



# **ProPAN Assessment of Infant and Young Child Feeding Practices in IDP Camps in Kachin State**

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Plan Myanmar



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## LIST OF ACRONYMS

FAO	Food and Agriculture Organization of the United Nations
GCA	Government Controlled Area
IDP	Internally Displaced Persons
IYCF	Infant and Young Child Feeding
KIA	Kachin Independence Army
KMSS	Karuna Myanmar Social Services
MAM	Moderate Acute Malnutrition
MMK	Myanmar Kyat
MUAC	Mid-upper Arm Circumference
NGCA	Non-Government Controlled Area
NGO	Non-Governmental Organization
PAHO	Pan American Health Organization
ProPAN	Process for the Promotion of Child Feeding
SAM	Severe Acute Malnutrition
SMART	Standardized Monitoring and Assessment of Relief and Transitions
UNICEF	United Nations Children's Fund
WHO	World Health Organization

## EXECUTIVE SUMMARY

Currently, there is limited information about nutrition status, practices, and beliefs in internally displaced persons (IDP) camps in Kachin State, Myanmar. In order to address this gap in knowledge and inform nutrition program activities, Plan Myanmar used the ProPAN (Process for the Promotion of Child Feeding) tool to conduct a comprehensive assessment of infant and young child feeding (IYCF) practices in Kachin State, Myanmar.

The primary objectives of the ProPAN assessment were to:

- Generate reliable, actionable data and rich contextual information about child nutrition and child feeding practices in the local population so that an appropriate and effective nutrition intervention can be designed.
- Build local capacity (IDP case managers and community facilitators, local partner organization staff, Plan Myanmar staff) through the training and assessment process.

Ten data collectors (five case managers and five community facilitators) were selected from five IDP communities and trained in seven quantitative and qualitative data collection tools. An exhaustive assessment of all children under five years of age and their caregivers was carried out over six days, reaching a total of 251 children and 167 caregivers.

Acute Malnutrition rates were found to be low in the five camps surveyed (GAM 3%, SAM 0.5%), but the stunting rate is high at 32%. Causes for the high rate of chronic malnutrition include low rates of exclusive breastfeeding for children under 6 months of age (54%, 14/26), low rates of continued breastfeeding for children through the age of 2 years (21%, 3/14), and less than 100% coverage for other ideal IYCF practices. Factors that influence these behaviors include limited communications with healthcare professionals, breastfeeding difficulties, lack of resources to purchase or produce nutritious foods, and cultural beliefs around nutrition during and after pregnancy.

IYCF interventions should focus on addressing gaps in knowledge about best feeding practices, providing special support to women having difficulties breastfeeding, and counseling caregivers on sources of nutrients that are not commonly consumed. Program activities should be mindful of local beliefs and avoid recommending sour, bitter, and spicy foods for children. Finally, program activities and future trainings should build upon the existing IYCF knowledge and data collection skills of case managers and community volunteers to better serve the IDP community.

## INTRODUCTION

Since 2011, the ongoing conflict has displaced more than 100,000 people from their homes in Kachin State and Northern Shan State<sup>1</sup>. Displacement due to conflict often results in negative health effects, including undernutrition, infectious diseases, and food insecurity, with women and children bearing the largest share of the burden<sup>2</sup>. The first two years of life is especially critical to a child's health and development, and inadequate nutrition and stimulation during this period can lead to negative impacts on cognition, educational attainment, and health outcomes later in life<sup>3</sup>. Stunting is a key risk factor leading to inequalities in child development, while exclusive breastfeeding, continued breastfeeding, and maternal education can be protective factors for child development<sup>3</sup>.

Currently, information on nutrition status, practices, and beliefs in Myanmar is incomplete, especially at the state and township levels and in conflict settings. Nationally, only 23.6% of children under 6 months are exclusively breastfed and the stunting rate is high (35.1%), indicating chronic and protein energy malnutrition<sup>4</sup>. These figures are likely to be higher in IDP camps, where livelihoods are disrupted and access to resources may be limited. The stunting figures are confirmed by the 2012 assessment of three townships in Kachin State conducted by the National Nutrition Center and the Department of Health. This assessment found low levels of malnutrition (MAM 1%, SAM 0.7%) but high levels of stunting (39%)<sup>4</sup>. Plan International's SMART survey conducted in 10 townships in Kachin State at the end of 2013 yielded the prevalence of stunting to be 44.5%, which is above the WHO emergency standard of 40%<sup>5</sup>. The survey also revealed misconceptions regarding immediate initiation of breastfeeding after birth and less than optimal practices for exclusive breastfeeding, initiation of complementary feeding, continued breastfeeding, and minimum dietary diversity, indicating a need for a comprehensive infant and young child feeding (IYCF) intervention<sup>5</sup>.

As part of start-up activities for a community-based nutrition, gender based violence, and child protection program in five internally displaced people (IDP) camps in Kachin, Plan Myanmar used the ProPAN (Process for the Promotion of Child Feeding) tool to build capacity, collect data about IYCF practices, and design interventions to improve nutrition outcomes for children under 5 years of age.

## METHODS

ProPAN is a free tool developed by the Pan American Health Organization (PAHO) and UNICEF for ministries of health and non-governmental organization (NGOs) to improve IYCF practices according to WHO and UNICEF ideal practices and growth standards. It is a comprehensive selection of assessment tools, including step-by-step guides on how to conduct the assessment from start to finish, guidance for each individual data collection activity, and EpiInfo software programmed to analyze the results. As a package, these quantitative and qualitative components are designed to identify nutrition problems among children under two years of age and pregnant or lactating women, the causes of these problems, and recommendations for programmatic interventions to improve child nutrition.

The ProPAN assessment was chosen as a comprehensive formative research and assessment tool that will yield valuable information about the local context and nutrition status that will guide program start-up in Kachin State. In addition to informing project design, the assessment also served as the baseline data collection for the project.

The primary objectives of the ProPAN assessment were to:

- Generate reliable, actionable data and rich contextual information about child nutrition and child feeding practices in the local population so that an appropriate and effective nutrition intervention can be designed.
- Build local capacity (IDP case managers and community facilitators, local partner organization staff, Plan Myanmar staff) through the training and assessment process.

### ***Assessment Preparation and Adaptation of Materials***

The assessment was conducted in five IDP areas camps one located in a non-government controlled area (NGCA) and the other four were located in government controlled areas (GCA).

One team consisting of two enumerators (one case manager and one nutrition community facilitator) were chosen by KMSS from each of the five program areas based on their involvement in the local community and motivation. Education levels for enumerators ranged from middle school completion to university degree completion. KMSS also provided two officers to assist two Plan officers in overseeing the data collection process.

Several adjustments were made to the ProPAN protocol in order to adapt the tool to the local program context. First, ProPAN guidelines recommend conducting the assessment (training preparation, training, and data collection) over a period of 9 weeks, but due to programmatic and funding limitations, this strategy was not feasible. The training and assessment was shortened from six weeks to three weeks in order to accommodate the terms of the grant (six months). Additionally, training for all data collection methods took place during the two week training rather than being interspersed with data collection since it would have been costly and time consuming to gather the enumerators in Myitkyina more regularly.

From the menu of ProPAN data collection tools, initially the main three—caregiver survey, 24-hour recall, and market survey—were selected. Three more tools—anthropometric measurements, focus group discussions, and opportunistic observations—were added based on the type of information gathered (quantitative or qualitative, actual practices vs. norms and beliefs) in order to round out the data collection. The key foods list, semi-structured interviews, and the food attributes exercise were excluded from the study after the data collection tools were prioritized.

Anthropometry was assessed using SMART methodology rather than ProPAN guidelines since Plan staff were already familiar with SMART. Due to the complexity of the 24-hour recall form, limited enumerator capacity, and limited training time, it was replaced with FAO's individual dietary diversity form for mothers as a proxy indicator for the dietary diversity of children under 2. Since the ProPAN tool does not include focus group discussion guides in the assessment phase, the guide for this activity was adapted from the Guidance for Formative Research on Maternal Nutrition created by the Manoff Group for USAID's Infant and Young Child Nutrition Project. Finally, a demographic assessment form was created to link mothers and children and to track eligibility to participate in data collection activities.

The final seven data collection tools used (Appendices 3-9):

1. Demographic Assessment
2. Anthropometric Measurements
3. Caregiver Survey
4. Dietary Diversity
5. Focus Group Discussions
6. Market Survey
7. Opportunistic Observations

Table 1 and Appendix 2 detail the target populations and objectives of each data collection tool.

All forms were translated from English to Myanmar by Plan national staff with initial adaptation to the Myanmar context. During the training, the forms were further adapted to the Kachin IDP context based on feedback from case managers and community facilitators and tested in a camp not covered by the assessment. Whenever possible, forms were simplified to help facilitate mastery by the data collectors within the limited training period. For example, the dietary diversity and market survey forms were synchronized so they contained the same eight recommended food groups and list of food items. Additionally, focus group discussions were simplified to only include handwritten notes in Myanmar when enumerators expressed that participants would be apprehensive of recordings and that would require two rounds of translation from the local dialect into English. After all adaptations were complete, the English forms were synchronized with the final Myanmar versions.

### ***Training and Data Collection***

The ProPAN assessment training was led by two Plan facilitators and took place over 10 days, from 18 November 2014 until 28 November 2014 in Myitkyina (Appendix 1). Trainings for each data collection method were conducted in Myanmar and consisted of both theoretical and practical components. Three practice sessions took place in a camp in Myitkyina to allow enumerators to practice in a camp setting and conduct field testing.

Data collection took place over a period of 6 days, from 1 December 2014 until 6 December 2014. Case managers and community facilitators worked together with camp committees to conduct an exhaustive survey of all children under 23 months of age and their mothers/caregivers. The demographic assessment, anthropometric measurements, and focus group discussions were held in common spaces in the camps while the caregiver survey, dietary diversity, and opportunistic observations were conducted individually by household based on eligibility determined during the demographic assessment. Enumerators were instructed to return two times if the caregiver was not available during their first home visit.

Due to the tense security situation, three camps had to be monitored remotely by Plan officers in Myitkyina while the other two had KMSS officers present. At the conclusion of data collection, enumerators returned to Myitkyina and participated in a focus group discussion facilitated by a Plan staff member where they were able to give feedback on the data collection experience and offer further tips for adapting the ProPAN process to the local context (Appendix 10). At this time, Plan officers also conducted a desk review of the data collected and clarified any problematic forms with the enumerators. After the desk review was complete, there were very few missing or incomplete questions from the camps and the data was of good quality for conducting analyses.



**Table 1: Target populations and objectives of each data collection tool**

<b>Data Collection Tool</b>	<b>Target Population</b>	<b>Objective(s)</b>
1. Demographic Assessment	All children 0-59 months & their mothers/caregivers	1) Identify and locate children 6-59 months, children 0-23 months, and mothers/caregivers for participation in further assessment
2. Anthropometric Measurements	All children 6-59 months	1) Identify current rates of undernutrition in children under 5 in project sites
3. Caregiver Survey	All mothers/caregivers of children 0-23 months	1) Identify current breastfeeding and complementary feeding practices 2) Determine the adequacy of current caregiver practices by comparing them with ideal practices outlined in ProPAN guide 3) Compare current practices with international indicators for assessing infant and young child feeding practices 4) Collect information that will increase understanding of the context in which current breastfeeding and complementary feeding practices occur
4. Dietary Diversity	All mothers/caregivers of children 0-23 months	1) Assess dietary diversity of mothers as a proxy for dietary diversity of children under 2 2) Identify key foods consumed by mothers and gaps in nutrition
5. Focus Group Discussions	5-10 Pregnant/lactating women per camp	1) Understand norms and pregnant women's perceptions about food, their health, feeding practices, and the health of their baby 2) Identify facilitators and barriers to ideal feeding practices; provide cultural and behavioral context for quantitative components of the assessment 3) Gather recommendations for how to improve diets and feeding practices for mothers and children
6. Market Survey	All markets/grocery stores where families source their food	1) Identify the locally available foods that provide the greatest amount of energy and nutrients for the least cost (nutrient/cost ratio) 2) Determine the seasonality and availability of specific foods
7. Opportunistic Observations	5 children 0-23 months and their mothers/caregivers per camp	1) Identify the context of feeding behaviors and observe the interaction between the caregiver and child during the child's mealtime 2) Assess the caregiver's feeding style and identify facilitators of and barriers to the ideal practice of responsive feeding 3) Observe other aspects of food preparation and feeding (e.g., hygiene and the use of bottles, spoons, and other utensils)

Quality and suitability of the training and assessment were monitored through a daily feedback form (Appendix 11), a final training evaluation form (Appendix 12), and various training practice sessions where enumerators applied the concepts they had learned. In addition to feedback from the data collectors, Plan staff gathered at the end of each day to discuss successes, challenges, and adjustments for the remainder of the training schedule. There were also attempts to solicit daily feedback during data collection, though this was not possible due to limited telecommunications in Kachin. Enumerators were given a checklist to help them review the data they collected in the absence of supervisors in the field. This was the same checklist that the supervisors used to review the data upon the enumerators' return to Myitkyina (Appendix 14).

Plan staff members conducted data entry and analysis in Yangon. Microsoft Excel was used for the demographic assessment, caregiver survey, dietary diversity, market survey, and opportunistic observations. ENA software was used to analyze anthropometric measurements according to SMART methodology. ProPAN software in EpiInfo was used to conduct additional analyses on the caregiver survey. Finally, Microsoft Word was used to analyze the notes from the focus group discussions.

## RESULTS

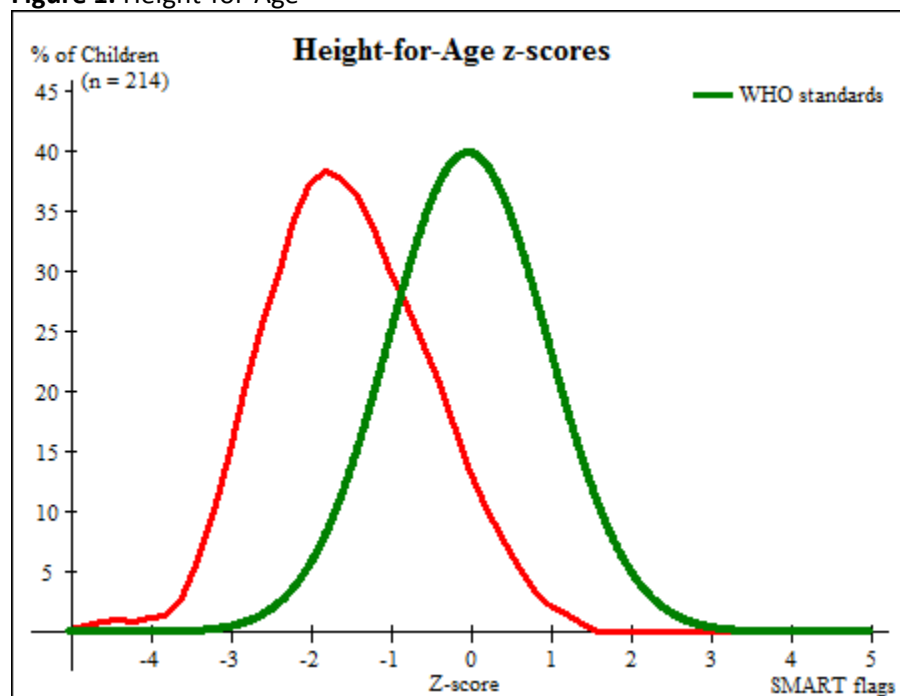
A total of 167 mothers/caregivers and 251 children across five IDP camp areas were captured in the various components of the assessment. Individual results are presented below and in Appendices 15 to 21. The study was exhaustive, so while the data presented in the results section is representative of the five camps of interest, the results cannot be generalized to include populations outside the five camps. However, there are likely to be similarities between the population surveyed and other IDP populations in Kachin State.

### ***Anthropometric Measurements***

Anthropometric measurements were conducted on 220 children (116 boys and 104 girls) between 6-59 months to assess nutrition status. Six children were flagged by the SMART software because their z-scores were out of range ( $\pm 3$  SD). There is low evidence of acute malnutrition according to global weight-for-height standards (GAM 3.2%, SAM 0.5%). The MUAC measurements and absence of oedema confirm the low prevalence of GAM (0.9%) and SAM (0.9%). Prevalence of underweight is also low, with 10.0% of children considered underweight and 1.4% of children qualifying as severely underweight. However, prevalence of stunting was found to be high, with 32.2% of children stunted (27.6% moderately stunted and 4.7% severely stunted). Though these rates are below the emergency threshold of 40%, they are still considered high by WHO standards and indicate chronic malnutrition in about one third of children under 5 in the IDP camps surveyed.

Age and weight measurements were of high quality according to plausibility checks. However, there was significant digit preference (rounding to ".0") in the height measurements, which may have impacted weight-for-height and height-for-age results. Given the quality of the age and weight measurements, and similar prevalence figures found from previous assessments in Kachin State, it is unlikely that wasting and stunting figures deviate much from the values found in the assessment.

**Figure 1. Height-for-Age**



### ***Caregiver Survey***

95 caregivers of children 0-23 months were surveyed to learn more about current reported IYCF practices, access to resources, and sources of information. The average household size was 6.4 (range 3-12) with 1.8 children under the age of 5. Children of the caregivers ranged in age from 0-23 months with a mean age of 11.3 months. Half (47/95) of the children whose caregivers were questioned were boys and half (48/95) were girls. Caregivers themselves averaged 29.8 years of age.

### ***Prenatal care & delivery***

All respondents able to recall number of prenatal visits reported visiting a healthcare center at least once, but 45% (38/85) of respondents received less than the WHO recommended 4 antenatal care visits. For the 55% (47/85) who did receive a minimum of 4 antenatal care visits, we do not know the nature or quality of the care mothers received. Forty-five percent (43/95) of respondents reported delivering in the home (either respondent's home or midwife's home) and 32% (30/95) delivered in a public hospital or clinic. This topic may be further explored in future studies to better assess quality of prenatal care.

### ***Breastfeeding***

Almost all caregivers (97%, 92/95) reported ever breastfeeding their children. Of mothers who breastfed their children, 72% (66/92) followed best practices of breastfeeding within one hour after birth and 94% (86/92) fed colostrum to their child. Eighty five percent of caregivers (78/92) did not feed anything other than breast milk to their children during the first three days of life. Infants given something other than breast milk were fed Dumex, water, infant formula, or other non-breastmilk milks. Roughly half the mothers/caregivers (55%, 51/92) were given support or advice regarding breastfeeding in the first three days after birth. The focus group discussions reveal additional insights about the content of the advice new mothers receive regarding breastfeeding.

All but one of the caregivers (99%, 72/73) who breastfed their children the previous day reported breastfeeding on demand, and only one child drank breast milk from a cup or bottle. However, much fewer women practice exclusive breastfeeding through 6 months of age (54%, 14/26) or continued breastfeeding through 2 years of age (21%, 3/14). The introduction of something other than breast milk before 6 months occurred most at 3 months and entailed the giving of sugar water or infant formula.

### ***Complementary Feeding***

On average, children were fed their first semi-solid food at age 6.2 months, with 79% of caregivers (46/58) reporting introducing complementary foods when the child was between 6 and 8.9 months. Fifty-seven percent of caregivers (33/58) introduced complementary foods at 6 months, 12% (7/58) introduced complementary foods at 7 months, and 10% (6/58) introduced complementary foods at 8 months. Mothers were the primary decision makers in the family when it came to child feeding, with 93% (68/73) of respondents reporting that mothers decide which semisolid foods the child eats. Children generally exhibit good appetites, with 86% (63/73) of children eating well or according to the opinion of the respondents, too much when they are healthy.

Thirteen percent (11/83) of respondents reported children drinking from a bottle with a nipple the previous day, even though best practices discourage any bottle feeding. Of children who ate solid or semi-solid foods, 87% (62/71) of caregivers reported feeding solid or semi-solid foods to the child yesterday. Most caregivers of children who ate solid or semi-solid foods (84%, 52/62) thought the child ate all the food they should have at the main meal the previous day.

Eighty-two percent of caregivers (51/62) had to employ tactics to encourage their child to eat. The most common tactics were verbal encouragement (45%, 23/51), modeling eating with or without toy (29%, 15/51), and offering another food or liquid (27%, 14/51). Only one respondent reported using negative tactics such as ordering or forcing the child to eat. The majority of caregivers (91%, 57/63) talked to the child while feeding them during the main meal yesterday. Most commonly, they praised the child (75%, 43/57), but in a few instances, they rewarded the child (9%, 5/57), told the child that she liked the food (7%, 4/57), or talked about the food (7%, 4/57). Only 38% of children (24/63) fed themselves at any point during the main meal yesterday. Forty-six percent (11/24) of children who self-fed were able to do it about half the duration of the meal, and 33% (8/24) were able to do it for the full duration of the meal. Taking all these behaviors into consideration, overall, 72% (50/69) of caregivers exhibited ideal responsive feeding behaviors.

### ***Feeding During and After Illness***

Only 3% (2/69) of caregivers fed their children as recommended during and after illness. When children are sick, caregivers give them less food and breast milk than when they are healthy because the children have decreased appetite. Fifty-three percent (38/72) of caregivers reported giving the child less breast milk; 48% (30/62) reported offering sick children smaller amounts of non-breast milk liquids; and 83% (57/69) offered less foods to the child because the child did not want it. When children recover, their consumption returns to normal or is increased—90% (62/69) of caregivers offer the child the same amount of food or more compared to when they are healthy.

### ***Services***

Almost half of caregivers (46%, 44/95) reported taking their child to a hospital or public clinic within the past three months. However, one third (35%, 33/95) responded that they have not taken their child to any health services in the past three months. Very little growth monitoring is conducted for IDP children. When asked whether or not the child was measured for weight, length, or MUAC over the past three

months, 40% (25/62) of respondents who had taken their children to health services replied that their children were measured for weight, 27% (17/62) had been measured for MUAC, and 6% (4/62) had been measured for length. This suggests that the current health system and health-seeking behaviors may be more reactive than proactive in providing healthcare for children, and are more focused towards underweight than stunting.

The most common assistance received by children during the past three months was general food rations, received by 52% (49/94) of respondents, followed by supplementary food such as Corn Soya Blend (39%, 37/94), lipid nutrient supplements such as Nutributter or Plumpydoz (38%, 36/94), multi-vitamin and mineral supplements such as Sprinkles (32%, 30/94), cash assistance to help purchase food (27%, 25/94), iron supplement or syrup (20%, 19/94), and food vouchers (14%, 13/94). Fifty-seven percent (54/94) of respondents reported their child taking a Vitamin A capsule, supplement, or syrup in the past 6 months.

### ***Communications***

There is a lack of consistent child feeding communications in the camps, with roughly one third (36%, 34/95) of respondents reporting hearing or receiving messages on child feeding in the past three months and more than half (59%, 56/95) receiving no child feeding messages. Most commonly, messages come from the health facility (74%, 25/34), neighbors/friends (29%, 10/34), or family members (24%, 8/34) and messages are centered around how often to feed the child, what foods to feed the child, and hand washing before eating. Most caregivers (80%, 76/95) rarely listen to the radio, and 61% (58/95) ever watch television (though frequency is unknown). A minority of caregivers (17%, 16/95) participate in community organizations or social programs such as women's organizations, Red Cross, church groups, and others.

### ***Family***

The majority of caregivers (94%, 89/95) are married or have partners. Eighty-two percent (78/95) of mothers and caregivers were able to read a complete sentence in Myanmar or in their native dialect, and about half (56%, 53/95) completed middle school or higher. Mothers are the primary decision makers in the family when it comes to purchasing food or seeking health services for the child, with 73% (69/95) replying that mothers/caregivers are the main decision makers and 23% (22/95) responding that mothers and fathers make decisions together.

There are few regular livelihood opportunities in the camps—18% (17/95) of respondents participated in paid work in the past week. For the few that had done paid work, selling items as a vendor was the most common response (41%, 7/17). Other types of work include agricultural work, government service, social work, and jade mining. Foods grown by the family are most commonly green leafy vegetables (40%, 38/95) and orange or yellow fruits and vegetables (15%, 14/95). However, roughly one third of families (36%, 34/95) did not grow any food at all. Thirty-two percent (30/95) of respondents reported owning cows, goats, sheep, pigs, or other large mammals for their meat and 60% (57/95) do not own any animals or livestock.

### ***Housing***

Overall, 97% of respondents (92/95) had access to protected water sources. The most common sources of drinking water for households were protected springs (37%, 35/95), protected wells (27%, 26/95), or water piped into the compound (24%, 23/95). It takes an average of 9 minutes for respondents to get water and return (for 67% of respondents, fetching water takes 5 minutes or less, but a few residents live 30 or even 60 minutes away from a clean water source). The majority of respondents (86%, 82/95)

treat the water to make it safer to drink. Methods used include boiling (83%, 68/82) and straining through a cloth (48%, 39/82). Seventy-one percent (67/95) of respondents use ventilated improved pit latrines and 25% (24/95) use flush to pit latrines. One respondent reported practicing open defecation. The most common cooking fuel used in households is wood (82%, 78/95), followed by charcoal (17%, 16/95). Only half of respondents (56%, 53/95) reported having electricity in their household. Thirty-one percent (29/95) of respondents have a radio, 24% (23/95) have a television, and 28% (27/95) have a landline or mobile phone.

### ***HIV/AIDS***

Almost all respondents (94%, 89/95) had ever heard of AIDS; however, fewer mothers and caregivers were aware of the causes of transmission and prevention. Seventy-four percent (66/89) of respondents said AIDS can be transmitted during pregnancy, 65% (58/89) said it can be transmitted during delivery, and 75% (67/89) said it can be transmitted by breastfeeding. Seventy-four percent (65/88) of respondents know there are special drugs available to prevent transmission of AIDS from an infected mother to her child and 39% (34/88) learned about ways to prevent transmission of AIDS during breastfeeding. As with child feeding information, the most common sources of information about preventing transmission of AIDS during breastfeeding were health personnel such as doctors, nurses, or midwives (74%, 25/34) and neighbors/friends (35%, 12/34). Half of respondents (51%, 45/89) reported being tested for HIV/AIDS during their pregnancy.

### ***Dietary Diversity***

Dietary information was gathered from 98 respondents and data from 75 participants were used in the final analysis. Those who said their food consumption during the previous 24 hours was unusual were excluded from analysis (23 respondents). Consumption was categorized into eight food groups, with four groups consumed representing adequate dietary diversity:

1. Cereals, white roots, and tubers
2. Vitamin A rich fruits, vegetables, and tubers
3. Dark green leafy vegetables, other vegetables, other fruits
4. Organ meat, flesh meats, fish, and seafood
5. Eggs
6. Legumes, nuts, and seeds
7. Milk and milk products
8. Oils and fats

For respondents who had a normal food day (no festivities the day before the assessment), average individual maternal dietary diversity score was 4.7, with an average of 2.8 meals and 0.9 snacks consumed. Twenty-three percent (17/75) of respondents ate at least one meal or snack outside the home; however, this figure varies from camp to camp.

Twelve percent of respondents recalled eating foods from three groups or fewer, falling below minimum dietary diversity requirements. Sixty-five percent ate foods from 4 or 5 groups and 23% ate foods from 6 groups or more. Respondents with low dietary diversity scores primarily consume cereals/white roots/tubers, dark green vegetables and fruits, and oils/fats. Rice was consumed at almost every meal, though sometimes it was accompanied by just a few spices for seasoning. Other common dishes include mustard soup, mustard greens, tomatoes, spinach, chili, eggs, chicken, beans, and cauliflower.

It appears that irregular consumption, or fluctuations in consumption due to holidays or festivals affect number of snacks consumed. Average number of meals and average dietary diversity score stays about constant but number of snacks increase on holidays (from 0.9 to 2.1).

**Table 2: Food groups consumed by more than 50% of respondents**

All Respondents	DD Score 3 or less	DD score 4-5	DD score 6 or more
Cereals, White Roots, tubers (99%)	Cereals, White Roots, tubers (100%)	Cereals, White Roots, tubers (98%)	Cereals, White Roots, tubers (100%)
Dark Green Leafy Vegetables, Other Vegetables, Other Fruit (97%)	Dark Green Leafy Vegetables, Other Vegetables, Other Fruit (89%)	Dark Green Leafy Vegetables, Other Vegetables, Other Fruit (98%)	Dark Green Leafy Vegetables, Other Vegetables, Other Fruit (100%)
Oils and Fats (95%)	Oils and Fats (56%)	Oils and Fats (100%)	Oils and Fats (100%)
Organ Meat, Flesh Meats, Fish, and Seafood (64%)		Organ Meat, Flesh Meats, Fish, and Seafood (65%)	Organ Meat, Flesh Meats, Fish, and Seafood (88%)
			Vit A Rich Fruits, Vegetables, & Tubers (53%)
			Eggs (88%)
			Legumes, Nuts, and Seeds (65%)

### **Focus Group Discussions**

A total of 48 pregnant and lactating women participated in 5 focus group discussions (one in each camp). When shown pictures of women in various stages of pregnancy, participants in the focus groups were able to recognize signs of pain in the woman and when the belly was in the wrong position. Many women delivered at home and participants associated visiting a nurse or a hospital as an indication of a problematic pregnancy or family situation (no family to help, poverty). Few regarded these visits as a component of good antenatal care. Participants commented that in their communities, some difficulties are encountered with childbirth, including extended periods of pain, babies in the wrong position, and lack of nutrition.

The focus group discussions revealed many traditional beliefs surrounding pregnancy and IYCF practices. Much of the information that women get comes from neighbors and family members, in addition to health workers. Participants reported changing their diets both during and after pregnancy due to this information. Women commonly avoided certain types of food (sweet, salty, sour, bitter, etc.) because they can cause abortion, influence the baby’s personality, or affect the baby through breastfeeding. One woman commented: *“Whatever you eat, it reaches to the child.”* Most women said that they should eat more nutritious foods after delivery to replace the energy expended during childbirth, but cited lack of said foods and lack of money as barriers to eating a nutritious diet. The women try to breastfeed regularly, but some mothers expressed difficulties with latching or breast milk production. More details of beliefs and practices around pregnancy can be found in Appendix 18.

### **Market Survey**

One market was surveyed in each camp area, with both Hpakant camps gathering data from the same market (despite the existence of two markets near camp) due to lack of food items in the smaller

market. Overall, an average of 91 products (range 67-110) from across the 8 food groups are available in each of the five camp areas, with 43-75 products available year-round. Group 3 (dark green leafy vegetables, other vegetables, other fruits) had the largest variety, with an average of 39 products available and an average price of 876MMK per unit. Group 4 (organ meats, flesh meats, fish, and seafood) had the second most variety with 18 items on average, but cost is very high at nearly 8,000MMK per unit. Milk and milk products are rarely consumed in camps and in Myanmar society and are rare and expensive in the markets where IDPs live.

The market survey data also reveal large variations in the foods available by camp. Only 24 items are available year round in all five camps, whereas individually in the camps, a range of 43-75 items are available year round. Specific product availability and price by camp is available in Appendix 19.

**Table 3: Average number of items available and price per food group**

Food Group	Average # of items available	Average price per unit (MMK)	# Items available year round
1. Cereals, White Roots, Tubers	11	1720	4
2. Vit A Rich Fruits, Vegetables, & Tubers	8	1097	2
3. Dark Green Leafy Vegetables, Other Vegetables, Other Fruits	39	876	8
4. Organ Meat, Flesh Meats, Fish, and Seafood	18	7919	7
5. Eggs	2	462	1
6. Legumes, Nuts, and Seeds	8	1301	2
7. Milk and Milk Products	1	5100	0
8. Oils and Fats	3	4140	0*

\*Due to incomplete information from Chipwi camp

### ***Opportunistic Observations***

Twenty-five children (15 boys, 10 girls) 1-23 months of age were observed during meal time in their homes. Fifteen breakfast, 5 lunch, and 5 dinner interactions were observed, with each interaction lasting an average of 25 minutes. The majority (23 out of 25) of caregivers were female and the average caregiver age was 29.9 years.

Overall, caregivers exhibited attentive child feeding behaviors, with all caregivers paying attention to the child (25/25) and verbally engaging the child during complementary feeding (18/18). Caregivers were always situated near the child and attentive during meals. Children were breastfed to satiety in 16 out of 23 cases, and in 10 out of 20 observations, breastfeeding difficulties related to lack of breast milk production were observed and cited by respondents during observation.

During observations of complementary feeding, caregivers washed the child's hands in 14 out of 19 instances and served the child first in 15/18 observations. 11/18 children were served food on his or her own plate. In 11/18 observations, children ate by themselves, but are usually fed with the help of the caregiver. Less than half of the time (8/18 observations), a spoon, bottle, or other utensil was used to feed the child. In only 4 cases, children were able to feed themselves without help. In almost of all the observations (15/18), some foods were specially prepared for the child and in all of the observations (18/18), some foods or drinks were served only to the rest of the family. The specially prepared foods



for the children were often blander or softer than the foods the family eats, to accommodate cultural beliefs that children should not consume foods that are too spicy, sour, or bitter.

All caregivers encouraged the child when he or she was eating well. In 14/18 observations, the caregiver used gestures or games to motivate the child to eat more and in 5/18 instances, the caregiver physically forced the child to eat by shouting at the child or threatening the child. The majority of children (14/18) ate most of the food that they were served, but in 10/18 observations, the child refused food at some point during the meal. In 10/18 observations, the caregiver served additional portions to the child.

## DISCUSSION

### *Feeding Practices*

Table 4 compares current IYCF practices against ideal practices and provides recommendations for improving these indicators, which were constructed according to ProPAN guidelines. While some indicators are better than others, there is room for improvement for all indicators in order to reach 100% coverage. The weakest indicators—and those that should be prioritized by interventions—are:

- All infants less than 6.0 months exclusively breastfed (14/26, 54%)
- All children breastfed through the age of 2 years old or older (3/14, 21%)
- All infants and young children 6.0-23.9 months fed as recommended during and after illness (2/69, 3%)

The quantitative and qualitative data gathered through the assessment suggest that there may be less than full coverage of the ideal feeding practices because of three key reasons: lack of communications from healthcare professionals, lack of resources, and physical challenges.

*Lack of communications from healthcare professionals:* Since 40% of women do not receive the minimum of four antenatal care visits and 45% of respondents delivered in the home rather than a public hospital or clinic, it is possible that mothers are not receiving the appropriate guidance regarding breastfeeding practices. Interestingly, it appears that mothers and pregnant women perceive visits to hospitals and healthcare professionals as a negative event. During the focus group discussions, women speculated that the reasons pregnant women had to seek medical attention were because they had no family, no one to help them, or they were poor. Very few women viewed clinic or hospital visits as an essential component of antenatal, safe delivery and post natal care.

Few women receive or hear messages about child feeding (only one-third of respondents received messages in the past three months). After healthcare facilities, neighbors and family members are two of the main sources of information for information about breastfeeding and child feeding. However, as seen in the focus group discussions and opportunistic observations, most of the information shared are traditional beliefs regarding what pregnant women and children should or should not eat and have little scientific support. One example of such a belief is the idea that pregnant women should not eat wild cat meat, or else their baby will be naughty.

Another possible reason for the lack of adherence to best IYCF practices is that the women are not retaining all of the IYCF information they are given. When asked to recall the advice they have received, women are able to recall messages about how often to feed the child and what foods to feed the child, but no respondents mention specific numbers or names of foods. An assessment of IYCF knowledge may be helpful for future surveys.

Communications should also make sure to target the underlying causes of undernutrition such as poor hygiene and diarrheal diseases. Thirteen percent of respondents (11/83) reported that their child drank

from a bottle with a nipple during the previous day when the standard is 0%. The practice of bottle feeding and corresponding risks of diarrheal disease may be exacerbating the prevalence of stunting in the community.

*Lack of resources:* There are few livelihood opportunities within the IDP camps and most families rely on food rations (52%, 49/94), cash assistance (27%, 25/94), and vouchers (14%, 13/94) for nourishment. This limits the variety of foods caregivers and children are able to access. During focus group discussions and opportunistic observations, caregivers cited financial difficulties as barriers to eating more frequently and more healthily. Enumerators also commented that it was difficult to discuss diets and food consumption with respondents because of the food security challenges faced by camp residents. There seems to be motivation among the participants to adhere more closely to ideal IYCF feeding practices, but due to resource constraints, they are unable to do so.

*Physical challenges:* Though the percentage of caregivers breastfeeding on demand is very high (99%), the percentages of children exclusively breastfed through the age of 6 months (54%) and breastfed through the age of 2 years (21%) are much lower. This discrepancy may be explained by the focus group discussions and opportunistic observations. Sometimes mothers stop breastfeeding early by choice, and other times, women perceive that they are unable to produce breast milk due to illness and as a result cannot breastfeed their children to satiety. Strategies employed by women to try to start the breast milk include drinking cow milk, drinking soup, and eating chicken eggs. Additional support should be given to mothers who have difficulty breastfeeding to understand any additional barriers and provide guidance and nutrients.

### ***Food Consumption and Availability***

Individual dietary diversity for caregivers was measured as a proxy for children's dietary diversity. Though 88% of caregivers' consumption in the previous day qualified as adequate (4 or more food groups), anecdotal evidence from the opportunistic observations suggest that the foods caregivers eat may be different from what children eat. Children's diets are often blander than caregivers' diets due to cultural taboos against children eating spicy, sour, and bitter foods.

Additionally, while almost all caregivers (99%, 97/98) ate two meals or more the previous day, we do not know if children eat as frequently, more frequently, or less frequently. Number of meals consumed also does not necessarily relate to quantity or size of each meal. During the focus group discussion, enumerators reported that caregivers ate only two meals per day, but this was counted by the dietary diversity tool as three meals. It does not take into consideration that respondents were eating leftovers from breakfast for lunch, or leftovers from lunch for dinner. Generally, participants reported experiencing a feeling of hunger in the camps since foods are expensive to purchase in the market. Respondents would request food, drinks, or snacks in return for participating in the assessment, and the potential to receive these tokens was a motivating factor for participation.

The market survey data complements the results from the dietary diversity survey and confirms availability of items from groups 1, 3, and 8, the groups most often consumed. Green leafy vegetables were also the type of produce most commonly grown by households. Given the availability and low cost of items from group 3 (green leafy vegetables), it is not surprising that it is one of the food groups consumed by nearly all respondents. Meats and sea foods, the most expensive category, is still consumed by more than 50% of respondents, perhaps indicating that caregivers understand the nutritional value of eating meat and seafood and purchase food from this category when they have sufficient resources.

**Table 3: Ideal Feeding Practices and Recommendations**

Ideal Practice	Num	Den	Current Coverage	Notes	Recommendations
1. All infants breastfed for the first time within 1 hour of birth	66	95	69%		1) Counsel PLW and caregivers on ideal breastfeeding and complementary feeding practices 2) Provide special support to lactating women who have difficulties breastfeeding 3) Determine additional barriers to ideal breastfeeding and complementary feeding practices
2. All infants not fed anything other than breast milk during first 3 days of life	78	95	82%	Infants fed other things were given Domex, water, infant formula, or other non-breastmilk milks	
3. All infants fed colostrum	86	95	91%		
4. All infants and young children breastfed on demand, day and night	72	73	99%	Children are breastfed on demand, but some women are unable to breastfeed children to satiety	
5. All infants less than 6.0 months exclusively breastfed	14	26	54%	Children not exclusively breastfed are given Domex, milk solution, or semi-solid foods	
6. All children breastfed through the age of 2 years old or older	3	14	21%		
7. All infants fed semi-solid complementary foods at the age of 6.0 months (180 days)	46	58	79%		
8. All infants and young children aged 6.0-23.9 months meet recommended daily energy and nutrient requirements			Cannot Assess	Food groups less commonly consumed in the caregivers' diets include vitamin A rich fruits, roots, and tubers; eggs; legumes, nuts, and seeds; and milk and milk products.	1) Counsel caregivers on energy and nutrient requirements for children 2) Provide recommendations to caregivers on best sources of nutrient and energy dense foods in each food group according to price and availability
9. All infants and young children aged 6.0-23.9 months fed nutrient- and energy-dense foods			Cannot Assess		
10. All infants and young children 6.0-23.9 months fed recommended number of meals daily			Cannot Assess	97/98 caregivers (99%) ate two meals or more during the previous day and 92/98 caregivers (94%) ate at least 3 times (meals and snacks) according to DD form, but we do not know if children eat more or less frequently.	1) Counsel caregivers on recommended number of meals according to child's age
11. All infants and young children 6.0-23.9 months fed by caregiver responsive to child	50	69	72%	Feeding behaviors are mostly positive, with few reported or observed instances of forced feeding or threatening language.	1) Counsel caregivers on responsive feeding behaviors 2) Share strategies for positive encouragement when the child is not eating well
12. All infants and young children 6.0-23.9 months fed as recommended during and after illness	2	69	3%	Most common reason cited for offering the child less food than usual is the child did not want it. The majority of caregivers offer the same or more food after the illness ends, but have difficulty adhering to recommended feeding during the illness.	1) Counsel caregivers on ideal feeding practices for sick children, with emphasis on offering the same or more food during the illness. 2) Share strategies for encouraging the child to eat when they are not feeling well

While the exact gaps and deficiencies in children's diets are not known, it is still possible to generate program interventions based on the data that was collected. It is clear from the caregiver dietary diversity survey and market survey that food groups less commonly consumed and less accessible are vitamin A rich fruits, roots and tubers; eggs; legumes, nuts, and seeds; and milk and milk products.

### ***Program Recommendations***

To improve infant and young child feeding practices, the following activities are recommended:

- Increasing the demand and access to quality MNCH service delivery, specifically antenatal care, skilled birth attendant and postnatal care, and integrated management of child illnesses, as platforms for delivering and strengthening IYCF promotion.
- Support facility and community based growth monitoring as a means to identify low birth weight and growth faltering with focus on height for age, and take appropriate actions.
- Counsel pregnant women and caregivers on ideal pregnancy, breastfeeding, and complementary feeding practices, taking into consideration local beliefs and cultural practices. This should include responsive feeding behaviors, strategies to positively encourage children to eat when they are ill or not feeding well, recommended number and quantity of meals, minimum nutrition requirements for children, and hygiene standards.
- Provide special support to lactating women who have difficulties breastfeeding through additional counseling from community facilitators and a peer support group.
- IYCF messages delivered through verbal or visual communications: Outside of healthcare professionals, most caregivers get their health and child feeding information from neighbors and friends. Respondents rarely listen to the radio but most can read simple sentences.
- IYCF messaging to include information on the dangers of artificial feeding.
- Establish community gardens that grow Vitamin A rich vegetables and tubers.
- Provide recipe recommendations to caregivers based on market availability and price of food products, using tools such as FAO's Trials in Improved Practices (TIP's). These recommendations should be targeted towards responsive feeding and improving consumption of Vitamin A rich foods; meats and seafood; eggs; and legumes, nuts, and seeds. Any recipes should be designed with cultural practices in mind, and should not be too heavy on extreme flavors such as sourness, bitterness, and spiciness.
- Support mothers/primary caregivers participating in regular communal baby/toddler feeding groups combined with play activities as a platform for IYCF and responsive feeding promotion.
- Integrate infant/child WASH promotion messages (food hygiene and preparation, hand washing incl. infant/child's hands, safe disposal of infant/child feces) into existing activities to promote hygiene and prevention of disease

### ***Successes***

Overall, the training and data collection process demonstrated that ProPAN is a comprehensive formative research tool that builds the capacity of members of the local community. It was successful in familiarizing enumerators (case managers and nutrition community facilitators) with a variety of data collection methods in a short amount of time and preparing them for the initial assessment.

Additionally, this skill set and knowledge of IYCF practices will serve the facilitators well in their day to day activities. It helped the community volunteers to better understand the nutrition situation in their communities through observations and discussions with caregivers. This awareness will make them better resources for nutrition information within their community and help them to conduct nutrition promotion activities that will improve feeding practices and outcomes.

The participatory approach was excellent for adapting the tools to the local context; enumerators were knowledgeable about their local camp conditions and the request for constant feedback helped the enumerators to feel more comfortable raising questions and participating in discussions. The discussions around the data collection methods helped the facilitators to better understand camp life (despite not

being able to visit the camps) and adjust trainings and tools accordingly. It also raises a series of further questions that can be explored.

The level of motivation that the enumerators exhibited was essential to the success of the assessment. The majority of participants demonstrated an eagerness to learn and consideration for their fellow camp residents, which likely motivated them to better understand the assessment tools and actively engage in training sessions. Reviews of practice sessions and training methods were also helpful in reinforcing concepts for the enumerators. Enumerators showed improvement with each practice session, and by the end of the training, demonstrated a deeper understanding of assessment questionnaires through the nuanced questions they asked. When the enumerators returned to Myitkyina after completing data collection activities, they expressed a desire to learn more and gain additional expertise in assessment methods and IYCF best practices:

*“The more training given to us, the better”*

*“If needed, we can go as far as you want us to go”*

*“If you can teach, we can learn”*

The high level of motivation and appreciation exhibited by enumerators demonstrates that ProPAN was a positive investment in the community that will likely be paying dividends even after the program ends.

## **Challenges**

While the individual assessment tools served ProPAN’s purpose well (minor adjustments are suggested in Appendix 22), the main challenges of the assessment were time, human resources, and security. Both participants and facilitators expressed that they would have liked more practice opportunities for the enumerators to reinforce what they learned during the theoretical trainings. Participants rated practice sessions at the Myitkyina IDP camp highly, but long theoretical days poorly. It was difficult for the enumerators to sit for long periods of time absorbing new material, especially since the ProPAN training was preceded by gender based violence, child protection, and IYCF trainings. At the end of training evaluation, one participant remarked: *“It is hard to follow as the training is providing multiple topics at one time. One suggestion is one topic at a time, then give time to practice well. This will be good for him/her to manage it.”* Additional training time would have also helped improve note taking skills for documentation and focus group discussion purposes.

There were also challenges with partner organization having insufficient time and resources. KMSS officers were not always able to be present for trainings since they were also responsible for handling training logistics and other program components. The KMSS officers did not always have previous data collection or data supervision experience, which made it more difficult for them to efficiently monitor and supervise the data collection process. Though a brief session on supervision and data monitoring was added towards the end of the training (Appendix 13).

Participant management also posed a challenge. Though the assessment was intended to be exhaustive, a few households were missed from each location because the enumerators were younger members of the community and did not have the respect from others that an outsider would have. Additionally, it was not possible to secure a private space within IDP camps and focus group discussions were held in common spaces. Officially, there were only 8-11 participants in each focus group discussion, but in practice, additional residents listened in and interjected.

Finally, the security situation was quite tense in Kachin State during the training period. Under these circumstances, the training team had to be flexible with assessment preparations and data monitoring plans. In a short span of time, the trainings were adjusted to prepare data collectors to conduct the assessments independently, without support from supervisors.

### **Assessment Recommendations**

Now that enumerators have a foundation in qualitative and quantitative methods, their understanding of data collection as it relates to IYCF practices should be further strengthened through follow up trainings to discuss more nuanced techniques and strategies. Due to the complexity of the ProPAN tool, future assessments should include high school graduation in the selection criteria for enumerators to ensure a minimum level of writing skills. Additionally, training should be held independently of trainings in other topic areas and extended by 2-3 days to avoid oversaturation. With the additional training days, participants can better digest the variety of data collection techniques and gain more practice. Local partner organization staff should have a separate training session and logistics support so they are better equipped to conduct supervision and monitoring activities. Another option would be to divide the training into 2 or 3 sessions, with data collection for two or three assessment tools occurring between trainings.

Recommendations for additional training modules include a session on participant management. During the training, participants were quite concerned with how respondents would react to certain questions and expressed difficulties with moderating the focus group discussions. After data collection was complete, it was apparent that the assessment was affected by the relationships and rapport built between the data collector, local community leaders (such as the camp management committee), and respondents. It is important to acknowledge and address this variable relationship, and to prepare enumerators to respond to the variety of reactions that they can encounter in the field. Even though the enumerators are members of the community, due to cultural norms they may not be as well respected as someone from outside the community. For future assessments, program staff may consider sending Plan or KMSS officers to the camps to introduce the assessment and gain support from the residents.

Future ProPAN assessments should maintain the same open training session style where data collectors can contribute actively towards discussions and the contextualization of each tool. At least one practice session should be conducted independent of supervisors so that data collectors can practice problem solving on their own. This independent practice session will help better prepare enumerators for remote management in the event that security does not allow for supervisors to travel into the field.

## **CONCLUSION**

The ProPAN assessment conducted in Kachin State revealed low prevalence of wasting but high stunting, or chronic malnutrition. Some possible causal factors include lack of adherence to exclusive breastfeeding and complementary feeding recommendations, lack of medical care, lack of resources and livelihoods, and cultural beliefs surrounding nutrition during and after pregnancy. In order to address these problems, interventions should target both knowledge of IYCF practices as well as availability and access to nutritious foods. IYCF interventions can be further strengthened through integration with livelihood and food security interventions.

The diversity of the ProPAN tool was particularly valuable for determining the cultural factors influencing IYCF behaviors and learning about the local context. The tool also played an essential role in building capacity among IDP camp volunteers, Plan staff, and KMSS staff to collect data and monitor data quality. Future assessments in Kachin State can further build upon the results of this assessment to explore the behaviors and beliefs impacting IYCF practices in-depth. While the scale and sample of this assessment did not allow for analysis into differences in access and feeding practices between GCA and NGCA areas, this topic can be explored by future ProPAN assessments among larger IDP camp populations. Finally, since this was the first time that this type of comprehensive nutrition assessment was conducted for IDPs in Myanmar, the lessons learned should be shared with other humanitarian actors to inform future IYCF assessments and programming.

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## APPENDIX 1: PROPAN ASSESSMENT AGENDA

### **TRAINING: Nov 18 – Nov 28**

#### **Day 1) Nov 18: Introduction ProPAN, Demographic Assessment, & Anthropometric Measurements I**

9:00am – 11:00am	Introduction to ProPAN Process & Timeline
11:00am – 12:00pm	Anthropometric Measurements Objective & Methodology
12:00pm – 1:00pm	Lunch
1:00pm – 5:00pm	Anthropometric Measurements Objective & Methodology (continued)

#### **Day 2) Nov 19: Anthropometric Measurements II & Dietary Diversity I**

9:00am – 12:00pm	Anthropometric Measurements Practice with mothers/caregivers and children
12:00pm – 1:00pm	Lunch
1:00pm – 5:00pm	Anthropometric Measurements Discussion & Feedback Dietary Diversity Objectives & Contextualization

#### **Day 3) Nov 20: Caregiver Survey II**

9:00am – 12:00pm	Consent Introduction to Caregiver Survey Objective & Methodology Data Collection Module 1: Identification Module 2: Introduction Module 3: Screening Module 4: Breastfeeding and Complementary Feeding Contextualization Practice, Discussion, & Feedback
12:00pm – 1:00pm	Lunch
1:00pm – 5:00pm	Module 5: Health & Other Services Module 6: Health Communication Module 7: Family Information

#### **Day 4) Nov 21: Caregiver Survey III**

9:00am – 12:00pm	Module 8: Housing Module 9: HIV/AIDS and Child Feeding Practice, Discussion, & Feedback
12:00pm – 1:00pm	Lunch
1:00pm – 5:00pm	Questions, challenges, concerns, and suggestions for addressing these issues More contextualization Preparation for field testing Introduction to HIV/AIDS & PMTCT

#### **Day 5) Nov 22: Caregiver Survey & Anthropometric Measurements Practice**

9:00am – 1:00pm	Caregiver Survey Practice (all modules) with mothers/caregivers
1:00pm – 2:00pm	Lunch
2:00pm – 5:00pm	Anthropometric Measurements Practice

**Nov 23: Sunday Off**



**Day 6) Nov 24: Practice Feedback & Dietary Diversity II**

9:00am – 12:00pm Caregiver Survey Practice Feedback  
Dietary Diversity Objective & Methodology  
12:00pm – 1:00pm Lunch  
1:00pm – 5:00pm Dietary Diversity Practice  
Practice, Discussion, & Feedback  
Anthropometric Measurements Practice Feedback

**Day 7) Nov 25: Focus Group Discussions I**

9:00am – 12:00pm Objective & Methodology  
12:00pm – 1:00pm Lunch  
1:00pm – 5:00pm FGD Practice, Discussion, & Feedback

**Day 8) Nov 26: FGD II & Market Survey I**

9:00am – 12:00pm FGD Review  
Practice, Discussion, & Feedback  
12:00pm – 1:00pm Lunch  
1:00pm – 5:00pm Market Survey Objective & Methodology

**Day 9) Nov 27: Market Survey II & Opportunistic Observations I**

9:00am – 12:00pm Opportunistic Observations Objective & Methodology  
12:00pm – 1:00pm Lunch  
1:00pm – 5:00pm Market Survey Practice, Discussion, & Feedback

**Day 10) Nov 28: Opportunistic Observations II & Wrap Up**

9:00am – 12:00pm Opportunistic Observations Practice with mothers/caregivers & children  
Anthropometric Measurements Practice  
Discussion & Feedback  
12:00pm – 1:00pm Lunch  
1:00pm – 5:00pm ProPAN Training Review & Wrap-Up

Nov 29-30: Travel to data collection sites (2 days)

**DATA COLLECTION: Dec 1 – Dec 10**

Dec 1: Demographic Assessment & Anthropometric Measurements  
Dec 2: Demographic Assessment & Anthropometric Measurements (if necessary)  
Caregiver Survey & Dietary Diversity  
Dec 3: Caregiver Survey & Dietary Diversity  
Dec 4: Caregiver Survey & Dietary Diversity  
Dec 5: Caregiver Survey & Dietary Diversity (if necessary)  
Focus Group Discussions  
Dec 6: Market Survey & Opportunistic Observations  
Dec 7: Case managers & IYCF volunteers travel back to Myitkyina (1-2 days)  
Dec 8: FGD with Data Collectors (case managers and IYCF volunteers)  
Meeting with KMSS and Plan for handover collected data and questionnaires + clearing  
outstanding expenditure (incl. receipts)

## APPENDIX 2: PROPAN ASSESSMENT METHODOLOGY

### Project Sites & Target Population:

1. Dum Bang Camp (Moe Mouk)
  - 120 HHs
  - 80 children under 5 (37 boys, 43 girls)
  - 30 pregnant/lactating women
  - 43 mothers/caregivers of children under 5
2. Nyin Chan Thar Camp (Hpakant)
  - 66 HHs
  - 37 children under 5 (12 boys, 25 girls)
  - 16 pregnant/lactating women
  - 21 mothers/caregivers of children under 5
3. AG Camp (Hpakant)
  - 67 HHs
  - 52 children under 5 (33 boys, 19 girls)
  - 17 pregnant/lactating women
  - 23 mothers/caregivers of children under 5
4. St. Patrick Camp (Moe Nyin)
  - 12 HHs
  - 9 children under 5 (4 boys, 5 girls)
  - 3 pregnant/lactating women
  - 4 mothers/caregivers of children under 5
- Host Community (Moe Nyin)
  - 43 HHs
  - 26 children under 5 (12 boys, 14 girls)
  - 9 pregnant/lactating women
  - 12 mothers/caregivers of children under 5
5. Chipwi EdC (Chipwi)
  - 38 HHs
  - 0 children under 5
  - 0 pregnant/lactating women
  - 0 mothers/caregivers of children under 5
- LBC (Chipwi)
  - 130 HHs
  - 94 children under 5 (60 boys, 34 girls)
  - 28 pregnant/lactating women
  - 39 mothers/caregivers of children under 5

### Data Collection Components

1. Demographic Assessment & Anthropometric Measurements
  - a. Training Lead: May Thukha Soe
  - b. Objectives:
    - 1) Identify current rates of undernutrition in children under 5 in project sites
    - 2) Identify and locate children under 2 (born after Dec 1, 2012) and their mothers/caregivers for participation in further assessment
  - c. Target population: Children under 5

- d. Sample size: Exhaustive
- e. Implementation: 1-2 days
- f. Materials needed:
  - 1) Scales
  - 2) Height boards
  - 3) Growth charts
  - 4) MUACs
  - 5) Forms
  - 6) Writing utensils
  - 7) Clipboards
- g. Data entry and analysis: ENA Software
- 2. Caregiver Survey
  - a. Training Lead: Linn Thant Aung
  - b. Objectives:
    - 1) Identify current breastfeeding and complementary feeding practices
    - 2) Determine the adequacy of current caregiver practices by comparing them with ideal practices outlined in ProPAN guide
    - 3) Compare current practices with international indicators for assessing infant and young child feeding practices
    - 4) Collect information that will increase understanding of the context in which current breastfeeding and complementary feeding practices occur
  - c. Target population: Mothers and caregivers of children under 2
  - d. Sample size: Exhaustive
  - e. Implementation: 3 days
  - f. Materials needed:
    - 1) Forms
    - 2) Writing Utensils
    - 3) Calendars and Visual Aids
    - 4) Clipboards
  - g. Data entry and analysis: ProPAN Software
- 3. Dietary Diversity
  - a. Training Lead: May Thukha Soe
  - b. Objectives:
    - 1) Assess dietary diversity of mothers as a proxy for dietary diversity of children under 2
    - 2) Identify key foods consumed by mothers and gaps in nutrition
    - 3) Identify mothers for participation in focus group discussions
  - c. Target population: Mothers and caregivers of children under 2
  - d. Sample size: Exhaustive
  - e. Implementation: 1 day
  - f. Materials needed:
    - 1) Forms
    - 2) Writing utensils
    - 3) Calendars
    - 4) Clipboards
  - g. Data entry and analysis: Microsoft Excel
- 4. Focus Group Discussions
  - a. Training Lead: May Thukha Soe

- b. Objectives:
    - 1) Understand norms and pregnant women's perceptions about food, their health, feeding practices, and the health of their baby
    - 2) Identify facilitators and barriers to ideal feeding practices; provide cultural and behavioral context for quantitative components of the assessment
    - 3) Gather recommendations for how to improve diets and feeding practices for mothers and children
  - c. Target population:
    - 1) First-time pregnant women and multiparous women
    - 2) Post-partum women who are breastfeeding
  - d. Sample size: 5 focus groups, 5-10 participants each (total 25-50 participants)
  - e. Implementation: 1 day
  - f. Materials needed:
    - 1) Recorders
    - 2) FGD discussion guide
    - 3) Paper
    - 4) Writing utensils
    - 5) Clipboards
  - g. Data entry and analysis: Microsoft Word
5. Market Survey
- a. Training Lead: May Thukha Soe
  - b. Objectives:
    - 1) Identify the locally available foods that provide the greatest amount of energy and nutrients for the least cost (nutrient/cost ratio)
    - 2) Determine the seasonality and availability of specific foods
  - c. Target population: Local market or other source for purchasing food items
  - d. Sample size: less than 5 in each site
  - e. Implementation: 1 day
  - f. Materials needed:
    - 1) Form
    - 2) Writing utensils
    - 3) Calendars
    - 4) Clipboards
  - g. Data entry and analysis: Microsoft Excel
6. Opportunistic Observations
- a. Training Lead: May Thukha Soe
  - b. Objectives:
    - 1) Identify the context of feeding behaviors and observe the interaction between the caregiver and child during the child's mealtime
    - 2) Assess the caregiver's feeding style and identify facilitators of and barriers to the ideal practice of responsive feeding
    - 3) Observe other aspects of food preparation and feeding (e.g., hygiene and the use of bottles, spoons, and other utensils)
  - c. Target population: Children under 2 and their mothers/caregivers
  - d. Sample size: 25 (5 per camp)
  - e. Implementation: 1 day
  - f. Materials needed:
    - 1) Forms

- 2) Utensils
    - 3) Clipboards
  - g. Data entry and analysis:
    - 1) Microsoft Excel
- 7. Focus Group Discussion with Data Collectors
  - a. Facilitator: May Thukha Soe
  - b. Objectives:
    - 1) Gather feedback from data collectors about the ProPAN training and data collection process
    - 2) Instill process of self-reflection and learning among data collectors to increase capacity for future assessments and interventions
    - 3) Obtain lessons learned that will be incorporated into future assessments
  - c. Target population: Data collectors + KMSS Officers
  - d. Sample size: 12
  - e. Implementation: ½ day
  - f. Materials needed:
    - 1) Recorders
    - 2) FGD discussion guide
    - 3) Paper
    - 4) Writing utensils
  - g. Data entry and analysis: Microsoft Word



Mother/ Caregive r Code	Full Name of Mother/Caregiver & Address (if available)	M/F	Age (yr)	PLW?	Children Under 5					
					Child's Full Name	M/F	Date of Birth (DD/MM/YYYY)	Age (mo.)	U2?	Child's Code
M01										M01C1
										M01C2
										M01C3
										M01C4
M02										M02C1
										M02C2
										M02C3
										M02C4
M03										M03C1
										M03C2
										M03C3
										M03C4
M04										M04C1
										M04C2
										M04C3
										M04C4

## APPENDIX 4: ANTHROPOMETRIC MEASUREMENTS

<b>I. IDENTIFICATION</b>	
1. Date measurement collected	Date.....__ __/ __ __/ __ __ __ __ day   month       year
2. Case Manager's code	Code.....__ __
3. Community Facilitator's code	Code.....__ __
4. Measurement results	Complete.....01 Incomplete.....02
5. Mother's code	Code.....__ __ __
6. Child's code	Code.....__ __ __ __
7. Child's name	_____
8. Child's sex (M/F)	__
9. Full Address WRITE THE DISTRICT, UNION, VILLAGE, STREET, AVENUE, KILOMETER, NEIGHBORHOOD, ETC.	_____ _____ _____
10. Supervisor's code	Code.....__ __
11. Date reviewed by supervisor	Date.....__ __/ __ __/ __ __ __ __ day   month       year



## II. ANTHROPOMETRY

After questionnaires for all children are complete, the measurer weighs and measures each child.

Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the household listing before recording measurements.

1. Result of height / length and weight measurement	Either or both measured ..... 1 Child not present ..... 2 Child or caretaker refused ..... 3 Other ( <i>specify</i> ) ..... 9	2⇒6 3⇒6 9⇒6
2. Child's weight	Kilograms (kg)..... ____ . ____ Weight not measured ..... 99.9	
2A. Was the child undressed to the minimum? <input type="checkbox"/> Yes. <input type="checkbox"/> No, the child could not be undressed to the minimum.		
3. Child's MUAC Measurement	MUAC (cm)..... ____ . ____ MUAC not measured ..... 99.9	
4. Oedema  Observe and record	Checked Oedema present ..... 1 Oedema not present ..... 2 Unsure ..... 3  Not checked ( <i>specify reason</i> ) ..... 7	
5. Check age of child: <input type="checkbox"/> Child under 2 years old. ⇒ Measure length (lying down). <input type="checkbox"/> Child age 2 or more years. ⇒ Measure height (standing up).		
5A. Child's length or height	Length / Height (cm) ..... ____ . ____ Length / Height not measured ..... 999.9	
5B. How was the child actually measured? Lying down or standing up?	Lying down ..... 1 Standing up ..... 2	

6. Is there another child in the household who is eligible for measurement?

- Yes ⇒ Record measurements for next child.  
 No ⇒ Thank you for your time.

## APPENDIX 5: CAREGIVER SURVEY

Good morning/afternoon, my name is \_\_\_\_\_ and I'm working for the \_\_\_\_\_ in an infant and child feeding project. Could you please tell me if there are any children less than 2 years of age living in this home? (IF THERE ARE NO CHILDREN LESS THAN 2 YEARS OF AGE, THANK THE PERSON AND CONTINUE ON TO THE NEXT HOME.)

Could you please confirm that you are the mother of a child less than 2 years of age? (IF THE CHILD'S MOTHER IS NOT PRESENT, STOP THE SURVEY AND RETURN TO THE HOME, UP TO 2 TIMES AT A LATER DATE. If the mother is no longer present in the child's life, interview the main caregiver.)

Could I ask you some questions regarding the feeding of the child less than 2 years of age living in the home? The information that you provide will be 100% confidential. (READ THE CONSENT LETTER, HAVE IT SIGNED AND GIVE THE PERSON A COPY.)

### I. IDENTIFICATION

1. Date survey is applied	Date.....__ __/ __ __ / __ __ __ __ day month year
2. Field Worker's code	Code.....__ __
3. Survey results	Complete.....01 Incomplete.....02 Dates of follow up visits: Visit 1.....__ __/ __ __ / __ __ __ __ day month year Visit 2.....__ __/ __ __ / __ __ __ __ day month year
4. Child's code	Code.....__ __ __ __
5. Full Address WRITE THE DISTRICT, UNION, VILLAGE, STREET, AVENUE, KILOMETER, NEIGHBOR- HOOD, ETC.)	_____ _____ _____
6. Supervisor's code	Code.....__ __
7. Date reviewed by supervisor	Date.....__ __/ __ __ / __ __ __ __ day month year

### II. INTRODUCTION

10. What is your name?	_____	
11. What is the [child's name]?	_____	
12. What is your relation to [child's name]?	Mother..... 01 Father..... 02 Other, specify: _____ 77	
13. Are you the primary caregiver of [child's name]?	Yes..... 01 No..... 02	

(IF THE CHILD HAS ALREADY HAD HER/HIS 24 MONTH BIRTHDAY, STOP THE SURVEY.)

### III. SCREENING

20. Could you please show me an immunization record or birth certificate with [child's name] birth date?	Yes.....01 No.....02	
21. What is [child's name] birth date? [IF UNKNOWN(If unknown, estimate by asking questions about the proximity of the child's birth to local holidays or festivals.)	Date ..... ___ / ___ / ___ day month year	
22. How many months old is [child's name]?	___ Months	
23. Is [child's name] a boy or a girl?	Male..... 01 Female..... 02	
<b>IV. BREASTFEEDING and COMPLEMENTARY FEEDING</b>		
Now I am going to ask you some questions regarding your pregnancy, what you fed the baby in the first few days after he/she was born and current breastfeeding and complementary feeding practices.		
30. During the pregnancy with [child's name], how many times did you visit a health care center/a midwife for a prenatal visit?	Number of visits..... ___ Does not know.....99	
31. Where was [child's name] born?	Hospital/Clinic (Public) ..... 01 Rural Health Center/ Rural Health Sub-center (Public).....02 Hospital/ Clinic/ Maternity Home (Private).....03 Community organized Maternity Home ... 04 In the respondent's home..... 05 In the midwife's home..... 06 Other, specify:..... 77 Does not know..... 99	
32. Was [child's name] ever breastfed?	Yes..... 01 No..... 02 Does not know..... 99	02->50 99->50
33. How many hours after birth was [child's name] breastfed for the first time?	Within 1 hour after birth..... 01 From 1 to 3 hours after birth..... 02 More than 3 hours after birth..... 03 Does not know..... 99	
34. Was [child's name] fed colostrum? (Explain that colostrum is the breast milk the first few days after birth, it is more yellow and more liquid and less thick than mature breast milk.)	Yes..... 01 No..... 02 Does not know..... 99	
35. During the first 3 days after birth, was [child's name] given anything other than breast milk?	Yes.....01 No.....02 Does not know.....99	02->37 99->37
36. What was [child's name] given? (READ ALL OPTIONS)	Tea..... 01 Water (includes sugar water)..... 02 Infant formula..... 03 Other non-breastmilk milks..... 04 Other, specify:..... 77 Does not know..... 99	

37. During the first 3 days after birth, were you offered any practical support or advice to help you start breastfeeding [child's name]?	Yes..... 01 No..... 02 Does not know..... 99	
Now I have few questions about breastfeeding [child's name] since this time yesterday.		
38. Yesterday, was [child's name] breastfed?	Yes.....01 No.....02 Does not know.....99	
39. Yesterday, did [child's name] drink breastmilk from a cup or a bottle?	Yes.....01 No.....02 Does not know.....99	01->50
40. Yesterday, was [child's name] breastfed whenever he/she wanted or on a fixed schedule?	Whenever the child wanted.....01 On a fixed schedule.....02 Does not know.....99	
Now I would like to ask about feeding solid or semi-solid foods to the child.		
50. Who mainly decides what [child's name] should and should not eat?	The mother.....01 A grandparent.....02 A sibling.....03 An aunt/uncle.....04 A neighbor/friend.....05 The father.....06 Other, specify:_____77 Does not apply (child does not eat solid foods).....88	88->53
51. Generally speaking, how is [child's name]'s appetite when she/ he is healthy? (READ FIRST THREE OPTIONS)	Eats too much.....01 Eats well.....02 Eats a little.....03 Does not know.....99	
52. At what age was [child's name] fed his/her first solid/semi-solid food? By solid or semi-solid foods we mean food that is thick, not a soup, broth or thin porridge.	Age in months .....__ __ Less than 1 month.....00 Does not know.....99	
Now we are going to discuss the feeding of [child's name] since this time yesterday.		
53. Are you the person who fed [child's name] yesterday?	Yes.....01 No.....02	02->67

54. Yesterday, what liquids other than breastmilk was [child's name] given? (READ ALL OPTIONS)	None.....01 Tea.....02 Water (includes sugar water) .....03 Infant formula.....04 Other non-breastmilk milks.....05 Other, specify:.....77 Does not know.....99	
55. Yesterday, did [child's name] have anything to drink from a bottle with a nipple?	Yes.....01 No.....02 Does not know.....99	
56. Yesterday, did [child's name] eat any solid or semi-solid foods?	Yes .....01 No.....02 Does not apply (child does not eat solid foods).....88 Does not know.....99	02->67  88->67 99->67
Now I would like to ask some questions about how [child's name] was fed yesterday during the main meal.		
60. Yesterday, at the main meal, did [child's name] eat all the food you thought he/she should?	Yes.....01 No.....02 Does not know.....99	
61. Yesterday, during the main meal, did you do anything to encourage [child's name] to eat?	Yes.....01 No.....02	02->63
62. What did you do? (Write down the caregiver's answer and code it later. Multiple responses are acceptable. Circle all codes that apply.)	Offered another food or liquid.....01 Encouraged verbally.....02 Modeled eating (with or without toy).....03 Ordered strongly or forced the child to eat.04 Another person helped feed child.....05 Another form of encouragement.....06 Does not know.....99	
63. Yesterday, during the main meal while feeding [child's name], did you talk to her/ him?	Yes.....01 No.....02 Does not know.....99	02->65 99->65
64. What did you say? (Write down the caregiver's answer and code it later. Multiple responses are acceptable. Circle all codes that apply.) _____ _____ _____ _____	Ordered child to eat.....01 Praised child.....02 Asked child questions.....03 Talked about the food .....04 Threatened the child.....05 Told child that she liked the food.....06 Rewarded the child.....07 Talked about other things .....08 Does not know.....99	
65. Yesterday, during the main meal, did [child's name] self-feed (eat by him/herself, using hands or utensil) at any moment during the meal?	Yes.....01 No.....02 Does not know.....99	02->67 99->67

66. Yesterday, during the main meal, did [child’s name] self-feed the whole time, half of the time, or for a little time?	All of the time.....01	
	Half of the time.....02	
	Little bit of time.....03	
	Does not know.....99	

Now we are going to talk about the breast milk, liquids and foods you gave to [child’s name] during the last time he/she was sick.

67. The last time [child’s name] was sick, did you offer less, more or the same amount of breast milk as when [child’s name] is healthy? (If response is “less”, ask additional questions to determine why.)	Less, because the child did not want it.....01	88->80
	Less, because mother’s decision.....02	
	More.....03	
	The same.....04	
	Child never breastfed or child breastfeeding before last illness.....05	
	Child has never been sick.....88	
	Does not know.....99	

68. The last time [child’s name] was sick, did you offer less, more or the same amount of non-breast milk liquids as when [child’s name] is healthy? (If response is “less”, ask additional questions to determine why.)	Less, because the child did not want it.....01	
	Less, because mother’s decision.....02	
	More.....03	
	The same.....04	
	Child never fed non-breast milk liquids.....88	
	Does not know.....99	

69. The last time [child’s name] was sick, did you offer less, more or the same amount of foods as when [child’s name] is healthy? IF THEY RESPOND “LESS” THEN PROBE “WHY?”)	Less, because the child did not want it.....01	88->80
	Less, because mother’s decision.....02	
	More.....03	
	The same.....04	
	Child never fed foods.....88	
	Does not know.....99	

70. After the illness ended, did you offer less, more or the same amount of food as when [child’s name] is healthy? (If response is “less”, ask additional questions to determine why.)	Less, because the child did not want it.....01	
	Less, because mother’s decision.....02	
	More.....03	
	The same.....04	
	Does not know.....99	

**V. HEALTH AND OTHER SERVICES**

Now I would like to discuss [child’s name]’s visits to health facilities in the last 3 months.

80. In the past 3 months, since _____ (MONTH), have you taken [child’s name] to a hospital, health center, mobile unit, or any other health service? (READ ALL OPTIONS)	Hospital / Clinic (Public) .....01	88->82 99->82
	Rural Health Center/Rural Health	
	Sub Center (Public) .....02	
	Mobile unit.....03	
	Voluntary Health Worker .....04	
	Community organized clinic.....05	
	Hospital / Clinic (Private) .....06	
	Traditional medicine/healer.....07	
	Religious treatment .....08	
	Other, specify _____77	
	Has not taken child.....88	
	Does not know.....99	

81. In the past 3 months, at any of these places (health facilities), was [child's name] measured for: (READ ALL OPTIONS)	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>Does not know</th> </tr> </thead> <tbody> <tr> <td>Weight</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Length</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Upper arm</td> <td>01</td> <td>02</td> <td>99</td> </tr> </tbody> </table>		Yes	No	Does not know	Weight	01	02	99	Length	01	02	99	Upper arm	01	02	99																	
	Yes	No	Does not know																															
Weight	01	02	99																															
Length	01	02	99																															
Upper arm	01	02	99																															
Next I have a few questions about vitamin and mineral supplements and other nutrition products.																																		
82. During the past 3 months, since _____ (MONTH), did [child's name] ever take/receive any of the following? [ONLY include PRODUCTS/SERVICES LOCALLY PROVIDED. IF PROVIDED locally, SHOW THE MOTHER/CAREGIVER THE PRODUCT YOU ARE ASKING ABOUT.]	<table border="1"> <thead> <tr> <th></th> <th>Yes</th> <th>No</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td>Iron supplement or syrup? (For example, ferrous sulfate)</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>A multi-vitamin and mineral supplement, syrup or powder (such as Sprinkles)?</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Lipid nutrient supplement, (such as Nutributter or Plumpydoz or [LOCAL NAME/ PRODUCT])?</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Supplementary food, (such as Corn Soya Blend or [LOCAL NAME/ PRODUCT])</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>General food rations</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Vouchers for food</td> <td>01</td> <td>02</td> <td>99</td> </tr> <tr> <td>Cash assistance to help purchase food [USE LOCAL PROGRAM NAME]</td> <td>01</td> <td>02</td> <td>99</td> </tr> </tbody> </table>		Yes	No	DK	Iron supplement or syrup? (For example, ferrous sulfate)	01	02	99	A multi-vitamin and mineral supplement, syrup or powder (such as Sprinkles)?	01	02	99	Lipid nutrient supplement, (such as Nutributter or Plumpydoz or [LOCAL NAME/ PRODUCT])?	01	02	99	Supplementary food, (such as Corn Soya Blend or [LOCAL NAME/ PRODUCT])	01	02	99	General food rations	01	02	99	Vouchers for food	01	02	99	Cash assistance to help purchase food [USE LOCAL PROGRAM NAME]	01	02	99	
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Vouchers for food	01	02	99																															
Cash assistance to help purchase food [USE LOCAL PROGRAM NAME]	01	02	99																															
83. During the past 6 months, since _____ (month), did [child's name] ever take a vitamin A capsule, supplement or syrup?	<table border="1"> <tbody> <tr> <td>Yes.....</td> <td>01</td> </tr> <tr> <td>No.....</td> <td>02</td> </tr> <tr> <td>Does not know.....</td> <td>99</td> </tr> </tbody> </table>	Yes.....	01	No.....	02	Does not know.....	99																											
Yes.....	01																																	
No.....	02																																	
Does not know.....	99																																	
<b>VI. HEALTH COMMUNICATION</b>																																		
Now, I would like to discuss where you receive messages about feeding children.																																		
90. In the past 3 months, did you hear or receive any messages or information on child feeding?	<table border="1"> <tbody> <tr> <td>Yes.....</td> <td>01</td> </tr> <tr> <td>No.....</td> <td>02</td> </tr> <tr> <td>Does not know.....</td> <td>99</td> </tr> </tbody> </table>	Yes.....	01	No.....	02	Does not know.....	99	<table border="1"> <tbody> <tr> <td>02-&gt;93</td> </tr> <tr> <td>99-&gt;93</td> </tr> </tbody> </table>	02->93	99->93																								
Yes.....	01																																	
No.....	02																																	
Does not know.....	99																																	
02->93																																		
99->93																																		

<p>91. Where or from whom did you receive the messages? (Do not read list aloud. Multiple answers are acceptable. Choose all that apply.)</p>	<p>Yes</p> <p>01 - Health facility 01 02 - Community health worker 01 03 - Traditional health providers 01 04 - Family member 01 05 - Neighbor/friend 01 06 - Child who attends school 01 07 - Community gathering 01 08 - Radio 01 09 - Television 01 10 - Internet 01 11 - Mobile phone messaging 01 12 - Printed materials 01 13 - Religious institution 01 14 - Mother-to-mother group 01 77 - Other, specify _____ 01 99 - Does not know/remember 01</p>	
<p>92. Do you remember what the message(s) said? (IF THE MOTHER/ CAREGIVER ANSWERS NO, ASK HER TO TRY TO REMEMBER, REPEAT THE QUESTION AND WAIT FOR A REASONABLE AMOUNT OF TIME)</p>	<p>Yes.....01 Please describe: _____ _____ _____ _____ No.....02</p>	
<p>93. How often do you listen to the radio?</p>	<p>Daily (7 days a week).....01 2 to 6 days a week .....02 Once a week.....03 Once every 2 weeks .....04 Once a month.....05 Rarely.....06 Other, specify_____77 Does not know.....99</p>	
<p>94. Do you ever watch television?</p>	<p>Yes.....01 No.....02</p>	
<p>95. Do you participate in any community organizations or social programs? (MENTION EXAMPLES SUCH AS COMMUNITY KITCHENS, PARENT ASSOCIATIONS, CREDIT ASSOCIATIONS, HEALTH COMMITTEES, ETC.)</p>	<p>Yes.....01 No.....02 Does not know.....99</p>	<p>02-&gt;100 99-&gt;100</p>
<p>96. In which organizations or programs do you participate? (WRITE DOWN ANY ORGANIZATIONS AND PROGRAMS that are mentioned.)</p>	<p>_____ _____ _____ _____</p>	

**VII. FAMILY INFORMATION**

Now, I will ask you some questions regarding this family and home.



100. How many people live in the home? (Clarify that the respondent should include herself, any other adults, including the elderly, and all children. Record the number in column B.)	Number.....__ __	
101. How many of them are under five years of age? (Record the number in next column)	Number.....__ __	
102. How old are you?	Age.....__ __ Does not know.....99	
103. Are you (the mother/caregiver)_____? (READ THE FIRST THREE OPTIONS aloud.)	Single.....01 Married/have a partner.....02 Separated/divorced/widowed.....03 Does not know.....99	
104. Do you know how to read and write? [IF THE RESPONDENT SAYS “YES”, ASK HER TO READ A SENTENCE IN LOCAL/NATIONAL LANGUAGE]	Yes (able to read whole sentence.....01 No (cannot read at all.....02 Able to read only parts of sentence.....03 Blind/visually impaired.....04	
105. What is the highest grade/form/ year of school that you completed?	Grade/form/year.....__ __ Did not study.....00 Does not know.....99	
106. In your household, who usually makes decisions about purchasing food or taking CHILD’S NAME to health services?	Mother/caregiver.....01 Husband/partner or other man in the household.....02 Mother/caregiver and father together.....03 Elder person in household/family (e.g. the grandparent of the child.....04 Mother/caregiver together with the elder person.....05 Other person, specify _____77 Mother/caregiver together with this other person.....06 Does not know.....99	
107. In what store or markets do you buy food? (WRITE THE NAME AND APPROXIMATE LOCATION)	_____ _____ _____ _____	
Now, I would like to discuss any employment you may have.		
108. Aside from your own housework, have you done any paid work in the last seven days?	Yes.....01 No.....02 Does not know.....99	02->110 99->110

<p>109. If yes, what is your occupation, that is, what kind of work do you mainly do?</p>	<p>Vendor.....01  Agricultural work .....02  Animal breeding .....03  Government Service .....04  Private work/service .....05  Social work/NGO .....06  Services not mentioned above .....07  Other, specify_____77</p>	
<p>110. Does anyone in your household grow food? If yes, tell me about all the types of food that are grown.  (CHECK ALL THAT APPLY)</p>	<p>Yes (grains, roots, tubers).....01  Yes (legumes, nuts).....02  Yes (orange or yellow fruits &amp; vegetables).....03  Yes (green leafy vegetables).....04  Yes (any other fruits &amp; vegetables).....05  Yes (other: specify_____)...77  No.....07  Does not know.....99</p>	
<p>111. Does this household own livestock, herds, other farm animals, poultry or fish? If yes, tell me about all the types of animals that you have.  (CHECK ALL THAT APPLY)</p>	<p>Yes (chickens, ducks, or other birds: for the meat).....01  Yes (chickens, ducks, or other birds: for the eggs).....02  Yes (cows, goats, sheep, pigs, camels or other large mammals for the meat).....03  Yes (cows, goats, sheep, or camels for the milk).....04  Yes (rabbits, guinea pigs, or other small mammals).....05  Yes  (fish).....06  No.....07  Does not know.....99</p>	

**VIII. HOUSING**

Now I would like to talk about your home.

120. What is the main source of drinking water for members of your household?	<b>Piped water</b> Piped into dwelling.....01 Piped into compound, yard or plot.....02 Piped to neighbor.....03 Public tap / standpipe.....04 Tube well, Borehole.....05 <b>Dug well</b> Protected well.....06 Unprotected well.....07 <b>Water from spring</b> Protected spring.....08 Unprotected spring.....09 Rainwater collection.....10 Tanker-truck.....11 Cart with small tank / drum.....12 Surface water (river, stream, dam, lake, pond, canal, irrigation channel).....13 Bottled water.....14 Other, specify:.....77 Does not know..... 99	01->122
121. How long does it take to go there, get water and come back?	Number of minutes.....__ __ Does not know.....99	
122. Do you do anything to the water to make it safer to drink?	Yes.....01 No.....02 Does not know.....99	02->124 99->124
123. What do you usually do to make the water safer to drink? (PROBE WITH QUESTIONS LIKE: “ANYTHING ELSE”? RECORD EVERYTHING THAT IS MENTIONED.)	Boil.....01 Add bleach / chlorine.....02 Strain it through a cloth.....03 Use water filter (ceramic, sand, composite, etc.).....04 Solar disinfection.....05 Let it stand and settle.....06 Other, specify:.....77 Does not know.....99	
124. What kind of toilet facility do members of your household usually use?	<b>Flush / Pour flush</b> Flush to piped sewer system.....01 Flush to septic tank.....02 Flush to pit (latrine).....03 Flush to somewhere else.....04 Flush to unknown place / Not sure / Does not know where.....05 <b>Pit latrine</b> Ventilated Improved Pit latrine (VIP) ..06 Pit latrine with slab.....07 Pit latrine without slab / Open pit.....08 Composting toilet.....09 Bucket.....10 Hanging toilet, Hanging latrine.....11 No facility, bush, field.....12 Other, specify:.....77 Does not know.....99	

125. What type of fuel does your household mainly use for cooking?	Electricity.....01 Liquefied Petroleum Gas (LPG).....02 Natural gas.....03 Biogas.....04 Kerosene.....05 Coal / Lignite.....06 Charcoal.....07 Wood.....08 Straw / shrubs / grass.....09 Animal dung.....10 Agricultural crop residue.....11 No food cooked in household.....12 Other, specify:.....77																					
126. Does your household have	<table border="0"> <tr> <td></td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> </tr> <tr> <td>A) Electricity</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> </tr> <tr> <td>B) Radio</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> </tr> <tr> <td>C) Television</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> </tr> <tr> <td>D) Phone (landline or mobile)</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> </tr> <tr> <td>E) Refrigerator</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> </tr> </table>		Yes	No	A) Electricity	01	02	B) Radio	01	02	C) Television	01	02	D) Phone (landline or mobile)	01	02	E) Refrigerator	01	02			
	Yes	No																				
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B) Radio	01	02																				
C) Television	01	02																				
D) Phone (landline or mobile)	01	02																				
E) Refrigerator	01	02																				
<b>IX. HIV/AIDS AND CHILD FEEDING</b>																						
Now I would like to talk about AIDS.																						
130. Have you ever heard of an illness called AIDS?	Yes.....01 No.....02	02->end of survey																				
131. Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	<table border="0"> <tr> <td></td> <td style="text-align: center;">Yes</td> <td style="text-align: center;">No</td> <td style="text-align: center;">DK</td> </tr> <tr> <td>During pregnancy</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">99</td> </tr> <tr> <td>During delivery</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">99</td> </tr> <tr> <td>By breastfeeding</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">99</td> </tr> <tr> <td>Other, specify _____</td> <td style="text-align: center;">01</td> <td style="text-align: center;">02</td> <td style="text-align: center;">99</td> </tr> </table>		Yes	No	DK	During pregnancy	01	02	99	During delivery	01	02	99	By breastfeeding	01	02	99	Other, specify _____	01	02	99	
	Yes	No	DK																			
During pregnancy	01	02	99																			
During delivery	01	02	99																			
By breastfeeding	01	02	99																			
Other, specify _____	01	02	99																			
132. Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	Yes.....01 No.....02 Does not know.....99																					
133. Have you learned about ways to prevent passing the AIDS virus from mother to child during breastfeeding?	Yes.....01 No.....02	02->135																				
134. How did you learn about ways to prevent passing the AIDS virus from mother to child during breastfeeding? (DO NOT READ OUT THE LIST) (MULTIPLE ANSWERS ARE ACCEPTED., CIRCLE ALL CODES THAT APPLY.)	<table border="0"> <tr> <td></td> <td style="text-align: center;">Yes</td> </tr> <tr> <td>01 - Health personnel (doctor, nurse, midwife, Counselor) Public.....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>02 - Health personnel (doctor, nurse, midwife, Counselor) NGO.....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>03 - Community health worker .....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>04 - Traditional health provider healer .....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>05 - Family member.....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>06 - Neighbor/friend.....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>07 - Through Media .....</td> <td style="text-align: center;">01</td> </tr> <tr> <td>77 - Other, specify.....</td> <td style="text-align: center;">01</td> </tr> </table>		Yes	01 - Health personnel (doctor, nurse, midwife, Counselor) Public.....	01	02 - Health personnel (doctor, nurse, midwife, Counselor) NGO.....	01	03 - Community health worker .....	01	04 - Traditional health provider healer .....	01	05 - Family member.....	01	06 - Neighbor/friend.....	01	07 - Through Media .....	01	77 - Other, specify.....	01			
	Yes																					
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05 - Family member.....	01																					
06 - Neighbor/friend.....	01																					
07 - Through Media .....	01																					
77 - Other, specify.....	01																					

	99 - Does not know.....01	
135. Were you tested for the AIDS virus during your pregnancy with CHILD'S NAME?	Yes.....01 No.....02 Does not know.....99	
<p>(Thank the mother/caregiver. If her child is 6.0 Month or older, ask her if it would be ok to continue the interview with some questions about what the child ate yesterday (i.E., Administer Dietary Diversity).          If not, ask if it would be possible to return another day at a more convenient time. If she agrees, ask what would be the most convenient day and time, and write in observations below.          If you have any observations (e.G., How to locate the home, or some extra information about any of the answers given by the respondent, write them in the space below.)</p>		
170. Observations	<hr/> <hr/> <hr/> <hr/>	

## APPENDIX 6: DIETARY DIVERSITY QUESTIONNAIRE

<b>I. IDENTIFICATION</b>	
1. Date survey is applied	Date.....__ __/ __ __/ __ __ __ __ day   month       year
2. Field Worker's code	Code.....__ __
3. Survey results	Complete.....01 Incomplete.....02 Dates of follow up visits: Visit 1.....__ __/ __ __/ __ __ __ __ day   month       year Visit 2.....__ __/ __ __/ __ __ __ __ day   month       year
4. Child's code	Code.....__ __ __ __
5. Full Address WRITE THE DISTRICT, UNION, VILLAGE, STREET, AVENUE, KILOMETER, NEIGHBORHOOD, ETC.	_____ _____ _____
6. Supervisor's code	Code.....__ __
7. Date reviewed by supervisor	Date.....__ __/ __ __/ __ __ __ __ day   month       year

<b>II. DIETARY DIVERSITY</b>
<p><b>Please describe the foods (meals and snacks) that you ate or drank yesterday during the day and night, whether at home or outside the home. Start with the first food or drink of the morning.</b></p> <p><i>Write down all foods and drinks mentioned. Circle whether each meal or snack was eaten inside or outside the home. When composite dishes are mentioned, ask for the list of ingredients.</i></p> <p><i>When the respondent has finished, probe for meals and snacks not mentioned.</i></p>

<b>Breakfast</b>	<b>Snack</b>	<b>Lunch</b>	<b>Snack</b>	<b>Dinner</b>	<b>Snack</b>
Inside Outside <i>(circle one)</i>	Inside Outside <i>(circle one)</i>	Inside Outside <i>(circle one)</i>	Inside Outside <i>(circle one)</i>	Inside Outside <i>(circle one)</i>	Inside Outside <i>(circle one)</i>

Was yesterday a celebration or feast day where you ate special foods or where you ate more or less than usual?

- Yes, more than usual
- Yes, less than usual
- No, yesterday was not a celebration or feast day

### III. FOOD GROUPS

*When the respondent recall is complete, fill in the food groups based on the information recorded in the previous section. For yes answers, circle the name of the food consumed. For any food groups not mentioned, ask the respondent if a food item from this group was consumed.*

Number	Food Group	Examples	YES=1 NO=2
1	CEREALS, WHITE ROOTS AND TUBERS	corn/maize, rice, wheat or any other grains or foods made from these (e.g. bread, noodles, porridge), sticky rice, oats, white potatoes, taro root, white and purple sweet potatoes, white radish, chive root, and other foods made from roots	
2	VITAMIN A RICH FRUITS , VITAMIN A RICH VEGETABLES AND TUBERS	pumpkin, carrot, sweet potato that are orange inside + red and yellow sweet pepper, ripe mango, ripe papaya, ripe passion, dried peach, cantaloupe, tae fruit, and 100% fruit juice made from these	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	paung laung leaf, spinach, watercress, horse shoe leaf, green sweet pepper, lettuce, mustard, bean greens, pumpkin green, chagyta green, coriander, drumstick, roselle, kale, and other vitamin A rich leaves, tomato, onion, eggplant, garlic, mushroom, bamboo shoot, gourd greens, cauliflower, okra, hin cho leaves, chilly, cucumbers, cabbages, ash pumpkin, gourd, grapes, apple, grapefruit, orange, pomelo, lime, kabala, tangarine, pomegranate, banana, durian, strawberry, pineapple, lychee, peach, pear, lemon, other fruits, and 100% fruit juice made from these	
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	liver, kidney, heart, gizzard or other organ meats, beef, pork, goat, rabbit, game (eg. hog, wild cow, etc., ..., ...), dog, monkey, frog, rat, chicken, duck, sparrow, other birds, insects, fish, shrimp, crab, snail, sardine, eel, fish eggs, dried fish or shell fish, fish without scale	
5	EGGS	eggs from chicken, duck, goose or any other egg	
6	LEGUMES, NUTS AND SEEDS	dried beans, dried peas, lentils, nuts, beans, chick peas, green peas, seeds (eg. peanut, almond, cashew nut, walnut, sunflower, soy bean, pumpkin) or foods made from these (eg. tofu, peanut butter)	
7	MILK AND MILK PRODUCTS	milk, cheese, yogurt, ma line or other milk products	
8	OILS AND FATS	oil (peanut, sesame, coconut, palm, mustard, walnut, sunflower), fats (gee, pork, fried potato, fried tofu, fried fish cracker, various fries) or butter added to food or used for cooking	
9	Did you eat anything (meal or snack) OUTSIDE the home yesterday?		





### **III. DIET & HEALTH DURING PREGNANCY**

#### **Key Question 3.1:**

I would like to show you some pictures of several pregnant women and I would like you to discuss who you think is healthy and having a good pregnancy and who is sick or might be having problems with her pregnancy.

Probes:

- Can you describe each woman's health condition?
- Why do the women appear healthy or sickly?
- Is their diet an influence? If so, what is it about their diet?
- Is their "good" or problem pregnancy affecting their unborn baby? How?

#### **Key Question 3.2:**

Now let's talk about women in this community. Which of these women best reflects the experience of women in this community?

Probes:

- What characteristics do they share with women in this community?
- What characteristics differ?
- What circumstances affect a woman's ability to get food during the course of her pregnancy? (change in seasons, migration, husband outside the home for work, etc.)

#### **Key Question 3.3:**

What is the experience of women in this community with delivery/birthing?

Probes:

- Is the experience connected to diet during pregnancy? How?

#### **Key Question 3.4:**

What is the health of babies in this community when they are born?

Probes:

- Are they healthy or unhealthy?
- What influences a healthy or unhealthy birth?
- Is the experience connected to the mother's diet during pregnancy? How?

### **IV. DIET & HEALTH AFTER PREGNANCY**

#### **Key Question 4.1:**

For those of you who are lactating or those who have previously had children, did your diet change after your baby was born? For first-time mothers, do you think your diet will change once your baby is born?

Probes:

- Can you describe the changes?
- Probe into numbers of meals and snacks, amount eaten during meals and snacks, what foods will be added or avoided
- Why did your diet change?

#### **Key Question 4.2:**

Can anyone share their experience with breastfeeding? Do you currently breastfeed your child or plan to breastfeed your child?

Probes:

- Probe into frequency, difficulties
- What influenced these breastfeeding practices?
- Are these breastfeeding practices representative of the community?
- Is diet linked to milk production and transfer of nutrients to children? How?

## **V. SOURCES OF INFORMATION AND ADHERENCE TO ADVICE**

### **Key Question 5.1:**

Can anyone here tell me about any advice they have received about what to eat during their pregnancy and who offered or where did they learn about the recommendation?

Probes:

- Probe different sources of information: people in the family, relatives outside of the house, health practitioners, traditions/myths, etc.
- What does the group think about the different pieces of advice?
- Would you follow the advice? Why or why not?

## **VI. REACTION TO RECOMMENDATIONS**

### **Key Question 6.1:**

Now I would like to share with you some recommendations that women in other communities have made about ways they have found to improve their diets during their pregnancy. I would like to hear what you think about them:

1. The first suggestion is to eat more food, by eating an extra rice and curry midday and in the evening.
2. The second suggestion is to eat more food by serving an additional large spoonful of beans with the meal twice a day.
3. The third suggestion is to not add food at meal time, but instead eat a snack like a small serving of beans and rice or a tortilla with beans or cheese
4. The fourth suggestion is to eat egg or cheese every day or at least several times a week.
5. The fifth suggestion is eat a serving of fruit or vegetable every day. This can be a mango, or a large piece of papaya, or carrots or tomatoes added to the food being prepared mid-day.

Probes:

- What are the advantages or disadvantages of each recommendation?
- Would these recommendations be easy to implement in your community? Why or why not?
- Would someone in the household have to agree to this practice in order to try it? Who?
- Would you be willing to try one of these recommendations tomorrow or in the next week? Why or why not?

## **VII. CLOSING**

Before we end our discussion today, does anyone have anything additional to add or does anyone think we missed something?

Thank you so much for sharing your opinions with us today. We really appreciate your time and contribution.

**Debriefing:** After the focus group is complete, moderator and notetaker should debrief to compare notes, fill in missing details if necessary, and share impressions of the discussion.

## APPENDIX 8: MARKET SURVEY

<b>I. IDENTIFICATION</b>	
1. Date survey is applied	Date.....__ __/ __ __/ __ __ __ __ day   month     year
2. Field Worker's code	Code.....__ __
3. Survey results	Complete.....01 Incomplete.....02
4. Market number	Number.....__ __
5. Full Address WRITE THE DISTRICT, UNION, VILLAGE, STREET, AVENUE, KILOMETER, NEIGHBORHOOD, ETC.	_____ _____ _____
6. Supervisor's code	Code.....__ __
7. Date reviewed by supervisor	Date.....__ __/ __ __/ __ __ __ __ day   month     year

**II. MARKET SURVEY**

*For each food in the chart, fill in whether or not the food is available, cost per unit of measurement, and what time of year the food is available.*

Group	Food Group	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY															
					All	J	F	M	A	M	J	J	A	S	O	N	D			
1	CEREALS, WHITE ROOTS AND TUBERS	corn/maize																		
		rice																		
		sticky rice																		
		wheat																		
		oats																		
		bread																		
		noodles																		
		porridge																		
		white potatoes																		
		white radish																		
		taro root																		
		white and purple sweet potatoes																		
		Chive root																		
		other foods made from roots (Please mention below)																		
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	pumpkin																		
		carrot																		
		sweet potato that are orange inside																		
		Red and yellow sweet pepper																		
		ripe mango																		
		ripe papaya																		
		ripe passion																		
		dried peach																		
		cantaloupe																		
		tae fruit																		



Group	Food Group	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
					All	J	F	M	A	M	J	J	A	S	O	N	D
		grapefruit															
		orange															
		pomelo															
		lime															
		kabala															
		tangarine															
		pomegranate															
		banana															
		durian															
		strawberry															
		pineapple															
		lychee															
		peach															
		pear															
		lemon															
other fruits																	
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	liver															
		kidney															
		heart															
		gizzard															
		other organ meats															
		Beef															
		Pork															
		Lamb															
		Goat															
		rabbit															
		Game (eg. hog, wild cow, etc.,)															
		chicken															
		Duck															
		sparrow															
		other birds															
insects																	
Fresh fish																	
Shrimp																	

Group	Food Group	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY														
					All	J	F	M	A	M	J	J	A	S	O	N	D		
		Crab																	
		Snail																	
		Fish eggs																	
		Eel																	
		Dried fish																	
		Shell fish																	
		Fish without scale																	
5	EGGS	eggs from chicken																	
		Duck																	
		quail																	
		goose																	
		any other eggs																	
6	LEGUMES, NUTS AND SEEDS	dried beans																	
		dried peas																	
		Lentils																	
		Nuts																	
		beans																	
		green peas																	
		chick peas																	
		peanut																	
		Almond seed																	
		cashew nut																	
		walnut																	
		Sunflower seed																	
		soy bean seed																	
		Pumpkin seed																	
foods made from these (eg. tofu, peanut butter) (Please mention below)																			



Group	Food Group	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
					All	J	F	M	A	M	J	J	A	S	O	N	D
7	MILK AND MILK PRODUCTS	milk															
		cheese															
		yogurt															
		ma line															
		Other milk products (Please mention below)															
8	OILS AND FATS	peanut oil															
		sesame oil															
		coconut oil															
		palm oil															
		mustard oil															
		walnut oil															
		sunflower oil															
		gee															
		pork															
		butter															

## APPENDIX 9: OPPORTUNISTIC OBSERVATION

It is possible to observe all key elements of breastfeeding and complementary feeding in a single caregiver-child pair or in a single observation. However, Field Workers should refer to the key data items below nonetheless whenever it is possible to observe the feeding of a child under 2 years old, recording as much data as possible.

<b>I. IDENTIFICATION</b>	
1. Date observation conducted	Date.....__ __/ __ __ / __ __ __ __ day   month        year
2. Field Worker's code	Code.....__ __
3. Observation results	Complete.....01 Incomplete.....02
4. Child's code	Code.....__ __ __ __
5. Child's name	_____
6. Child's age (months)	__ __ months
7. Child's sex	M ( )      F ( )
8. Age of feeding person (years)	__ __ years
9. Sex of feeding person	M ( )      F ( )
10. Place of observation (home, market, park, etc.)	_____
11. Mealtime observed (breakfast, lunch, dinner, or snack)	_____
12. Duration of observation (min)	__ __ min
13. Supervisor's code	Code.....__ __
14. Date reviewed by supervisor	Date.....__ __/ __ __ / __ __ __ __ day   month        year

TOPIC	OBSERVATION
<b>II. BREASTFEEDING</b>	
1. Caregiver-child interaction: _____ _____ <ul style="list-style-type: none"> <li>• Does the caregiver pay attention to the child? _____</li> <li>• Is the child breastfed to satiety? _____</li> <li>• Are any difficulties observed? [If so, describe below.]</li> </ul> _____ _____	
<b>III. COMPLEMENTARY FEEDING</b>	
During mealtime 1. When serving the food, does the caregiver: <ul style="list-style-type: none"> <li>• Wash the child's hands? Yes ( ) No ( )</li> <li>• Serve the child first? Yes ( ) No ( )</li> </ul>	
2. Child eats: by himself/herself ( ) with family members ( )	
3. How is the child fed during the mealtime? <ul style="list-style-type: none"> <li>• The child feeds self without help from caregiver ( )</li> <li>• The child mostly feeds self but receives help from caregiver ( )</li> <li>• The child is fed mostly by caregiver but sometimes feeds self ( )</li> <li>• The child is fed only by caregiver (i.e., child does not touch food or utensils). ( )</li> </ul>	
4. Is the child served food on his/her own plate? _____ Is a spoon, bottle, or other utensil used to feed the child? _____	
5. What is the location of caregiver in relation to child? _____ <ul style="list-style-type: none"> <li>• Caregiver is near the child and attentive ( )</li> <li>• Caregiver is not near the child and/or busy with another activity ( )</li> </ul>	
6. Foods, dishes, and drinks served to child: _____	
7. Are any foods, dishes, or drinks served only to the child (not to other members of the family)? If so, which types of foods, dishes, or drinks? _____	
8. Is the child only served portions of the foods, or drinks that are served to the rest of the family, or are some foods or drinks prepared specially for the child? _____	
9. Are any foods or drinks served only to the rest of the family (not to the child)? _____	

<b>CAREGIVER-CHILD INTERACTION</b>	
<p>10. Does the caregiver talk to the child, verbally encouraging him/her to eat? What does the caregiver say?</p> <p>_____</p> <p>_____</p>	
<p>11. Does the caregiver encourage the child when he/she is eating well? What does the caregiver do or say?</p> <p>_____</p> <p>_____</p>	
<p>12. Does the caregiver ever motivate the child to eat more using gestures or games, or by demonstrating to her/him how to eat?</p> <p>_____</p> <p>What strategies does the caregiver use?</p> <p>_____</p>	
<p>13. Does the caregiver ever physically force the child to eat during the meal?</p> <p>_____</p>	
<p>14. During the meal, does the child ever refuse the food?</p> <p>_____</p> <p>What does the caregiver do?</p> <p>_____</p> <p>_____</p>	
<p>15. Does the caregiver ever serve additional portions to the child during the meal?</p> <p>_____</p>	
<p>16. Does the child eat all of the food he/she is served?</p> <p>_____</p> <p>What does the caregiver do with any leftovers?</p> <p>_____</p> <p>_____</p>	
<p>17. How does the caregiver spend her time while the child is eating?</p> <p>_____</p>	
<p>18. Other aspects related to the feeding:</p> <p>_____</p> <p>_____</p>	
<p>19. General observations about hygiene during food preparation or handling:</p> <p>_____</p> <p>_____</p>	



### **III. DATA COLLECTION**

**Key Question:**

How was your data collection experience?

**Probes:**

- What went well?
- What didn't go well?
- How did you deal with the challenges you encountered?
- Inquire into the specific data collection activities to get feedback on each.

**Key Question:**

What was the reaction of respondents to the data collection?

**Probes:**

- What questions or comments did the respondents have?
- Were there any difficulties or complaints?
- Ask about the assessment in general and the individual forms.

### **IV. TRAINING**

**Key Question:**

Was the training appropriate for the context in which you were collecting data?

**Probes:**

- What additional resources would be helpful?
- What additional training would be helpful?
- How can we better support you in your role as data collectors?
- Probe into each individual training: anthropometric measurements, caregiver survey, dietary diversity, market survey, opportunistic observations, FGDs

### **V. LESSONS LEARNED**

**Key Question:**

What did you learn from this process?

**Probes:**

- How will this help you in your role as case managers and community facilitators?
- How will this help you for future assessments?
- Would you do anything differently in the future?

### **VI. CLOSING**

Before we end our discussion today, does anyone have anything additional to add or does anyone think we missed something? Any additional lessons learned or comments?

Thank you again for sharing your experiences with us. We look forward to integrating this information into future assessments and look forward to working with you soon to implement the intervention.

## APPENDIX 11: PROPAN DAILY TRAINING FEEDBACK

1. What did you like about today's training?
2. What did you learn in today's training?
3. What could be improved in today's training?

## APPENDIX 12: PROPAN END OF TRAINING EVALUATION

**1. Overall, how would you rate the ProPAN training?**

Unsatisfactory	Needs Improvement	Satisfactory	Good	Excellent
1	2	3	4	5

Comments:

**2. On a scale of 1-5, how would you rate your understanding of each of the ProPAN components:**

	Do not understand	Understand a Little	Understand	Understand Well	Understand Completely
--	----------------------	------------------------	------------	--------------------	--------------------------

ProPAN Objectives	1	2	3	4	5
-------------------	---	---	---	---	---

Comments:

Triage	1	2	3	4	5
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Comments:

Anthropometric Measurements	1	2	3	4	5
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Comments:

Caregiver Survey	1	2	3	4	5
------------------	---	---	---	---	---

Comments:

Dietary Diversity	1	2	3	4	5
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Comments:

Focus Group Discussion	1	2	3	4	5
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Comments:

Market Survey	1	2	3	4	5
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Comments:

Opportunistic Observation	1	2	3	4	5
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Comments:

**3. On a scale of 1-5, how prepared do you feel to conduct the ProPAN assessment?**

Not Prepared At All	Somewhat Prepared	Prepared	Very Prepared	Extremely Prepared
1	2	3	4	5

Comments:

**4. How can the ProPAN training be improved?**



## APPENDIX 13: DATA MONITORING PLAN

### PROPAN ASSESSMENT DATA MONITORING & QUALITY ASSURANCE 1-6 DEC 2014

Supervisors:	Troubleshooting:
Seng Mu Bu (KMSS) – Chi Bwe Camp	Annie Zhou (Plan)
La San (KMSS) – Dum Bung Camp	
Ma Khek (Plan) – Remote Monitoring, Moe Nyin & KMSS Officers	
May Thukha Soe (Plan) – Remote Monitoring, Hpakant & KMSS Officers	

#### Supervisor daily responsibilities:

- If security allows, observe at least 20% of data collection activities in person:
  - Provide guidance and feedback to case managers and community facilitators as needed
  - If it is not possible to observe all 6 days of data collection in person, supervisors should be present for Triage & Anthropometric Measurements
- Maintain regular communication with case managers and community facilitators:
  - Monitor progress of data collection activities according to the ProPAN timeline
  - Address any concerns or questions that arise
  - Check in at the end of the day in person (preferred) or by phone/text:
    - Solicit update on the day's data collection activities (# mothers/caregivers/children surveyed)
    - Receive data collected that day for review (if not possible, direct case managers & community facilitators to cross check their work)
- Review data collected that day:
  - Clarify any illegible answers or marks using red pen
  - Are forms filled out completely?
  - Are ID numbers and mother/child codes clearly labelled?
  - Are data points plausible?
  - Were skip patterns followed?
  - Are free response answers written in Burmese?
  - See checklist for additional guidelines
- Communicate with Annie Zhou & other supervisors:
  - Discuss special cases to standardize how these situations are addressed
  - Share challenges and/or successful strategies
  - KMSS & Plan Officers should communicate on a daily basis
- Document data collection experiences, including:
  - Questions/concerns and their solutions
  - Common errors
  - Challenges & successes
  - # of surveys/forms received

#### At the conclusion of data collection activities:

- Ensure that all 7 forms (and the correct quantities) are received
- Ensure that all materials are accounted for
  - Heightboards can stay at the camp
  - Scales must be brought back

## APPENDIX 14: DATA SUPERVISION CHECKLIST

### DEMOGRAPHIC ASSESSMENT

- Is the field worker's code written on the top of every sheet?
- Are all children under 5 years of age and their mothers/caregivers included?
- Are all children under 2 identified for further assessment?
- Are age calculations correct?
- Are pregnant/lactating women identified for further assessment?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Was consent obtained?

### ANTHROPOMETRIC MEASUREMENTS

- Are the child/caregiver codes written correctly?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Are all children 6-59 months of age included?
- Do weight, height, and MUAC measurements make sense logically?

### CAREGIVER SURVEY

- Is the field worker's code written on the top of every sheet?
- Is the child's code written correctly on the top of every sheet?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Does the survey include all mothers/caregivers of children under 2 (born after Dec 1, 2012)?
- Were skip patterns followed?

### DIETARY DIVERSITY

- Is the field worker's code written on the top of every sheet?
- Is the mother/caregiver's code written correctly on the top of every sheet?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Was the form completed for all mothers/caregivers that participated in the Caregiver Survey?
- Were all composite dishes broken down?
- In section 3, are all yes answers accompanied by circling the item consumed?
- Do all ingredients in section 2 appear in section 3?

### FOCUS GROUP DISCUSSION

- Is the field worker's code written on the top of every sheet?
- Are all fields in the identification section filled out?
- Do the notes make sense?
- Do the notes include moderator/notetaker observations from after the FGD?
- Are PLW demographics recorded on the attendance sheet?

### MARKET SURVEY

- Is the field worker's code written correctly on the top of every sheet?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Do the prices per unit make sense logically?

**OPPORTUNISTIC OBSERVATIONS**

- Is the field worker's code written on the top of every sheet?
- Is the child's code written correctly on the top of every sheet?
- Are all fields in the identification section filled out?
- Are all relevant sections filled out?
- Was the observation conducted only on children under 2 and their mothers/caregivers?
- Are short answers recorded as well as detailed observations?

## APPENDIX 15 ANTHROPOMETRIC MEASUREMENT RESULTS

**Table 3.1: Distribution of age and sex of sample**

AGE (mo)	Boys		Girls		Total		Ratio
	no.	%	no.	%	no.	%	Boy:girl
6-17	26	44.1	33	55.9	59	26.8	0.8
18-29	29	60.4	19	39.6	48	21.8	1.5
30-41	23	53.5	20	46.5	43	19.5	1.1
42-53	24	61.5	15	38.5	39	17.7	1.6
54-59	14	45.2	17	54.8	31	14.1	0.8
<b>Total</b>	<b>116</b>	<b>52.7</b>	<b>104</b>	<b>47.3</b>	<b>220</b>	<b>100.0</b>	<b>1.1</b>

**Table 3.2: Prevalence of acute malnutrition based on weight-for-height z-scores (and/or oedema) and by sex**

	All n = 216	Boys n = 114	Girls n = 102
Prevalence of global malnutrition (<-2 z-score and/or oedema)	(7) 3.2 %	(2) 1.8 %	(5) 4.9 %
Prevalence of moderate malnutrition (<-2 z-score and >=-3 z-score, no oedema)	(6) 2.8 %	(2) 1.8 %	(4) 3.9 %
Prevalence of severe malnutrition (<-3 z-score and/or oedema)	(1) 0.5 %	(0) 0.0 %	(1) 1.0 %

The prevalence of oedema is 0.0 %

**Table 3.3: Prevalence of acute malnutrition by age, based on weight-for-height z-scores and/or oedema**

Age (mo)	Total no.	Severe wasting (<-3 z-score)		Moderate wasting (>= -3 and <-2 z-score)		Normal (> = -2 z score)		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17	59	1	1.7	3	5.1	55	93.2	0	0.0
18-29	46	0	0.0	1	2.2	45	97.8	0	0.0
30-41	42	0	0.0	0	0.0	42	100.0	0	0.0
42-53	38	0	0.0	1	2.6	37	97.4	0	0.0
54-59	31	0	0.0	1	3.2	30	96.8	0	0.0
<b>Total</b>	<b>216</b>	<b>1</b>	<b>0.5</b>	<b>6</b>	<b>2.8</b>	<b>209</b>	<b>96.8</b>	<b>0</b>	<b>0.0</b>

**Table 3.4: Distribution of acute malnutrition and oedema based on weight-for-height z-scores**

	<-3 z-score	>=-3 z-score
<b>Oedema present</b>	Marasmic kwashiorkor No. 0 (0.0 %)	Kwashiorkor No. 0 (0.0 %)
<b>Oedema absent</b>	Marasmic No. 2 (0.9 %)	Not severely malnourished No. 217 (99.1 %)

**Table 3.5: Prevalence of acute malnutrition based on MUAC cut off's (and/or oedema) and by sex**

	<b>All</b> n = 220	<b>Boys</b> n = 116	<b>Girls</b> n = 104
<b>Prevalence of global malnutrition (&lt; 125 mm and/or oedema)</b>	(2) 0.9 %	(1) 0.9 %	(1) 1.0 %
<b>Prevalence of moderate malnutrition (&lt; 125 mm and &gt;= 115 mm, no oedema)</b>	(0) 0.0 %	(0) 0.0 %	(0) 0.0 %
<b>Prevalence of severe malnutrition (&lt; 115 mm and/or oedema)</b>	(2) 0.9 %	(1) 0.9 %	(1) 1.0 %

**Table 3.6: Prevalence of acute malnutrition by age, based on MUAC cut off's and/or oedema**

Age (mo)	Total no.	Severe wasting (< 115 mm)		Moderate wasting (>= 115 mm and < 125 mm)		Normal (> = 125 mm )		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17	59	0	0.0	0	0.0	59	100.0	0	0.0
18-29	48	1	2.1	0	0.0	47	97.9	0	0.0
30-41	43	1	2.3	0	0.0	42	97.7	0	0.0
42-53	39	0	0.0	0	0.0	39	100.0	0	0.0
54-59	31	0	0.0	0	0.0	31	100.0	0	0.0
<b>Total</b>	220	2	0.9	0	0.0	218	99.1	0	0.0

**Table 3.7: Prevalence of underweight based on weight-for-age z-scores by sex**

	<b>All</b> n = 219	<b>Boys</b> n = 116	<b>Girls</b> n = 103
<b>Prevalence of underweight (&lt;-2 z-score)</b>	(22) 10.0 %	(9) 7.8 %	(13) 12.6 %
<b>Prevalence of moderate underweight (&lt;-2 z-score and &gt;=-3 z-score)</b>	(19) 8.7 %	(8) 6.9 %	(11) 10.7 %
<b>Prevalence of severe underweight (&lt;-3 z-score)</b>	(3) 1.4 %	(1) 0.9 %	(2) 1.9 %

**Table 3.8: Prevalence of underweight by age, based on weight-for-age z-scores**

Age (mo)	Total no.	Severe underweight (<-3 z-score)		Moderate underweight (>= -3 and <-2 z-score )		Normal (> = -2 z score)		Oedema	
		No.	%	No.	%	No.	%	No.	%
6-17	59	0	0.0	7	11.9	52	88.1	0	0.0
18-29	47	0	0.0	3	6.4	44	93.6	0	0.0
30-41	43	2	4.7	5	11.6	36	83.7	0	0.0
42-53	39	0	0.0	2	5.1	37	94.9	0	0.0
54-59	31	1	3.2	2	6.5	28	90.3	0	0.0
<b>Total</b>	219	3	1.4	19	8.7	197	90.0	0	0.0

**Table 3.9: Prevalence of stunting based on height-for-age z-scores and by sex**

	All n = 214	Boys n = 115	Girls n = 99
Prevalence of stunting (<-2 z-score)	(69) 32.2 %	(38) 33.0 %	(31) 31.3 %
Prevalence of moderate stunting (<-2 z-score and >=-3 z-score)	(59) 27.6 %	(33) 28.7 %	(26) 26.3 %
Prevalence of severe stunting (<-3 z-score)	(10) 4.7 %	(5) 4.3 %	(5) 5.1 %

**Table 3.10: Prevalence of stunting by age based on height-for-age z-scores**

Age (mo)	Total no.	Severe stunting (<-3 z-score)		Moderate stunting (>= -3 and <-2 z-score )		Normal (> = -2 z score)	
		No.	%	No.	%	No.	%
6-17	56	1	1.8	10	17.9	45	80.4
18-29	47	3	6.4	12	25.5	32	68.1
30-41	42	3	7.1	15	35.7	24	57.1
42-53	38	2	5.3	14	36.8	22	57.9
54-59	31	1	3.2	8	25.8	22	71.0
<b>Total</b>	214	10	4.7	59	27.6	145	67.8

Figure 1. Weight-for-Height z-scores

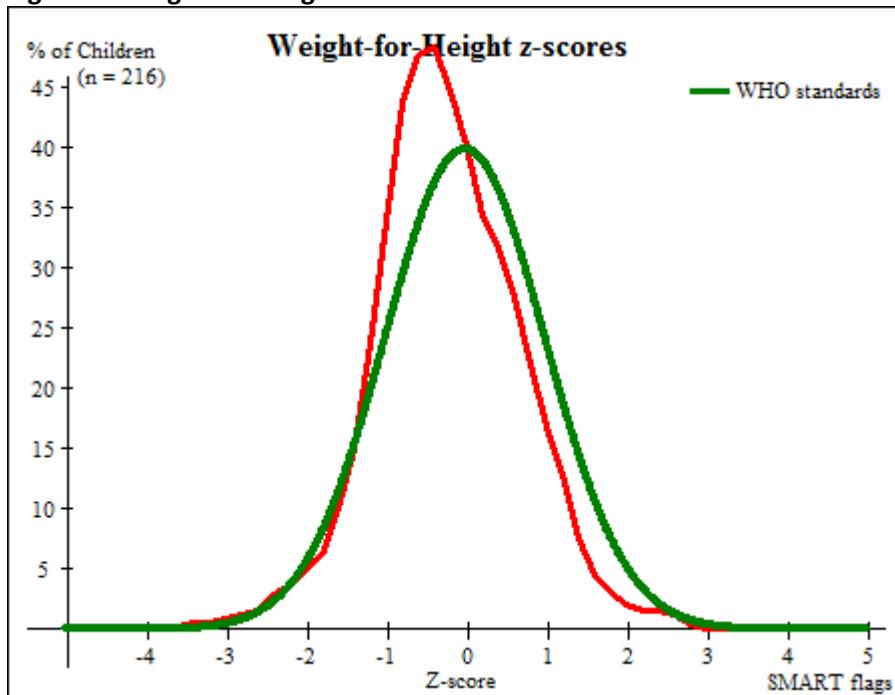


Figure 2: Height-for-Age z-scores

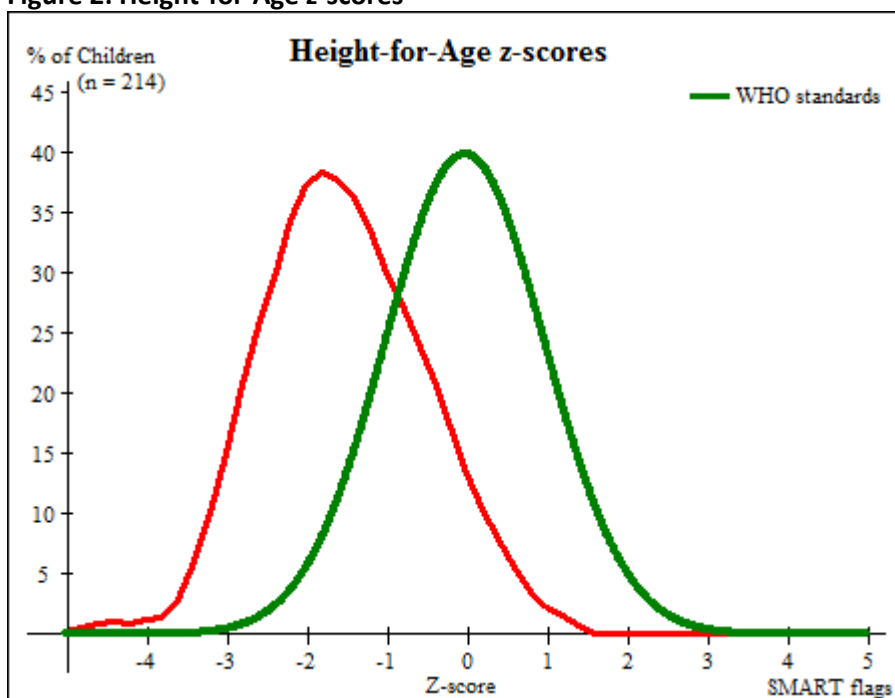
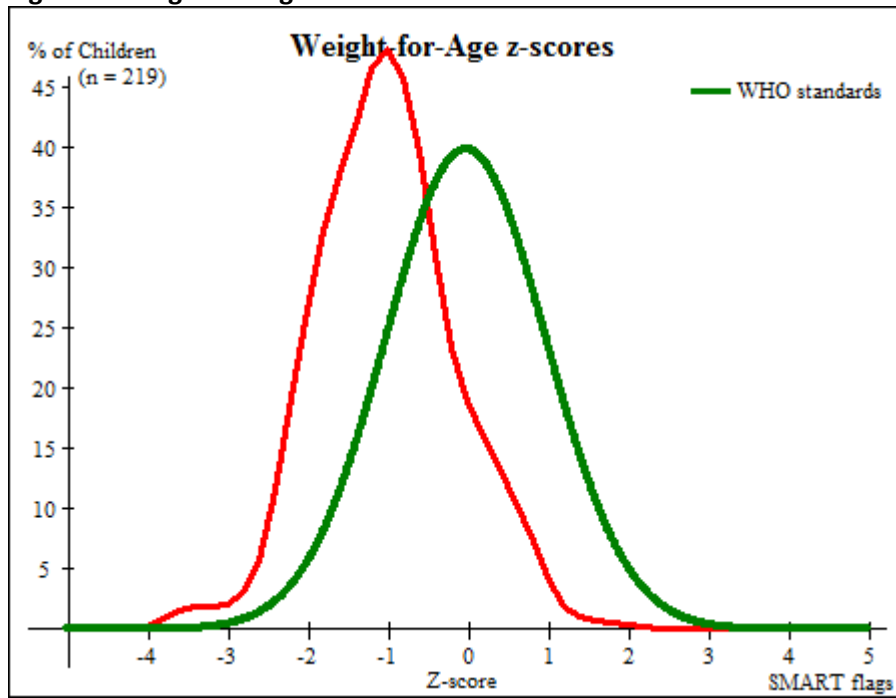


Figure 3: Weight-for-Age z-scores





## APPENDIX 16: CAREGIVER SURVEY RESULTS

### BASIC INFORMATION

#### Child's Age

Obs	Mean	Variance	Std Dev		
95	10.7	43.8	6.6		
Minimum	25%	Median	75%	Maximum	Mode
0	5	11	16	23	9

20. Could you please show me birth certificate or immunization record with CHILD'S NAME's birthdate?	Frequency	Percent
Yes	58	61%
No	37	39%
<b>Total</b>	95	100%

23. Is CHILD'S NAME a boy or a girl?	Frequency	Percent
Boy	47	50%
Girl	48	51%
<b>Total</b>	95	100%

30. During your pregnancy with CHILD'S NAME, how many times did you visit a health care center for a prenatal visit?	Frequency	Percent
1	3	4%
2	11	13%
3	24	28%
4	10	12%
5	6	7%
6	10	12%
7	3	4%
8	5	6%
9	1	1%
10	6	7%
12	1	1%
13	2	2%
14	1	1%
16	1	1%
25	1	1%

<b>31. Where did you give birth to CHILD'S NAME?</b>	<b>Frequency</b>	<b>Percent</b>
Hospital/Clinic (Public)	30	32%
Rural Health Center/ Rural Health Sub-Center (Public)	19	20%
Hospital/Clinic/Maternity Home (Private)	3	3%
In the respondent's home	36	38%
In the midwife's home	7	7%
<b>Total</b>	<b>95</b>	<b>100%</b>

## **BREASTFEEDING**

<b>32. Did you ever breastfeed CHILD'S NAME?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	92	97%
No	3	3%
<b>Total</b>	<b>95</b>	<b>100%</b>

<b>33. How many hours after birth did you breastfeed CHILD'S NAME for the first time?</b>	<b>Frequency</b>	<b>Percent</b>
Within 1 hour after birth	66	72%
From 1-3 hours after birth	8	9%
More than 3 hours after birth	16	17%
Does not know	2	2%
<b>Total</b>	<b>92</b>	<b>100%</b>

<b>34. Did you feed colostrum (the first breast milk) to your child?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	86	94%
No	6	7%
<b>Total</b>	<b>92</b>	<b>100%</b>

<b>35. During the first 3 days after birth, was CHILD'S NAME given anything other than breast milk?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	14	15%
No	78	85%
<b>Total</b>	<b>92</b>	<b>100%</b>

<b>36. What was CHILD'S NAME given?</b>	<b>Frequency</b>	<b>Percent</b>
Water (including sugar water)	3	21%
Infant formula	3	21%
Other non-breastmilk milks	1	7%
Other	7	50%
<b>Total</b>	<b>14</b>	<b>100%</b>

<b>37. During the first 3 days after birth, were you offered any practical support or advice to help you start breastfeeding CHILD'S NAME?</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	51	55%
<b>No</b>	40	44%
<b>Does Not Know</b>	1	1%
<b>Total</b>	92	100%

<b>38. Yesterday, did you breastfeed CHILD'S NAME?</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	74	80%
<b>No</b>	18	20%
<b>Total</b>	92	100%

<b>39. Yesterday, did CHILD'S NAME drink breastmilk from a cup or a bottle?</b>	<b>Frequency</b>	<b>Percent</b>
<b>Yes</b>	1	1%
<b>No</b>	90	99%
<b>Total</b>	91	100%

<b>40. Yesterday, did you breastfeed whenever CHILD'S NAME wanted or on a fixed schedule?</b>	<b>Frequency</b>	<b>Percent</b>
<b>Whenever the child wanted</b>	72	99%
<b>On a fixed schedule</b>	1	1%
<b>Total</b>	73	100%

## **FEEDING**

<b>50. Who mainly decides what CHILD'S NAME should and should not eat?</b>	<b>Frequency</b>	<b>Percent</b>
<b>The Mother</b>	68	93%
<b>A Grandparent</b>	3	4%
<b>The Father</b>	2	3%
<b>Total</b>	73	100%

<b>51. Generally speaking, how is CHILD'S NAME's appetite when she/he is healthy?</b>	<b>Frequency</b>	<b>Percent</b>
<b>Eats too much</b>	19	26%
<b>Eats well</b>	44	60%
<b>Eats a little</b>	10	14%
<b>Total</b>	73	100%

52. At what age did you feed CHILD'S NAME his/her first solid/semi-solid food?		Frequency	Percent		
0		2	3%		
3		4	6%		
5		2	3%		
6		41	58%		
7		10	14%		
8		6	8%		
9		3	4%		
10		3	4%		
Total		71	100%		
Obs	Mean	Variance	Std Dev		
71	6.2	3.1	1.8		
Minimum	25%	Median	75%	Maximum	Mode
0	6	6	7	10	6

53. Are you the person who fed CHILD'S NAME yesterday?	Frequency	Percent
Yes	82	87%
No	12	13%
Total	94	100%

54. Yesterday, what liquids other than breastmilk was CHILD'S NAME given?	Frequency	Percent
None	34	41%
Tea	3	4%
Water (including sugar water)	26	31%
Infant Formula	4	5%
Other non-breastmilk milks	11	13%
Other	5	6%
Total	83	100%

55. Yesterday, did CHILD'S NAME have anything to drink from a bottle with a nipple?	Frequency	Percent
Yes	11	13%
No	72	87%
Total	83	100%

56. Yesterday, did CHILD'S NAME eat any solid or semi-solid foods?	Frequency	Percent
Yes	62	87%
No	9	13%
Total	71	100%

<b>60. Yesterday, at the main meal, did CHILD'S NAME eat all the food you thought he/she should?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	52	84%
No	10	16%
<b>Total</b>	<b>62</b>	<b>100%</b>

<b>61. Yesterday, during the main meal, did you do anything to encourage CHILD'S NAME to eat?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	51	82%
No	11	18%
<b>Total</b>	<b>62</b>	<b>100%</b>

<b>62. What did you do? *Multiple answers allowed</b>	<b>Frequency</b>	<b>Percent</b>
Offered another food or liquid	14	27%
Encouraged verbally	23	45%
Eating (with or without toy)	15	29%
Ordered strongly or forced the child to eat	1	2%
Another person helped feed child	9	18%
Another form of encouragement	14	27%
Does not know	1	2%

<b>63. Yesterday, during the main meal while feeding CHILD'S NAME, did you talk to her/ him?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	57	91%
No	6	10%
<b>Total</b>	<b>63</b>	<b>100%</b>

<b>64. What did you say? *Multiple answers allowed</b>		
Praised child	43	75%
Talked about the food	4	7%
Threatened the child	1	2%
Told child that she liked the food	4	7%
Rewarded the child	5	9%
Talked about other things	2	4%

<b>65. Yesterday, during the main meal, did CHILD'S NAME self-feed (eat by him/herself, using hands or utensil) at any moment during the meal?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	24	38%
No	39	62%
<b>Total</b>	<b>63</b>	<b>100%</b>

<b>66. Yesterday, during the main meal, did CHILD'S NAME self-feed the whole time, half of the time, or for little time?</b>	<b>Frequency</b>	<b>Percent</b>
All of the time	8	33%
Half of the time	11	46%
Little bit of time	5	21%
<b>Total</b>	<b>24</b>	<b>100%</b>

<b>67. The last time CHILD'S NAME was sick, did you offer less, more or the same amount of breast milk as when CHILD'S NAME is healthy?</b>	<b>Frequency</b>	<b>Percent</b>
Less, b/c the child did not want it	38	53%
More	21	29%
The same	13	18%
<b>Total</b>	<b>72</b>	<b>100%</b>

<b>68. The last time CHILD'S NAME was sick, did you offer less, more or the same amount of non-breast milk LIQUIDS as when CHILD'S NAME is healthy?</b>	<b>Frequency</b>	<b>Percent</b>
Less, b/c child did not want it	30	48%
Less b/c mother's decision	1	2%
More	18	29%
The Same	13	21%
<b>Total</b>	<b>62</b>	<b>100%</b>

<b>69. The last time CHILD'S NAME was sick, did you offer less, more or the same amount of FOODS as when CHILD'S NAME is healthy?</b>	<b>Frequency</b>	<b>Percent</b>
Less, b/c child did not want it	57	83%
Less b/c mother's decision	1	1%
More	3	4%
The Same	8	12%
<b>Total</b>	<b>69</b>	<b>100%</b>

<b>70. After the illness ended, did you offer less, more or the same amount of FOOD as when CHILD'S NAME is healthy?</b>	<b>Frequency</b>	<b>Percent</b>
Less b/c the child did not want it	7	10%
More	30	44%
The same	32	46%
<b>Total</b>	<b>69</b>	<b>100%</b>

## SERVICES

80. In the past 3 months, since _____ (MONTH), have you taken CHILD'S NAME to a hospital, health center, mobile unit, or any other health service?	Frequency	Percent
Hospital/Clinic (Public)	44	46%
Rural Health Center/Rural Health Sub Center (Public)	17	18%
Hospital/Clinic (Public)	1	1%
Has not taken child	33	35%
<b>Total</b>	<b>95</b>	<b>100%</b>

81. In the past 3 months, at any of these places (health facilities) was child's name measured for:		
Weight	25	40%
Length	4	6%
MUAC	17	27%

82. In the past 3 months, did child's name ever take/receive any of the following?		
Iron supplement or syrup? (For example, ferrous sulfate)	19	20%
A multi-vitamin and mineral supplement, syrup or powder (such as Sprinkles)?	30	32%
Lipid nutrient supplement, (such as Nutributter or Plumpydoz or [other local name/product])?	36	38%
Supplementary food, (such as Corn Soya Blend or [local name or local product])	37	39%
General food rations	49	52%
Vouchers for food	13	14%
Cash assistance to help purchase food	25	27%

83. During the past 6 months, since _____ (month), did CHILD'S NAME ever take a vitamin A capsule, supplement or syrup?	Frequency	Percent
Yes	54	57%
No	40	43%
<b>Total</b>	<b>94</b>	<b>100%</b>

## COMMUNICATIONS

90. In the past 3 months, did you hear or receive any messages or information on child feeding?	Frequency	Percent
Yes	34	36%
No	56	59%
Does not know	5	5%
<b>Total</b>	<b>95</b>	<b>100%</b>

91. Where or from whom did you receive the messages? *multiple answers		
Health facility	25	74%
Community health worker	4	12%
A family member	8	24%
Neighbor/friend	10	29%
Community gathering	3	9%
Radio	1	3%
Television	2	6%
Religious institution	2	6%
Other (KMSS)	1	3%

92. Do you remember what the message(s) said?	Frequency	Percent
Yes	24	71%
No	10	29%
Total	34	100%

92. If Yes, please describe: _____
breast feed many times to breast fed child, take care of children clean
child can be prevented from illness by feeding nutrients
child should be fed nutrients in correct frequency
Clean hands of mother and child when feeding child
cook nutrient powder for child feeding, keep child clean for good health
explain how to feed child, everything should keep clean for feeding
Feed child frequently, feed nutritious food for good resistance
Feed child less meal frequently like 3 times a day.
Feed child nutritious food while feeding complimentary food to child more than 6 months
Feed child once s/he turns 6 months
feed child regularly, feed fruits moderately
feed child regularly, take good care for child's health, give vitamins to child depends on child's condition
Feed child soup
Feed children nutrients, give Vitamin A supplementation , Iron tablets, advised by the DoH
Feeding child at one place is good.
fresh food plus fruit have to feed child. Hand wash before eating and feeding to child
give vitamins and minerals to the child who does not eat well, feed child patiently until s/he is full
how to cook ? Hand wash before feeding child, and handling food
nutrition will be provided in the first month of next year
Personal Hygiene, hand washing before eating and feeding to child
take care of child health. Give vitamins to child. Feed child regularly
take care of children much and feeding them with nutritious food
take good care of child, feed child enough food
take good care of child's health, give vitamins, feed enough meals



93. How often do you listen to the radio?	Frequency	Percent
1. Daily (7 days/week)	6	6%
2. 2-6 Days/week	4	4%
3. Once a week	4	4%
4. Once every 2 weeks	2	2%
5. Once a Month	3	3%
6. Rarely	76	80%
<b>Total</b>	95	100%

94. Do you ever watch television?	Frequency	Percent
Yes	58	61%
No	37	39%
<b>Total</b>	95	100%

95. Do you (the mother/caregiver) participate in any community organizations or social programs?	Frequency	Percent
Yes (CCCM, Church, ECCD, Education, HPA, Women's Organization, Gender, Mother's Group, Pig Husbandry, Red Cross)	16	17%
No	79	83%
<b>Total</b>	95	100%

## FAMILY

100. How many people live in the home, including you, young children and elderly?

Obs	Mean	Variance	Std Dev		
95	6.4	5.1	2.3		
Minimum	25%	Median	75%	Maximum	Mode
3	5	6	8	12	6

101. How many of them are less than five years of age?

Obs	Mean	Variance	Std Dev		
95	1.8	0.5	0.7		
Minimum	25%	Median	75%	Maximum	Mode
1	1	2	2	3	2

102. How old are you?

Obs	Mean	Variance	Std Dev		
95	29.8	43.4	6.6		
Minimum	25%	Median	75%	Maximum	Mode
19	25	30	35	44	30

103. Are you _____?	Frequency	Percent
Married/With Partner	89	94%
Separated/Divorced/Widowed	6	6%
Total	95	100%

104. Do you know how to read and write?	Frequency	Percent
Yes, able to read whole sentence	78	82%
No, cannot read at all	15	16%
Able to read only parts of sentence	2	2%
Total	95	100%

105. What is the highest grade/form/year of school that you completed?	Frequency	Percent
Never Attended	12	13%
Primary School	29	31%
Middle School	27	28%
High School	26	27%
Other	1	1%
Total	95	100%

106. In your household, who usually makes decisions about purchasing food or taking CHILD'S NAME to health services?	Frequency	Percent
1. Mother/caregiver	69	73%
2. Husband/partner or other man in the household	1	1%
3. Mother/caregiver and father together	22	23%
5. Mother/caregiver together with the elder person	3	3%
Total	95	100%

108. Aside from your own housework, have you done any paid work in the last seven days?	Frequency	Percent
Yes	17	18%
No	77	81%
Does not know	1	1%
Total	95	100%

109. If yes, what is your occupation, that is, what kind of work do you mainly do?	Frequency	Percent
Vendor	7	41%
Agricultural Work	3	18%
Government Service	2	12%
Social work/NGO	1	6%
Other (jade mining, menial labor, harvesting)	4	24%
Total	17	100%

<b>110. Does anyone in your HH grow food? If yes, types of food grown? multiple responses</b>		
Yes (grains, roots, tubers)	6	6%
Yes (legumes, nuts)	7	7%
Yes (orange or yellow fruits & vegetables)	14	15%
Yes (green leafy vegetables)	38	40%
Yes (any other fruits & vegetables)	11	12%
No	34	36%

<b>111. Does this HH own livestock, herds, other farm animals, poultry, or fish? If yes, types of animals? *multiple responses</b>		
Yes (chickens, ducks, any other birds: for the meat)	4	4%
Yes (chickens, ducks, any other birds: for the eggs)	9	10%
Yes (cows, goats, sheep, pigs, camels or other large mammals for the meat)	30	32%
Yes (cows, goats, sheep, camels for the milk)	3	3%
Yes (fish)	2	2%
No	57	60%

## HOUSING

<b>120. What is the main source of drinking water for members of your household?</b>	<b>Frequency</b>	<b>Percent</b>
Piped into dwelling	1	1%
Piped into compound, yard, or plot	23	24%
Protected well	26	27%
Unprotected well	1	1%
Protected spring	35	37%
Unprotected spring	2	2%
Tanker-truck	6	6%
Bottled water	1	1%
<b>Total</b>	<b>95</b>	<b>100%</b>

### 121. How long does it take to go there, get water and come back? (Minutes)

Obs		Mean		Variance		Std Dev	
94		9.3		106.3		10.3	
Minimum	25%	Median	75%	Maximum	Mode		
1	5	5	10	60	5		

<b>122. Do you do anything to the water to make it safer to drink?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	82	86%
No	13	14%
<b>Total</b>	<b>95</b>	<b>100%</b>

123. What do you usually do to make the water safer to drink?		
Boil	68	83%
Add bleach / chlorine	6	7%
Strain it through a cloth	39	48%
Use water filter (ceramic, sand, composite, etc.)	0	0%
Solar disinfection	0	0%
Let it stand and settle	9	11%
Other (filter sold in the market)	3	4%

124. What kind of toilet facility do members of your household usually use?	Frequency	Percent
Flush to piped sewer system	1	1%
Flush to pit (latrine)	24	25%
Ventilated improved pit latrine (VIP)	67	71%
Pit latrine with slab	2	2%
No facility, bush, field	1	1%
Total	95	100%

125. What type of fuel does your household mainly use for cooking?	Frequency	Percent
Coal/Lignite	1	1%
Charcoal	16	17%
Wood	78	82%
Total	95	100%

126. Does your household have:		
A) Electricity	53	56%
B) A radio	29	31%
C) A television	23	24%
D) Phone (landline or mobile)	27	28%

130. Have you ever heard of an illness called AIDS?	Frequency	Percent
Yes	89	94%
No	6	6%
Total	95	100%

131. Can the virus that causes AIDS be transmitted from a mother to her baby:		
During pregnancy?	66	74%
During delivery?	58	65%
By breastfeeding?	67	75%

<b>132. Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	65	74%
No	1	1%
Does not know	22	25%
<b>Total</b>	<b>88</b>	<b>100%</b>

<b>133. Have you learned about ways to prevent passing the AIDS virus from mother to child during breastfeeding?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	34	39%
No	54	61%
<b>Total</b>	<b>88</b>	<b>100%</b>

<b>134. How did you learn about ways to prevent passing the AIDS virus from mother to child during breastfeeding? *Multiple responses</b>		
01 - Health personnel (doctor, nurse, midwife) - Public	25	74%
02 - Health personnel - NGO	3	9%
03 - Voluntary Health Worker	2	6%
04 - Traditional health/healer	1	3%
05 - Family member	3	9%
06 - Neighbor/Friend	12	35%
07 - Through Media	3	9%
99 - Does not know	1	3%

<b>135. Were you tested for the AIDS virus during your pregnancy with CHILD'S NAME?</b>	<b>Frequency</b>	<b>Percent</b>
Yes	45	51%
No	42	47%
Does not know	2	2%
<b>Total</b>	<b>89</b>	<b>100%</b>

## APPENDIX 17: DIETARY DIVERSITY RESULTS

**Table 1: Food groups consumed by dietary diversity score**

	<b>Total</b>	<b>&lt;=3 Food Groups</b>	<b>4-5 Food Groups</b>	<b>6+ Food Groups</b>
<b>Total Respondents</b>	75	9	49	17
<b>1. Cereals, White Roots, Tubers</b>	74 (99%)	9 (100%)	48 (98%)	17 (100%)
<b>2. Vit A Rich Fruits, Vegetables, &amp; Tubers</b>	17 (23%)	0 (0%)	8 (16%)	9 (53%)
<b>3. Dark Green Leafy Vegetables, Other Vegetables, Other Fruits</b>	73 (97%)	8 (89%)	48 (98%)	17 (100%)
<b>4. Organ Meat, Flesh Meats, Fish, and Seafood</b>	48 (64%)	1 (11%)	32 (65%)	15 (88%)
<b>5. Eggs</b>	36 (48%)	0 (0%)	21 (43%)	15 (88%)
<b>6. Legumes, Nuts, and Seeds</b>	26 (35%)	0 (0%)	15 (31%)	11 (65%)
<b>7. Milk and Milk Products</b>	7 (9%)	1 (11%)	1 (2%)	5 (29%)
<b>8. Oils and Fats</b>	71 (95%)	5 (56%)	49 (100%)	17 (100%)
<b>Anything eaten outside the home</b>	17 (23%)	3 (33%)	7 (14%)	7 (41%)
<b># Meals Eaten (Average)</b>	2.81	2.89	2.78	2.88
<b># Snacks Eaten (Average)</b>	0.93	1.00	0.80	1.29
<b># Meals and Snacks Eaten (Average)</b>	3.75	3.89	3.57	4.18

## APPENDIX 18: PLW FOCUS GROUP DISCUSSION RESULTS

### **3.1 I would like to show you some pictures of several pregnant women and I would like you to discuss who you think is healthy and having a good pregnancy and who is sick or might be having problems with her pregnancy.**

- Women recognize signs of pain, IV drip, act of seeking healthcare services (Moe Nyin)
- Women recognize signs of pain, belly position, signs of seeking emergency healthcare (AG)
- Women speculate as to reasons for IV/going to the hospital (no family, no people to help, poverty)
- Most see going to nurse as bad sign, as a sign that there are complications or poverty to go to hospital/clinic (very few see it as essential component of good antenatal care)
  - “go to hospital since it is not possible to deliver at home” (Chipwi)
- Comments on strength, lack of appetite, poverty/lack of support; potential reasons for needing transport to hospital/checkup by nurse (Chipwi)
- Recognize difficulties in facial expressions, speculate about causes/inability to seek help (Dum Bung)
- Many women recognize that woman’s belly is in the wrong position

### **3.2 Now let’s talk about women in this community. Which of these women best reflects the experience of women in this community?**

- None, women in the camp give birth with no difficulty (NCT)
- Most frequently occurring is scenarios 2 & 3, clinics and nurses available, child not born in isolation (Chipwi)

### **3.3 What is the experience of women in this community with delivery/birthing?**

- Healthy, women can visit clinic (Moe Nyin); some stay in the forest w/ no proper food or care
- Lack of nutrition, not healthy pregnancy/delivery/post-delivery; feel weakness after delivery (AG)
- Two women got sick few months after delivering so they were unable to produce more breast milk, linked to child’s health (AG)
- Pain during delivery, some women had excess bleeding, some had to be admitted to hospital/seek assistance and some had no problems with actual delivery/baby’s health (NCT)
- Many women deliver at home; some lost appetite or had to work during pregnancy so birth was more difficult (Chipwi)
- Many births had difficulties (big babies, or babies in wrong positions, extended periods of pain) (Dum Bung)

### **3.4 What is the health of babies in this community when they are born?**

- Generally, babies are healthy (NCT)
- Babies not very healthy when born (Dum Bung)

### **4.1 For those of you who are lactating or those who have previously had children, did your diet change after your baby was born? For first-time mothers, do you think your diet will change once your baby is born?**

- Responses for appetite before/after pregnancy varies widely among the women. Some at more, some ate less, some ate the same (Moe Nyin)
- Some women wanted to eat after pregnancy but couldn’t make the effort or didn’t have the strength to eat (AG)

- Eat more after delivery to replenish energy expended during delivery (Moe Nyin)
- Avoid sweet, salty, sour, spicy food, handmade salads, cold foods, tomatoes (Moe Nyin)
  - These items will affect the baby through breastfeeding (Moe Nyin)
  - After delivery avoid brinjals, eggplant (AG)
- Eat three times a day regularly after delivery or eat whenever hungry (Moe Nyin)
- Difference between pregnancy and post-pregnancy. Have to change diet (avoid pickled bamboo-shoot, chili, spicy/salty/pasted/sweet/bitter foods, pickled celery). Need to eat more nutritious foods and rest more (NCT)
- Lack of appetite during pregnancy, did not want to eat meals after delivery. Many items on list of things not to eat (Chipwi)
- “The foods we can eat are – wheat, bean leaves, bean sprout, white mustard, Indian pennywort (*hydrocotyle asiatica*), drumstick leaves, chicken eggs, various kinds of meat.” (Dum Bung)
- Avoid foods with climbing stem, pickled bamboo shoots, pickled celery, tomatoes, taro, sour/spicy foods at time of delivery (Dum Bung)
- Some participants think chicken eggs are nutritious but others avoid them (Moe Nyin)

#### **4.2 Can anyone share their experience with breastfeeding? Do you currently breastfeed your child or plan to breastfeed your child?**

- Some women had difficulties breastfeeding initially, but generally try to breastfeed if possible and on demand (Moe Nyin)
- Mother’s health linked to child health “Whatever you eat, it reaches to the child” (Moe Nyin, AG)
- A few mothers talked about getting sick after giving birth, which caused them to stop producing milk (AG)
- Some mothers express difficulty with latching (NCT)
- Many mothers had difficulties breastfeeding and producing milk, especially in the first 2-3 days after delivery. Many different strategies to try to start the breast milk (ex. drinking cow milk, drinking leaves soup, eating chicken eggs, etc.) (Chipwi)
- Feed breast milk regularly when child is hungry/cries/goes to the bathroom (Dum Bung)

#### **5.1 Can anyone here tell me about any advice they have received about what to eat during their pregnancy and who offered or where did they learn about the recommendation?**

- Advice from neighbors, health assistant, nurse, family, most follow because afraid of aborting the child or having something wrong with the child (Moe Nyin)
- Afraid of abortion, follow advice about certain foods thought to cause abortion (Moe Nyin)
- Many myths about babies’ personalities being related to the foods they eat (AG)
- Don’t watch movies with monkeys, cats, cartoons, can cause something wrong for the baby (NCT)
- “Do not cross over the wild banana tree. It can cause abortion.” (NCT)
- Eating fish caught from dynamite fishing can cause abortion (Moe Nyin)
- If eat beef, baby’s nose will make sound; if eat kite meat, baby will become thief; wild cat meat causes baby to be naughty; if eat sparrow meat, baby will steal; eating buffalo during pregnancy causes baby to cry (AG)
- “During pregnancy, having meal frequently can bring more health” (AG)
- No strenuous activity (ex. climbing mountains), advice comes from health staff, families, neighborhood societies (NCT)
- Advice about how to start lactating came from nurse (Chipwi)
- Info from health center, nurse, health Ngo, friends, relatives, partners, more experienced persons, news, radio, video (Dum Bung)



- Feed breast milk regularly (after child pees, when child cries, whether child cries or not) (Dum Bung)

**6.1 Now I would like to share with you some recommendations that women in other communities have made about ways they have found to improve their diets during their pregnancy. I would like to hear what you think about them:**

- 1. The first suggestion is to eat more food, by eating an extra rice and curry midday and in the evening.**
  - 2. The second suggestion is to eat more food by serving an additional large spoonful of beans with the meal twice a day.**
  - 3. The third suggestion is to not add food at meal time, but instead eat a snack like a small serving of beans and rice or a tortilla with beans or cheese**
  - 4. The fourth suggestion is to eat egg or cheese every day or at least several times a week.**
  - 5. The fifth suggestion is eat a serving of fruit or vegetable every day. This can be a mango, or a large piece of papaya, or carrots or tomatoes added to the food being prepared mid-day.**
- Agree with suggestions to eat more nutritious foods, with the exception of chicken egg, want to try the five suggestions (Moe Nyin)
  - Eating more frequently can increase health, but difficult to practice eating regularly (AG).
  - Want to follow suggestions but challenge is lack of nutritious foods and lack of money to buy said foods (NCT)
  - Eating not only for the mother but also for the child. Try to follow recommendations (Chipwi)
  - Hard to have good things inside the camp, also an issue of losing face if cannot have abundance of food during festivals. People cannot eat like others on the outside, cannot have prenatal vitamins, vegetables are rare/cannot afford (Dum Bung)

## APPENDIX 19: MARKET SURVEY RESULTS

**Table 1. Mohnyin Camp**

Food Group #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
				All	J	F	M	A	M	J	J	A	S	O	N	D
1	Arrow root	viss	1000	2	1	1	1	2	2	2	2	2	2	2	2	1
1	Bean root	viss	1500	2	1	1	1	2	2	2	2	2	2	2	2	1
1	bread	packet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
1	Chayote root	viss	1000	2	1	1	1	2	2	2	2	2	2	2	2	1
1	chive root	viss	1500	2	1	1	2	2	2	2	2	2	2	2	1	1
1	noodles	packet	500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	oats	sachet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
1	porridge	bowl	500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	rice	basket	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
1	sticky rice	basket	1100	1	1	1	1	1	1	1	1	1	1	1	1	1
1	taro root	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	wheat	viss	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white and purple sweet potatoes	viss	1000	2	1	1	1	2	2	2	2	2	2	1	1	1
1	white potatoes	viss	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white radish	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
2	cantaloupe	piece	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
2	carrot	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	persimmon	piece	300	2	2	2	2	2	2	2	2	2	2	1	1	1
2	pumpkin	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Red and yellow sweet	viss	2500	1	1	1	1	1	1	1	1	1	1	1	1	1

	pepper															
2	ripe mango	piece	500	2	2	2	2	2	1	1	1	1	1	2	2	2
2	ripe papaya	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	ripe passionfruit	piece	100	2	2	2	2	2	2	1	1	1	1	1	2	2
2	sweet potato that are orange inside	viss	1000	2	1	1	1	2	2	2	2	2	2	2	1	1
3	apple	piece	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	ash pumpkin	piece	100	2	1	1	1	1	1	1	1	2	2	2	2	1
3	avocado	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	bamboo shoot	pile	200	2	2	2	2	2	2	2	1	1	1	1	2	2
3	banana	bundle	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	bean greens	bundle	100	2	2	2	2	2	2	1	1	1	1	1	1	1
3	cabbages	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cauliflower	piece	300	2	1	1	1	1	1	2	2	2	1	1	1	1
3	chayote green	bundle	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	Chili	pile	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	coriander	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cucumbers	piece	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	drumstick	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	durian	piece	4000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	eggplant	bundle	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	garlic	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd	piece	500	2	2	2	2	2	2	2	2	1	1	1	2	2
3	gourd greens	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	grapefruit	piece	350	1	1	1	1	1	1	1	1	1	1	1	1	1
3	grapes	viss	4000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	green sweet pepper	piece	100	1	1	1	1	1	1	1	1	1	1	1	1	1

3	hin cho leaves	bundle	100	2	2	2	2	2	2	2	1	2	2	2	2	2
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3	horse shoe leaf (Hydrocotyle asiatica)	pile	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	kabala/sweet orange	piece	100	2	2	2	2	2	2	1	1	1	1	2	2	2
3	kale	bundle	200	2	1	1	1	1	2	2	2	2	2	1	1	1
3	lemon			1	1	1	1	1	1	1	1	1	1	1	1	1
3	lettuce	bundle	100	2	1	1	2	2	2	2	2	2	2	1	1	1
3	lime	piece	100	2	1	1	2	2	2	2	2	2	2	2	1	1
3	mushroom	bundle	500	2	2	2	2	2	1	1	1	1	1	2	2	2
3	mustard	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	okra	bundle	100	2	2	2	2	2	2	2	1	1	1	1	2	2
3	onion	viss	700	1	1	1	1	1	1	1	1	1	1	1	1	1
3	orange	piece	200	2	1	1	1	2	2	2	2	2	2	1	1	1
3	paung laung leaf	bundle	100	2	2	2	2	2	2	2	2	2	2	1	1	1
3	peach	piece	100	2	2	2	2	2	1	1	1	2	2	2	2	2
3	pear	piece	700	2	2	2	2	2	1	1	1	1	1	1	2	2
3	pineapple	piece	500	2	2	2	2	2	2	2	1	1	1	1	2	2
3	pomegranate	piece	350	1	1	1	1	1	1	1	1	1	1	1	1	1
3	pomelo	piece	500	2	1	1	1	2	2	2	2	2	2	2	1	1
3	pumpkin green	bundle	100	2	2	2	2	2	1	1	1	1	1	2	2	2
3	roselle	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	spinach	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	strawberry	viss	6000	2	1	1	2	2	2	2	2	2	2	2	2	1
3	tangerine	viss	3000	2	1	1	2	2	2	2	2	2	2	1	1	1
3	tomato	viss	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
3	watercress	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Beef	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	chicken	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Crab	pile	100	2	2	2	2	2	2	1	1	1	1	2	2	2
4	Dried fish	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Duck	piece	10000	1	1	1	1	1	1	1	1	1	1	1	1	1

4	Eel	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Fish eggs	viss	5000	2	2	2	2	2	1	1	1	1	1	2	2	2
4	Fish without scale	viss	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Freshwater fish	viss	3500	1	1	1	1	1	1	1	1	1	1	1	1	1
4	frog	viss	8000	2	2	2	2	2	1	1	1	1	2	2	2	2
4	Game (eg. hog, wild cow, etc.,)	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	gizzard	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	heart	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	kidney	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	liver	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Pork	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Sardine	can	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shell fish	viss	3500	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shrimp	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Snail	basket	1500	2	2	2	2	2	2	2	2	1	1	1	1	1
5	Duck	piece	150	1	1	1	1	1	1	1	1	1	1	1	1	1
5	eggs from chicken	piece	130	1	1	1	1	1	1	1	1	1	1	1	1	1
5	quail	piece	30	1	1	1	1	1	1	1	1	1	1	1	1	1
6	beans	bundle	1000	2	2	2	2	2	2	1	1	1	1	2	2	2
6	chick peas	basket	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	green peas	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Lentils	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peanut	can	300	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peanut jam	viss	2400	2	1	1	1	1	1	2	2	2	2	2	1	1
6	peas	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Pumpkin seed	basket	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
6	soy bean seed	basket	1200	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Sunflower seed	basket	800	1	1	1	1	1	1	1	1	1	1	1	1	1

6	walnut	piece	167	1	1	1	1	1	1	1	1	1	1	1	1	1
7	milk	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	butter	<b>viss</b>	<b>15000</b>	<b>1</b>	1	1	1	1	1	1	1	1	1	1	1	1
8	ghee	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	mustard oil	viss	3500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	palm oil	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	peanut oil	viss	4500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	pork oil	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1

**Table 2: Hpakant AG Camp**

Food Group #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
				All	J	F	M	A	M	J	J	A	S	O	N	D
1	bread	parcel	300	1	1	1	1	1	1	1	1	1	1	1	1	1
1	chive root	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	noodles	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	oats	sachet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
1	porridge	bowl	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	rice	basket	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	sticky rice	basket	1400	1	1	1	1	1	1	1	1	1	1	1	1	1
1	taro root	viss	1000													
1	wheat	parcel	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white and purple sweet potatoes	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white potatoes	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white radish	bundle	100	2	1	1	2	2	2	2	2	2	2	1	1	1
2	cantaloupe	piece	500	2	2	2	2	2	2	2	2	2	1	1	2	2
2	carrot	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	dried peach	parcel	200	1	1	1	1	1	1	1	1	1	1	1	1	1
2	persimmon	piece	500	2	2	2	2	2	2	2	2	2	1	1	2	2
2	pumpkin	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Red and yellow sweet pepper	piece	100	2	2	2	2	2	2	2	2	2	2	2	1	1
2	ripe mango	piece	500	2	2	2	2	1	1	1	1	1	2	2	2	2
2	ripe papaya	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
2	ripe passionfruit	piece	100	2	2	2	2	2	2	2	1	1	2	2	2	2
2	sweet potato that are orange inside	viss	1500	2	2	2	2	2	2	2	2	2	2	1	1	1
3	apple	piece	300	2	2	2	2	2	2	2	2	1	1	1	1	1

3	ash pumpkin	piece	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	bamboo shoot	packet	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	banana	bundle	1500	2	2	2	2	2	2	2	2	2	2	1	1	1
3	bean greens	parcel	1000	2	2	2	2	2	2	2	2	2	2	2	1	1
3	cabbages	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cauliflower	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	chayote green	bundle	1000	2	2	2	2	1	1	2	2	2	2	2	2	2
3	Chili	basket	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	coriander	bundle	100	2	2	2	2	2	2	2	2	2	2	2	1	1
3	cucumbers	piece	500	2	2	2	2	2	2	2	2	1	1	1	2	2
3	drumstick	bundle	200	2	2	2	2	2	2	2	2	1	1	2	2	2
3	durian	piece	2000	2	2	2	2	2	2	1	1	1	2	2	2	2
3	eggplant	bundle	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	garlic	viss	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd	piece	1000	2	2	2	2	2	2	2	2	1	1	1	1	2
3	gourd greens	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	grapefruit	piece	200	2	2	2	2	2	2	2	2	2	1	1	1	1
3	grapes	viss	6000	2	2	2	2	2	2	2	2	1	1	1	1	1
3	green sweet pepper	piece	100	2	2	2	2	2	2	2	2	2	2	1	1	1
3	hin cho leaves	bundle	100	2	2	2	2	1	1	1	1	2	2	2	2	2
3	horse shoe leaf (Hydrocotyle asiatica)	parcel	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	kabala/sweet orange	piece	200	2	2	2	2	2	2	2	2	2	1	1	1	1
3	kale	bundle	200	2	2	2	2	2	2	2	2	2	2	2	1	1
3	lemon	piece	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	lettuce	piece	100	2	2	2	2	2	2	2	2	2	2	2	1	1
3	lime	piece	200	2	2	2	2	2	2	2	2	2	1	1	1	1
3	mushroom	bundle	200	2	2	2	2	2	2	2	2	1	1	2	2	2
3	mustard	bundle	100	2	2	2	2	2	2	2	2	2	2	1	1	1
3	okra	viss	2000	2	2	2	2	2	2	2	2	2	2	1	1	1



3	onion	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	orange	piece	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	paung laung leaf	bundle	100	2	2	2	2	2	2	2	2	1	1	2	2	2
3	pineapple	piece	500	2	2	2	2	2	2	2	1	1	2	2	2	2
3	pomelo	piece	300	2	2	2	2	2	2	2	2	2	1	1	1	1
3	pumpkin green	bundle	100	2	2	2	2	2	2	2	1	1	1	2	2	2
3	roselle	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	spinach	viss	2000	2	2	2	2	2	2	2	2	2	2	2	1	1
3	strawberry	viss	10000	2	2	2	2	2	2	2	2	2	2	1	1	1
3	tangerine	viss	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	tomato	viss	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
3	watercress	bundle	50	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Beef	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	chicken	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	dog	lb	5000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Dried fish	viss	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Eel	viss	10000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Fish eggs	viss	6000								1	1				
4	Fish without scale	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Freshwater fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	frog	viss	12000	2	2	2	2	2	1	1	1	1	2	2	2	2
4	Game (eg. hog, wild cow, etc.,)	viss	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	gizzard		8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Goat	viss	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	heart	viss	9000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	kidney	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	liver	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	monkey	viss	5000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Pork	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1

4	rat	piece	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Sardine	can	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shell fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shrimp	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Snail	basket	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Duck	piece	150	1	1	1	1	1	1	1	1	1	1	1	1	1
5	eggs from chicken	piece	125	1	1	1	1	1	1	1	1	1	1	1	1	1
5	quail	piece	30	1	1	1	1	1	1	1	1	1	1	1	1	1
6	beans	basket	1900	2	2	2	2	2	2	2	2	1	1	1	2	2
6	Lentils	basket	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peanut	basket	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peas	basket	1200	2	2	2	2	2	2	2	2	1	1	1	1	1
6	soy bean seed	packet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Sunflower seed	can	500	1	1	1	1	1	1	1	1	1	1	1	1	1
7	goat milk	basket	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
7	milk	bottle	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	coconut oil	bottle	500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	ghee	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	mustard oil	viss	8500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	peanut oil	bottle	3200	1	1	1	1	1	1	1	1	1	1	1	1	1

**Table 3: Hpakant Nyein Chan Tarya Camp**

Food Group #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
				All	J	F	M	A	M	J	J	A	S	O	N	D
1	bread	parcel	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	chive root	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	noodles	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	oats	sachet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
1	porridge	bowl	500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	rice	basket	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	sticky rice	basket	1400	1	1	1	1	1	1	1	1	1	1	1	1	1
1	taro root	viss	1000	2	2	2	2	2	2	2	2	2	2	1	1	2
1	wheat	parcel	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white and purple sweet potatoes	viss	1500	2	2	2	2	2	2	2	2	2	2	2	1	1
1	white potatoes	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white radish	bundle	100	2	2	2	2	2	2	2	2	2	1	1	1	2
2	cantaloupe	piece	200	2	2	2	2	2	2	2	2	2	1	1	2	2
2	carrot	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	dried peach	parcel	200	1	1	1	1	1	1	1	1	1	1	1	1	1
2	persimmon	piece	500	2	2	2	2	2	2	2	2	2	1	1	2	2
2	pumpkin	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	Red and yellow sweet pepper	piece	100	2	2	2	2	2	2	2	2	2	2	2	1	1
2	ripe mango	piece	500	2	2	2	2	2	2	2	2	1	1	2	2	2
2	ripe papaya	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
2	ripe passionfruit	piece	100	2	2	2	2	2	2	2	1	1	2	2	2	2
2	sweet potato that are orange inside	viss	1500	2	2	2	2	2	2	2	2	2	2	1	1	1
3	apple	piece	300	2	2	2	2	2	2	2	2	1	1	1	1	1

3	ash pumpkin	piece	1500	2	2	2	2	2	2	2	2	2	1	1	1	1
3	bamboo shoot	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	banana	bundle	1500	2	2	2	2	2	2	2	2	2	2	1	1	1
3	bean greens	bundle	1000	2	2	2	2	2	2	2	2	2	2	2	1	1
3	cabbages	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cauliflower	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	chayote green	bundle	1000	2	2	2	2	1	1	2	2	2	2	2	2	2
3	Chili	bundle	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	coriander	bundle	100	2	2	2	2	2	2	2	2	2	2	2	1	1
3	cucumbers	piece	500	2	2	2	2	2	2	2	2	1	1	1	2	2
3	drumstick	bundle	200	2	2	2	2	2	2	2	2	1	1	2	2	2
3	durian	piece	2000	2	2	2	2	2	2	1	1	1	2	2	2	2
3	eggplant	bundle	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	garlic	viss	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd	piece	1000	2	2	2	2	2	2	2	1	1	1	1	2	2
3	gourd greens	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	grapefruit	piece	200	2	2	2	2	2	2	2	2	1	1	1	1	1
3	grapes	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	green sweet pepper	piece	100	2	2	2	2	2	2	2	2	2	2	1	1	1
3	hin cho leaves	bundle	100	2	2	2	2	1	1	1	1	2	2	2	2	2
3	horse shoe leaf ((Hydrocotyle asiatica)	parcel	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	kabala/sweet orange	piece	200	2	2	2	2	2	2	2	2	2	1	1	1	1
3	kale	bundle	200	2	2	2	2	2	2	2	2	2	2	2	1	1
3	lemon	piece	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	lettuce	piece	100	2	2	2	2	2	2	2	2	2	2	2	1	1
3	lime	piece	200	1	1	1	1	1	1	1	1	1	1	1	1	1
3	mushroom	bundle	200	2	2	2	2	2	2	2	2	1	1	2	2	2
3	mustard	bundle	100	2	2	2	2	2	2	2	2	2	2	1	1	1
3	okra	viss	2000	2	2	2	2	2	2	2	2	2	2	1	1	1

3	onion	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	orange	piece	200	2	2	2	2	2	2	2	2	2	1	1	1	1
3	paung laung leaf	bundle	100	2	2	2	2	2	2	2	2	1	1	2	2	2
3	pineapple	piece	500	2	2	2	2	2	2	2	1	1	2	2	2	2
3	pomelo	piece	300	2	2	2	2	2	2	2	2	2	1	1	1	1
3	pumpkin green	bundle	100	2	2	2	2	2	2	2	1	1	2	2	2	2
3	roselle	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	spinach	parcel	2000	2	2	2	2	2	2	2	2	2	2	2	1	1
3	tangerine	viss	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	tomato	viss	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
3	watercress	bundle	50	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Beef	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	chicken	viss	12000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Dried fish	viss	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Eel	viss	10000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Fish eggs	viss	6000	2	2	2	2	2	2	2	1	1	2	2	2	2
4	Fish without scale	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Freshwater fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	frog	viss	12000	2	2	2	2	2	1	1	1	1	2	2	2	2
4	gizzard	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Goat	viss	20000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	heart	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	kidney	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	liver	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	monkey	lb	5000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	other organ meats	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Pork	viss	15000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Sardine	can	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shell fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shrimp	cup	1000	1	1	1	1	1	1	1	1	1	1	1	1	1

4	Snail	viss	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
5	Duck	piece	150	1	1	1	1	1	1	1	1	1	1	1	1	1
5	eggs from chicken	piece	125	1	1	1	1	1	1	1	1	1	1	1	1	1
5	quail	piece	30	1	1	1	1	1	1	1	1	1	1	1	1	1
6	beans	basket	1900	2	2	2	2	2	2	2	1	1	2	2	2	2
6	Lentils	basket	1800	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peanut	basket	3000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peas	viss	1200	2	2	2	2	2	2	2	2	1	1	1	2	2
6	soy bean seed	packet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Sunflower seed	cup	500	1	1	1	1	1	1	1	1	1	1	1	1	1
7	milk	bottle	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
7	yogurt	glass	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	coconut oil	bottle	500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	ghee	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
8	mustard oil	viss	8500	1	1	1	1	1	1	1	1	1	1	1	1	1
8	peanut oil	bottle	3200	1	1	1	1	1	1	1	1	1	1	1	1	1

**Table 4: Chipwi Camp**

Food Group #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
				All	J	F	M	A	M	J	J	A	S	O	N	D
1	bread	parcel	200	1	1	1	1	1	1	1	1	1	1	1	1	1
1	noodles	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	porridge	bowl	500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	rice	basket	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	sticky rice	basket	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
1	taro root	viss	5000	2	1	1	1	1	1	2	2	2	1	1	1	1
1	white and purple sweet potatoes	viss	2000	2	1	1	2	2	2	2	2	2	2	2	1	1
1	white potatoes	viss	1300	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white radish	viss	5000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	cantaloupe	piece	500	2	2	2	2	2	2	2	2	2	1	1	1	2
2	carrot	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	pumpkin	piece	500	2	1	1	1	2	2	2	2	2	2	1	1	1
2	Red and yellow sweet pepper	viss	4000	1	1	1	1	1	1	1	1	1	1	1	1	1
2	ripe papaya	piece	500	1	1	1	1	1	1	1	1	1	1	1	1	1
2	sweet potato that are orange inside	viss	3000	2	1	1	2	2	2	2	2	2	2	1	1	1
3	apple	piece	400	2	1	1	2	2	2	2	2	2	2	2	1	1
3	ash pumpkin	piece	500	2	1	1	2	2	2	2	2	2	2	2	1	1
3	bamboo shoot	pile	100	2	2	2	2	2	2	1	1	1	2	2	2	2
3	banana	bundle	500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	bean greens	pile	100	2	1	1	1	2	2	2	2	2	2	1	1	1
3	cabbages	piece	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cauliflower	piece	800	1	1	1	1	1	1	1	1	1	1	1	1	1
3	chayote green	piece	167	2	1	1	1	2	2	2	2	2	2	1	1	1

3	Chili	can	300	1	1	1	1	1	1	1	1	1	1	1	1	1
3	coriander	bundle	100	2	1	1	1	2	2	2	2	2	2	2	1	1
3	cucumbers	piece	300	1	1	1	1	1	1	1	1	1	1	1	1	1
3	drumstick	bundle	100	2	2	2	2	2	2	2	1	1	1	2	2	2
3	eggplant	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	garlic	viss	2500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd	piece	500	2	2	2	2	2	2	2	1	1	2	1	1	2
3	gourd greens	bundle	100	2	2	2	2	2	2	2	1	1	2	2	1	2
3	grapefruit	piece	300	2	2	2	2	2	2	2	2	2	1	1	1	1
3	green seaweed	pile	500	2	2	2	2	2	2	2	2	2	2	2	2	1
3	green sweet pepper	piece	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	hin cho leaves	piece	100	2	2	2	2	2	2	2	1	1	1	2	2	2
3	horse shoe leaf (Hydrocotyle asiatica)	pile	100	1	1	1	1	1	1	1	1	1	1	1	1	1
3	kale	bundle	200	2	1	1	2	2	2	2	2	2	2	2	1	1
3	lemon	piece	100	2	2	2	2	2	2	2	1	1	1	2	2	2
3	lettuce	piece	100	2	1	1	1	2	2	2	2	2	2	2	1	1
3	mustard	piece	200	2	1	1	1	2	2	2	1	1	2	2	1	1
3	okra	piece	25	2	1	2	2	2	2	2	1	1	2	2	1	1
3	onion	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	orange	piece	500	2	1	1	1	2	2	2	2	2	2	1	1	1
3	paung laung leaf	bundle	100	2	2	2	2	2	2	1	1	2	2	2	2	1
3	pineapple	piece	1000	2	2	2	2	2	2	1	1	1	1	2	2	2
3	pumpkin green	bundle	100	2	2	2	2	2	2	2	1	1	1	1	2	2
3	roselle	bundle	100	2	2	2	2	2	2	2	1	1	1	2	1	2
3	spinach	bundle	100	2	2	2	2	2	1	1	1	1	1	2	2	2
3	tomato	viss	1500	1	1	1	1	1	1	1	1	1	1	1	1	1
3	watercress	bundle	100	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Beef	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	chicken	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1



4	Dried fish	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Eel	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Fish without scale	viss	5000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Freshwater fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Game (eg. hog, wild cow, etc.,)	viss	1000	2	1	1	2	2	2	2	2	2	2	2	1	1
4	gizzard	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Goat	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	heart	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	insects	can	500	2	1	2	2	2	2	2	2	2	2	2	2	1
4	kidney	viss	8000													
4	liver	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	monkey	viss	7000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Pork	viss	8000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Sardine	can	500	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Shell fish	viss	6000	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Snail	can	500	2	2	2	2	2	2	2	1	1	2	2	1	2
5	eggs from chicken	piece	167	1	1	1	1	1	1	1	1	1	1	1	1	1
6	beans	bundle	100	2	2	2	2	2	2	1	1	1	2	2	2	2
6	dried beans	can	1000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	green peas	bundle	100	2	2	2	2	2	2	1	1	1	1	2	2	2
6	Lentils	can	300	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peas	viss	2000	1	1	1	1	1	1	1	1	1	1	1	1	1
6	soy bean seed	packet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Sunflower seed	packet	100	1	1	1	1	1	1	1	1	1	1	1	1	1
6	tofu	bowl	300	1	1	1	1	1	1	1	1	1	1	1	1	1
6	walnut	piece	100	2	2	2	2	2	2	2	2	2	2	1	1	1
7	incomplete															
8	incomplete															

**Table 5: Dum Bung Camp**

Food Group #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY												
				All	J	F	M	A	M	J	J	A	S	O	N	D
1	rice	sac	24975	1	1	1	1	1	1	1	1	1	1	1	1	1
1	sticky rice	basket	2997	1	1	1	1	1	1	1	1	1	1	1	1	1
1	wheat	parcel	1332	1	1	1	1	1	1	1	1	1	1	1	1	1
1	oats	sachet	166.5	1	1	1	1	1	1	1	1	1	1	1	1	1
1	noodles	viss	2331	1	1	1	1	1	1	1	1	1	1	1	1	1
1	porridge			2	2	2	1	1	1	1	1	1	1	1	1	1
1	white potatoes	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
1	white radish	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
1	taro root	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
1	chive root	viss	1665	1	1	1	1	1	1	1	1	1	1	1	1	1
2	pumpkin	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
2	carrot	viss	1498.5	1	1	1	1	1	1	1	1	1	1	1	1	1
2	sweet potato that are orange inside	viss	999	2	2	2	2	2	2	2	2	2	2	2	1	1
2	Red and yellow sweet pepper	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
2	ripe mango	viss	999	2	2	2	2	2	1	1	1	2	2	2	2	2
2	cantaloupe	piece	1332	2	2	2	2	2	2	2	2	2	1	1	2	2
2	ripe papaya	piece	832.5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	paung laung leaf	bundle	333	1	1	1	1	1	1	1	1	1	1	1	1	1
3	spinach	bundle	333	1	1	1	1	1	1	1	1	1	1	1	1	1
3	watercress	bundle	166.5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	horse shoe leaf (Hydrocotyle asiatica)	pile	333	1	1	1	1	1	1	1	1	1	1	1	1	1
3	green sweet pepper	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
3	mustard	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1

3	bean greens	viss	1831.5	2	2	2	2	2	2	2	2	2	2	2	1	1
3	pumpkin green	bundle	333	2	2	2	2	2	1	1	1	1	1	1	2	2
3	chayote green	bundle	499.5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	coriander	viss	2997	1	1	1	1	1	1	1	1	1	1	1	1	1
3	roselle	bundle	166.5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	kale	viss	999	2	1	1	2	2	2	2	2	2	2	2	1	1
3	tomato	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
3	onion	viss	1665	1	1	1	1	1	1	1	1	1	1	1	1	1
3	garlic	viss	1665	1	1	1	1	1	1	1	1	1	1	1	1	1
3	mushroom	viss	7492.5	2	2	2	2	2	2	1	1	1	2	2	2	2
3	eggplant	viss	1665	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd greens	bundle	333	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cauliflower	viss	1332	1	1	1	1	1	1	1	1	1	1	1	1	1
3	okra	bundle	333	2	2	2	2	2	2	2	2	1	1	1	2	2
3	Chili	basket	1998	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cucumbers	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
3	cabbages	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
3	gourd	piece	1665	1	1	1	1	1	1	1	1	1	1	1	1	1
3	ash pumpkin	piece	999	2	2	2	2	2	2	2	2	2	2	1	1	1
3	apple	viss	2497.5	1	1	1	1	1	1	1	1	1	1	1	1	1
3	orange	viss	2497.5													
3	pomelo	viss	1998	2	2	2	2	2	2	2	2	2	2	1	1	1
3	banana	viss	999	1	1	1	1	1	1	1	1	1	1	1	1	1
3	tangerine	viss	2497.5	2	2	2	2	2	2	2	2	2	2	2	1	1
3	lychee	viss	2497.5	2	2	2	2	2	1	2	2	2	2	2	2	2
4	liver	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
4	kidney	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
4	heart	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
4	gizzard	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
4	other organ meats	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1

4	chicken	viss	5994	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Pork	viss	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Game (eg. hog, wild cow, etc.,)	viss	8325	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Freshwater fish	viss	6660	1	1	1	1	1	1	1	1	1	1	1	1	1
4	Dried fish	viss	6660	1	1	1	1	1	1	1	1	1	1	1	1	1
5	eggs from chicken	carton	3996	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Lentils	viss	2497.5													
6	beans	viss	1498.5	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peas	viss	1498.5	1	1	1	1	1	1	1	1	1	1	1	1	1
6	peanut	viss	2997	1	1	1	1	1	1	1	1	1	1	1	1	1
6	Sunflower seed	viss	2997	1	1	1	1	1	1	1	1	1	1	1	1	1
6	soy bean seed	viss	3496.5	1	1	1	1	1	1	1	1	1	1	1	1	1
7	not available															
8	peanut oil	bottle	2997	1	1	1	1	1	1	1	1	1	1	1	1	1
8	mustard oil	bottle	7492.5	1	1	1	1	1	1	1	1	1	1	1	1	1
8	pork oil	viss	2497.5	1	1	1	1	1	1	1	1	1	1	1	1	1

## APPENDIX 20: OPPORTUNISTIC OBSERVATION RESULTS

**Table 1: Basic information**

<b>BASIC INFORMATION</b>	<b>#</b>	<b>%</b>
<b>Total Participants</b>	25	
<b>Avg Age of Child (mo)</b>	10.8	
# Children 0-5 mo	7	28%
# Children 6-11 mo	8	32%
# Children 12-23 mo	10	40%
<b>Sex of Child</b>		
M	15	60%
F	10	40%
<b>Avg Age of Feeding Person (yr)</b>	29.9	
<b>Sex of Feeding Person</b>		
M	2	8%
F	23	92%
<b>Location of Observation: Home</b>	25	100%
<b>Mealtime Observed</b>		
Breakfast	15	60%
Lunch	5	20%
Dinner	5	20%
<b>Duration of Observation (min)</b>	25.4	

**Table 2: Breastfeeding Practices**

<b>BREASTFEEDING</b>	<b>Total</b>	<b>Yes</b>	<b>No</b>
<b>Does the caregiver pay attention to the child?</b>	25	25 (100%)	0 (0%)
<b>Is the child breastfed to satiety?</b>	23	16 (70%)	7 (30%)
<b>Are any difficulties observed?</b>	20	10 (50%)	10 (50%)

**Table 3: Complementary Feeding**

<b>COMPLEMENTARY FEEDING</b>	<b>Total</b>	<b>Yes</b>	<b>No</b>
<b>1A. When serving the food, does the caregiver wash the child's hands?</b>	19	14 (74%)	5 (26%)
<b>1B. When serving the food, does the caregiver serve the child first?</b>	18	15 (83%)	3 (17%)
<b>2. Child eats alone or with family</b>			
By himself/herself	18	11 (61%)	
With family members	18	7 (39%)	
<b>3. How is child fed during mealtime (multiple answers)</b>	18		
Feeds self without help from caregiver		4	
Mostly feeds self with help from caregiver		6	
Fed mostly by caregiver but sometimes feeds self		10	
Fed only by caregiver		6	
<b>4. Is the child served food on his/her own plate?</b>	18	11 (61%)	7 (39%)
<b>4. Is a spoon, bottle, or other utensil used to feed the child?</b>	18	8 (44%)	10 (56%)
<b>5. Location of caregiver in relation to child</b>			
Near child and attentive	19	19 (100%)	
Not near child and/or busy with another activity	19	0 (0%)	
<b>7. Are any foods, dishes, drinks served only to the child?</b>	18	9 (50%)	9 (50%)
<b>8. Is the child only served portions of the foods or drinks that are served to the rest of the family or are some prepared specially for the child?</b>			
Child only served what is served to the rest of the family	18	3 (17%)	
Some foods/drinks are prepared specially for the child	18	15 (83%)	
<b>9. Are any foods/drinks served only to the rest of the family?</b>	18	18 (100%)	0 (0%)

**Table 4: Caregiver-Child Interaction**

<b>CAREGIVER-CHILD INTERACTION</b>	<b>Total</b>	<b>Yes</b>	<b>No</b>
<b>10. Does the caregiver talk to the child, verbally encouraging him/her to eat?</b>	18	18 (100%)	0 (0%)
<b>11. Does the caregiver encourage the child when he/she is eating well?</b>	18	18 (100%)	0 (0%)
<b>12. Does the caregiver ever motivate the child to eat more using gestures or games, or by demonstrating?</b>	18	14 (78%)	4 (22%)
<b>13. Does the caregiver ever physically force the child to eat during the meal?</b>	18	5 (28%)	13 (72%)
<b>14. During the meal, does the child ever refuse the food?</b>	18	10 (56%)	8 (44%)
<b>15. Does the caregiver ever serve additional portions to the child during the meal?</b>	18	10 (56%)	8 (44%)
<b>16. Does the child eat all of the food he/she is served?</b>	18	14 (78%)	4 (22%)

## APPENDIX 21: DATA COLLECTOR FGD RESULTS

### Data Collection Observations and Challenges

- Anthropometric measurements had to be conducted every day – hard to get all mothers and children together on one or two days. Could not demand mothers to come on a certain day; had to go by residents schedules. Difficult to have people come together.
  - Some teams (Moe Nyin, Dum Bung) went door-to-door to ensure that no one was missed
- FGDs: Difficult to discuss diets and food because residents are not able to eat a lot. “They would eat only in the morning and at night. No lunch and snacks. Some say they eat what's left from the morning. But that's too little to count. So that's basically two meals a day.”
- Dec 1 coincided with World Aids Day, people already gathered so easy to make the announcement about the assessment.
- Some people had difficulties writing their names for consent
- Respondents wanted advice, wanted to know what the plans were for intervention and what support would be made available, especially when they were asked dietary diversity questions
- Language barrier – some places spoke different dialects, difficult for KMSS officers to follow along
- FGD crowd control
- More time would be good for the data collection
- Some camps asking about outsiders, put all of their trust in outsiders
- “The more training given to us, the better.” “If needed, we can go as far as you want us to go.” “If you can teach, we can learn”
- Materials were ok, visual aids worked, heightboards/scales worked
- Enumerators learned that they need to study more, learn more, and practice more. Complained about the long walks require for fieldwork.



## APPENDIX 22: ASSESSMENT TOOL RECOMMENDATIONS

*Demographic Assessment:* This form was helpful in creating a master list of survey participants and linking children to their mothers and caregivers. However, even after three practice sessions, the codes and calculation of birthdays remained a bit hard to grasp for some enumerators. For future assessments, it is important for practical sessions to be linked so that participants can practice administering multiple survey components on the same mothers and children.

Though one to two days were allotted for the demographic assessment and anthropometric measurements, data collectors reported that it was hard to gather mothers and caregivers together according to this schedule. They would bring their children to be measured on other data collection days as well, which sometimes interrupted other surveys that were being conducted. Future assessments may consider conducting the demographic assessment and anthropometric measurements door to door rather than in one central location to encourage more participation.

*Anthropometric Measurements:* The adjustment of the anthropometric measurements form to follow SMART methodology specifications was a successful one because the SMART method is more commonly used in emergency settings and had been used by Plan previously. Plan staff were already familiar with the methods and software, and incorporating the SMART survey into this assessment helped to strengthen understanding and use of this tool. For future assessments, anthropometric data should be entered after practice sessions to check for digit preference and any other errors in measurement. This way, mistakes can be corrected prior to the data collection phase.

*Caregiver Survey:* During the practice session, all data collectors performed very well with the caregiver survey and demonstrated a clear understanding of skip patterns. However, during the actual data collection some enumerators were confused by the skip patterns. The data collectors explained that they did not realize how difficult the survey would be when they were left to conduct it by themselves. Since most enumerators only had the chance to practice on one caretaker each from Jan Mai Kawng camp, more practice sessions with a variety of caretakers and children would help to solidify their understanding and comfort with the tool. Additionally, future practice sessions should be divided between guided practice (with a supervisor overseeing), and independent practice.

The ProPAN caregiver survey is still the most appropriate questionnaire for this context and the most user friendly for data entry since data entry formats are already build into the software. WHO's IYCF assessment tool contains too many "if" statements that would confuse the enumerators, does not assess for contextual factors such as access to basic services and resources, communications, and housing. However, the ProPAN caregiver survey could better assess hygiene practices by including an observation question about availability of a stocked handwashing station within the home. This would allow better assessment of hygiene practices, which are linked to nutrition outcomes.

*Dietary Diversity:* The simplifications to the dietary diversity form (eight main groups of foods, removal of negligible ingredients such as spices) were successful in helping enumerators to follow the form and correctly categorize ingredients. Additionally, the check that was added (circle the item that was eaten in the category) ensured that fewer categories were missed. However, the dietary diversity assessment was weak in capturing quantity of foods consumed, nutrient density of meals and snacks, regular consumption patterns (ie. longer than 24 hours), and true consumption patterns of children. During the focus group discussion, enumerators remarked that even though a caregiver was recorded as eating

three meals on the dietary diversity form, it is common for camp residents to save some of their breakfast for lunch (and thus eating only two full meals). Future assessments should take these lessons into consideration and adapt the dietary diversity form accordingly.

One possible alternative tool is the dietary diversity segment from WHO's IYCF Assessment, which collects dietary diversity data over the previous 24 hours for children. This tool can be easily adapted to the Myanmar context using the food list created during this assessment and included at the end of the caregiver survey. The same free recall/probe techniques should be used as in the dietary diversity survey for caregivers. Asking caregivers to recall their child's food consumption may also reveal insights into the caregiver's attentiveness during feeding.

*Focus Group Discussions:* As expected, facilitation was challenging for the participants since this is normally a skill that is developed over time and with practice. Initially, it was difficult for the participants to understand how to facilitate and how to ask questions. This was clarified for the enumerators when Plan staff demonstrated moderating and notetaking during a practice focus group. The modeling helped the participants to understand the purpose and techniques behind the focus group, and practice sessions went more smoothly afterwards.

During the data collection, there was some confusion about the last question, which asks women what they think of recommendations for improving diet during pregnancy in other communities. For the next assessment, this question should be rephrased to remove the recommendations and only ask the women how they would recommend improving diet during pregnancy. Other adjustments recommended for future assessments include conducting the focus group discussion training after the opportunistic observation training to build upon notetaking skills and adding a training module on participant management. The enumerators had difficulties with crowd control during the actual focus group discussions; since there are no private spaces, camp residents passing by wanted to participate for food and snacks.

*Market Survey:* The ProPAN market survey was straightforward to teach and to execute, but the form fails to take into account that in some contexts, it is not possible to weigh all the foods and assess their nutritional values. The lack of up-to-date regional food composition tables was also a challenge. Originally, there were plans to use the market survey analysis available in the ProPAN EpiInfo software; however, this was not possible because of local foods for which there were no direct translations/nutritional values and difficulties in obtaining weights.

There was also a high level of variability in market units and product availability across camps. In future market surveys, it would be important to obtain price per weight so the market survey measurements can be standardized and nutrient density can be calculated. Enumerators and supervisors reported that vendors were unwilling to permit weighing of the foods without purchase. With additional funding, it would have been possible to assess availability and cost of nutrients by allowing enumerators to purchase the foods for weighing. Other information that may be considered for inclusion in future surveys is time to nearest market and how often families shop at the market.

*Opportunistic Observations:* Enumerators understood the objectives of this assessment method well, but they still need practice in recording all the interactions they observe during feeding. They were able to fill out the short answer questions on the forms, but descriptions could have included more detail. Plan officers remarked that this was likely due to enumerators not being accustomed to writing down lengthy notes. Further practice in this aspect would also help to improve the quality of focus group discussion notes. It would also be helpful for future assessments to include a larger sample of observations to help confirm or refute data reported from the caregiver survey and dietary diversity forms.