

Comprehensive Infant and Young Child Feeding (IYCF) Assessment

Kachin, Myanmar

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Plan Myanmar



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Annie Zhou
Nutrition Consultant

Enumerators

Jan Chang Myaw
Lu Seng
Ja Gu
Zawng Nyo
Ma Ru Bawk Un
L. B. Bawk Nan
Hpau Ji Kai Htang
M.T. Lu Bu
Jan Hkaw Nam
La Bya Kai Nan
La Htaw Ji Nu
N Law Seng Mai
Ah Sar Mi
Jan Nang Mai
Jan Nem Ra
Jan Bawk Ra
Jan Ban Mun
Jan Doi Ra
Jan Lu Bu

KBC

Dau Naw, Nutrition Assistant
Sut Ja Lu, Nutrition Officer
Chan Myaw, Project Manager

Plan

May Thukha Soe, MNCHN Program Manager
Zin Nwe Win, MNCHN Research Intern, Chiang Mai University
Ze Naw, Nutrition Officer
Lum Khaung, Household Gardening Officer
Linn Thant Aung, Monitoring, Evaluation and Research Manager
Tu Aung, Humanitarian Program Unit Manager

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EXECUTIVE SUMMARY

Since 2011, ongoing conflict between the Government of Myanmar and the Kachin Independence Army (KIA) has displaced more than 100,000 people from their homes in Kachin State and Northern Shan State¹. Plan International's SMART survey conducted in 10 townships in Kachin State at the end of 2013 confirmed a very low rate of acute malnutrition (GAM 1.9%) but yielded a 44.5% stunting prevalence, which is above the WHO emergency standard of 40%². 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. In October 2013, Plan Myanmar began partnering with Kachin Baptist Convention (KBC), a local faith-based organization, to implement nutrition activities in 46 internally displaced persons (IDP) camps covering both government and non-government controlled areas.

In order to better target nutrition program activities in IDP camps in Kachin, Plan Myanmar conducted this comprehensive IYCF assessment to better understand the current landscape and gaps in feeding practices for children under 2 years of age.

The primary objectives of the assessment were to:

- Generate reliable, actionable data and rich contextual information about nutritional status and IYCF practices in the local population so that an appropriate and effective nutrition intervention can be designed.
- Build local capacity of community volunteers and partner staff to assess multiple determinants of nutritional status.

Nineteen volunteers from IDP camps in Kachin were trained in six quantitative and qualitative data collection tools. A two-stage cluster sampling design with Probability Proportional to Size (PPS) was used to select a representative sample of 329 children under 2 years of age from 20 camps (17 originally selected and 3 reserve camps). The assessment was carried out over five days, reaching a total of 310 children and their caregivers.

The survey revealed a continued need for nutrition and infant and young child feeding support. Key IYCF indicators remain low, including early initiation of breastfeeding (77%, 95% CI: 72% - 82%), exclusive breastfeeding (43%, 95% CI: 30% - 55%), and minimum dietary diversity (59%, 95% CI: 53% - 66%). Additionally, bottle feeding is high at 17% (95% CI: 13% - 21%), which increases children's risk for diarrheal diseases. Possible causal factors for these poor indicators include lack of specific knowledge of best IYCF practices, competing messaging from infant formula companies, and lack of resources.

In order to address these problems, interventions should target both knowledge and practice of key IYCF behaviors including timely initiation of breastfeeding, exclusive breastfeeding, and dietary diversity through counselling and supportive supervision. Additionally, programming should seek to provide targeted support to vulnerable households, explore opportunities for home gardening, learn more about attitudes towards breastfeeding, and closely monitor use of breastmilk substitutes.

¹ 2015 UNHCR Country Operations Profile – Myanmar.

² Nutrition Anthropometric Assessment (Based on SMART Methodology). Plan International Myanmar. 2014.

LIST OF ACRONYMS

FAO	Food and Agriculture Organization of the United Nations
GAM	Global Acute Malnutrition
GCA	Government Controlled Area
IDP	Internally Displaced Persons
IYCF	Infant and Young Child Feeding
KBC	Kachin Baptist Convention
KIA	Kachin Independence Army
MMK	Myanmar Kyat
NGCA	Non-Government Controlled Area
NGO	Non-Governmental Organization
PAHO	Pan American Health Organization
ProPAN	Process for the Promotion of Child Feeding
SBA	Skilled Birth Attendant
SMART	Standardized Monitoring and Assessment of Relief and Transitions
UNICEF	United Nations Children's Fund
WASH	Water, Sanitation, and Hygiene
WHO	World Health Organization
WFP	World Food Programme

INTRODUCTION

Since 2011, ongoing conflict between the Government of Myanmar and the Kachin Independence Army (KIA) has displaced more than 100,000 people from their homes in Kachin State and Northern Shan State³. About half of these internally displaced persons (IDPs) reside in camps Government Controlled Areas (GCA) while the other half reside in Non-Government Controlled Areas (NGCA). NGCA are typically more remote, with limited access for international NGOs and heavy reliance on local partners for humanitarian assistance.

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 burden⁴. Pregnancy and 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 life⁵. 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 development⁶.

Nationally in Myanmar, only 23.6% of children under 6 months are exclusively breastfed and the stunting rate is high (35.1%), indicating chronic and protein energy malnutrition⁷. These infant and young child feeding challenges may be exacerbated in IDP camps, where livelihoods are disrupted and access to resources may be limited. Plan International's SMART survey conducted in 10 townships in Kachin State at the end of 2013 confirmed a very low rate of acute malnutrition (GAM 1.9%) but yielded a 44.5% stunting prevalence, which is above the WHO emergency standard of 40%⁸. 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) intervention⁹.

In response to the conflict, Plan Myanmar partnered with Kachin Baptist Convention (KBC), a local faith-based organization, to implement child protection and water, sanitation, and hygiene (WASH) programs in IDP camps. In October 2013, Plan expanded its programming to include nutrition activities such as health education and mother peer groups. Currently, Plan's nutrition program is active in 46 camps located in both GCA and NGCA. The World Food Programme (WFP) distributes food baskets and supplementary foods in all areas except for six NGCA camps. In these six camps, Plan distributes supplementary foods to under 2 children and pregnant and lactating women.

In April 2015, Plan conducted another SMART Survey that confirmed low acute malnutrition (GAM 2.9%) and high stunting prevalence (37%)¹⁰. In order to complement the SMART Survey and target nutrition

³ 2015 UNHCR Country Operations Profile – Myanmar.

⁴ Thomas SL, Thomas SDM. Displacement and health. *Br Med Bull*. 2004 Jan 1;69(1):115–27.

⁵ UNICEF. *The State of the World's Children 2012*.

⁶ *Ibid*.

⁷ Ministry of National Planning and Economic Development and Ministry of Health, Myanmar. *Myanmar Multiple Indicator Cluster Survey 2009-2010 Final Report*. Nay Pyi Taw; 2011.

⁸ *Nutrition Anthropometric Assessment (Based on SMART Methodology)*. Plan International Myanmar. 2014.

⁹ *Ibid*.

¹⁰ *Nutritional Anthropometric Assessment (Based on SMART Methodology)*. Plan International Myanmar. 2015.

program activities in Kachin, Plan Myanmar conducted this comprehensive IYCF assessment to better understand the current landscape and gaps in feeding practices for children under 2 years of age.

OBJECTIVES

The primary objectives of the comprehensive IYCF assessment were to:

- Generate reliable, actionable data and rich contextual information about nutritional status and IYCF practices in the local population so that an appropriate and effective nutrition intervention can be designed.
- Build local capacity of community volunteers and partner staff to assess multiple determinants of nutritional status.

METHODOLOGY

Assessment Tools

To generate data and rich contextual information about the nutritional status of children under 2 in IDP camps in Kachin State, a combination of tools were selected from the World Health Organization (WHO), Pan American Health Organization (PAHO), and other agencies and non-governmental organizations (NGOs). These tools were then adapted based on previous lessons learned from the 2014 pilot Process for the Promotion of Child Feeding (ProPAN) assessment in Kachin and the current operating context. The target population and objective of each tool is outlined in Table 1. The data collection tools can be found beginning in Annex 2.

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

Data Collection Tool	Source	Target Population	Objective(s)
1. Demographic Assessment	Plan Myanmar	All children 0-23 months & their mothers/caregivers	1) Identify and locate children 0-23 months and mothers/caregivers for participation in further assessment
2. IYCF Assessment	WHO Indicators for assessing IYCF practices	All mothers/caregivers of children 0-23 months	1) Identify current breastfeeding and complementary feeding practices 2) Compare current practices with international indicators for assessing infant and young child feeding practices 3) Identify key gaps in practice
3. Caregiver Dietary Diversity	FAO Individual Dietary Diversity	All mothers/caregivers of children 0-23 months	1) Assess maternal/caregiver dietary diversity 2) Identify key foods consumed by mothers/caregivers and gaps in nutrition
4. Focus Group Discussions	The Manoff Group: Guidance for Formative Research on Maternal Nutrition	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
5. Market Survey	PAHO ProPAN	All markets/grocery stores where families source their food	1) Determine the seasonality, availability, and cost of specific foods 2) Identify the locally available foods that provide the greatest amount of dietary diversity for the least cost
6. Opportunistic Observations	PAHO ProPAN	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)

Study Design

This survey used a two-stage cluster sampling design with Probability Proportional to Size (PPS). In the first stage, thirty clusters were selected proportional to population size. Out of 46 camps in which Plan and KBC were operating, 19 contained clusters for assessment. One camp from the original selection (Hmaw Si Sar) was inaccessible due to security, leaving 18 camps in the original selection. Three additional reserve clusters were selected in the event that any other camps were inaccessible. A list of camps can be found in Annex 1.

In the second stage, the primary sampling unit consisted of children under 2 years of age. Out of a total under 2 population of 1668 children, the required sample size was determined taking into consideration the following factors:

1. The ProPAN tool recommended surveying between 306-323 children under 2, assuming a 95% confidence interval, 5% precision, and 50% indicator prevalence.
2. The April 2015 SMART Survey that took place among the same camps recommended 396 households and 216 individuals under 5.

Given these factors, available resources, and accounting for a 3% non-response rate, the final sample size required was determined to be 333 children under 2.

Training

Nineteen existing IYCF and Nutrition volunteers from the Nutrition project were selected to participate in the assessment based on their involvement in the community, motivation, and literacy. Five supervisors from Plan and KBC and one assessment manager from Plan helped to facilitate and oversee the training, data collection, and data entry process.

Training was conducted over a period of five days from 14 July 2015 to 18 July 2015. Trainings for all data collection methods were conducted in Myanmar and consisted of both theoretical and practical components. One market visit was arranged for the enumerators to practice collecting this information. The remainder of the practical sessions consisted of role-playing.

Data Collection

Data was collected over six days, from 21 July 2015 to 26 July 2015. Enumerators were assigned to five areas based on camp location and size, and one supervisor was assigned to each area. During the data collection, enumerators worked with camp committees, local residents, and other volunteers to ensure that the lists of under 2 children were up-to-date and accurate. In five camps, enumerators discovered that the under 2 populations did not match the sampling lists. In these cases, enumerators, along with the help of camp management committees and volunteers, collected updated under 2 lists and resampled according to the original methodology. In three camps, enumerators discovered there were additional under 2 children who were not in the original list. In these situations, information for the additional children was appended to the list and additional children were selected for inclusion in the survey according to the original sampling methodology. All three reserve clusters were included in the final survey. Le Kone Ziun camp replaced Mang Hawng camp due to flooding, and Shatapru and Ja Mai Hkawng camps were included to account for smaller than expected populations in the camps where enumerators had to re-gather population lists. After these changes, the final sample size of children under 2 selected to participate in the survey was 329.

The demographic assessment 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. Children who had completed two years of age on the day of the demographic assessment were not included as part of the sample. If a child passed away before the age of two, the caregiver's responses for initiation of breastfeeding were included but they were removed from further questioning. Supervisors monitored quality of the data collected by reviewing forms daily and also helped to resolve any issues or questions that arose during the assessment.

Monitoring

Quality and suitability of the training and assessment were monitored through a daily feedback form, a final training evaluation form, and various training practice sessions where enumerators applied the concepts they had learned. In addition to feedback from the data collectors, Plan and KBC staff gathered at the end of each day to discuss successes, challenges, and adjustments for the remainder of the training schedule. Feedback was also gathered on a daily basis throughout data collection and supervisors were given a checklist to review the data collected. Finally, a focus group discussion was held with the enumerators at the conclusion of the assessment to learn more about the data collection process.

Data Entry

The data were entered by three supervisors in Yangon after data collection was complete. During data entry, one supervisor conducted random checks daily. After data entry was completed, the three supervisors cross-checked each other's work. Data cleaning consisted of:

1. Finding cases with missing data or individuals who should not be in the dataset
2. Visually scanning data to make sure they are clean
3. Range checks
4. Consistency checks

Data Analysis

Data analysis and report writing was conducted by the Nutrition Consultant. Stata Statistical Software (Version 11) was used for the demographic assessment, IYCF assessment, and dietary diversity forms; Microsoft Excel was used for the market survey and opportunistic observations; and Microsoft Word was used to analyze the notes from the focus group discussions. Analysis of the IYCF assessment was conducted according to WHO guidelines and the indicator definitions listed below¹¹. Indicators were disaggregated by age and sex whenever possible; the significant results are presented in the results section.

1. Early initiation of breastfeeding: Proportion of children born in the last 24 months who were put to the breast within one hour of birth.

Children born in the last 24 months who were put to the breast within one hour of birth
Children born in the last 24 months

¹¹ Indicators for assessing infant and young child feeding practices. World Health Organization. 2010.

2. Exclusive breastfeeding under 6 months: Proportion of infants 0–5 months of age who are fed exclusively with breast milk.

$$\frac{\text{Infants 0–5 months of age who received only breast milk during the previous day}}{\text{Infants 0–5 months of age}}$$

3. Continued breastfeeding at 1 year: Proportion of children 12–15 months of age who are fed breast milk.

$$\frac{\text{Children 12–15 months of age who received breast milk during the previous day}}{\text{Children 12–15 months of age}}$$

4. Introduction of solid, semi-solid or soft foods: Proportion of infants 6–8 months of age who receive solid, semi-solid or soft foods.

$$\frac{\text{Infants 6–8 months of age who received solid, semi-solid or soft foods during the previous day}}{\text{Infants 6–8 months of age}}$$

5. Minimum dietary diversity: Proportion of children 6–23 months of age who receive foods from 4 or more food groups.

$$\frac{\text{Children 6–23 months of age who received foods from } \geq 4 \text{ food groups during the previous day}}{\text{Children 6–23 months of age}}$$

6. Minimum meal frequency: Proportion of breastfed and non-breastfed children 6–23 months of age who receive solid, semi-solid, or soft foods (but also including milk feeds for non-breastfed children) the minimum number of times or more.

$$\frac{\text{Breastfed children 6–23 months of age who received solid, semi-solid or soft foods the minimum number of times or more during the previous day}}{\text{Breastfed children 6–23 months of age}}$$

and

$$\frac{\text{Non-breastfed children 6–23 months of age who received solid, semi-solid or soft foods or milk feeds the minimum number of times or more during the previous day}}{\text{Non-breastfed children 6–23 months of age}}$$

7. Minimum acceptable diet: Proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk).

$$\frac{\text{Breastfed children 6–23 months of age who had at least the minimum dietary diversity and the minimum meal frequency during the previous day}}{\text{Breastfed children 6–23 months of age}}$$

and

Non-breastfed children 6–23 months of age who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day

Non-breastfed children 6–23 months of age

8. Consumption of iron-rich or iron-fortified foods: Proportion of children 6–23 months of age who receive an iron-rich food or iron-fortified food that is specially designed for infants and young children, or that is fortified in the home.

Children 6–23 months of age who received an iron-rich food or a food that was specially designed for infants and young children and was fortified with iron, or a food that was fortified in the home with a product that included iron during the previous day

Children 6–23 months of age

9. Children ever breastfed: Proportion of children born in the last 24 months who were ever breastfed.

Children born in the last 24 months who were ever breastfed

Children born in the last 24 months

10. Continued breastfeeding at 2 years: Proportion of children 20–23 months of age who are fed breast milk.

Children 20–23 months of age who received breast milk during the previous day

Children 20–23 months of age

11. Age-appropriate breastfeeding: Proportion of children 0–23 months of age who are appropriately breastfed.

Infants 0–5 months of age who received only breast milk during the previous day

Infants 0–5 months of age

and

Children 6–23 months of age who received breast milk, as well as solid, semi-solid or soft foods, during the previous day

Children 6–23 months of age

12. Predominant breastfeeding under 6 months: Proportion of infants 0–5 months of age who are predominantly breastfed.

Infants 0–5 months of age who received breast milk
as the predominant source of nourishment during the previous day

Infants 0–5 months of age

13. Bottle feeding: Proportion of children 0–23 months of age who are fed with a bottle.

Children 0–23 months of age who were fed with a bottle during the previous day
Children 0–23 months of age

RESULTS

Demographics

A total of 329 children under 2 years of age and their caregivers from 20 camps were selected to participate in the assessment. Due to movement within the population, plantation work, and other reasons, 19 children and their caregivers were unavailable to participate in the IYCF and caregiver dietary diversity components of the assessment, yielding a non-response rate of 6%.

IYCF Assessment

Three hundred and ten children and their caregivers participated in the IYCF assessment, which yielded information about reported IYCF practices including breastfeeding and complementary feeding. Caregivers averaged 30.4 years of age and almost all were female (98%). Children averaged 12.2 years of age. Fifty-six percent were boys and 44% were girls, yielding a slightly high sex ratio (1.26, normal ratio 0.8-1.2). The thirteen key IYCF indicators are presented in Figure 1.

Figure 1: Key IYCF indicators



Breastfeeding

Almost all caregivers (99%, 95% CI: 98% - 100%) reported ever breastfeeding their children. However, only 77% (95% CI: 72% - 82%) followed the best practice of breastfeeding within one hour after birth. The percentage of women who exclusively breastfed their children under six months of age was even lower, at 43% (95% CI: 30% - 55%). When ORS, vitamin and/or mineral supplements, water and water-based drinks, and fruit juice are “allowed” in the predominant breastfeeding indicator, the proportion increases to 62% (95% CI: 50% - 75%) of caregivers.

Continued breastfeeding at one year was high at 92% (95% CI: 85% - 99%), indicating that at one year caregivers are breastfeeding their children almost daily (but not necessarily exclusively). However, at two years, the continued breastfeeding indicator drops to 58% (95% CI: 44% - 72%). The proportion of women who breastfed their children appropriately based on the child’s age was 69% (95% CI: 64% - 75%). This indicator is a composite indicator of exclusive breastfeeding and appropriate complementary feeding, and would have been higher if not for the low rate of exclusive breastfeeding for children under six months and the lack of continued breastfeeding for children approaching two years. Finally, 17% (95% CI: 13% - 21%) of caregivers reported their child drinking from a bottle with a nipple during the previous day. This value is high and cause for concern considering that hygiene conditions within the camps are less than ideal.

Complementary Feeding and Dietary Diversity

Eighty-two percent (95% CI: 70% - 96%) of children between the ages of 6-8 months ate solid, semi-solid, or soft foods the previous day. Among children 6-23 months of age, only 59% (95% CI: 53% - 66%) met the minimum dietary diversity requirements and consumed food from at least four food groups the previous day. Minimum meal frequency was higher, at 75% (95% CI 69% - 80%), suggesting that most children are eating the recommended number of times each day but not getting the variety of nutrients they need. The minimum acceptable diet indicator—a composite indicator of dietary diversity and meal frequency—was low, with just 43% (95% CI: 37% - 50%) of children 6-23 months meeting both dietary diversity and meal frequency requirements. Seventy-six percent of children (95% CI: 71% - 81%) received an iron-rich food or iron-fortified food the previous day. The most common source of iron is infant formula, but blended foods and micronutrient powders are also sources of iron. Iron consumption appears to be significantly associated with age ($p=0.03$) with children from the 12-17 month interval receiving the most iron-rich or iron-fortified foods.

Looking more deeply into dietary diversity for children 0-23 months of age, the assessment revealed that children 6-23 months ate from an average of 3.8 food groups (95% CI: 3.6 – 4.0) the previous day. Of those who did not meet minimum dietary diversity requirements, 19% ate foods from three groups the previous day, 11% ate foods from two groups the previous day, 9% ate foods from one group, and 3% did not consume any soft, semi-solid, or solid foods.

The most commonly consumed food groups were grains, roots, and tubers (93%, 95% CI: 90% - 96%); Vitamin A rich fruits and vegetables (67%, 95% CI: 61% - 73%); and flesh foods (61%, 95% CI: 55% - 67%). Children who did not meet the minimum dietary diversity consumed mostly grains (82%, 95% CI: 75% - 90%) with some Vitamin A rich fruits and vegetables (34%, 95% CI 24% - 43%) and eggs (30%, 95% CI: 21% - 39%). In comparison, all children (100%) who met the minimum dietary diversity requirements consumed grains, with most also eating Vitamin A rich fruits and vegetables (89%, 95% CI: 84% - 94%) and flesh foods (84%, 95% CI 79% - 90%). More than half of those children meeting dietary diversity requirements also consumed legumes and nuts, dairy products, and eggs.

Alarming, children who met minimum dietary diversity requirements and those who did not had statistically significant differences ($p < 0.05$) in their consumption of all food groups. Additionally, minimum dietary diversity was just below statistical significance ($p = 0.07$) when comparing between boys and girls. Girls met minimum dietary diversity requirements 53% of the time, whereas boys ate foods from at least four groups 65% of the time. This possible difference may be an area of further observation for nutrition volunteers and staff within the camps.

Figure 2: Children’s Dietary Diversity, Number of food groups consumed

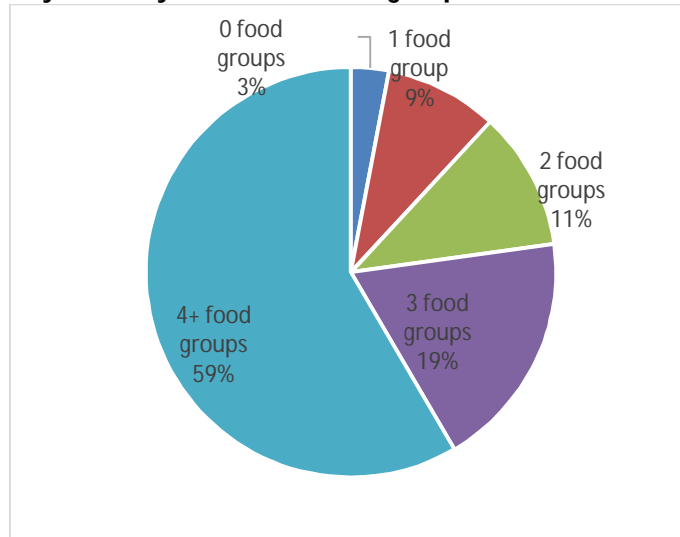
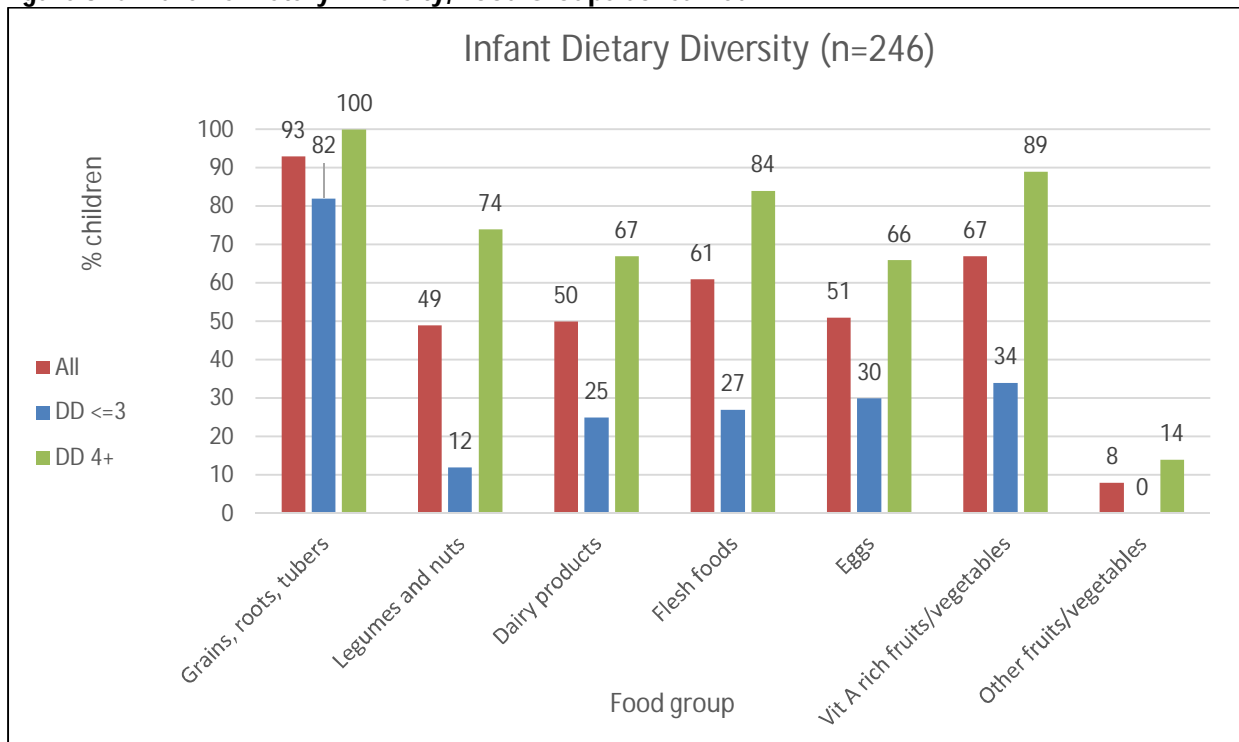


Figure 3: Children’s Dietary Diversity, Food Groups Consumed



Caregiver Dietary Diversity

When comparing Caregiver Dietary Diversity to Child Dietary Diversity, it is important to keep in mind that the two results are not directly comparable because they utilize different methodologies. Whereas Caregiver Dietary Diversity follows FAO guidelines, Child Dietary Diversity comes from the WHO IYCF Assessment tool. They differ slightly in the categorization of foods and number of food groups (FAO uses eight while WHO uses seven). Minimum dietary diversity for both methodologies is four categories.

Dietary information was gathered from 304 caregivers and used in the final analysis. While 19% of the respondents said their food consumption was unusual during the previous day (12% said they ate more than usual and 7% said they ate less than usual), there was no statistical significance in consumption patterns between these respondents and those who had a normal food day. Therefore, no one was excluded from the analysis.

Consumption was categorized into eight food groups, with at least 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

In order to be able to compare more closely with Children's Dietary Diversity assessed in the IYCF tool, which only uses seven categories and does not count oils and fats as a food category, the eighth category (oils and fats) in Caregiver Dietary Diversity was excluded from calculations.

The assessment revealed that 84% (95% CI: 80% - 88%) of caregivers ate food from four or more groups the previous day, meeting minimum dietary diversity requirements. Twelve percent ate food from three groups the previous day, and 4% ate food from two groups the previous day. The most commonly consumed food groups were grains, roots, and tubers (99%, 95% CI: 98% - 100%); dark green leafy vegetables and other fruit and vegetables (96%, 95% CI: 94% - 98%); and flesh foods (60%, 95% CI: 54% - 65%). Caregivers who did not meet the minimum dietary diversity primarily consumed food from the grains, roots, and tubers and green leafy vegetables groups (over 80% for each). The other five food groups were rarely consumed by this group of caregivers (less than 13% consumption for each food group). On the other hand, more than 50% of caregivers who met minimum dietary diversity requirements also consumed food from the legumes and nuts, flesh foods, and/or eggs categories. On average, respondents consumed 2.7 meals (95% CI 2.7 – 2.8) and 0.8 snacks (95% CI 0.7 - 0.9) daily, and only 7% (95% CI: 4% - 10%) of caregivers consumed something outside the home the previous day.

Figure 4: Caregiver Dietary Diversity, Number of food groups consumed

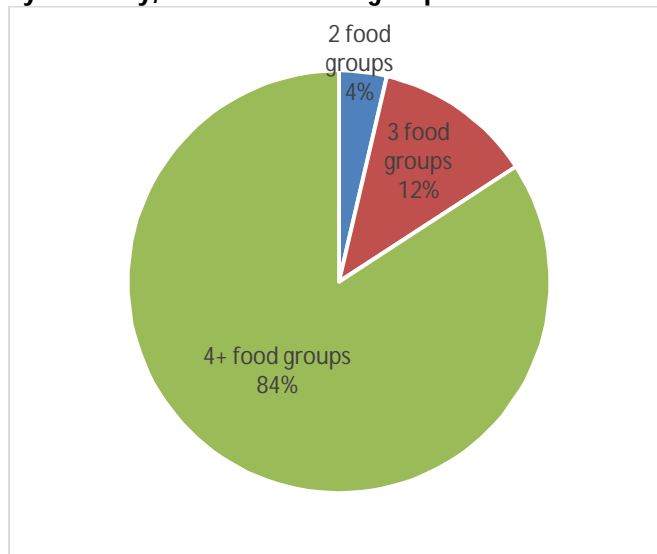
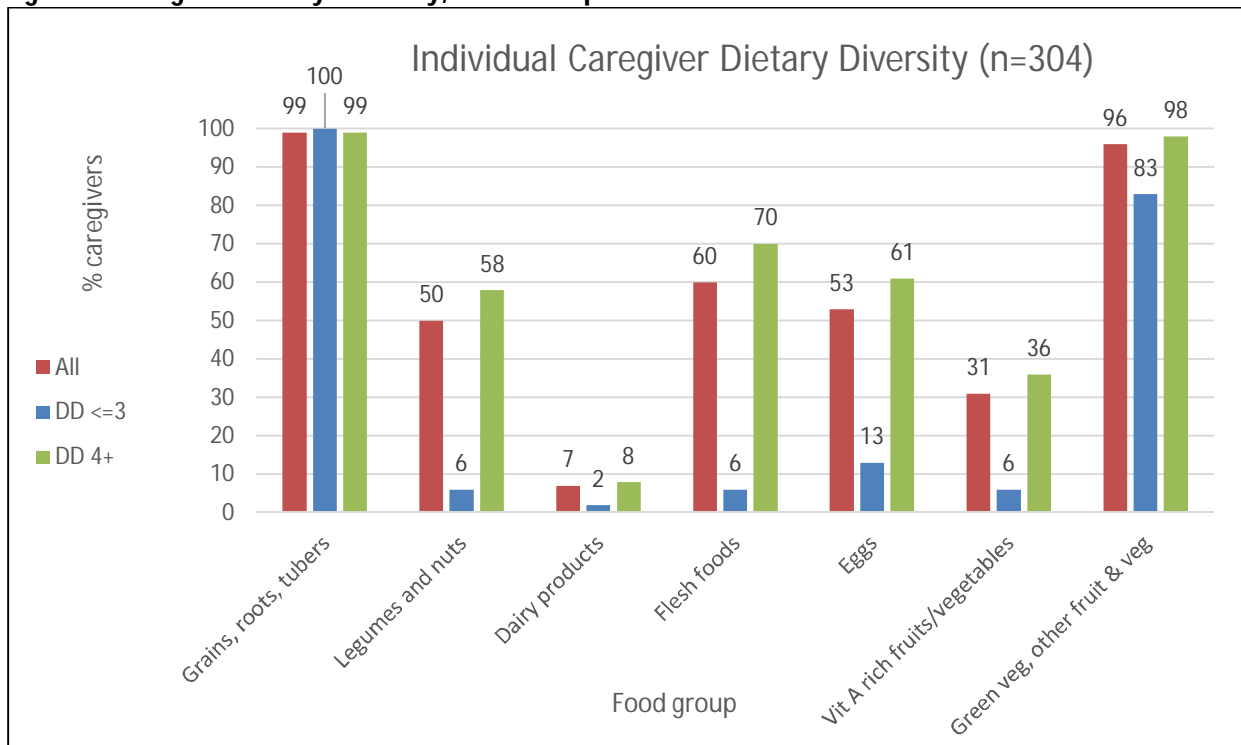


Figure 5: Caregiver Dietary Diversity, Food Groups Consumed



Focus Group Discussions

A total of 49 pregnant and lactating women (15 pregnant women, 34 lactating women) participated in focus group discussions held in eight camps. These discussions revealed that some nutrition knowledge such as benefits of prenatal visits and nutrition for pregnant women already exists within the camps. This information used to come from friends, neighbors, elders, and family members, but now is communicated by Plan Myanmar, other NGOs, and healthcare providers such as the State Health Department, midwives, and Skilled Birth Attendants (SBAs):

“In the past, I get suggestions from my elders. Now, there many organizations working caring for pregnant and lactating women. I also follow to those instructions and educational advice. They are very useful for young children as well as for mothers.” – Loi Je Camp

“I also get suggestions from Plan Myanmar, doctors, and other health-related organizations. Those information and messages are very useful for our pregnancy and child feeding practices. I would like to follow to them as they are good suggestions.” – Momauk camp

Most women receive antenatal care, however, those without husbands struggle financially. Most women give birth in the home; they do not go to the hospital unless there is a complication. Pregnant women mentioned having poor appetites in the first and second trimesters of their pregnancies. Once they regained their appetites, they eat frequently (3-6 times per day) and their diets usually consist of rice and vegetables.

“During my pregnancy, I usually drank water rather than eating food. However, after giving birth, I could eat more and very well. I really wanted to eat many kinds of food, but I couldn’t eat because I couldn’t afford to buy them.” – Loi Je camp

“During early pregnancy periods like in one or two months of pregnancy, I couldn’t eat much. However, since 3 months of pregnancy up to postnatal periods, I can eat a lot.” – Loi Je camp

There are no foods that are avoided during pregnancy. Once the child is born, women avoid sour and spicy foods, mushrooms, and bamboo shoots because they believe it will cause the baby to have a stomachache. Women reported eating frequently during the post-partum period.

In the focus group discussions, mothers mentioned no difficulties with breastfeeding and reported breastfeeding their children whenever they are hungry. In the few instances where women did have breastfeeding difficulties, they mentioned that consuming blended foods helped with production of breastmilk:

“In this camp, there are many pregnant women who can’t produce breastmilk and their breast also can’t come out for breastfeeding. However, I have noticed that when those lactating women eat blended food, they could produce breastmilk.” – Mungga Zup camp

The main constraints to eating more vegetables and meat/fish for pregnant and lactating women and their children is lack of financial resources and limited land for home gardening in the IDP camps. Several women became quite emotional when discussing their household resources. Men work mostly as daily low-wage laborers and there are extremely limited opportunities for women since employers don’t want to offer them jobs. Those who have gardens can eat the vegetables they grow, but many do not have

access to land due to limited availability in the camps. Without home gardens, families lose a source for vegetables that they would have access to under normal circumstances.

“For me, I have many family members in my household. Therefore, we have some food availability and access issues. Even if I want to eat, I can’t eat [because a small amount of food is shared among family members].” – Mina KBC camp

“I don’t have much access to meat and poultry and fish. I know that I have to eat a lot of healthy and nutritious food during pregnancy. However, as I didn’t have any money to buy due to my husband’s work as a daily wage labor, I couldn’t eat meat and fish most of the time. My husband’s work is very irregular because he has a job only when there is someone to hire him.” – Momauk camp

“If I want to eat some vegetables, I can grow them only in small amounts. For fruits, I can’t grow them in the camp. I also can’t afford to buy fruits.” – Pa Jaung camp”

Market Survey

Market surveys were conducted in 15 camps. A few camps (for example: Momauk and Robert, Loi Je and Htoi Sen) share markets – in these cases, one survey was conducted for both camps. The market survey combines prices from several sources, including the wet market, home shops, and motorcycle vendors. If there were multiple prices for an item, enumerators averaged the price. For camps with markets in China, prices were collected in Yuan and then converted to Myanmar Kyats.

Overall, an average of 84 products from across the 8 food groups are available in the camps, with 67 items available year-round. The group consisting of dark green leafy vegetables, other vegetables, and other fruits had the largest variety, with an average of 41 products available and an average price of 836MMK per unit (some greens are even available for free). Cereals, white roots, and tubers had the second most variety with 14 items on average. By far, organ meats, flesh meats, fish, and seafood was the most expensive category at an average of 7156MMK per item. Availability of products tended to be more limited in NGCA camps such as Hkau Shau.

Table 2: Average number of items available and price per food group

Food Group	Average # of items available	Average price per unit (MMK)	Average # Items available year round
1. Cereals, White Roots, Tubers	13.6	1391	11.5
2. Vit A Rich Fruits, Vegetables, & Tubers	5.5	929	3.9
3. Dark Green Leafy Vegetables, Other Vegetables, Other Fruits	41.1	836	29.2
4. Organ Meat, Flesh Meats, Fish, and Seafood	8.8	7156	8.1
5. Eggs	2.3	152	2.3
6. Legumes, Nuts, and Seeds	8.3	996	7.6
7. Milk and Milk Products	1.3	1121	1.3
8. Oils and Fats	2.6	3164	2.6

Opportunistic Observations

Fifty-three children (26 boys, 27 girls) 1-23 months of age were observed during meal time in their homes. Six breakfast, 12 lunch, 20 dinner, 5 snack, and 10 breastfeeding interactions were observed, with each interaction lasting an average of 35 minutes. All but one caregiver was female and the average caregiver age was 28.7 years.

Overall, caregivers exhibited attentive child feeding behaviors, with almost all caregivers paying attention to the child (22/25, 88%) and with most verbally engaging the child during complementary feeding (30/36, 83%) by complimenting the child on their handsomeness/intelligence/strength, promising to play with the child after eating, singing, or adopting silly actions. Caregivers were usually situated near the child and attentive during meals. Children were breastfed to satiety in 19 out of 24 cases (79%), and in 4 out of 23 (17%) observations, breastfeeding difficulties were observed.

During observations of complementary feeding, caregivers washed the child's hands in 29 out of 37 instances (88%) and served the child first in 28/37 (76%) observations. However, enumerators observed that in 7/37 (19%) observations, the kitchen was dirty or the caregiver used dirty utensils/bowls. About a third of children (23/37, 62%) were served food on his or her own plate and in all observations, the child was fed with at least a little bit of help from the caregiver. In 21 out of 37 (57%) of observations, a spoon, bottle, or other utensil was used to feed the child. In about half of the observations (17/36, 47%), some foods were specially prepared for the child and some foods or drinks were served only to the rest of the family (18/36, 50%). The specially prepared foods/drinks for the children were often foods that are not too spicy such as beef soup, fried eggs, or rice. Food reserved for the rest of the family included pounded chili.

The majority of caregivers encouraged the child when he or she was eating well. In 28/36 (78%) observations, the caregiver used gestures or games to motivate the child to eat more and in 4/36 (11%) instances, the caregiver physically forced the child to eat by shouting at the child or threatening the child. About half of the children (19/36, 53%) ate most of the food that they were served, but about half (16/36, 44%) also refused food at some point during the meal. In 13/36 (36%) observations, the caregiver served additional portions to the child.

Discussion

Breastfeeding Practices

The high percentage of children that are ever breastfed and that continue to be breastfed at one year indicate that this is a common practice within the population and that mothers recognize the benefits of breastfeeding. However, the exclusive breastfeeding indicator is very low and the early initiation of breastfeeding and predominant breastfeeding indicators have room for improvement. This suggests that while caregivers know about the benefits of breastfeeding, more nuanced communications targeting the first hour after birth, the first six months of a child's life, and the first two years of a child's life should be emphasized and reinforced.

Enumerators mentioned that there is heavy advertising from Chinese infant formula companies discouraging thin mothers and mothers with difficulties producing breastmilk from breastfeeding their children. Additionally, bottle feeding was high, with 17 percent of children consuming liquids from a bottle with a nipple during the previous day. Given the dangers of breastmilk substitutes and bottle feeding, particularly in an environment where water quality, hygiene, and sanitation may be less than

ideal, it is important to advocate against these practices and to support women in exclusively breastfeeding their children up to six months of age and continuing breastfeeding up to two years of age.

Complementary Feeding Practices

While the introduction of solid, semi-solid, and soft foods indicator is at an acceptable level (83%), it is important to keep in mind that this indicator is likely skewed higher by the low prevalence of exclusive breastfeeding and caregivers introducing soft foods such as rice to their children before the recommended age of six months.

Even though children may begin eating solid, semi-solid, and soft foods at an early age, by the time they reach six months 41% are not meeting minimum dietary diversity standards. Minimum meal frequency is slightly more promising, with 75% of respondents meeting this requirement. However, it is important to consider that though children may be eating the recommended number of times each day, we do not know if the quantity of each feeding is reduced. Though there were no mentions of favoritism between boys and girls, the difference between boys meeting minimum dietary diversity requirements and girls meeting minimum dietary diversity requirements was close to being statistically significant. This trend should be monitored closely to ensure that there is no practice of preferential treatment.

Based on observations of caregiver-child interactions during feeding times, it appears that most caregivers are attentive to the child and engage the child during feeding through verbal encouragement and other techniques. However, hygiene practices around utensil cleaning could be improved.

Food Consumption and Availability

Fifty-nine percent of children 6-23 months of age meet minimum dietary diversity requirements. As rice is a staple in Myanmar, it is not surprising that 93% of children and 99% of caregivers consume this category of food daily. Alarming, children who met minimum dietary diversity requirements and those who did not had statistically significant differences ($p < 0.05$) in their consumption of all food groups. This suggests that for children who do not meet dietary diversity requirements, the challenge may be access to food in general, not just access to certain types of food.

A higher proportion of caregivers (84%) than children (59%) met minimum dietary diversity requirements, suggesting that it is possible for children to meet dietary diversity requirements if they follow their caregiver's diets. Counselling, recipe recommendations, and cooking sessions can focus on further adapting the adult diet to suit local beliefs (such as children cannot eat sour or spicy foods) and children's dietary needs.

The market survey data complements the results from the dietary diversity survey and confirms availability of items from the grains, roots, and tubers and dark green leafy vegetables groups. These are the food groups most often consumed by children and caregivers, and the dark green leafy vegetable category is one of the least expensive ones available. Flesh foods is the most expensive food group according to the market survey, but the fact that about 60% of children and caregivers consume food from this group despite the high price suggests that they understand the nutritional value of this category.

Resources

Through the focus group discussions with pregnant and lactating women and the enumerators, it appears that a key barrier in achieving dietary diversity infants and young children is the lack of financial resources. The women interviewed emphasized several times that they understand that they should feed their children more fish, meat, and vegetables, but do not have the resources to carry out this recommendation. This may be particularly problematic for single female-headed households, households in which the husband is paralyzed, and households in hard-to-reach areas that may not receive food rations from WFP. Enumerators reported that in some families, resources are diverted towards drugs and alcohol rather than food for children. Program interventions should be sensitive towards these cases and coordinate with Child Protection to ensure that children are adequately cared for and fed.

Recommendations

In order to improve knowledge and practice of infant and young child feeding, Plan Myanmar and KBC should strengthen nutrition programming through the following activities:

- Home counselling visits for pregnant women, caregivers, and their parents. Focus on interactive learning and simulations to reinforce existing knowledge. Target pregnant women in their first and second trimesters for diet-related support and postpartum women for exclusive breastfeeding support. Involvement from pregnancy will help to reach the child at the beginning of the critical 1000 days and will also help to build trust with the mothers and facilitate postnatal counselling on breastfeeding and complementary feeding practices.
- Strong messaging in support of exclusive and continued breastfeeding. Communicate the dangers of bottle feeding and giving other liquids/foods to infants under 6 months. Monitor the use of breastmilk substitutes and BMS code violations.
- Volunteers should coordinate with midwives, nurses, and other health workers on IYCF messaging and counselling, helping to facilitate visits if necessary. Skilled birth attendants should be included in trainings since they help to deliver children in the community.
- Support mothers/primary caregivers participating in regular communal baby/toddler feeding groups. Conduct discussions within these groups to learn more about local attitudes towards exclusive and continued breastfeeding, and preferential treatment (if any) of children based on sex.
- Provide recipe recommendations and participatory cooking sessions to caregivers based on market availability and price of food products. Focus on adapting adult diets for child consumption (not spicy, not sour) to facilitate greater dietary diversity among children. Incorporate hygiene messaging into these sessions and monitoring visits. Provide targeted support to hard to reach households, female-headed households, and households where children do not meet minimum dietary diversity requirements.
- Establish community gardens and explore opportunities for animal husbandry to increase access to cheap vegetables and sources of protein.
- Collaborate with livelihood actors in the camps to explore ways to diversify sources of income.

Annex 1: List of Camps

Series	Camp Name	Total population	Clusters	Remark
1	Hkau Shau (BP 12)	1216	1	
2	Pajau/ Jan Mai	761	2	
3	Hpare Hkyer- BP6	879		
4	Shing Jai	865	3	
5	Ma Ga Yang	2827	4, 5	
6	Zai Aung/ Mung Ga Zup	2641	6,7	
7	Je Yang	8760	8, 9, 10, 11, 12, 13	
8	Woi Chyai	5055	14, 15, 16	
9	Masat 3	2228	17, 18	
10	Hpum Lumyang	2210	19	
11	Tat Kone Galile Baptist Church	138		
12	Tat Kone San Pya Baptist Church	185		
13	Maliyang Baptist Church	321	20	
14	Man Hkring Baptist Church	395		
15	Le Kone Ziun Baptist Church	743	Reserve	Replaced cluster 25
16	Le Kone Bethlehem Church	466	21	
17	Njang Dung Baptist Church	269		
18	Shatapu Sut Ngai Tawng	390	Reserve	
19	Kyun Pin Tha Baptist Church	173		
20	Shwe Zat Baptist Church	366		
21	Du Kahtawng Qtr 4,5,14	351	22	
22	Tot Kong Baptist Church	247		
23	Maina Lawang Baptist Church	197		
24	Mading Baptist Church	116		
25	Maina KBC (Bawng Ring)	1845	23	
26	Hmaw Si Sar Baptist Church	327	24	Inaccessible due to security, not replaced.
27	Nga Pyaw Taw Baptist Nursery School	472		
28	Seng Tawng	159		
29	Seng Ngai	98		
30	Yumar Baptist Church	155		
31	AG camp	334		
32	Nawng Ing Baptist Church	97		
33	Mang Hawng Baptist Church	68	25	Inaccessible due to flood
34	Hlaing Naung Baptist	69		
35	Nat Gyi Kone Baptist Church	37		
36	Kyun Taw Baptist Church	50		
37	Phan Khar Kone	421		
38	Robert Church	2933	26, 27	
39	Mansi Baptist Church	394		
40	Loi Je Baptist Church	396		
41	Loi Je Lisu Camp	324	28	
42	Momaok Baptist Church	1543	29	
43	Nyaung Na Pin (Loi Je)	274		
44	Seng Ja (Loi Je)	195		
45	Htoi San	700	30	
46	Ja Mai Hkawng	1022	Reserve	

Annex 2: Demographic Assessment

I. IDENTIFICATION	
1. Date information collected	Date.....__ __ / __ __ / __ __ __ __ day month year
2. Field worker's code	Code.....__ __
3. Field site	_____
4. Supervisor's code	Code.....__ __
5. Date reviewed by supervisor	Date.....__ __ / __ __ / __ __ __ __ day month year


II. DEMOGRAPHIC INFORMATION
<p><i>Please fill out all sections of this form completely, recording information for all children 0-59months and their mothers/caregivers.</i></p> <p>Address: Record address if available or nearby landmark/house so the family can be identified for later data collection.</p> <p>PLW: Ask pregnant & lactating women if they would be willing to participate in a focus group discussion on June 22nd, 2015. Use a check to indicate agreement (√) or x to indicate disagreement.</p> <p>U2: Ask mothers/caregivers of children under 2 years of age if they would be willing to participate in further data collection. Use a check (√) to indicate agreement or x to indicate disagreement.</p> <p><i>Children between 6-59 months should proceed to anthropometric measurements.</i></p>

Mother/ Caregiver 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



Annex 3: Infant and Young Child Feeding Questionnaire

I. IDENTIFICATION	
1. Date survey is applied	Date.....__ __ / __ __ / __ __ __ __ day month year
2. Field Worker's code	Code.....__ __
3. Survey results	Complete.....01 Incomplete.....02
4. Mother's Code	Code.....__ __ __
5. Camp's Name	_____ _____ _____
6. Supervisor's code	Code.....__ __
7. Date reviewed by supervisor	Date.....__ __ / __ __ / __ __ __ __ day month year

2.1 INITIATION OF BREASTFEEDING MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	In what month and year were you born?	Month _ _ _ _ <i>If month is not known, enter "98".</i> Year _ _ _ _ _ _ _ _ _ <i>If year is not known, enter "9998".</i>	
2	Please tell me how old you are. <i>What was your age at your last birthday? Record it in completed year.</i>	Age in completed year _ _ _ _	
8	What is child's name?	Name: _____	
9	Is (<u>Child's Name</u>) a male or female?	Male.....M Female.....F	
10	Did you ever breastfeed (<u>Child's Name</u>)?	Yes1 No 2 	End Module
11.	How long after the birth did you put (NAME) to the breast? <i>If respondent reports she put the infant to the breast immediately after birth, circle '000' For 'Immediately'.</i> <i>If less than 1 hour, circle '1' for hours and record '00' hours.</i> <i>If less than 24 hours, circle '1' and record number of completed hours, from 01 to 23.</i> <i>Otherwise, circle '2' and record number of completed days.</i>	IMMEDIATELY.....000 OR HOURS..... 1 _ _ _ _ OR DAYS..... 2 _ _ _ _	

2.2 INFANT AND YOUNG CHILD FEEDING MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1	Has (<u>Child's Name</u>) ever been breastfed?	Yes 1 No 2  Don't Know 8 	Go to 2a Go to 2a
2	Was (<u>NAME</u>) breastfed yesterday during the day or at night?	Yes 1 No 2 Don't Know 8	
2a	Sometimes babies are breastfed by another woman, or given breast milk from another woman. This can happen if a mother cannot breastfeed her own baby. Did (<u>Child's Name</u>) consume breast milk in any of these ways yesterday during the day or at night?	Yes 1 No 2 Don't Know 8	
3	Now I would like to ask you about some medicines and vitamins that are sometimes given to infants. Was (<u>Child's Name</u>) given any vitamin drops or other medicines as drops yesterday during the day or at night?	Yes 1 No 2 Don't Know 8	
4	Was (<u>Child's Name</u>) given [<i>Oral Rehydration Salts</i>] yesterday during the day or at night?	Yes 1 No 2 Don't Know 8	

Read the questions below. Read the list of liquids only one by one and mark YES or NO accordingly. After you have completed the list, continue by asking question 6 (See far right hand column) for those items (5B, 5C, and/or 5 D) where the respondent replies “YES”.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				Questions and Codes
5	<p>Next I would like to ask you about some liquids that (<i>Child’s Name</i>) may have had yesterday during the day or night.</p> <p>Did (<i>Child’s Name</i>) have any (<i>Items from the list</i>)? Read the list of liquids starting with “Plain Water”.</p>	Liquid’s Name	YES	NO	DK	<p>6. How many times yesterday during the day or at night did (<i>Child’s Name</i>) consume any (<i>items from the list</i>)?:</p> <p><i>Read question 6 for items B, C, and D if child consumed the item.</i></p> <p><i>Record “98” for Don’t Know.</i></p>
A	Plain Water?	A	1	2	8	
B	Infant formula such as [Dumex, Nestle, etc...]?	B	1	2	8	B. TIMES ____ ____
C	Milk Products such as tinned, powdered, or fresh animal milk (PEP Milk Powder, Red Cow tinned Milk, Mya Bayin Milk Powder, etc...)	C.....	1	2	8	C. TIMES ____ ____
D	Fresh Juice or juice drinks?	D.....	1	2	8	
E	Clear broth?	E.....	1	2	8	
F	Yogurt?	F.....	1	2	8	F. TIMES ____ ____
G	Thin Porridge?	G.....	1	2	8	
H	Any other liquids such as [rice starch liquid, sugar juice, green tea, Ovaltine, etc...]?	H.....	1	2	8	

7.

Please describe everything that (Child's Name) ate yesterday during the day or night, whether at home or outside the home.

- a) Think about when (Child's Name) first woke up yesterday. Did (Child's Name) eat anything at that time? IF YES: Please tell me everything (Child's Name) ate at that time. **Probe:** Anything else? *Until respondent says nothing else. If NO, continue to question b.*
- b) What did (Child's Name) do after that? Did (Child's Name) eat anything at that time?

If YES: Please tell me everything (NAME) ate at that time. PROBE: Anything else? Until respondent says "Nothing Else".

*Repeat question (b) above until respondent says the child went to sleep until the next day. If respondent mentions mixed dishes like a porridge, sauce or stew, **Probe;***

- c) What ingredients were in that (MIXED DISH)? **Probe:** Anything else? *Until respondent says "Nothing Else".*

*As the respondent recalls foods, underline the corresponding food and circle "1" in the column next to the food group. If the food group is not listed in any of the food groups below, write the food in the box labeled "**Other Foods**". If foods are used in small amounts for seasoning or as a condiment, include them under the condiments food groups.*

Once the respondent finishes recalling foods eaten, read each food group where "1" was not circled, ask the following question and circle "1". If respondent says 'YES', "1". If 'NO' and 'Don't Know', "2".

Yesterday during the day or night, did (NAME) drink/ eat any (FOOD GROUP ITEMS)?

No.	QUESTIONS AND FILTERS	CODING CATEGORIES			
			YES	NO	DK
A	Porridge, bread, rice, noodles, or other foods made from grains	A.....	1	2	8
B	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside	B.....	1	2	8
C	White potatoes, white yams, manioc, cassava, or any other foods made from roots	C.....	1	2	8
D	Any dark green leafy vegetables	D.....	1	2	8
E	Ripe mangoes, ripe papayas or (other local vitamin A-rich fruits)	E.....	1	2	8
F	Any other fruits or vegetables	F.....	1	2	8
G	Liver, kidney, heart, or other organ meats	G.....	1	2	8
H	Any meat such as beef, pork, lamb, goat, chicken, or duck	H.....	1	2	8
I	Eggs	I.....	1	2	8
J	Fresh or dried fish, shellfish, or seafood (fresh, dried)	J.....	1	2	8
K	Any foods made from beans, peas, lentils, nuts, or seeds	K.....	1	2	8
L	Cheese, yogurt, or other milk products	L.....	1	2	8
M	Any oil, fats, or butter, or foods made with any of these	M.....	1	2	8
N	Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits	N.....	1	2	8
O	Condiments for flavor, such as chilies, spices, herbs, or fish powder	O.....	1	2	8
P	Grubs, snails, or insects	P.....	1	2	8
Q	Food made with red palm oil, red palm nut, or red palm nut pulp sauce	Q.....	1	2	8
Check categories A-Q		IF ALL 'NO': → GO TO 8 IF AT LEAST ONE 'YES' OR ALL 'DK': → GO TO 9			

	<p>OTHER FOODS: Please write down other foods in this box that respondent mentioned but are not in the list below.</p>
--	---

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
8.	<p>Did (<i>Child's Name</i>) eat any solid, semi-solid, or soft foods yesterday during the day or at night?</p> <p>IF 'YES' PROBE: What kind of solid, semi-solid, or soft foods did (NAME) eat?</p>	<p>YES1</p> <p>Go back to question (7) and record foods eaten. Then, continue with question (9).</p> <p>NO..... 2 →</p> <p>DON'T KNOW3 →</p>	<div style="border: 1px solid black; width: 50px; height: 50px; margin: 0 auto;"></div> <p style="text-align: center;">←</p> <p>go to 10.</p> <p>go to 10.</p>
9.	<p>How many times did (<i>Child's Name</i>) eat solid, semi-solid, or soft foods other than liquids yesterday during the day or at night?</p>	<p>Number of Times ... _____ _____ </p> <p>DON'T KNOW 98</p>	
10.	<p>Did (<i>Child's Name</i>) drink anything from a bottle with a nipple yesterday during the day or night?</p>	<p>YES 1</p> <p>NO 2</p> <p>DON'T KNOW 8</p>	

2.3 Additional questions to append to infant and young child feeding module

No.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
IFF Q1	Now I would like to ask you about some particular foods (<u>NAME</u>) may eat. I am interested in whether your child had the item even if it was combined with other foods. Yesterday, during the day or night, did (<u>NAME</u>) consume any [list iron fortified solid, semi- solid or soft foods designed specifically for infants and young children available in the local setting]?	YES1 NO2 DON'T KNOW8	
IFF Q2	Yesterday, during the day or night, did (<u>NAME</u>) consume any food to which you added a [powder or sprinkles] like this? <i>SHOW COMMON TYPES OF MICRONUTRIENT POWDERS AVAILABLE IN SURVEY AREA.</i>	YES1 NO2 DON'T KNOW8	
IFF Q3	Yesterday, during the day or night, did (<u>NAME</u>) consume any [list lipid based nutrient supplement (LNS) available in the local setting]? <i>SHOW COMMON TYPES OF LNS AVAILABLE IN SURVEY AREA. LIKE Plumpy'Nut¹²</i>	YES1 NO2 DON'T KNOW8	
IFF Q4	Yesterday, during the day or night, did (<u>NAME</u>) consume any [list iron fortified infant/toddler formulas available in the local setting]?	YES1 NO2 DON'T KNOW8	

¹² Plumpy'Nut is a Ready-to-Use Therapeutic Food (RUTF) which is specifically formulated to the nutritional rehabilitation of severely acute malnourished children (from six months of age and above). It's a paste of groundnut composed of vegetable fat, peanut butter, skimmed milk powder, lactoserum, maltodextrin, sugar, mineral, and vitamin complex.

Annex 4: Caregiver Dietary Diversity

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, NEIGHBORHOOD, ETC.	_____ _____ _____
6. Supervisor's code	Code.....__ __
7. Date reviewed by supervisor	Date.....__ __/ __ __/ __ __ __ __ day month year

II. DIETARY DIVERSITY
<p>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.</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>

Breakfast		Snack		Lunch		Snack		Dinner		Snack	
Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside	Inside	Outside
<i>(circle one)</i>		<i>(circle one)</i>		<i>(circle one)</i>		<i>(circle one)</i>		<i>(circle one)</i>		<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, leeks, 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	spinach, watercress, centalla, green sweet pepper, lettuce, mustard, bean greens, bitter gourd green, pumpkin green, drumstick, chayote green, coriander, bristly greenbrier, fenugreek, fiddle head ferns, sesbania grandiflora, climbing wattle, tender tamarind leaf, roselle, kale, and other vitamin A rich leaves, tomato, onion, eggplant, garlic, mushroom, bamboo shoot, eggplant, gourd greens, angel loofah, bitter gourd, cauliflower, okra, , chili, cucumbers, cabbages, white gourd, gourd, june plum, grapes, apple, grapefruit, orange, pomelo, lime, kabala, tangerine, 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, Asian bison, porcupine, squirrels, armadillo, 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.

Annex 6: Market Survey

<i>I. Identification</i>	
1. Date survey is conducted	Date __ __ / __ __ / ____ __ __ day month year
2. Field Worker's Code	Code
3. Survey's Result	Complete01 Incomplete.....02
4. Market Number	Number __ __
5. Camp's Name	_____ _____ _____
6. Supervisor's Code	Code
7. Date reviewed by Supervisor	Date __ __ / __ __ / ____ __ __ day month year

2. Market Survey																	
<i>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.</i>																	
Food Group #	Food Group Name	Food #	Food	Unit	Cost Per Unit (MMK)	AVAILABILITY											
						W		S			R				W		
						All	J	F	M	A	M	J	J	A	S	O	N
1	CEREALS, WHITE ROOTS AND TUBERS	1	corn/maize														
1	CEREALS, WHITE ROOTS AND TUBERS	2	rice														
1	CEREALS, WHITE ROOTS AND TUBERS	3	sticky rice														
1	CEREALS, WHITE ROOTS AND TUBERS	4	wheat														
1	CEREALS, WHITE ROOTS AND TUBERS	5	oats														
1	CEREALS, WHITE ROOTS AND TUBERS	6	bread														
1	CEREALS, WHITE ROOTS AND TUBERS	7	noodles														
1	CEREALS, WHITE ROOTS AND TUBERS	8	porridge														
1	CEREALS, WHITE ROOTS AND TUBERS	9	potatoes														
1	CEREALS, WHITE ROOTS AND TUBERS	10	white radish														
1	CEREALS, WHITE ROOTS AND TUBERS	11	taro root														
1	CEREALS, WHITE ROOTS AND TUBERS	12	yam														
1	CEREALS, WHITE ROOTS AND TUBERS	14	cassava														

1	CEREALS, WHITE ROOTS AND TUBERS	15	Arrowroot																
1	CEREALS, WHITE ROOTS AND TUBERS	16	Indian Arrow root																
1	CEREALS, WHITE ROOTS AND TUBERS	17	white and purple sweet potatoes																
1	CEREALS, WHITE ROOTS AND TUBERS	18	Leek																
1	CEREALS, WHITE ROOTS AND TUBERS	19	other foods made from roots (Please mention below)																
1	CEREALS, WHITE ROOTS AND TUBERS	20																	
1	CEREALS, WHITE ROOTS AND TUBERS	21																	
1	CEREALS, WHITE ROOTS AND TUBERS	22																	
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	1	pumpkin																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	2	carrot																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	3	sweet potato that are orange inside																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	4	Red and yellow sweet pepper																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	5	ripe mango																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	6	ripe papaya																

2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	7	ripe passionfruit																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	8	Dried Peach																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	9	Santol fruit																
2	VITAMIN A RICH VEGETABLES AND TUBERS, VITAMIN A RICH FRUITS	10	Others (Vitamin A rich vegetables and tubers, vitamin A rich fruits)																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	1	Fenugreek																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	2	spinach																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	3	watercress																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	4	pennywort																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	5	green sweet pepper																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	6	lettuce																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	7	mustard																

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	8	Pea tips																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	9	Tamarind green																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	10	Baby mangoes																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	11	Watermelon green																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	12	Pumpkin green																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	13	Chayote green																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	14	Bean leaf																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	15	Dragon tongue																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	16	Vegetable ferns																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	17	<i>Ka mont ywat</i>																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	18	Soya bean leaf																

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	19	Roselle																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	20	Sesbania Grandiflora																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	21	Lemon basil																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	22	Holy Basil																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	23	Coriander																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	24	Kaffir Lime Leaves																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	25	Climbing Wattle																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	26	Drumstick Leaf																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	27	Dragon Tongue																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	28	Angled Loofah																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	29	Corchorus Ditorias																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	30	Chili Green																

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	31	Lady Fingers																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	32	June Plum																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	33	Dagga																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	34	Onion																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	35	Garlic																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	36	Mushroom																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	37	Bamboo shoot																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	38	Drumstick																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	39	lasia																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	40	Eggplants																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	41	Bitter Gourd																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	42	Cauliflower																

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	43	Chili																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	44	Cucumber																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	45	Hidged Luffa																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	46	Cabbage																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	47	Gourd																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	48	Winter Gourd																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	49	Banana Bud/ Stem																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	50	Other dark green leafy vegetables, other vegetables, and other fruits																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	51																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	52																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	53																	

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	54																		
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	55	Coconut																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	56	Plum																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	57	grapes																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	58	Guava																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	59	orange																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	60	Longan																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	61	Damson																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	62	Grapefruit																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	63	Apple																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	64	Kaffir Lime																	
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	64	Pomelon																	

3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	66	Burmese Grape																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	67	Soursop																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	68	<i>Ohm Shit Thee</i>																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	68	Pomegranate																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	69	tangerine																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	70	rambutan																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	71	lemon																
3	DARK GREEN LEAFY VEGETABLES, OTHER VEGETABLES, OTHER FRUITS	72	Durain																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	1	other fruits																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	2	liver																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	3	kidney																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	4	heart																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	5	gizzard																

4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	6	other organ meats																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	7	chicken																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	8	Duck																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	9	Pork																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	10	Beef																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	11	Goat																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	12	Game (eg. hog, lizard, wild cow, wild cat, etc.,)																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	13	dog																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	14	monkey																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	15	rabbit																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	15	squirrel																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	16	frog																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	17	rat																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	18	other birds																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	19	Crickets																

4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	20	Other insects																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	22																	
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	23																	
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	20	Freshwater fish																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	21	shrimp																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	22	crab																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	20	snail																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	21	mussels																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	22	Crab																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	23	oysters																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	24	Fish eggs																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	25	Sardine																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	26	Dried fish																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	27	Shell fish																
4	ORGAN MEAT, FLESH MEATS, FISH AND SEAFOOD	28	Fish without scale																

5	EGGS	1	eggs from chicken																
5	EGGS	2	Duck egg																
5	EGGS	3	quail																
5	EGGS	4	Swan																
5	EGGS	5	any other eggs																
5	EGGS	6																	
5	EGGS	7																	
5	EGGS	8																	
6	LEGUMES, NUTS AND SEEDS	1	Dried Beans																
6	LEGUMES, NUTS AND SEEDS	2	Dried Beans																
6	LEGUMES, NUTS AND SEEDS	4	Chick Peas																
6	LEGUMES, NUTS AND SEEDS	5	Long Beans																
6	LEGUMES, NUTS AND SEEDS	6	Soya bean																
6	LEGUMES, NUTS AND SEEDS	7	Bean sprout																
6	LEGUMES, NUTS AND SEEDS	8	Bean tofu																
6	LEGUMES, NUTS AND SEEDS	9	Bean curd																
6	LEGUMES, NUTS AND SEEDS	10	Bo sar pae																
6	LEGUMES, NUTS AND SEEDS	11	Green bean																
6	LEGUMES, NUTS AND SEEDS	12	peanut																
6	LEGUMES, NUTS AND SEEDS	13	chick peas																
6	LEGUMES, NUTS AND SEEDS	14	green peas																
6	LEGUMES, NUTS AND SEEDS	15	Variety of lentils																
6	LEGUMES, NUTS AND SEEDS	16																	
6	LEGUMES, NUTS AND SEEDS	17																	
6	LEGUMES, NUTS AND SEEDS		walnut																
6	LEGUMES, NUTS AND SEEDS		Almond fruits																
6	LEGUMES, NUTS AND SEEDS		cashew nut																
6	LEGUMES, NUTS AND SEEDS		Sunflower seed																
6	LEGUMES, NUTS AND SEEDS		Pumpkin seed																

6	LEGUMES, NUTS AND SEEDS		foods made from these (eg. tofu, peanut butter) (Please mention below)																
7	MILK AND MILK PRODUCTS	1	milk																
7	MILK AND MILK PRODUCTS	4	ma line																
7	MILK AND MILK PRODUCTS	5	Other milk products (Please mention below)																
7	MILK AND MILK PRODUCTS	6																	
7	MILK AND MILK PRODUCTS	7																	
8	OILS AND FATS	1	peanut oil																
8	OILS AND FATS	2	sesame oil																
8	OILS AND FATS	3	coconut oil																
			palm oil																
			Peanut oil																
8	OILS AND FATS	5	Soya bean oil																
8	OILS AND FATS	8	beef oil																
8	OILS AND FATS	9	sunflower oil																
8	OILS AND FATS	10	pork oil																
		11	fried potato																
		12	fried tofu																
		13	fried fish crackers																
		14	fritters																

Annex 7. Opportunistic Observations

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.

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

CAREGIVER-CHILD INTERACTION	
<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>	