



**Knowledge Attitude and Practice survey on  
Infant and Young Child Feeding**

**Children aged 0 to 23 months living in IDP camps in Nam Hkam, Man Win Gyi and  
Mai Ja Yang**

**North Shan State and Kachin State – Republic of the Union of Myanmar**

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## Abbreviations

ANC	Antenatal Care
CARE	Cooperative for Assistance and Relief Everywhere
EBF	Exclusive Breastfeeding
FSIN	Food Security Information Network
GCA	Government Controlled Area
HH	Household
IDP	Internal Displaced people
IYCF	Infant and Young Child Feeding
IYCF-E	Infant and Young Child Feeding in Emergency
KAP	Knowledge Attitude and Practice
KBC	Kachin Baptist Convention
KIA	Kachin Independence Army
KMSS	Karuna Myanmar Social Services
MJY	Mai Ja Yang
NGCA	Non-Government Controlled Area
NGO	Non-Governmental Organization
NSS	Northern Shat State
PNC	Postnatal Care
RC	Roman Catholic
SAM	Severe Acute Malnutrition
SCI	Save the Children International
TNLA	Ta'ang National Liberation Army
U2	Under two years old
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization
WPN	Wunpawng Ninghtoi

## 1. INTRODUCTION

### 1.1. Background description of survey area

Save the Children has been implementing humanitarian response activities in Kachin and Northern Shan State, Myanmar. SCI and WPN are providing food security livelihood, nutrition and WASH activities in some areas of IDP camps based on the nature of the camps setting.

There are total of fourteen camps comprising five camps in Namkham, eight camps in Mansi Township and one camp in Moemauk Twonship where Save the Children is currently providing humanitarian assistance. Namkham Township is one of the townships of Northern Shan State and five camps included Nay Win Ni, St. Thomas, Jaw 1 , Jaw 2 and Bang Lung. Eight camps in Mansi are Man Wein Gyi KBC1, Man Wein Gyi KBC2, Man Win RC1, Man Wein Gyi RC2, Bump Tisp Pa 1, Bump Tisp Pa 2, Lana Zup Ja and Nkawng Pa. Paka Htawn is under the Momauk Township. Both Mansi and Momauk township are under the Kachin State were most of the areas are under the KIA controlled areas except Man Wein Gyi Camps.

In Kachin and northern Shan states, a series of renewed armed clashes in 2014 between Government forces and the ethnic armed groups, including the Kachin Independence Army (KIA), the Ta'ang National Liberation Army (TNLA) and others resulted in the displacement of several thousand people.

Violence by armed actors against the affected population remains a key threat to those living in Kachin and northern Shan. In addition, part of the population is faced with protracted displacement, while others have been displaced multiple times

While the majority of conflict affected people are located in Kachin State, most of the new armed clashes in 2014 were in northern Shan State. Some remain in need of emergency assistance due to the volatile situation while in other situations IDPs are being resettled based on their own requests. Increased presence is needed to assess and respond appropriately to these very different needs, which includes working with the authorities in an effort to deliver durable solutions. Furthermore, with presence of multiple armed groups and a general lack of security, the needs of the overall population and the IDPs are interlinked and this requires a holistic approach.<sup>1</sup>

Save the children International (SCI) has been working in border states since 1999, and has been providing essential humanitarian assistance to IDPs from the Kachin conflict in Northern Shan State (Muse, Nam Hkam) and around Mai Ja Yang (Kachin) by supporting Wunpawng Ninghtoi (WPN) – a local NGO - since September 2011.

### 1.2. Description of the population

According to the January 2015 updated data from Camps committees and volunteers, there are total of 3,196 Household with 15,190 population in fourteen IDP camps in Save the Children humanitarian response areas. In terms of current income sources, the top activity across all camps and demographics was daily agricultural labour - which is seasonal, sporadic and low paying. Some households however are missing out on these opportunities due to a lack of tools<sup>5</sup> as not all land owners provide the necessary inputs for daily labourers.

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<sup>1</sup> 2015 Humanitarian Response Plan, Myanmar, 2015

Certain tools (machetes, etc.) are used for a variety of household chores and income generating activities as well. Other current sources of income include livestock rearing (mostly pigs and chickens), a limited amount of off-farm labour, small scale vegetable, corn or spice cultivation either in the camps which have space or more likely in surrounding areas rented from the host community, transportation of teak, gathering wild plants (such as bamboo shoots) as well as unconditional cash grants given by local NGOs (METTA, and KMSS). A very small percentage of households also maintain access to more substantial amounts of land (through direct access to their own land depending upon the security context). Many also cited volunteering for NGOs as another major source of income for some IDP households.<sup>2</sup>

## 2. SURVEY OBJECTIVES

### 2.1. Main Objective

To understand trend in IYCF practices for children aged 0-23 months living in IDP camps Namkham, Man Win Gyi and Mai Ja Yang areas of Kachin and Northern Shan State of Myanmar.

### 2.2. Specific Objectives

- ✚ To establish IYCF baseline indicators for children aged from 0-23 months
- ✚ To assess the essential knowledge on ANC/PNC/New born care of caregivers
- ✚ To assess the IYCF knowledge of caregivers

Data collection took place from the 15th to 22nd May 2015 in Nam Hkam, Man Wein Gyi and May Ja Yang IDP camps within SCI and WPN intervention areas.

The assessment was conducted following CARE's KAP Guide which provides guidance and tools for the implementation of IYCF Knowledge Attitude and Practice (KAP) surveys.

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<sup>2</sup> Income Generating Activities Feasibility Assessment Report, Northern Shan and Kachin State, SCI, Nov 2014

### 3. METHODOLOGY

#### 3.1 Sample size

This survey forms part of the IYCF project regular monitoring that includes a baseline and an end-line KAP survey. The sampling size calculation was based on IYCF core indicators and the expected impact of the project in the area. Mothers or primary caretakers of children aged from 0 to 23 months and living in the intervention area were the target of this KAP survey. Since the number of under two children in the areas is less than 1000, this survey was conducted by using Exhaustive sampling method.

Discussions with partner and field team led to expected prevalence summarized in table below. Sample size calculation was done base on the previous KAP survey results especially based on EBF rate, which need at least 251 children for the specific indicators and final sample size including 10% of refusal and incomplete children would need minimum 1105 children to cover all the children under 24. and As a result, preliminary calculations required the number of U2 to be covered to be larger than the actual population (526 U2) therefore an exhaustive survey methodology was adopted for the KAP survey, covering the total the U2 population living in IDP camps.

Table 1 : Expected IYCF indicator's prevalence at project's baseline and end-line

Indicator		Estimated prevalence Point 1	Estimated prevalence Point 2
<b>Timely initiation of breastfeeding (children 0-23 months)</b>	0_23	61%	75%
<b>Exclusive breastfeeding under 6 months</b>	0_5	75%	85%
<b>Timely complementary feeding</b>	6_9	63%	75%
<b>Introduction of solid, semi-solid or soft foods</b>	6_8	60%	75%
<b>Continued breastfeeding at 1 year</b>	12_15	90%	95%
<b>Minimum dietary diversity</b>	6_23	59%	75%
<b>Minimum meal frequency</b>	6_23	67%	80%
<b>Minimum acceptable diet</b>	6_23	46%	65%
<b>Consumption of iron-rich or iron-fortified foods</b>	6_23	62%	75%
<b>Bottle feeding</b>	6_23	5%	3%

#### 3.2 Sampling procedure

There are many approaches to sampling. The three used most commonly by implementing agencies are simple random sampling, systematic random sampling, and cluster sampling. In this survey, none of these sampling procedure were used since the final sample size was larger than the existing population and the total population is less than one thousand. For these reasons, an exhaustive survey was conducted.

##### **Study Population**

The study population for the Infant Young Child Feeding KAP survey were children aged 0 to 23 months living in IDP camps in Nam Hkam, Man Win Gyi and Mai Ja Yang in areas where Save the Children and WPN is providing a humanitarian response.

##### **Sampling frame**

Since SCI/WPN is doing nutrition surveillance in those areas, regularly updated lists of under two children were the sampling frame.

##### **Sampling unit**

Households with under two children was sampling unit of this Infant and Young Child Feeding focused KA survey.

Population figures were collected from camp leader at the camp level and combined all data from each camp was compiled. This data were last updated on January 2015, and a cross check was conducted with volunteers using the current updated population and other department's data. Little difference between the data sets were found, so data from camp leaders was used. There are total of 3,196 household with a total population of 15,190.

### 3.3. Sampling procedure: selecting and children

All children aged 0 to 23 months old were part of the sample for this assessment. Since the target population of the survey is mother or caretakers of children aged from 0 to 23 months and living in the intervention areas, every household living in the camps with children under two years of age was selected. No child was excluded from the survey unless he/she had reached 24 months on the day of the interview. Each child's mother or primary caretaker were interviewed by the nutrition team in order to collect data on IYCF and other topics:

- ✎ When absent, the existence of the child was confirmed by the family as well as his/her age and the interview was carried out with the mother.
- ✎ In case the mother was not living with the child anymore, the primary caretaker (sister, grandmother, aunty etc.) was selected as the respondent. If no caretaker was present, the team returned to the house later during the day or the next day.
- ✎ In case of refusal from the parents to perform the interview an identifying number was given to the child.
- ✎ When a house was empty and neighbors confirmed that the family slept in the house the previous night and would come back (=house not abandoned), the team returned there at the end of the day. When it was not possible to return at the end of the day or when people were still absent at the second visit, it was then recorded as absent.
- ✎ Recent movement of population from one camp to another occurred between the listing and the day of the interview. If a family moved within the intervention area, the U2 child was still part of the survey and his/her mother had to be interviewed. If the family moved out from the intervention area, the child was not considered as part of the sample.

### 3.4 Case definitions and inclusion criteria

#### **Household**

Household is defined as “who slept together under the same roof and ate from the same pot last night”.

#### **Individual**

Individual mother or caretakers who are living in the camps with children aged 0-23 months. Every individual who meets this criteria is included in the survey.

#### **Unknown age**

Information on IYCF indicators cannot be meaningful without accurate information on age, all infant and young child feeding recommendations are age-dependent, and analysis of all current status indicators depends on careful determination of a child's exact age. To decide whether child with unknown age should be included, a critical event calendar was used to estimate the age of the child. If the child was estimated to be less than 24 month, the child was included in the survey. This surveyors made every effort to get accurate information on the child's age.

#### **Recall period**

For both household and child dietary diversity, the recall period is defined as the last 24 hours. The recall period for the coping strategy index is defined as 7 days.



### 3.5 Questionnaire, training and supervision

#### Questionnaire

Questionnaires were designed in tranches; one for the Household Level information and one for the WHO IYCF indicators. The questionnaires were translated to both Myanmar and Kachin Language. During the interview Kachin Language was mostly used. To make sure the enumerators had full understanding of the questionnaires and to check the consistency of the questionnaires, piloted testing was conducted during the field training. Copy of questionnaires in English is attached in the Appendix

#### Survey teams and supervision

There were total of ten local bilingual (Myanmar: Kachin) enumerators with four supervisors from SCI and WPN- a total of four teams with two or three enumerators with one supervisor per team. Supervisors are experienced in conducting different kind of surveys, including mobile data collection. Some of the enumerators participated in initial SCI nutrition surveys in the area, and some were new, so needed extensive training. Teams were closely supervised at all times with at least two interviews supported by a supervisor per day. Key findings and lesson learned were shared on spot through mobile phones and also shared at the end of each day among different teams.

#### Training

SCI's Programme Advisor-Nutrition (Humanitarian) conducted four day training for the survey teams. The training included general survey objectives, overview of the survey design, household selection procedures, concept of malnutrition, data collection and interview skills, and use of mobile tablets and pilot testing. Practice sessions, case scenarios and exercises were done throughout the training. Pilot testing was conducted in Muse urban camps, which is out of our survey area. During the pilot test, a total of 30 care givers were interviewed using the full set of questionnaires, including the Household information and WHO IYCF practices.

### 3.6 Data analysis

This KAP survey covered all households with children under 2. The results apply only to this population and cannot be extrapolated to the entire population. The same applies to the food security component targeting all households with U2, although it is possible for the results to be used as proxy indicators for food security for the whole population.

The SCI/WPN nutrition project's aim is to promote optimal IYCF through:

- ✚ early initiation (within one hour of birth) of breastfeeding,
- ✚ exclusive breastfeeding for the first six months of life,
- ✚ nutritionally adequate and safe complementary foods after 6 complete months,
- ✚ Continued breastfeeding for up to two years of age or beyond.

#### IYCF baseline indicators: definitions and formulas

***Timely initiation of breastfeeding (children 0-23 months):*** Proportion of children 0-23 months who were put to the breast within one hour.

Children 0-23 months who were put to the breast within the first hour of birth

Total number of children 0-23 months

**Exclusive breastfeeding under 6 months:** Proportion of infant 0-5 months of age who were fed exclusively with breast milk in the past 24 hours (no other liquids not even water with the exception of drops or syrup consisting of vitamins, mineral supplements or medicines)

$$\frac{\text{Children 0-5 months who received breast milk in the past 24 hours} \\ \text{and did not receive any other foods or liquids in the past 24 hours}}{\text{Total number of children 0-5 months}}$$

**Timely complementary feeding:** Percent of infant 6-9 months of age who receive breastmilk and a solid or semi-solid food in the previous 24 hours. Solid, Semi-solid and soft foods are defined as mushy or solid foods, not fluids. They should be included after 6 completed months (180 days).

$$\frac{\text{Number of infant 6-9 months who were breastfed} \\ \text{in the past 24 hours and who also received at least one food in the past 24 hours}}{\text{Total number of breastfed infant 6-9 months}}$$

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

$$\frac{\text{Number of infant 6-8 months who received at least one food in the past 24 hours}}{\text{Total number of infant 6-8 months}}$$

**Continued breastfeeding at 1 year:** Proportion of children 12-15 months old who are fed breastmilk.

$$\frac{\text{Number of children 12-15 months who received breastmilk in the past 24 hours}}{\text{Total number of children 12-15 months}}$$

**Minimum dietary diversity:** Proportion of children 6-23 months who received food from 4 or more food groups in the past 24 hours. The 7 food groups used to calculate this indicator are:

- 1) Grain, roots tubers;
- 2) Legumes and nuts;
- 3) Dairy product like milk, yoghurt or cheese;
- 4) Flesh food;
- 5) Eggs;
- 6) Vitamin A rich fruits and vegetable;
- 7) Other fruits and vegetables.

$$\frac{\text{Number of children 6-23 months who received food} \\ \text{from 4 or more of the 7 food groups in the past 24 hours}}{\text{Total number of children 6-23 months}}$$

**Minimum meal frequency:** Proportion of breastfed and non-breastfed children 6-23 months of age who receive solid, semi-solid or soft foods the minimum number of times or more. The expected number of meals depends on whether or not children are breastfed leading to two calculations as follows:

- ✚ If children are breastfed: 2 times meal/snacks for 6-8 months, 3 times for 9-23 months.
- ✚ If they are not breastfed: 4 times for 6-23 months.

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

**Minimum acceptable diet:** Proportion of children 6-23 months of age who receive a minimum acceptable diet (apart from breastmilk). Calculation performed for two groups: for breastfed and non-breastfed children.

$$\frac{\text{Number of children 6-23 months who had at least} \\ \text{the minimum dietary diversity and minimum meal frequency in the past 24 hours}}{\text{Total number of children 6-23 months}}$$

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

$$\frac{\text{Number of children 6-23 months who received at least one iron-rich or iron-fortified food}}{\text{Total number of children 6-23 months}}$$

**Bottle feeding:** Proportion of children 6-23 months who were fed with a bottle over the course of the previous day.

$$\frac{\text{Number of children 6-23 months who were fed with a bottle during the previous 24 hours}}{\text{Total number of children 6-23 months}}$$

## 4. RESULTS

### 4.1. Infant and Young child feeding situation

#### 4.1.1. IYCF indicators summary findings

Table 2 shows the summary results of the IYCF indicators from timely initiation of breastfeeding until bottle feeding. Breastfeeding situation show with Timely initiation of breastfeeding is 58%, Exclusive breastfeeding under 6 moth is 69% and continued breastfeeding at 1 year is also 78%. Regarding complementary feeding, timely complementary feeding is 70%, introduction of solid, semi-solid or soft foods is 83%, minimum dietary diversity is 43%, minimum meal frequency is also 59% and so minimum acceptable diet is only 27%. Only 48% of children consume iron-rich food or iron-fortified foods while bottle feeding rate is 8%.

Table 2: Summary findings on IYCF Indicators compared to expected baseline and end line results

Indicator	Estimated prevalence Point 1	Estimated prevalence Point 1	Results Point 1
<b>Timely initiation of breastfeeding (children 0-23 months)</b>	61%	75%	58%
<b>Exclusive breastfeeding under 6 months</b>	75%	85%	69%
<b>Timely complementary feeding</b>	63%	75%	70%
<b>Introduction of solid, semi-solid or soft foods</b>	60%	75%	83%
<b>Continued breastfeeding at 1 year</b>	90%	95%	78%
<b>Minimum dietary diversity</b>	59%	75%	43%
<b>Minimum meal frequency</b>	67%	80%	59%
<b>Minimum acceptable diet</b>	46%	65%	27%
<b>Consumption of iron-rich or iron-fortified foods</b>	62%	75%	48%
<b>Bottle feeding</b>	5%	3%	8%

#### 4.1.2. Breastfeeding practices

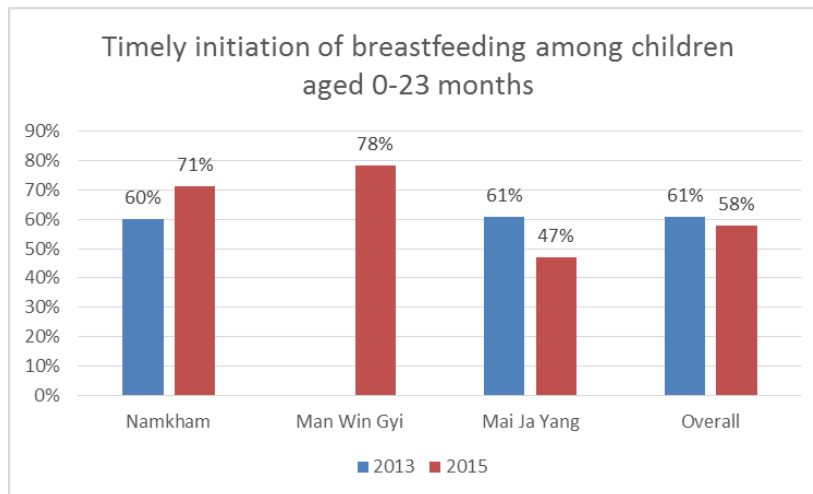
##### *Initiation of breastfeeding and Exclusive breastfeeding*

Table 3: Timely initiation of breastfeeding among children aged 0-23 months living in Nam Hkam (N=66), Man Win Gyi (N=129) and Mai Ja Yang (N=331) camps

Timely initiation of breastfeeding among children aged 0-23 months					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	66	47	71%	19	29%
<b>Man Win Gyi</b>	129	101	78%	28	22%
<b>Mai Ja Yang</b>	331	156	47%	175	53%
<b>Overall</b>	<b>526</b>	<b>304</b>	<b>58%</b>	<b>222</b>	<b>42%</b>

71% in Namkham and 78% in Man Win Gyi reported initiation of breastfeeding within an hour after birth. 47% reported initiation of breastfeeding within an hour after birth in Ma Ja Yang. There is a significant difference between these areas ( $p < 0.01$ ).

Figure 1: Comparison on timely initiation of breastfeeding between 2013 and 2015 survey.



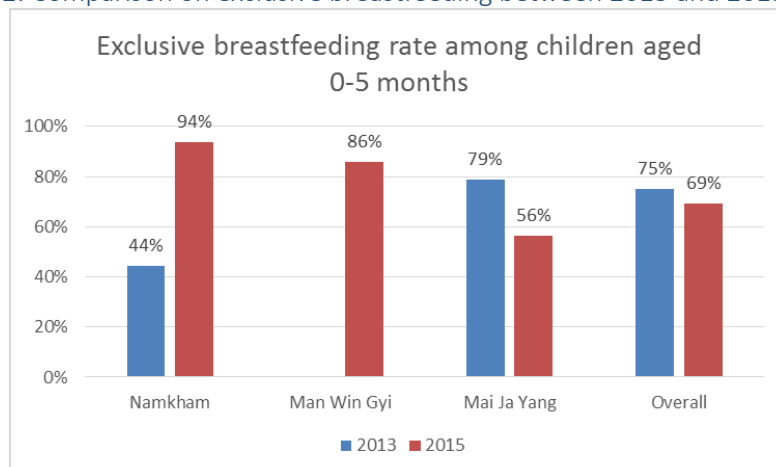
In Namkham, timely initiation of breastfeeding increased from 60% to 71%, while the rate in Mai Ja Yang significantly decreased to 47%. Since the timely initiation of breastfeeding decreased in Mai Ja Yang, it affected the overall rate on timely initiation of breastfeeding until the overall rate was 58% .

Table 4: Exclusive breastfeeding rate among children aged 0-5 months living in Nam Hkam (N=16), Man Win Gyi (N=42) and May Ja Yang (N=85) camps

Exclusive breastfeeding rate among children aged 0-5 months					
	N	Yes		No	
		n	%	n	%
<b>Namkham</b>	16	15	94%	1	6%
<b>Man Win Gyi</b>	42	36	86%	6	14%
<b>Mai Ja Yang</b>	85	48	56%	37	44%
<b>Overall</b>	<b>143</b>	<b>99</b>	<b>69%</b>	<b>44</b>	<b>31%</b>

94% in Namkham and 86% in Man Win Gyi with children aged 0-5 months being exclusively breastfed. The EBF rate in Mai Ja Yang is 56% which is significantly lower ( $p < 0.05$ ) than in the GCA areas. Only a limited proportion of families introduced liquids shortly after birth (8%). This was mainly plain water (3%); animal milk (1%) and infant formula (2%).

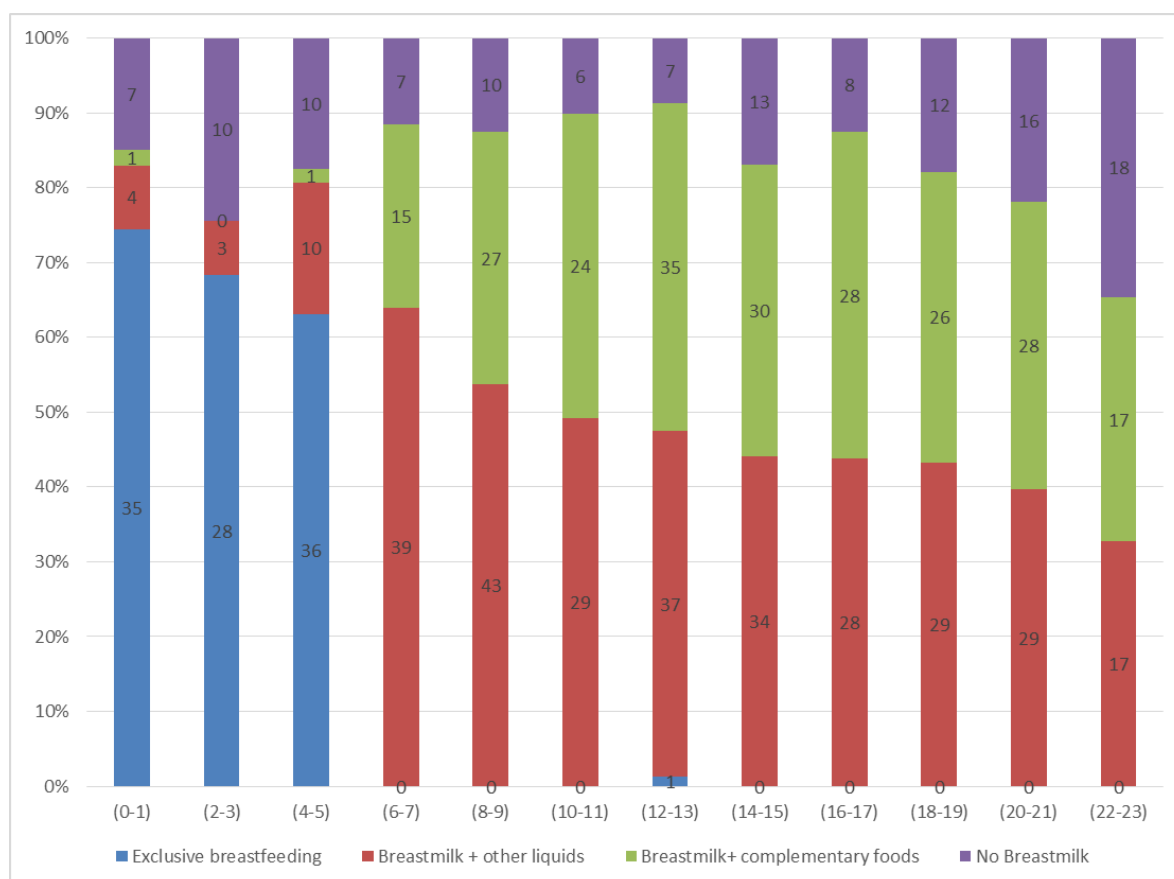
Figure 2: Comparison on exclusive breastfeeding between 2013 and 2015 survey.



Comparison between the two surveys conducted 2013 and 2015 shows a significant increase in EBF practices in Namkham from 44% to 94% which is satisfactorily good. EBF practices in Mai Ja Yang significantly decreased.

The following figure shows an overview of the diet of the surveyed children in the last 24 hours with trends in feeding practices. More than 70% of children were exclusively breastfed at birth, and liquids were introduced at birth followed by complementary food at 6-7 months of age.

The EBF rate falls to 68% at 2-3 months, 63% at 4-5 months and more than 60% children were given mixed feeding at the age of 6-7 month. 11% of children 6 month of age and 9% at 12 month of age did not breastfeed.



### Continued breastfeeding

The survey findings show 78% of the children still being breastfed at 12-15 months. There was no significant difference between Namkham, Man Win Gyi and Mai Ja Yang ( $p > 0.05$ ).

Table 5: Continued breastfeeding rate among children aged 12-15 in intervention area

Continued breastfeeding rate among children aged 12-15 months					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	13	11	85%	2	15%
<b>Man Win Gyi</b>	22	20	91%	2	9%
<b>Mai Ja Yang</b>	57	41	72%	16	28%
<b>Overall</b>	<b>92</b>	<b>72</b>	<b>78%</b>	<b>20</b>	<b>22%</b>

#### 4.1.3. Bottle feeding and impact on breastfeeding

The rate of bottle feeding rate for children aged 0-23 months was 8% instead of the expected 3%. Not significant difference was found between the three areas ( $p = 0.314$ ).

Table 6: Bottle feeding rate among children aged 0-23 months and living in Nam Hkam (N=66), Man Win Gyi (N=129) and Mai Ja Yang (N=331) areas

Bottle feeding rate among children aged 0-23 months					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	66	3	5%	63	95%
<b>Man Win Gyi</b>	129	14	11%	115	89%
<b>Mai Ja Yang</b>	331	27	8%	304	92%
<b>Overall</b>	<b>526</b>	<b>44</b>	<b>8%</b>	<b>482</b>	<b>92%</b>

#### 4.1.4. Timely complementary feeding and introduction of solid, semi-solid or soft food

89% of children 6 to 9 months were introduced to complementary food in Namkham and 79% in Man Win Gyi. Complementary food was introduced between 6 and 9 months for 62% of the children living in Mai Ja Yang area with no significant difference among Mai Ja Yang, Man Win Gyi and Nam Kham ( $p>0.05$ ).

The proportion of children aged 6-8 months receiving solid, semi-solid or soft food in the past 24 hours was 83% for the overall area with no significant difference between Nam Hkam, Man Win Gyi and Mai Ja Yang ( $p>0.05$ ).

Table 7: Percentage of children aged 6-9 months receiving complementary food living in Namkham (N=9), Man Win Gyi (N=29) and May Ja Yang (N=61) areas

% of children aged 6-9 months receiving complementary food					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	9	8	89%	1	11%
<b>Man Win Gyi</b>	29	23	79%	6	21%
<b>Mai Ja Yang</b>	61	38	62%	23	38%
<b>Overall</b>	<b>99</b>	<b>69</b>	<b>70%</b>	<b>30</b>	<b>30%</b>

Table 8: Percentage of children aged 6-8 months receiving complementary food living in Namkham (N=7), Man Win Gyi (N=23) and Mai Ja Yang (N=50) areas

% of children aged 6-8 months receiving solid, semi-sold or soft foods					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	7	6	86%	1	14%
<b>Man Win Gyi</b>	23	19	83%	4	17%
<b>Mai Ja Yang</b>	50	41	82%	9	18%
<b>Overall</b>	<b>80</b>	<b>66</b>	<b>83%</b>	<b>14</b>	<b>18%</b>

#### 4.1.5. Minimum diet diversity, meal frequency and acceptable diet

43% of children aged 6-23 months received food groups according to minimum dietary diversity. To look at minimum dietary diversity, Namkham is highest with 62% followed by Mai Ja Yang 41% and Man Win Gyi 37%. In addition, the proportion of children reaching the minimum diet diversity is significantly higher in Nam Kham and Mai Ja Yang than in Man Win Gyi ( $p < 0.0113$ ).

Minimum meal frequency for children aged 6-23 months was under the expected target of 80%. 59% of children aged 6-23 months received an adequate number of meals per the day. The frequency is more or less the same with 56% in Nam Kham, 67% in Man Win Gyi and 57% in Mai Ja yang respectively. There was no significant difference between the three intervention areas regarding this minimum meal frequency. Only 27% of children aged 6-23 months had a minimum acceptable diet with 36% in Nam Kham and 25% in Man Win Gyi and Mai Ja Yang.

Table 9: Percentage of children aged 6-23 months with a minimum diet diversity living in Nam Kham (N=50), Man Wing Gyi (N=87) and Mai Ja Yang (N=246) areas

% of children aged 6-23 months with a minimum diet diversity					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	50	31	62%	19	38%
<b>Man Win Gyi</b>	87	32	37%	55	63%
<b>Mai Ja Yang</b>	246	102	41%	144	59%
<b>Overall</b>	<b>383</b>	<b>165</b>	<b>43%</b>	<b>218</b>	<b>57%</b>

Table 10: Percentage of children aged 6-23 months with a minimum meal frequency living in Nam Kham (N=50), Man Win Gyi (N=87) and Mai Ja Yang (N=246) areas

Percentage of children aged 6-23 months with a minimum meal frequency					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	50	28	56%	22	44%
<b>Man Win Gyi</b>	87	58	67%	29	33%
<b>Mai Ja Yang</b>	246	141	57%	105	43%
<b>Overall</b>	<b>383</b>	<b>227</b>	<b>59%</b>	<b>156</b>	<b>41%</b>

Table 11: Percentage of children aged 6-23 months with a minimum acceptable diet living in Nam Kham (N=50), Man Win Gyi (N=87) and Mai Ja Yang (N=246) areas

% of children aged 6-23 months with a minimum acceptable diet					
		Yes		No	
	N	n	%	n	%
<b>Namkham</b>	50	18	36%	32	64%
<b>Man Win Gyi</b>	87	22	25%	65	75%
<b>Mai Ja Yang</b>	246	62	25%	184	75%
<b>Overall</b>	<b>383</b>	<b>102</b>	<b>27%</b>	<b>281</b>	<b>73%</b>

A total of 48% of children aged 6-23 months were reported to be fed with iron rich food or fortified food in the past 24 hours. Namkham is highest with 66% and Man Win Gyi lowest with 24% while Mai Ja Yang is 53% in consumption of iron rich or fortified food.

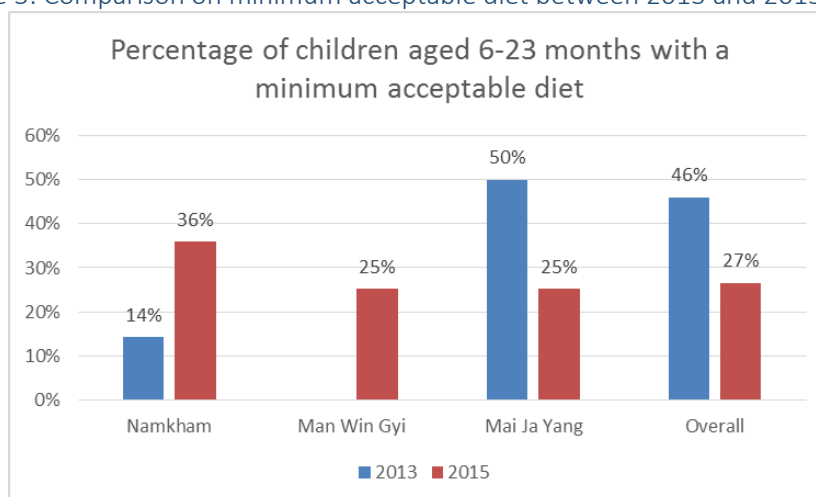


Table 12: Consumption of iron rich fortified food by children aged 6-23 months in the past 24 hours, Nam Kham, Man Win Gyi and Mai Ja Yang IDP camps

Consumption of iron rich fortified food by children aged 6-23 months					
	N	Yes		No	
		n	%	n	%
<b>Namkham</b>	50	33	66%	17	34%
<b>Man Win Gyi</b>	87	21	24%	66	76%
<b>Mai Ja Yang</b>	246	130	53%	116	47%
<b>Overall</b>	<b>383</b>	<b>184</b>	<b>48%</b>	<b>199</b>	<b>52%</b>

Comparison between 2013 Survey and 2015 survey shows that there is increase in Namkham from 14% to 36% but decrease in Mai Ja Yang from 50% to 25%. The decrease in Namkham make to decrease overall minimum acceptable diet from 46% to 27%. There was a significant increase in minimum acceptable diet in Namkham from 14% to 36%.

Figure 3: Comparison on minimum acceptable diet between 2013 and 2015 survey



The number of 6-23 months of children who consumed number of food group in the past 24 hours in the intervention areas and only 43% of children ate 4 or more food groups and more than 50% of children ate only 3 food group or lower. This is also one of the factors that affect the increase or decrease of minimum acceptable diet.

Figure 4: Number of food groups consumed by children under 24 months living in the intervention area.

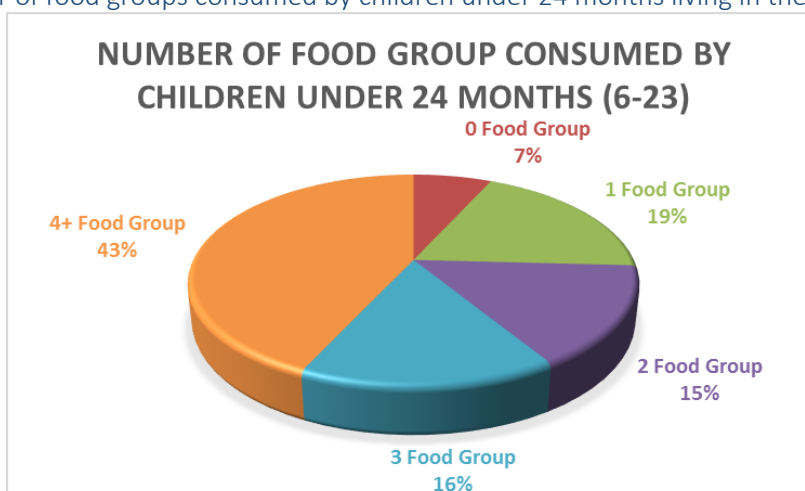
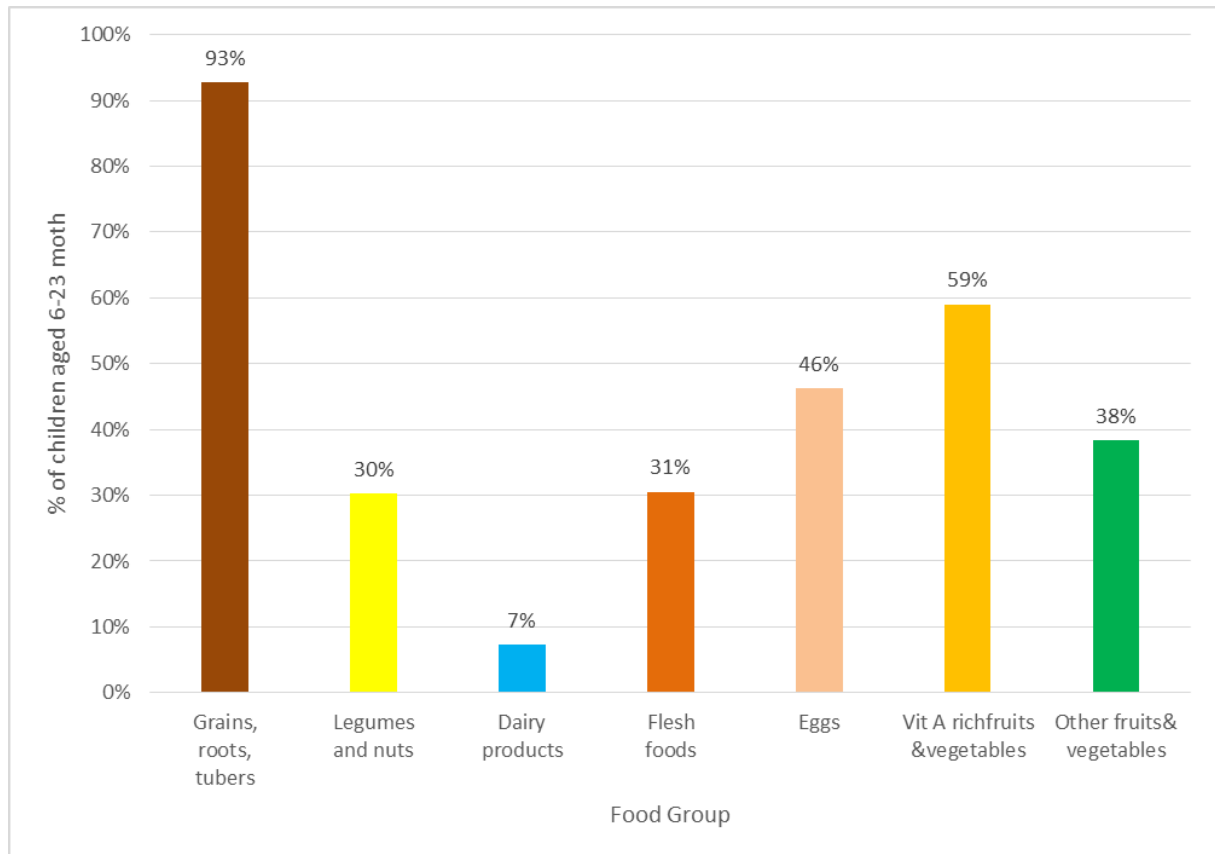


Figure 5 present the percentage of children consuming each food group in the previous 24 hours and number of food group consumed. Not surprisingly, the group 'grains, roots and tubers' are the most important due to rice being the staple food in the area. The second most common food groups is vitamin A rich fruits and vegetables, consumed by 59% of the children in the past 24 hours. 43% of the children consumed food from 4 or more groups.

Figure 5: Percentage of children aged 6-23 months consuming items from each food group in the past 24 hours in the intervention area



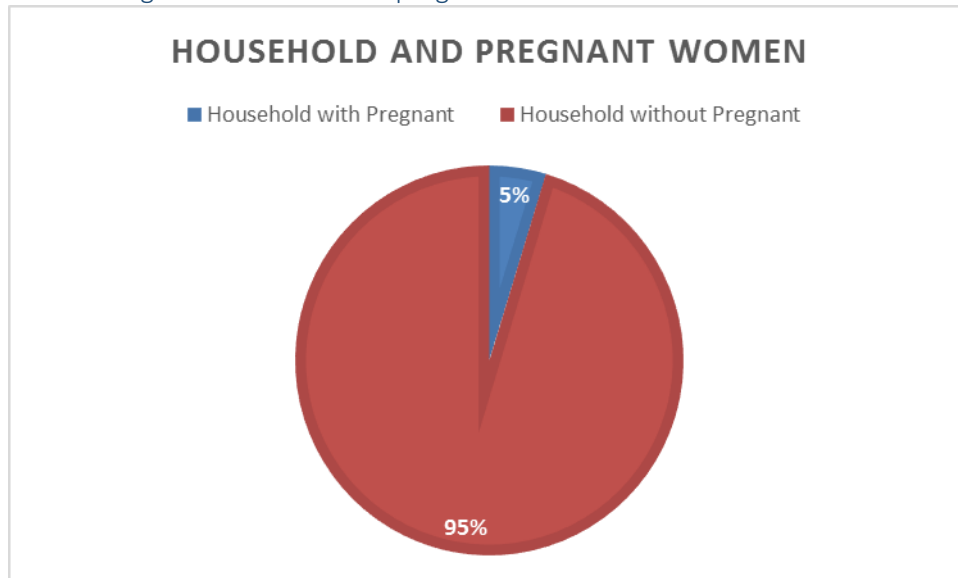
## 4.2. General household food security and livelihood situation

### 4.2.1. General household situation

26% of households do not have an income earner, and 66% of families depend on only one income among the 510 household with children 0 to 23 month of age. Monthly median income for each household is 30,000 Kyat (Q1 20000, Q3 50000).

The following figure-6 shows that 5% of households are pregnant women while they are lactating their child of under two year but remaining 95% lactating women are not pregnant.

Figure 6: Percentage of household with pregnant and lactation mothers in the intervention area



### 4.2.2. Household food security and livelihood situation

44% of household expenditure was used for food for the family with 3% for water, 24% for health care and 29% for other miscellaneous cost. 19% of household reported that they had received income generation support from Save the Children/WPN. Among them 83 household received support for running of Kitchen Garden activities and 5 household reported they received support for Brick Making and 11 for Sewing.

Figure 7: Percentage of household expenditure in the intervention area

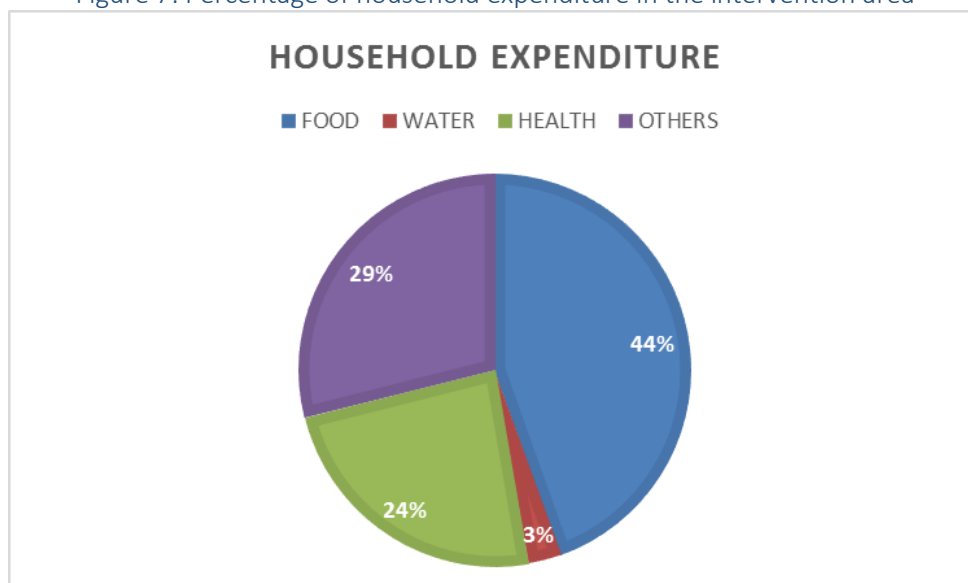
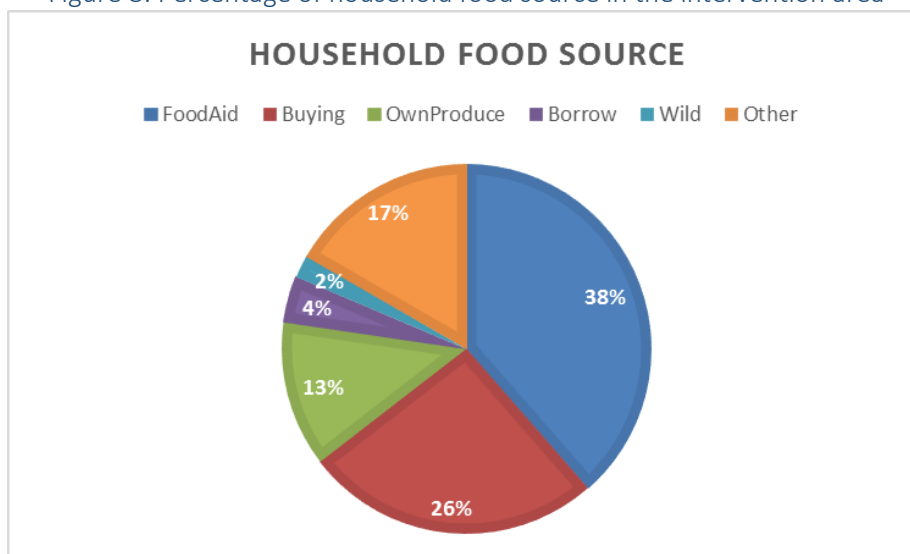


Figure 8 say that 38% of household food sources come from food aid while 26% come from buying. The rest of the food source for household are 13% own production, 4% borrow, 2% wild and 17% are from other miscellaneous food source.

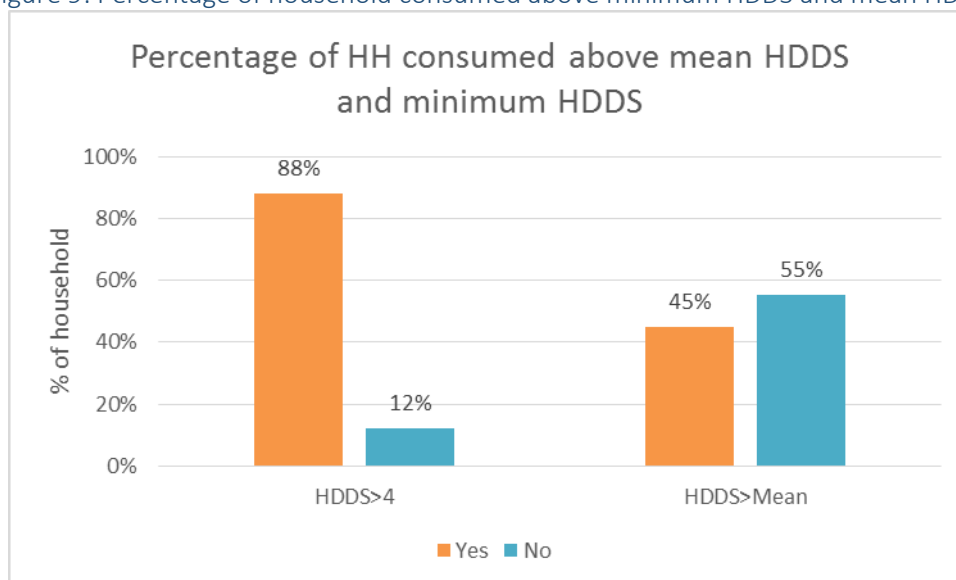
Figure 8: Percentage of household food source in the intervention area



20% of household reported that they had practiced one of the coping strategies to deal with income gaps in last seven days. 13% of HH prioritized food for children and adult, 9% of HH reduced daily meals, 19% of HH ate less preferred foods, 12% of HH changed rice quality, 22% of HH borrowed food/money, 19% of HH bought food on credit, 15% of HH reduced health expenditures and 19% of HH used a common kitchen for **one day** during last week because of income/food gaps.

11% of HH ate less preferred foods, 20% of HH borrowed food/money and 17% of HH bought food on credit during **two days** in the past week. 21% of HH eat less preferred food, 9% of HH changed quality of rice, 10% of HH borrowed food or money, and 9% of HH buy food on credit for **three days** during the past week.

Figure 9: Percentage of household consumed above minimum HDDS and mean HDDS

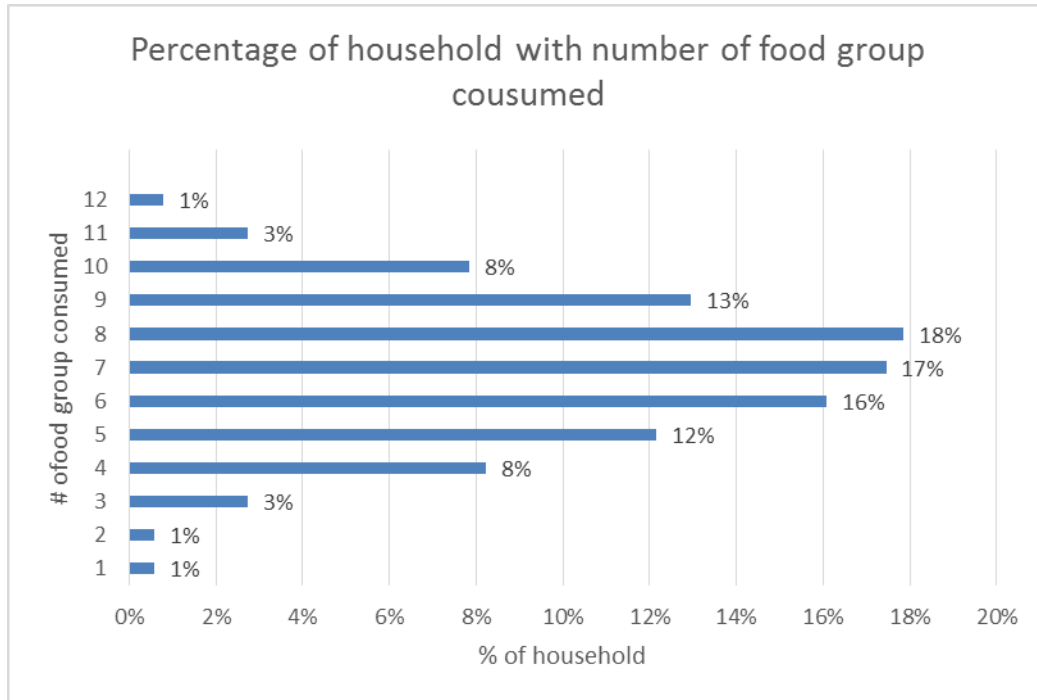


Mean household dietary diversity score was 5 out of 12. (3 or fewer food groups reflect severe dietary inadequacy while consumption of only 4 food groups indicates moderate dietary inadequacy. Anything above 4 would indicate adequate dietary diversity. Please note that these cut offs continue to be assessed so recommendations may change over time.)<sup>3</sup> Figure-9 present 88% of survey household were adequate dietary diversity and 45% of households were above the mean HDDS score.

<sup>3</sup> FSIN Recommended indicators to measure the food security status of households and communities

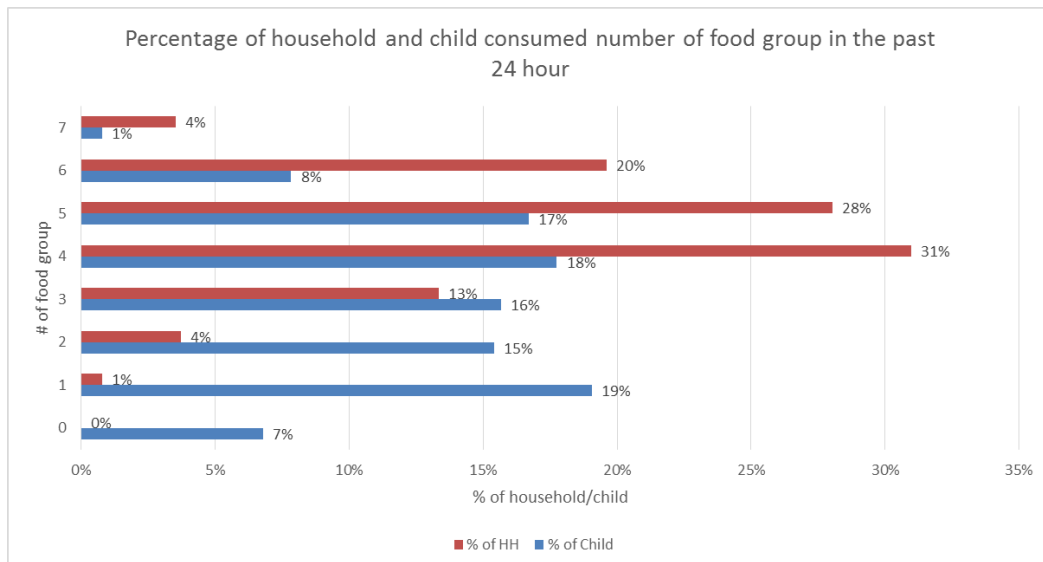
Figure 10 present % of households consumed number of food group in the past 24 hours in the intervention areas and household ate mostly eight food groups out of twelve were eaten with 18% in the past 24 hour and followed by seven or six food group with 17% or 16% of household and only 1% of household ate one or two food group and 1% of household only ate 12 food groups and only 3% of household ate 11 food groups in the last 24 hour.

Figure 10: Percentage of household consuming number of food group in the past 24 hours in the intervention area



The figure 11 compares number of foods group consumed by child and number of foods group consumed by household in the past 24 hours in the intervention areas. This shows 31% of household consume 4 food group but on 18% of children consume four food group. While 28% of household consume 5 food group, only 17% if children consume 5 food groups. So as while 20% of household consume 6 food group, only 8% of household consume 6 food groups. This figure show that most households are eating different food group but children were introduced only few food group less than the household can access.

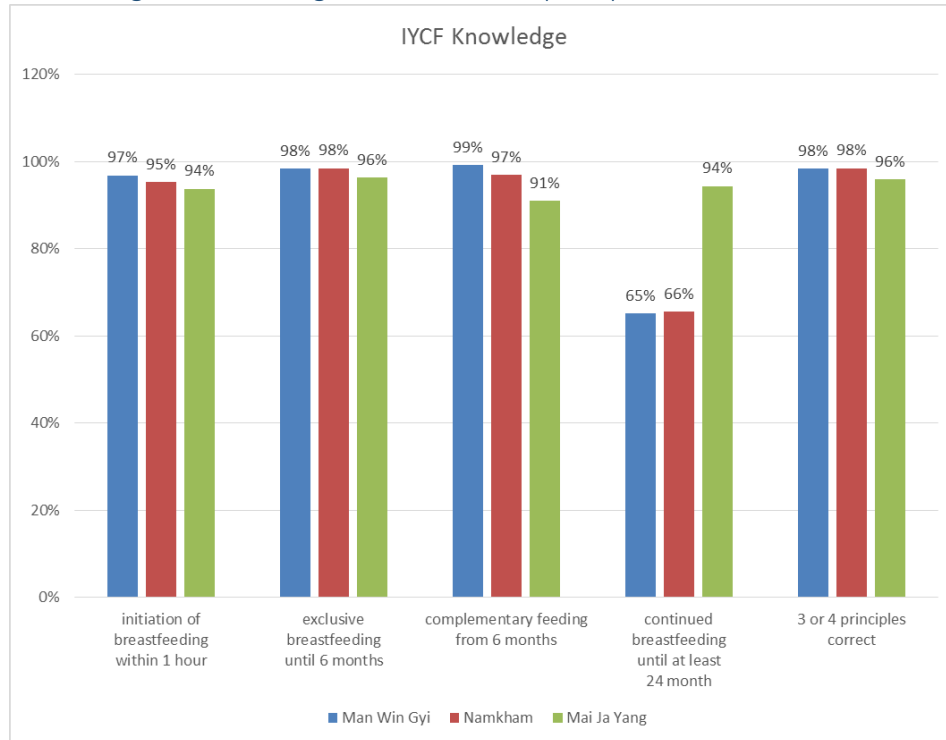
Figure 11: Number of household and child consuming number of food group in the past 24 hours in the intervention area



### 4.2.3. Household knowledge on maternal, infant and young child nutrition and health seeking behavior

Figure 12 show 98% of mothers/caregivers from Namkham and Man Win Gyi and 96% from Mai Ja Yang know at least 3 or 4 IYCF principles.

Figure 12: Caregivers’ knowledge on the four IYCF principles in SCI/WPN intervention area.



72% of caregivers attended Maternal, Infant and Young Child Nutrition education sessions conducted by Save the Children or WPN in the past month. 81% of mothers reported and confirmed that they know danger signs of high risk pregnancy, and 75% of mothers reported awareness on dangers signs during delivery. 76% of mothers also reported awareness on post natal danger signs and 87% of mothers on new born danger signs. 54 out of 526 mothers (10.3%) reported they had experienced breastfeeding difficulties. Despite displacement, 88.6% of mothers reported that their child had been vaccinated since birth according to this survey. In term of knowledge about maternal, infant and young child nutrition is quite good with at least 96% of mother know 3 or 4 optimal IYCF principles and vaccination coverage is also good with 88.6% in those displaced populations.

In the past two weeks, 67.5% of mothers reported that their child had diarrhoea, 66.7% of mothers reported fever and 68.1% of mother reported that their child had coughing or fast breathing. 28.5% of mothers gave home remedies, and 45.1% of mothers sought medical treatment with a health care professional. The mean cost for the medical services was 5152 Kyat (Minimum 50, Maximum 30000).

## 5. DISCUSSIONS AND RECOMMENDATIONS

### ***Behavior change trends on IYCF practices in the IDP community highlights the need for more enabling environment for the community in the long run***

According to the results of this survey, knowledge level of mothers/caregivers with optimal IYCF practices is satisfactorily high in both GCA and NGCA areas. The result of continue breastfeeding rate is 15% lower than the expected target. This indicate the need for more sensitization on the matter to ensure breastfeeding is extended until children reach at least 24 months. Some significant differences were noticed on exclusive breastfeeding, early initiation of breastfeeding among the areas. Higher prevalence of positive practices for all these indicators are observed in Namkham and Man Win Gyi camps, in GCA compared to Mai Ja Yang, NGCA camps. More information should be collected in order to determine the cause of this gap, whether it is cultural, financial, linked to the access or level of humanitarian assistance or other factors. That shows that awareness of community regarding IYCF knowledge is good but highlight the need of intensive behavior change communication programme with the integration of food security, livelihood and other nutrition sensitive social protection programming.

The difference between the expected results and actual findings show that there is the need to further emphasize nutrition promotion, especially in Non-Government Control Areas, including strengthening the skills of nutrition volunteers (breastfeeding counsellors) to implement IYCF. Behavior Change Communication. In addition more integration with IYCF-E programming and food security /livelihoods should be done in next project cycle in order to enable behavior change.

#### Recommendations:

- ✚ To conduct further research to determine the causes and barriers to current IYCF practices, and to gain a better understanding of differences observed between Nam Kham, Man Win Gyi and Mai Ja Yang areas in order to deliver an appropriate response
- ✚ To organize workshops on best practice in chronic emergency programming for programme staffs
- ✚ To work closely with SC's program coordinators and advisors to integrate food security, nutrition and livelihood programmes across sectors to increase impact of interventions(particularly regarding provision of nutrition supplements to pregnant and breastfeeding women and young children)
- ✚ To focus on implementing a Behavior Change Communication approach rather than the traditional health education model in implementing IYCF programmes in chronic emergency
- ✚ Regular evaluations and workshops on program implementation should be maintained.

### ***High IYCF knowledge but limited practice in following recommendations, including adequate complementary feeding highlight the need to strengthen nutrition sensitive programming***

Good IYCF knowledge but particularly low optimal IYCF practices were observed. Few children were able to obtain a minimum acceptable diet, a result of both of low diet diversity and poor meal frequency. Although the programme is providing some income generation activities like kitchen gardens, brick making and sewing for the community, this coverage is very low in the IDP community which may contribute to these outcomes. The number of meals and food group is insufficient and so more information should be collected on the reason for such limitation in terms of quantity and diversity.

7% of children are not breastfeed at 0-1 month and 12-13 month which may lead to usage of inappropriate formula. Despite SCI and WPN team are practicing to monitor with the violations against the Order of Marketing of Formulated Food for Infant and Young Child, the bottle feeding rate is high. When we look at the detail, bottle feeding is tend to be higher in those close relation to boarder areas. This practice should still carefully be monitored considering that WASH conditions in camp are variable and bottle feeding may become an additional vector of water-borne diseases.

Almost half of household food source were came from food aid which is generally relevant for the IDP population who are depending on the aid. The survey population also mentions food supply as a major role of household food source. But on the other hand, food is the main household expenditure despite of food supply.

Regarding child nutrition, household are eating four or five food group mostly while child are eating mostly only one food group. So, what we can assume that there is gap with complementary feeding for the children above 6 month of age. Even though household hold are eating different food group, children are not receiving the same food group as household is consuming. This mean, access and availability of different food group is not the only problem in these intervention areas and highlight the culture or perception level of community regarding complementary feeding. So, this is the need that the programme should address.

Sensitization on breastfeeding practices with a focus on behavior change should be addressed. Monitoring of breastmilk substitutes should be strengthened because bottle feeding is above expected end line target. Mothers using BMS should identified and provided close counselling to prevent harmful consequences to the child's nutritional status .If necessary, these mothers can be supported in artificial feed as a last option. Very strong sensitization should be carried out to promote breastfeeding particularly in cases of unnecessary bottle feeding and even for mothers who delivered at hospitals.

#### Recommendations:

- ✚ To identify potential gaps in food availability, review the adequacy of complementary rations and improve the integration of income generation activities with nutrition promotions. A sustainable approach should be considered for this context.
- ✚ Strengthen monitoring and reporting of inappropriate marketing of breastmilk substitutes by advocating health care key stakeholders (health care professionals, mothers, baby food companies) and monitor the condition of infant formula use and bottle feeding.
- ✚ A Barrier Analysis survey should be done in the next project cycle to identify the barriers to what in the population. This information will be key in designing and implementing behavior change programme in the emergency areas.

***Strong knowledge on IYCF shows the efficacy of the nutrition programme, but more effort and time should be allocated in designing long term response for the IDP community from different context to enhance and support sustained behavior change.***

The result of timely initiation of breastfeeding is 17% below the project's expected target which therefore needs to be re-evaluated to further increase child survival. The differences between the areas were relatively different especially with Government Control Area (GCA) and Non-Government Control Area (NGCA). Despite knowledge level was good regarding timely initiation of breastfeeding, there is significant decrease with practice in Mai Ja Yang between 2013 survey and 2015 survey. The exclusive breastfeeding (EBF) rate is above the project's end-line target in Namkham but EBF rate in MJY is significantly lower compare to GCA areas and thus more information should be gathered to explain the reason for such difference. Increases of EBF practices in Namkham is also satisfactorily good compare to 2013 survey while EBF in Ma Ja Yang is significantly decreased. Significant increase with minimum acceptable diet in Namkham which is good changes for the area. As the minimum dietary diversity and minimum meal frequency also decreased, the result of minimum acceptable is also significantly decreased in Mai Ja Yang.

When looking at the quality of the overall complementary feeding diet, which is under the 75% of expected program target. Minimum dietary diversity, meal frequency and acceptable diet are also quite below under the 65% of expected target. Consumption of iron rich fortified food were also under the 75% of expected target objective which may also lead to micronutrient deficiency in the long run. Almost half of the children consumed food from 4 or more which is a positive sign and a promising start but a higher proportion of individuals consuming 4 groups or more would be needed to reduce an impact on chronic malnutrition and other micronutrient linked diseases in the U2 population. A focus on quantities consumed would also be needed to ensure proper micronutrient intake.



This may also be because of travel restriction during project implementation period because of scatter battle between army and ethnic arm group and it seem effect on the project implementation and SCI's supervision/technical support to WPN. This can be not just access issue or this can be quality services issues or this can be other nutrition sensitive factors. It would be worth to identify the barrier for the low infant feeding practices in these areas by doing additional investigation. This is the question for the programme that should consider in the next project cycle and find the barriers or factors that make decrease the programme performance in different area.

Recommendations:

- ✦ To review the approach of nutrition programme from the nutrition specific to nutrition sensitive programme. It is important to create enabling environment for the community while they are thinking behavior change.
- ✦ To integrate the concept of nutrition in different sectors including food security, livelihood programme, WASH programme, child protection programme and Education programme.
- ✦ To conduct a qualitative study to find the real barrier between two different area and review the partnership level for the long run as the nature of emergency become chronic.

## 6. REFERENCES

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- ✚ Jangma Kai Seng Zin (MJY)
- ✚ Shadau Bawk Nu (MJY)
- ✚ Maran Ji Pan (MJY)
- ✚ Labya Tawng Nu (MJY)
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- ✚ Lawt Awng Zin (Namkham)
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***Special thanks finally to the mothers and caregivers for their time and participation to this exercise.***

Swe Linn Maung  
Programme Advisor-Nutrition (Humanitarian)

## 8. APPENDICES

### Appendice-1

<b>QID#</b>		<b>Team#</b>	
<b>Township #</b>		<b>Interviewer ID</b>	
<b>Camp #</b>		<b>Result</b>	.....
<b>HH#</b>		<b>Date of Interview</b>	

This questionnaire is designed for **all children in the household who are less than 24 months of age** – that is, the child has not yet reached his/her 2<sup>nd</sup> birthday. This includes other children from the same mother as well as children from other caregivers **in the same household**. Once you have completed the survey for one child, use a separate form for each and every other child less than 24 months of age who lives in the same household. You should complete an **IYCF behaviors and Child Health Seeking Practices for EACH** child under 2 years of age.

My name is \_\_\_\_\_. We are conducting a survey with SCI. The purpose of the survey is to gather information from you about how (MOTHER/YOU) feed (YOUR) infants and young children. Your responses will help us understand the realities of IYCF nutrition in (VILLAGE NAME) and design interventions that are specifically tailored to women and children here.

I will ask you some questions, which I have prepared. If you do not want to answer a question, you do not have to. All your answers will **be kept confidential and your name will not be identified** with the information you provide. Do you agree to participate in this survey?

Wait for the oral consent of the person and then start the questionnaire.

**YES**

**NO**

**AGREED?**

1. Demographic Information				
1.1	What is (Respondent name's) position in the household? (Circle one response)	Head of Household		1
		Spouse of Head of HH		2
		Other (specify): _____		88
		No Answer / Don't Know		99
1.2	Is the Respondent is the main carer?	No	0	If Yes (1) go to Q 1.5
		Yes	1	
		No Answer / Don't Know	99	
1.3	Main Carer and/or Mother Education level?	Illiterate		1
		Read/Write/ Primary School		2
		Middle School		3
		High School		4
		Bachelor Degree and above		5
1.4	If Not the Respondent, who is the main carer of children under 2 years of age?	Mother		1
		Father		2
		Grandmother		3
		Grandfather		4
		Aunty		5
		Uncle		6
		Older sister		7
		Older brother		8
		Other female relative		9
		Other male relative		10
		Other (specify): _____		88
		No Answer / Don't Know		99
1.5	Sex of respondent	Male		1
		Female		2
1.6	Age of respondent (Specify age in years.) If specific age not known, round to the nearest 5 years upwards. If unknown circle 99).	___ years		
		99		
1.7	Number of pregnant women			
1.8	Number of children under 2 years			
1.9	Number of children 2 to 5 years			
1.1 1	Number of children 5 to 18 years			

1.1 2	Number of adults over 18 years	
1.1 3	How many people in the household contribute to basic household expenditures?	
1.1 4	Are any HH members: If yes, how many? <ul style="list-style-type: none"> <li>• Disabled (physically/mentally).....</li> <li>• Elderly (approx. over 65) .....</li> <li>• Chronically ill (HIV, debilitating or terminal illnesses etc.) .....</li> </ul>	_____ _____ _____

<b>2. Household Level Information</b>																				
2.1	What is the average total income for your household from all sources in a normal month?					_____	MMK													
2.2	<p>In the last month, if you spent a total of 10 “stones” on household expenses, how many “stones” did you spend in each category?  <i>(Use stones or other items available.)</i>  <i>Ask the respondent to arrange the stones into piles for each category.</i>  <i>In each “amount spent” box, put an X for each stone under the respective category box, or put 0 if no expense in this category.</i>  <i>“Other” includes household cleaning &amp; utensils, clothes, education, loans, investments, betel/alcohol/tobacco, etc. Do not specify)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 30%;">Categories</th> <th style="width: 15%;">Food</th> <th style="width: 15%;">Water</th> <th style="width: 15%;">Healthcare</th> <th style="width: 15%;">Other</th> <th style="width: 10%;"></th> </tr> </thead> <tbody> <tr> <td>Amount spent (Xs or 0)</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Categories	Food	Water	Healthcare	Other		Amount spent (Xs or 0)							
Categories	Food	Water	Healthcare	Other																
Amount spent (Xs or 0)																				
Sources of food obtained for household																				
2.3	<p>In the last month, if you obtained a total of 10 “stones” of food, how many “stones” of food did you obtain from each source?  <i>(Same technique as in 3.2)</i></p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 15%;">Source</th> <th style="width: 15%;">Food Assistance</th> <th style="width: 15%;">Purchase</th> <th style="width: 15%;">Own produce</th> <th style="width: 15%;">Borrow</th> <th style="width: 15%;">Wild</th> <th style="width: 10%;">Other</th> </tr> </thead> <tbody> <tr> <td>Amount (Xs or 0)</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>						Source	Food Assistance	Purchase	Own produce	Borrow	Wild	Other	Amount (Xs or 0)						
Source	Food Assistance	Purchase	Own produce	Borrow	Wild	Other														
Amount (Xs or 0)																				
2.4	During last year, have your HH received any Income Generation Activities support from SCI/WPN”				1 0 8	Yes No (Skip 2.5 ) Don’t know														
2.5	If yes, what kind of IGA support did you received?				1 2 3	Sewing Vocation Training Brick Making Kitchen Garden														
2.6	Has your household taken money loans/credits in the last 12 months?				1 0 8	Yes (Skip 2.7 ) No Don’t know														
2.7	If yes, please indicate the value of your current debts/loans?					_____	MMK													

## 2.8. HOUSEHOLD DIETARY DIVERSITY SCORE

Now I would like to ask you about the types of foods that **you or anyone else in your household ate yesterday** during the day and night (if yesterday was a special day – wedding, charity or funeral or other, ask the day before).: **(Multiple responses)**

Category		LAST 24 HOURS	
		Y DK	N
aa	Bread, rice, noodles, or other foods made from, including thick grain-based porridge?	1 8	0
bb	White potatoes, white yams, manioc, cassava, or any other foods made from roots?	1 8	0
cc	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	1 8	0
dd	Any foods made from beans, peas, lentils or nuts, including Plumpy 'nut?	1 8	0
ee	Any dark green leafy vegetables?	1 8	0
ff	Ripe mangoes, ripe papayas or (insert other local vitamin A-rich fruits)?	1 8	0
gg	Any other fruits or vegetables?	1 8	0
hh	Liver, kidney, heart or other organ meats?	1 8	0
ii	Any meat such as beef, pork, lamb, goat, chicken or duck?	1 8	0
jj	Fresh or dried fish, shellfish, or seafood?	1 8	0
kk	Grubs, snails or insects?	1 8	0
ll	Eggs?	1 8	0
mm	Cheese, yogurt, or other milk products?	1 8	0
nn	Any oil, fats or butter, or foods made with any of these?	1 8	0
pp	Any sugary foods such as chocolates, sweets, candies, pastries, cakes or biscuits?	1 8	0
qq	Condiments for flavor such as chilies, spices, herbs or fish powder?	1 8	0
Other foods: please write down other foods in this box that the respondent mentioned but are not in the list above. When data are entered into the computer, the other foods will be assigned to one of the 7 categories of foods:			

Coping mechanisms				
2.9	In the past 7 days, have there been times when your household did not have enough food or money to buy food?	1 0 8	Yes No Don't know	Skip
2.10	How often in the past week has the household had to utilize the following coping mechanisms? (Enter the number of days (0-7) when the mechanisms was used in the last 7 days)			
	Activity			
	A Eating rice porridge	_____ days		
	B Prioritizing children and elderly for food	_____ days		
	C Reducing the number of daily meals	_____ days		
	D Reducing rice portion size	_____ days		
	E Consuming only rice at meal times	_____ days		

	F	Consuming less preferred staples	_____ days
	G	Changing curry ingredients / variety / rice quality	_____ days
	H	Begging for food	_____ days
	I	Borrowing food from neighbours / relatives	_____ days
	J	Eating rice seed stocks	_____ days
	K	Eating immature crops	_____ days
	L	Eating wild animals or plants	_____ days
	M	Purchasing food on credit	_____ days
	N	Reducing health expenditures	_____ days
	O	Sending children/elderly away to eat	_____ days
	P	Common kitchen (shared among household)	88
	Q	Household did not use above coping mechanisms in the past 7 days	9

<b>3</b>	<b>Essential Knowledge that support 1000 Days</b>		
3.1	Have joined any nutrition education session or ANC last month	Yes No	1 0
	If yes, how many times?	_____	times
	Now I would like to ask you some questions on infant and young child feeding. I would like you to tell me what you know about it even if this is different from what you do at home.		
	<b>ANC/PNC/Newborn Care Essential Knowledge</b>		
3.1.1	Should you see health personnel for pregnancy care while you are pregnant?	Yes No	1 2
3.1.2	In your opinion, <b>what signs/symptoms during pregnancy</b> that indicate the need to seek immediate health care outside home?	<b>(Multiple Response)</b> Don't Know Shortness of breath Bleeding Swelling of face/body/hands Fits Severe pain in abdomen Other (Specify) .....	99 1 2 3 4 5 88
3.1.3	What are the danger signs <b>during delivery</b> ?	<b>(Multiple Response)</b> Don't Know Prolonged delivery (more than 12 hr) Retained Placenta Fit Shortness of breath Other (Specify) .....	99 1 2 3 4 88
3.1.4	What are the danger signs <b>after giving birth</b> that indicate the need to seek emergency care outside home?	<b>(Multiple Response)</b> Don't Know Excessive Bleeding Smelly vaginal discharge Convulsion Severe abdominal pain Other (Specify) .....	99 1 3 4 5 88
3.1.5	What are the danger signs that indicate <b>a newborn baby's</b> sick?	<b>(Multiple Response)</b> Don't Know Fast breathing or pneumonia Convulsion/Fits Yellow fever (Jaundice) Continuous vomiting Diarrhea Others (Specify) .....	99 1 2 3 4 5 88
	<b>IYCF Knowledge</b>		



3.2.1	Could you tell me, after delivery, when do you need to start breastfeeding your baby?	Right after /within 1 hour after birth Other answer/Don't know	1 0
3.2.2	How long should the baby receive only breastmilk (do not even receive water)?	Until 6 months Other answer/Don't know	1 0
3.2.3	From what age should the baby start eating food?	6 months of age Other answer/Don't know	1 0
3.2.4	How long should the baby continue to receive breastmilk?	Until 24 months or more Less than 24 months/Don't know	1 0

#### 4. IYCF behaviors and Child Health Seeking Practices (0-23 months child)

### SECTION 1: BACKGROUND

Make every effort to speak with the mother. If she is not available, speak with the primary caregiver responsible for feeding of the child.

**Are there any children in the household who have not had their 2<sup>nd</sup> birthday? If YES, identify the mother/primary caregiver and continue:**

**What is your youngest child's name?** \_\_\_\_\_ [Use this NAME in remaining questions] **please get his/her card.**

*If there is more than 1 child under 2 years of age in the household, identify each child's mother or primary caregiver and arrange to interview her once the first interview is completed. After you have completed the questionnaire for the first child, repeat this session interview for the 2<sup>nd</sup> child, substituting the correct NAME for this child.*

1.	<b>Date of birth of child</b> [There are various sources for documenting date of birth of child including identification cards, health or immunization cards, birth certificates and baptismal certificates. If there is no document showing the child's DOB, ask the mother if she knows the child's DOB. If you cannot obtain DOB from a card or the mother, you will need to skip to question 3 and ask the mother how old the child is.]	____/____/____ DD YY MM	
		Circle <b>numbers</b> not responses	
2.	<b>Source for date of birth</b> ['Card' could be an identification card, a health or immunization card, a birth certificate or a baptismal certificate.]	1 Card → 2 Caregiver → 8 Don't know →	Go to 4 Go to 3 Go to 3
3.	<b>How many months old is [NAME]?</b> Since all children should be between 0 and 23 months of age. If the child has completed 2 years on his or her last birthday, the child is older than the age range for the survey. Thank the mother and terminate the interview.	_____ MONTHS	
4.	<b>Sex of child</b>	1 Boy 2 Girl	

**SECTION 2: FEEDING HISTORY**

#	Question	Code		Action
			Circle <b>numbers</b> not responses	
5.	<b>Has [NAME] ever consumed breastmilk in any ways?</b>	1 0 8	Yes No DK	Go to 6 Go to 7 Go to 7
6.	<b>How long after birth did you first put [NAME] to the breast?</b> If less than 1 hour, write '00' for hours. If 1-24 hours, record number of completed hours from 1 to 23. Otherwise, record number of completed days. If the respondent doesn't know, circle 'Don't know.'	→ → → 99	Immediately Hours    _ _  Days    _ _  Don't know	
7	<b>In the first 3 days after delivery, was [NAME] given anything to drink other than or in addition to breastmilk?</b> If yes, circle ALL items that are reported. Simply record all liquids mentioned. Do not read the list of possible responses.	0 1 2 3 4 5	Nothing Plain water Sugar water or glucose water Powdered or fresh animal milk Infant formula (Nestle, etc.) Other (specify) _____	Go to(8)
8.	<b>Yesterday during the day or at night, did [NAME] consume breastmilk from you or another woman, or did anyone give [NAME] breastmilk using a spoon, cup or bottle?</b>	1 0 8	Yes No Don't know	
9.	Now I would like to ask you about liquids that [NAME] may have had yesterday during the day and at night. I am interested in whether your child had the item even if it was combined with other foods. <b>Yesterday, during the day or at night, did [NAME] receive any of the following?</b>			
			Category	LAST 24 HOURS Y   N   DK How many times yesterday during the day or night did [NAME] consume the item?
	a		Vitamin drops or other medicines as drops	1   0   8   ___ ___ times
	b		ORS	1   0   8   ___ ___ times
	c		Plain water	1   0   8   ___ ___ times
	d		Infant formula (china brand, donation)	1   0   8   ___ ___ times
	e		Milk such as tinned, powdered, or fresh animal milk (Cow Milk, China Brand Milk)	1   0   8   ___ ___ times
	f		Juice or juice drinks (China Brand Juice)	1   0   8   ___ ___ times
	g		Clear broth or other soup (Corn soup, bean soup)	1   0   8   ___ ___ times
	h		Other water-based liquids (rice water, green tea, tea, coffee mix, traditional medicine)	1   0   8   ___ ___ times
	i		Sour milk or yogurt (Soybean milk)	1   0   8   ___ ___ times
	j		Thin porridge (honey, quaker oats mix, )	1   0   8   ___ ___ times
10	<b>Please tell me everything that [NAME] ate yesterday during the day or night (whether at home or outside the home). Think about when [NAME] first woke up yesterday. Did [NAME] eat anything at that time?</b> Keep probing 'Anything else?' until the respondent says 'nothing			If at least one food from the food group has been given in the past 24 hours, circle 'Y' in the column below. If no food in a food group has been given,

	<p>else.’ If nothing else was given when the child first got up, ask:  <b>What did [NAME] do after that? Did [NAME] eat anything at that time?</b>          If yes, ask: <b>Please tell me everything [NAME] ate at that time.</b>          Probe: ‘<b>Anything else?</b>’ until respondent says ‘nothing else.’          If respondent mentions mixed dishes like a sauce or stew, probe: <b>What ingredients were in that [MIXED DISH]?</b> Probe: ‘<b>Anything else?</b>’          Until respondent says ‘nothing else.’</p> <p><b>Every line must have a code.</b></p>		<p>circle ‘N.’ If the respondent doesn’t know, circle ‘DK.’</p>	
#	Category		LAST 24 HOURS	
			Y	N
	a a	Bread, rice, noodles, or other foods made from grains, including thick grain-based porridge?	1 8	0
	b b	White potatoes, white yams, manioc, cassava, or any other foods made from roots?	1 8	0
	c c	Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	1 8	0
	d d	Any foods made from beans, peas, lentils or nuts, including Plumpy ‘nut’?	1 8	0
	e e	Any dark green leafy vegetables?	1 8	0
	f f	Ripe mangoes, ripe papayas or (insert other local vitamin A-rich fruits)?	1 8	0
	g g	Any other fruits or vegetables?	1 8	0
	h h	Liver, kidney, heart or other organ meats?	1 8	0
	i i	Any meat such as beef, pork, lamb, goat, chicken or duck?	1 8	0
	j j	Fresh or dried fish, shellfish, or seafood?	1 8	0
	k k	Grubs, snails or insects?	1 8	0
	l l	Eggs?	1 8	0
	m m	Cheese, yogurt, or other milk products?	1 8	0
	n n	Any oil, fats or butter, or foods made with any of these?	1 8	0
	o o	Foods made with red palm oil, red palm nut and red palm nut pulp sauce?	1 8	0
	p p	Any sugary foods such as chocolates, sweets, candies, pastries, cakes or biscuits?	1 8	0
	q q	Condiments for flavor such as chilies, spices, herbs or fish powder?	1 8	0
	Other foods: please write down other foods in this box that the respondent mentioned but are not in the list above. When data are entered into the computer, the other foods will be assigned to one of the 7 categories of foods:			
11	<p><b>How many times did [NAME] eat solid, semi-solid or soft foods other than liquids yesterday during the day or at night?</b>          Small snacks and small feeds such as one or two bites of mother’s or sibling’s food should not be counted. If caregiver answers 7 or more times, record 7. If she/he doesn’t know, record 88.</p>		_____	Times
12	<b>Now I would like to ask you about other foods [NAME]</b>		1	Yes

.	<b>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 [NAME] consume any iron fortified solid/semi-solid/soft food specially designed for infant and young children?</b>	0 8	No Don't know	
13	<b>Yesterday, during the day or night, did [NAME] consume any food to which you added a powder or sprinkles like this?</b> Show picture of sprinkles with packaging.	1 0 8	Yes No Don't know	
14	<b>Yesterday, during the day or night, did [NAME] consume any Plumpy'nut/EeZee Paste ?</b> Show pictures of PPN and EeZeePaste.	1 0 8	Yes No Don't know	
15	<b>Yesterday, during the day or night, did [NAME] consume any Nestle, China Brand...?</b>	1 0 8	Yes No Don't know	
16	<b>Did [NAME] drink anything from a bottle with a nipple yesterday or last night?</b>	1 0 8	Yes No Don't know	
17	<b>Have you ever experienced breastfeeding difficulty with NAME</b>	1 0 8	Yes No Don't know	Go to 19 Go to 19

## SECTION 2: Child Health Seeking Practices

### Immunization

18	<b>Has your child received any vaccination since birth?</b>	No	0
		yes	1
20	Did you ever have a vaccination card for (YOUNGEST CHILD'S NAME)? May I copy the information from the card? (If no go to Q XXX)	No	0
		Yes	1
21	BCG (date: DD/MM/YYYY)	-----/-----/-----	
22	Hep B (date: DD/MM/YYYY)	-----/-----/-----	
23	PENTA 5 1 (date: DD/MM/YYYY)	-----/-----/-----	
24	Oral Polio Vaccine (date: DD/MM/YYYY)	-----/-----/-----	
25	If not card, Did [child name] received a BCG vaccination against tuberculosis that is, an injection in the arm or shoulder that usually causes a scar?	NO	0
		YES, SCAR PRESENT	1
		YES, SCAR NOT PRESENT	2
		DON'T KNOW	99
26	Did [child name] receive a PENTA 5 vaccination, that is, an injection given in the thigh?	No	0
		yes	1
		Don't know	99
27	Did [child name] receive a polio vaccine (drops in the mouth)?	No	0
		yes	1
		Don't know	99

### Recent Illnesses

28	<b>Has (CHILD) have diarrhea in the last 2 weeks?</b>	No	0
----	---	----	---

	<i>(diarrhea = 3 or more loose stools in any 24 hour period)</i>	Yes	1
		No Answer / Don't Know	99
29	<b>Has (CHILD) have a fever in the last 2 weeks?</b>	No	0
		Yes	1
		No Answer / Don't Know	99
30	<b>Has (name of child: _____) have a cough or fast breathing in the last 2 weeks?</b>	No	0
		Yes	1
		No Answer / Don't Know	99
31	<b>Has (name of child: _____) have any other illness in the last 2 weeks?</b> <b>If Yes, what illness or symptoms? _____</b> _____	No	0
		Yes	1
		No Answer / Don't Know	99
<b>If Yes (1) to any of the above (Q28 to 31), go to Q32. If No or No Answer / Don't Know (0 or 99) to all of the above (Q28 to 31), finish questionnaire for this Child. Start next Child.</b>			

### Health Seeking Behaviour

<b>Answer this section for a single illness or the most severe if there were multiple illnesses in the last 2 weeks</b>			
32	<b>How many episodes of illness did (CHILD) have in the last 2 weeks.</b> <i>(Circle one).</i>	Single illness	0
		Multiple illnesses	1
		No Answer / Don't Know	99
33	<b>If multiple illnesses, specify which was the most severe.</b>	_____	
34	<b>Did you give anything at home to (CHILD) for this illness?</b>	No	0
		Yes	1
		No Answer / Don't Know	99
35	<b>If Yes, specify what you gave:</b>	_____	
36	<b>Did you seek advice or treatment for this illness?</b>	No	0
		Yes	1
	<b>If No or No Answer (0 or 99), finish questionnaire for this Child.</b>	No Answer / Don't Know	99
37	<b>How long after you noticed (CHILD) illness did you seek treatment?</b> <i>(Circle single response)</i>	Same day	1
		Next day	2
		Two days	3
		Three or more days	4
		No Answer / Don't Know	99
38	<b>Where did you <u>first</u> go for advice or treatment for (CHILD) illness?</b> <i>(Circle single response)</i>  <i>Note: can determine distance from child's home to place of treatment from village information</i>	Township hospital	1
		Station hospital	2
		RHC/Health Assistant	3
		SRHC/Midwife	4
		Private clinic/doctor	5
		Camp Clinic	6
		Traditional healer	7
		Quack	8

		Drug from the shop	9
		Others (specify).....	88
		No Answer / Don't Know	99
39	<b>Did you pay for these advices or treatment?</b>	No	0
		Yes	1
		No Answer / Don't Know	99
40	<b>How much did you have to pay?</b> e.g. user fees, medicines, transport, lost income	_____mmk	
41	<b>Did you go <u>anywhere else</u> for advice or treatment for (CHILD) illness?</b> (Circle single response)	Nowhere else	0
		Township hospital	1
		Station hospital	2
		RHC/Health Assistant	3
		SRHC/Midwife	4
		Private clinic/doctor	5
		Camp Clinic	6
		Traditional healer	7
		Quack	8
		Drug from the shop	9
		Others	88
	<b>If Nowhere Else (0), finish questionnaire for this Child.</b>	No Answer / Don't Know	99
42	<b>Did you pay for these advices or treatment?</b>	No	0
		Yes	1
		No Answer / Don't Know	99
43	<b>How much did you have to pay?</b> e.g. user fees, medicines, transport, lost income	_____mmk	
<b>Finish questionnaire for this Child.</b>			

Check to see if there is another child less than 24 months of age living in the household by asking: **Is there another child living in this house who is less than 24 months old?** This includes other children from the same mother as well as children from other caregivers in the same household. If same caregiver, repeat section 1 to 3 of the interview using a separate form. If another caregiver, complete a new questionnaire.