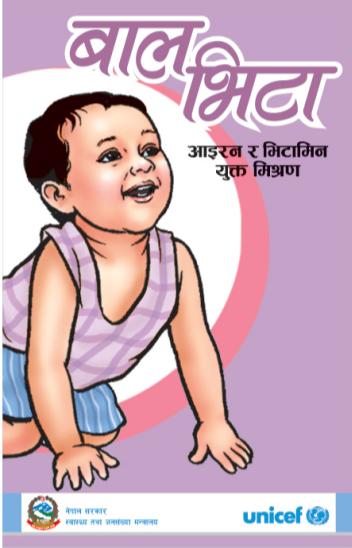
Infant and young child feeding practices contribute to the high rates of chronic malnutrition and anemia. Breastfeeding in Nepal is almost universal, and exclusive breastfeeding for the first six months is relatively widespread; 70 % of all children less than 6 months are exclusively breastfed. This represents an improvement from 53% found in 2006 NDHS. Of the 98% ever breastfed, 45% started breastfeeding within one hour of birth (compared to 35% in 2006) and 85% started breastfeeding within one day of birth. Breastfeeding within one hour of birth was more common in urban areas (51 %) than in rural areas (44 %). However, timely introduction of complementary foods is a concern, among breastfeeding children 6-8 months of age, only 66% received solid or semi-solid foods. Appropriate complementary feeding in terms of frequency is also an issue; though 78% were consuming solid/semi-solid foods for the recommended minimum number of times per day among all children 6-23 months, only 28% were eating from the recommended number of food groups (4+). All in all, only 24% met the three recommended IYCF practices (breastfeeding, number of feedings per day, and 4+ food groups). Complementary feeding practices are particularly poor in terai, where only 21% of children were given foods from four or more food groups and 18% met the three recommended IYCF practices, compared to 33 % of children living in the hill zone (DHS, 2011). It is evident that intensified efforts are needed in Nepal to reduce chronic malnutrition and anemia rates through improved feeding practices. Efforts to accelerate reduction of stunting and anemia by scaling up evidence-based interventions, would need to build upon successful micronutrient programs in Nepal. Biannual Vitamin A supplementation coverage among children 6-59 months of age was at 90% in 2011, and deworming of children 12-59 months during Vitamin A days was at 84%. Furthermore, the 2011 NDHS results also show that about 80% of the households are using adequately iodized salt.

***Description of the Ongoing Interventions***

**Integrated Infant Young Child Feeding and Multiple Micronutrient Powders(Change this to be specific to the program and or implementation being conducted).**

As part of the government of Nepal’s efforts to combat malnutrition, the Multi-sectoral Nutrition Plan (MSNP) was formulated with two main objectives of reducing chronic malnutrition and anemia. To achieve these objectives the government of Nepal, UNICEF, and other partners are establishing infant and young child feeding (IYCF) & national micronutrient powders (MNPs) program that will promote improved IYCF practices and distribute MNPs to children 6-24 months of age eventually in all 75 districts of Nepal. MNPs have been selected based on evidence establishing their efficacy and cost-effectiveness in several countries throughout the world (WHO 2011; Horton, 2008). MNPs have been locally branded as Baal Vita. When brought to national scale, in Nepal all children 6-24 months will receive 60 sachets of Baal Vita twice a year (total of 120 sachets per child per year). Messages and counselling for improving IYCF practices will be promoted during MNPs distribution. The recent pilot on the MNPs integrated with IYCF programs tested three major distribution approaches two in rural areas and one in urban areas (municipalities). These included: (1) Rural - routine distribution through health facilities with Female Community Health Volunteers (FHCV) counselling mothers in the community; 2) Rural - routine distribution through FCHV; and 3) Urban - distribution through FCHVs from the ward offices in the municipality and health facilities that may be present.

The three phases of implementation include: (1) Feasibility study of IYCF promotion and Baal Vita distribution in 4 Village Development Communities (VDC) in Makwanpur and Parsa (completed); (2) Evaluation of the above three potential distribution models (completed); and (3) Scale up of National IYCF and MNP Program in all 75 districts. The first two phases have been completed successfully and the third is starting in 2012. The use of a mixed distribution modality of IYCF-MNP program through FCHVs as well as Health Facilities and Ward offices has been recommended by the evaluation of the pilot phase. The Program is being implemented in 15 districts and the IYCF/MNPs impact evaluation follow-up survey will serve as an input into the policy decisions for further scaling up of this intervention to all 75 districts.

The 15- micronutrient formulation of Baal Vita per sachet and local image are as follows:

Vitamin A (Retinol) 400 µg

Vitamin C 30 mg

Vitamin D 5 µg

Vitamin E 5 mg

Vitamin (B1) 0.5 mg

Riboflavin (B2) 0.5 mg

Niacin (B3) 6 mg

Pyridoxine (B6) 0.5. mg

Cyanocobalamin (B12) 0.9 µg

Folic Acid 150 µg (later revised to 90 µg)

Iron 10 mg

Zinc 4.1 mg

Copper 0.56 mg

Selenium 17 µg

Iodine 90 µg

UNICEF and the European Union (EU) have partnered in a project to improve nutrition security of women and young children in Asia. The 4-year Maternal and Young Child Nutrition Security Initiative in Asia (MYCNSIA) is being implemented in five countries, including Nepal. The Initiative is made up of four pillars: upstream policy and awareness, capacity building, data analysis and knowledge sharing, and scaling up nutrition security interventions. The first three pillars can be viewed as systemic inputs to the fourth, which holds the evidence based interventions detailed in the Lancet Nutrition Series. The Initiative aims to achieve two goals: reduce stunting rates by 5% points from baseline in four years, and reduce anaemia in pregnant women and children by one third from baseline in the same period. A key component of MYCNSIA is scaling up the IYCF/MNP Baal Vita intervention, including implementing a baseline/follow-up survey among young children that collects anthropometry and anaemia/micronutrient status data.

***Significance of the Proposed Survey for Nutrition Program Policy Decisions***

There is currently enormous political momentum and interest in support of nutrition in Nepal. Globally, Nepal’s success on micronutrients and its strong commitment to nutrition have been well recognized; the country was identified as an “early riser” by the Scaling Up Nutrition (SUN) movement, and is one of the 54 countries to receive support from the global initiative on Renewed Efforts Against Child Hunger (REACH) to help in the SUN efforts.

With lead technical support from UNICEF to the NPC, nutrition reviews within the nutrition specific and the sensitive sectors have fed into the development of the evidence-based five-year costed multi-sector nutrition plan (MSNP), with a ten-year vision. The main purpose of MSNP is to accelerate reduction of maternal and child undernutrition with a focus on the ‘critical window of opportunity” or the first 1,000 days of life. With the leadership of NPC, six key ministries (Ministry of Health and Population, Ministry of Agriculture Development, Ministry of Education, Ministry of Federal Affairs and Local Development, Ministry of Women, Children and Social Welfare and Ministry of Urban Development), are delivering a package of nutrition specific and nutrition sensitive interventions in a coordinated manner for sustained results, in line with the global SUN framework for action. The MSNP was approved by the cabinet and lunched nationally by the then Prime-Minister in September 2012; its implementation is being inaugurated in all the six model districts in 2013. This advanced progress and development as earlier stated is more than was anticipated, there is a need to maintain the momentum and ensure that MSNP is effectively modelled in these initial six districts.

Two of the main recommendations of the 2011 nutrition review for the health sector in Nepal were to: (1) maintain and strengthen key micronutrient interventions that have been successfully implemented at scale (e.g. Vitamin A supplementation to children, iron and folic acid supplementation to pregnant women, zinc in management of diarrhea and salt iodization); and (2) scale-up on-going pilots (e.g. IYCF/MNPs, Community-based Management of Acute Malnutrition (CMAM), and roller mill flour fortification). The follow-up impact survey will serve to inform policy makers about the potential impact of the scale up of the integrated IYCF/MNP programs when they reach national level distribution.

***Primary Objective of the Survey* (Change to be specific to the survey)**

A cross-sectional baseline survey was conducted on 2012-2013 to assess the nutritional status of children 6–24 months. The survey included questionnaires, anthropometry, and assessment of the condition of anemia, and status of iron, folic acid, vitamin A, vitamin B12, and zinc, providing baseline estimates for the IYCF/Baal Vita and the EU/MYCNSIA interventions. A follow-up cross-sectional survey is hence planned to be conducted 3 years later in the same clusters (with a new random selection of eligible children) in order to assess the impact of the intervention. Unless otherwise specified, the rest of this TOR relates only to the follow-up survey.

***Survey Design, Target Population, Data Collection and Sampling* (Change to be specific to the survey)**

*Survey Design*

The follow-up survey design is cross-sectional, population based, and representative of each of two districts (one hill and one terai) that participated in the baseline data collection and since that time have been exposed to the IYCF-MNP interventions. The evaluation districts are Kapilvastu in the Western region (terai) and Achham in the Far Western region (hills). Due to the large number of agencies and organizations implementing a variety of health intervention programs across Nepal, as well as limited district-level data that could be used for matching districts, it was determined that it would be extremely challenging to identify appropriate control districts. As a result, the decision was made to use internal controls within each evaluation district.

In analysis of the follow-up survey, in addition to pre-post comparison of changes in biological indicators and IYCF and ECD practices, children who did not receive or consume Baal Vita will be used as the control group for which to compare changes in biological indicators among children who did consume Baal Vita (both low users and high users). The internal control analysis might also be applied to the IYCF and ECD practices. This could potentially be carried out by considering Baal vita coverage and use as a proxy for exposure to the integrated intervention package and using the same stratification groupings (non-, low and high Baal Vita users), or by stratifying the population into those with reported IYCF or ECD counselling encounters and those without.

*Target Population:* Children 6–23 months of age.

*Data Collection*

Administered questionnaires with the mother or caretaker will collect information on the target child. Measures of recumbent length and weight, and a venous blood sample will also be collected from each target child.

*Biological Indicators Assessed*

Table 1 describes the biological indicators proposed to be collected in the impact evaluation follow-up survey. Most of the indicators will provide representative estimates of micronutrient deficiency for each of the selected districts. The exception includes the assessment of vitamin A liver reserves using the modified relative dose response (MRDR) which will not report a prevalence of vitamin A deficiency, but instead will report a change in liver stores from the baseline to the follow-up survey.

**Table 1. Impact evaluation for IYCF/BV & EU MYCNSIA project 6-23 months: Biological Indicators and Tests**

|  |  |  |
| --- | --- | --- |
| Nutrient or Condition | Test | Method |
| Anemia | Hemoglobin | HemoCue® |
| Iron status | Ferritin  Soluble transferrin receptor (sTfR) | ELISA\* |
| Vitamin A | Retinol binding protein  MRDR† & retinol (subsample) | ELISA\*  HPLC† |
| Folic acid | RBC folate | Folate Microbiological Assay |
| Vitamin B12 | Serum B12 | IMMULITE® 1000 (Chemiluminescence) |
| Zinc | Serum zinc | ICP-MS |
| Malaria | Differential diagnosis of *P. falciparum* and *P.vivax* species | Malaria rapid test |
| Anthropometry | Length and weight | Shorr board and electronic scales |
| Inflammation | C-reactive protein (CRP)  Alpha-1-acid glycoprotein (AGP) | ELISA\* |

\*ELISA includes indicators of iron, vitamin A, and inflammation: ferritin, soluble transferrin receptor (sTfR), retinol binding protein (RBP), C-reactive protein (CRP), and alpha 1-acid glycoprotein (AGP).

†MRDR, modified relative-dose-response test. This test requires consuming a small challenge dose of a retinol analog along with a fatty snack, and collecting a blood sample 4 to 6 hours later (Tanumihardjo, 2011).

*Sample Size Estimates*

The follow-up survey originally intended to use non-MNP users as internal controls and calculate sample sizes separately for Baal Vita non-users (control), low-users, or high- users. Because of the high coverage and adherence estimates from internal monitoring data after the first distribution in 2013, we assume this will not be possible for the follow-up survey and designed the follow-up survey based on expected change in prevalence from baseline to follow-up.

We used the results of the baseline survey data to estimate sample sizes for the follow-up survey in order to capture an approximate 10 percentage point (PP) public health significant difference for most biological indicators (total sample and among those without inflammation, where relevant) between the two surveys; this requires a total sample size of 2,662 children 6 to 23 months in the two districts (Achham 1,305 children; Kapilvastu 1,357 children).

For all estimates, the assumed design effect (DEFF) was 2, with the exception of anemia which was estimated as 3.2 based on the DEFF from the baseline survey results. The baseline household response rate was 97% and the individual response rate was 99% for the questionnaire. Venous blood samples were successfully collected in 86% of the total attempted sample and 89% among those interviewed. For the follow-up survey, we assume a household response rate of 95%, and individual response rate of 90%, for an overall response rate of 85.5%. Sample sizes were also increased for indicators influenced by inflammation by 43.5% based on the baseline survey results.

The sample size for MRDR is calculated to identify mean change in liver stores and a sample size of 50 for each district will allow for the detection of an effect size of 0.52 or greater. A random sample of 50 children surveyed in each district will be selected for MRDR analysis.

*Sampling*

The same 80 clusters are used in the baseline and follow-up survey as part of the evaluation design. In rural areas, clusters are often defined as wards and in urban areas clusters are often defined as sub-wards. In the first stage of sampling for this evaluation, a total of 40 clusters per district (strata) were selected using population proportion to size (PPS) which provided a total of 80 clusters selected overall. Due to the large number of target aged children to be selected per cluster (32 in Achham (hills) and 34 in Kapilvastu (terai) in the baseline and 33 in Achham and 34 in Kapilvastu for the follow-up), wards and sub-wards were combined before the first stage of sampling to ensure sufficient numbers of target aged children could be identified in each cluster.

In the second stage of sampling, a census is conducted in each of the selected clusters to identify all households with children 6–23 months. Simple random sampling will then be carried out to select 33 children per cluster in Accham district and 34 children per cluster in Kapilvastu district for the follow-up survey. In each cluster, the first eligible child 6-11 months, 12-17 months and 18-23 months selected (total of 3 children per cluster) will be invited to participate in the assessment of MRDR, which will result in a sample size of 120 children per district and 240 children total.

In each cluster, households of selected children will be visited and mothers/caregivers will be invited to participate in the survey; all data collection will occur in the household. As appropriate, community leaders, female community health volunteers (FCHVs), and other local health facility staff will help promote the survey and explain the importance of the survey to mothers. In-country partners will need to determine whether additional permissions or community mobilization are needed. If any clusters have less than the target number of eligible children (33 in Achham and 34 in Kapilvastu), then all eligible children will be approached for enrollment. There will be no replacement of children if less than the target number of children are available or if mothers/caregivers refuse to participate in the survey. There will be no replacement of clusters if community leaders refuse to participate in the survey or clusters are inaccessible due to natural disasters or unrest.

***Proposed Field Teams* (Update based on survey size and budget)**

*Field Teams*

A survey coordinator and a laboratory coordinator are required positions to manage field operations and the laboratory logistics. Laboratory logistics will include maintaining a cold chain (uninterrupted storage and transfer of biological samples at the correct temperature) and working with laboratories to ensure samples are processed each night. Additional field managers and logistics coordinators may also be needed.

Current estimates suggest there should be approximately 8 field teams for the data collection in order to carry out training, piloting and collecting the data within ~10 weeks (see Table 2). Each proposed team is made up of 7 members including a supervisor, interviewers (who will also do anthropometry measures), phlebotomists, a lab technician, and a driver. Lab technicians are required as a part of the field team because zinc is very sensitive to degradation and has to be analyzed in the field within one to two hours of sample collection.

|  |  |  |
| --- | --- | --- |
| **Table 2. Suggested Field Team Composition** | | |
| Team composition | 1 team | 8 teams (total) |
| Supervisor | 1 | 8 |
| Interviewers | 2 | 16 |
| Phlebotomists | 2 | 16 |
| Lab techs | 1 | 8 |
| Drivers | 1 | 8 |
| **Total people** | **7** | **56** |

1. **JUSTIFICATION: (Update based on survey justification)**

Based on outcome of the IYCF/MNPs pilot phase evaluation, the Government of Nepal has expanded this intervention in 9 additional districts. However, before taking this to scale there is a need to generate follow-up data for comparison with the baseline data to better understand the potential impact of the intervention in the Nepali context; the evaluation results will serve as inputs to policy decisions as well as for advocacy and resource mobilization to sustain this programme. Nutrition Officers in the Government and in UNICEF are too busy to afford sufficient time for an intensive complex evaluation survey which requires specific expertise and full time attention to collect, compile, review, and analyse the IYCF/MNPs follow-up survey data. The Nutrition Officers are also currently highly involved with the preparations for the national micronutrient survey, multi sector nutrition plan implementation at the district level and technical and coordination activities with the Child Health Division to implement other initiatives (1000 days campaign, IMAM, vitamin A supplementation, scale-up of MNPs integrated with IYCF, and IFA). To this end, a suitable local research institute is needed to organize, plan and undertake quality data collection, consolidation, analysis and reporting under close guidance support of UNICEF and in close collaboration with the key stakeholders including the MoHP and CDC.

**PCR/ IR Relevance:**

The PCR 1 states that “*The health and nutrition status of mothers, children and adolescents improved with focus on socially excluded and economically marginalized groups and equitable and participatory approach and implementation of high-impact cost effective proven interventions*” and IR 3 states that *“Families, especially the disadvantaged groups, practice essential maternal, New Born, Infant and Young Child nutrition care, feeding and early stimulation, hygiene and sanitation, with active involvement of male, family and community members in focused districts*.” UNICEF has been providing technical and coordination support to effectively promote optimal IYCF practices during the previous country programme and this has been a key area of focus as well in the CPAP (2013-2017). Though exclusive breastfeeding rate has improved as a result and now stands at 70%, there is still more work to be done to enhance complementary feeding. Nepal’s on-going efforts to scale up IYCF/MNPs needs to be well documented for future course of action to accelerate progress in this particular area of intervention which is lagging behind. This will also provide guidance to identify key action in order to move forward to improve optimal IYCF practices as per WHO/UNICEF recommendations.

1. **GOAL/ OBJECTIVE: (Update based on survey)**

The basic purpose of the Institutional Contract is to organize, plan and undertake a follow-up survey as per the proposed methodology highlighted in this TOR and full follow-up survey protocol, in line with the latest global nutrition survey quality standards and guidelines, and draws from other country findings on efficacy and effectiveness of IYCF/MNPs.

The objective of Institutional Contract under the SSA is as follows:

Under the guidance of the Chief of Nutrition Section and Nutrition Specialist, and in close collaboration with the Child Health Division of the MoHP and key stakeholders:

1. To develop a detailed operational and logistics plan, questionnaires, data collection instruments and formats, and guideline/training materials for field workers to collect IYCF/MNPs follow-up data as per the proposed methodology.
2. To recruit and train field workers to collect the necessary data with a robust and strong supervision and quality assurance mechanism.
3. To develop a detailed plan of analysis and report outline through a consultative process involving the key stakeholders.
4. To ensure that data collection procedures, including logistical handling and transportation of biological samples are in line with global recommendations, and standards.
5. To undertake data consolidation, review, cleaning, analysis in line with the plan of analysis and report outline, meeting global scientific study and reporting standards.
6. **EXPECTED OUTPUTS (DELIVERABLES) AND ACTIVITIES** **(Update based on survey)**

**Expected Output 1**:Based on a careful review of the survey TOR, operational and logistical plan, questionnaires, supervisors’ and fieldworkers’ guidelines and training materials are completed ***by March 2015.***

**Deliverable 1:** Detailed operational plan document, including timelines, roles and responsibilities to recruit, train, and undertake data collection, entry and analysis with monitoring and supervision mechanisms in place to assure quality data collection and management for the follow-up impact evaluation survey in Achham and Kapilvastu districts, supervisors’ and fieldworkers’ guidelines and training materials.

**Expected Output 2:** Supervisors and field workers that will undertake follow-up impact evaluation survey in Achham and Kapilvastu districts are recruited, trained, and research instruments are pre-tested and finalized ***by the end of July 2015.***

**Deliverable 2:** Trained field workers and supervisors in close consultation with CDC as per the details in the TOR are available to undertake the follow-up survey, and required quantity of pre-tested and finalized questionnaires and research instruments are available.

**Expected Output 3:** Quality follow-up impact evaluation survey in Achham and Kapilvastu districts is conducted in ***December 2015-February 2016.***

**Deliverable 3:** High standard quality follow-up impact evaluation survey data in Achham and Kapilvastu districts is collected and available (assure data is reliable and valid).

**Expected Output 4:** Collected Samples are maintained for the cold-chain during transportation form survey sites to National Public Health Laboratories and then send to the respective laboratories for analysis by March 2016, or within three weeks of the completion of all data collection, recognizing that **international laboratories that need additional approvals to receive specimens (e.g., China) may delay shipment.**

**Deliverable 4: All collected samples are** maintained for the cold-chain during transportation from survey districts and storage (National Public Health Laboratories) and timely sent to the CDC accredited laboratories for analysis **by March 2016**.

**Expected Output 5:** Quality data cleaning, analysis and reporting are completed in close consultation with CDC and are in line with global scientific standards; the main findings are presented and report finalized incorporating inputs from the key stakeholder ***by June 2016.*** The report needs to follow standard scientific reporting format, professionally written and succinct (no more than 20 pages per district specific report – plus consolidated comparative analysis, should not be more than 40 pages)

**Deliverable 5:** High standard quality follow-up impact evaluation survey final report for Achham and Kapilvastu districts completed ***by June 2016***.

The **specific activities** for the contractor are as follows to achieve the expected outputs.

* Based on the standard TOR and protocol available from UNICEF, develop a detailed operational and logistical plan, as well as draft questionnaires and research instruments, supervisors’ and fieldworkers’ guidelines and training materials, to undertake the follow-up impact evaluation survey in Achham and Kapilvastu districts.
* Recruit and train enumerators to complete the census and identify children 6-23 months; identifythe randomly selected children and collect biological specimens following the standard survey protocol and collect other data using the guideline and questionnaires/research instrument for the follow-up impact evaluation survey in Achham and Kapilvastu districts.
* Pre-test and finalize questionnaires, research instruments and guidelines for use during the field survey.
* Update maps of the 80 clusters already selected (40 in each district) from the baseline survey.
* Conduct a census in each of the selected clusters to identify all households with children 6–23 months. Apply simple random sampling method to select 33 children per cluster in Achham district and 34 children per cluster in Kapilvastu district in each cluster. If any clusters have less than the target number of eligible children (33 in Achham and 34 in Kapilvastu), then all eligible children will be approached for enrollment. There will be no replacement of children if less than the target number of children are available or if mothers/caregivers refuse to participate in the survey. There will be no replacement of clusters if community leaders refuse to participate in the survey or clusters are inaccessible due to natural disasters or unrest. There is no way to account for the bias due to refusals or inaccessibility; the sample size calculations are increased for refusals and inaccessibility.
* Coordinate and supervise the survey team including the biochemical team (staff nurse, lab technicians etc) to draw blood samples, transport this to nearest health facility or other appropriate specified locations for further processing/storage.
* Undertake regular field spot check monitoring and validation of the collected data to ensure quality of data during the survey.
* Use Global Positioning System (GPS) during the survey to collect altitude, longitude and latitude coordinates at each selected household, in addition to the FCHV’s house(s) in each cluster and the nearest health facility to each cluster. .
* Clean, compile, analyze and interpret the findings, and prepare and finalize the survey report in close coordination with the CDC, UNICEF and other partners.
* NOTE: **The blood sample analysis will be separately done by CDC, so no need to include the costs and task.**

# SurvEY ORGANISATION’s SKILLS AND pERSONNEL (Update based on survey)

The survey contractor will be competitively tendered but it is expected that the survey contractor have the following skills and competencies:

* In depth knowledge and skills in designing and development of complex, population based surveys involving the collection of venous blood specimens in households, nutrition survey methodologies, quality data collection and management, analysis, interpretation of the main findings and survey report writing;
* Evidence of previous work and performance on nutrition assessment, survey organization and reporting, Proven evidence and record of nutrition assessment and survey
* Extensive knowledge on IYCF/micronutrient nutrition survey (MNS)/early childhood development (ECD) nutrition survey methodology
* Professional experience on IYCF,MNS, ECD surveys is highly desirable
* Demonstrated ability to develop and maintain effective work relationships with counterparts and external partners;
* Cost effectiveness in data collection and analysis skills;
* Strong quantitative data collection and analysis skills;
* Ability to do advance statistical analysis and reporting.
* Survey team with enough human resources to complete survey on the given deadline.
* A team of experts consisting of at least following key experts – a team leader/nutrition researcher, survey supervisor, laboratory coordinator, enumerators and a data analyst/statistician.
* Able to work in an international environment and multicultural environment.
* Knowledge of standard operation procedure in the UNICEF
* Good analyzing, negotiating, communication and advocacy skills
* Good documentation and report writing skills.

# TIMING OF SurveY (Update based on survey)

It is expected that the field implementation of the survey will be finished in 2 months. More detailed timelines for key milestones will be developed once the contract is awarded but an indicative timeline is given below:

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Milestones** | **2015** | | | | | | | **2016** | | | | |
| **Feb** | **Mar** | **July** | **Sept** | **Oct** | **Nov** | **Dec** | **Jan** | **Mar** | **May** | **June** | **July** |
| Selection of national survey organization and train enumerator | KTM |  |  |  |  |  |  |  |  |  |  |  |
| operational and logistical plan, questionnaires, supervisors’ and fieldworkers’ guidelines and training materials are completed |  | KTM |  |  |  |  |  |  |  |  |  |  |
| Train supervisors and enumerators for the survey |  |  | KTM |  |  |  |  |  |  |  |  |  |
| Pre-testing |  |  |  | Districts |  |  |  |  |  |  |  |  |
| Field implementation of survey |  |  |  |  |  |  | Districts | Districts | Districts |  |  |  |
| Survey data entry and analysis |  |  |  |  |  |  |  |  |  |  |  |  |
| Sending Samples for Laboratory Analysis |  |  |  |  |  |  |  | Couriers |  |  |  |  |
| Lab Reports available (UNICEF/CDC) |  |  |  |  |  |  |  |  | Labs |  |  |  |
| Quality data cleaning, analysis and Survey report preparation |  |  |  |  |  |  |  |  |  | KTM |  |  |
| Final Report Submission |  |  |  |  |  |  |  |  |  |  | KTM |  |
| Dissemination and feedback |  |  |  |  |  |  |  |  |  |  |  | KTM |

# SuRVEY BUDGET (Update based on survey)

The survey will be funded by UNICEF Country Office Kathmandu. Program Component Result- 1 and PCR 3, Intermediate Result- 3, from the upcoming USAID funds and the EU funds expected in 2015

**Total Project budget $ Enter Amount Here**

**Donor(s)/ funding sources Enter Here**

**Duration of contract XX years**

**Starting date Enter Date**

**Implementing agency and partners** **Enter Here**

1. **Working Condition**

The Selected Research Institute will under the guidance and support of (**Enter Parties Here**), and in close coordination with (**Enter Parties Here**).

1. **Endorsement of Terms of Reference**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Function | Name | Signature | Date | Comment |
| Section Chief (OIC) |  |  |  |  |
| Supply Specialist |  |  |  |  |
| Deputy Representative |  |  |  |  |

**ANNEX:**

The baseline data collection took place between **DATE** and **DATE**. It is expected a similar time frame will be needed for the follow-up survey due to similar sample sizes and methods. However, it may require less time if more field teams are involved and /or the teams have greater efficiency based on lessons learned from the baseline survey.

Assumptions:

* The cluster maps are available from the baseline and only require updating and not completely developing again.
* The training, piloting and data collection timeline estimates below do not account for conducting a census to identify all households with eligible children in each of the clusters. The census should be carried out a few days or weeks prior to the survey data collection and can potentially be implemented by survey field team members when they arrive in the cluster, or by different staff who are working ahead of the field teams, depending on the preferences of the contractor.
* Community leaders, health facility staff, and FCHVs will help provide community mobilization, as appropriate, to support acceptance of the survey data collection, identifying households of selected children, and response rates
* Two weeks of training and piloting will be conducted with all survey staff
* Every week:
  + Teams work 6 days a week and have one day off
  + One day total to account for travel between clusters in the district
  + Four to five days a week collecting data from participants
* Two teams are expected to collect data from all participants in one cluster in one day, so that the 8 teams are expected to complete 4 clusters per day
* Each pair of teams will collect data from ~4-5 clusters each week
* Field work should take 4-5 weeks (**not including census**)
* Budget an additional week for mop up and unexpected delays
* Total time line from start of training to end of data collection ~8 weeks (**not including census**)

**References**

1. Ministry of Health and Population (MOHP) [Nepal], New ERA, and Macro International Inc. 2007. Nepal Demographic and Health Survey 2006. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and Macro International Inc.
2. Ministry of Health and Population (MOHP) [Nepal], New ERA, Macro International Inc., and the USAID 2011. Nepal Demographic and Health Survey Preliminary Report 2011. Kathmandu, Nepal: Ministry of Health and Population, New ERA, and Macro International Inc.
3. Department of Health Services, Ministry of Health and Population, Government of Nepal. Tracking Progress on Child and Maternal Nutrition in Nepal: A survival and development priority. Kathmandu, Nepal: Ministry of Health and Population, 2010.
4. Department of Health Services, Ministry of Health and Population. National Nutrition Policy and Strategy. Kathmandu, Nepal: Ministry of Health and Population, 2008.
5. Department of Health Services, Ministry of Health and Population. Annual Report: Department of Health Services 2009/2010. Kathmandu, Nepal: Ministry of Health and Population, 2010.
6. Codling, K. 2011. Accelerating Progress in Reducing Maternal and Child Undernutrition in Nepal: A review of global evidence of essential nutrition interventions for the Nepal Health Sector Plan II and Multi-Sectoral Plan for Nutrition, The World Bank.
7. National Planning Commission. 2011. Nepal Multi-sectoral Nutrition Plan for Accelerating the Reduction of Maternal and Child Under-Nutrition in Nepal. Preliminary Draft.
8. WHO. Guideline: Use of multiple micronutrient powders for home fortification of foods consumed by infants and children 6–23 months of age. Geneva, World Health Organization, 2011.