

Knowledge Attitude and Practice survey on Infant and Young Child Feeding

Children aged 0 to 23 months living in IDP camps in Nam Hkam and May Ja Yang

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

February 2014

Data collection period: 05<sup>th</sup>-15<sup>th</sup> of November 2013

#### Funded by:



Humanitarian Aid and Civil Protection Grateful thanks to the many people that contributed to this KAP survey.

To the Department of Health, State Health Director and humanitarian actors present in the intervention area for their collaboration during the preparation and conduction of the assessment.

To Save the Children International (SCI) staff, including :

- Nicholus Tint Zaw National Senior Nutrition Advisor,
- Swe Linn Maung National Nutrition Advisor, Humanitarian,
- Khin Thone Thone Su Nutrition Project Officer,
- Clare Nang Mai Project assistant,
- May Nyi Mon M&E Officer Nutrition,
- Thet Khine Win M&E Coordinator.

To WPN and the staff that participated in this assessment:

- Dr Nu Nu Aung Nutrition coordinator,
- Seng Pan Project officer,
- Bawk Nu Project assistant,
- Tsawm Mai Awng Project Officer

Thanks as well to the camp committee members and the volunteers for their help in providing information and facilitating our work with the families.

Special thanks finally to the mothers and caregivers for their time and participation to this exercise.

INTRODUCTION	7
1. BACKGROUND	7
2. SITUATION IN SCI/WPN INTERVENTION AREA	7
2.1 Education and Protection	7
2.2 Shelter and Non-Food Items (NFI)	8
2.3 Water Sanitation and Hygiene (WASH)	8
2.4 Health,	8
2.5 Food security and livelihood (FSL)	9
2.6 Nutrition and IYCF	9
METHODOLOGY	10
1. OBJECTIVES	10
1.1 Main objective	10
1.2 Specific objectives	10
2. SAMPLE SIZE AND INDIVIDUAL SELECTION	10
2.1 Sample size	10
2.2 Individual selection and field case scenario	11
3. TRAINING AND SUPERVISION	11
4. DATA ANALYSIS	11
4.1 Program targets and indicators	11
4.2 IYCF baseline indicators: definitions and formulas	12
4.3 Food security and livelihood	13
RESULTS	15
1. SAMPLE CHARACTERISTICS	15
2. INFANT AND YOUNG CHILD FEEDING SITUATION	15
2.1 IYCF indicators summary findings	15
2.2 Breastfeeding practices	15
2.2 Complementary feeding	18
3. NUTRITION PROGRAM IMPACT ON POPULATION AND COVERAGE	21
3.1 Impact of the conflict on IYCF practices	21
3.2 Participation to nutrition education session and impact	21
3.3 Breastfeeding difficulties and support	22
3.4 Knowledge of the target mothers on IYCF principles	23
4. FOOD SECURITY AND LIVELIHOOD	24
4.1 Livelihood, level of income and debts	24
4.2 Food assistance coverage and expenditure	25
4.3 Coping mechanism	
4.4 Household food consumption score	
DISCUSSION / RECOMMENDATIONS	31
ANNEXES	

### LIST OF TABLES

Table 1 : Expected IYCF indicator's prevalence at project's baseline and end-line10
Table 2 : Food Consumption Score calculation and thresholds         14
Table 3 : Coping Strategy Index calculation14
Table 4: Sample non-response rate and sex ratio    15
Table 5 : Summary findings on IYCF CARE indicators compared to expected baseline and endline results         15
Table 6: Timely initiation of breastfeeding among children aged 0-23 months living in Nam Hkam (N=35)and May Ja Yang (N=298) camps15
Table 7 : Exclusive breastfeeding rate among children aged 0-5 months living in Nam Hkam (N=9) andMay Ja Yang (N=71) camps
Table 8 : Continued breastfeeding rate among children aged 12-15 months living in Nam Hkam (N=3)and May Ja Yang areas (N=49)
Table 9 : Continued Breastfeeding rate among children aged 20-23 months living in Nam Hkam (N=12)and May Ja Yang areas (N=43) – WHO indicator
Table 10 : Bottle feeding rate among children aged 0-23 months and living in Nam Hkam (N=37) andMay Ja Yang (N=295) areas18
Table 11 : Percentage of children aged 6-9 months receiving complementary food living in Nam Hkam(N=6) and May Ja Yang (N=50) areas18
Table 12 : Percentage of children aged 6-8 months receiving solid, semi-sold or soft foods living in NamHkam (N=6) and May Ja Yang (N=36) areas
Table 13 : Percentage of children aged 6-23 months with a minimum diet diversity living in Nam Hkam(N=28) and May Ja Yang (N=224) areas19
Table 14 : Percentage of children aged 6-23 months with a minimum meal frequency living in Nam Hkam(N=28) and May Ja Yang (N=224) areas19
Table 15 : Percentage of children aged 6-23 months with a minimum acceptable diet living in Nam Hkam(N=28) and May Ja Yang (N=222) areas19
Table 16 : Consumption of iron rich fortified food by children aged 6-23 months in the past 24 hours,Nam Hkam and May Ja Yang IDP camps
Table 17 : Household's expenditure on non-food items in the last 6 months (N=295)27
Table 18 : Diet diversity based on household's 7 days food consumption score (N=333)28

### LIST OF FIGURES

Figure 1 : Motivations around the introduction of liquids within 3 days of the infant's life17
Figure 2: 24 hours recall diet summary of children aged 0 – 23 months living in the intervention area (N=353)
Figure 3: Percentage of children aged 6-23 months consuming items from each food group in the past 24 hours in the intervention area
Figure 4: Number of food group consumed by children under 24 months living in the intervention area
Figure 5 : Positive and negative changes in IYCF practices noticed by mothers and resulting from the conflict
Figure 6: Reported nutrition education session impact on U2 feeding practices22
Figure 7: Reported nutrition education session impact on U2 mothers' diet and workload (N=263)22
Figure 8 : Type of help provided to overcome breastfeeding difficulties encountered by mothers of children aged 0-23 months living in Nam Hkam and May Ja Yang areas (N=67)23
Figure 9: Caregivers' knowledge on the four IYCF principles in SCI/WPN intervention area23
Figure 10 : Source of income in IDP families (N=333)24
Figure 11: IDPs household average monthly income (N=325)25
Figure 12: Amount of debt in household (N=294)25
Figure 13: Household perception of relief assistance need coverage (N=295)26
Figure 14: Proportion of households purchasing food and other commodities in the last 30 days (N=295)
Figure 15: Recurrence of coping mechanisms in household facing lack of money or food in the past 7 days (N=175)
Figure 16 : Distribution of the FCS according to last monthly income in households having earned less than 150,000MMK (N=301)
Figure 17 : Consumption of food group in the past 6 days by household (N=333)
Figure 18 : Importance of food group in household diet according to FCS (N=333)
Figure 19 : Main origin of household's food (N=333)

### LIST OF ACRONYMS

CARE	Cooperative for Assistance and Relief Everywhere
CSI	Coping Strategy Index
DRC	Danish Refugee Council
EBF	Exclusive Breastfeeding
FCS	Food Consumption Score
FSIN	Food Security Information Network
GAM	Global Acute Malnutrition
GCA	Government Controlled Area
GFD	General Food Distribution
НН	Household
HPA	Health Poverty Action
IDP	Internal Displaced people
IYCF	Infant and Young Child Feeding
KAP	Knowledge Attitude and Practice
KBC	Kachin Baptist Convention
KIA	Kachin Independence Army
KIO	Kachin Independence Organisation
KMSS	Karuna Myanmar Social Services
LDO	Local Development Organization
MAM	Moderate Acute Malnutrition
MUAC	Mid-Upper Arm Circumference
NFI	Non-Food Item
NGCA	Non-Government Controlled Area
NGO	Non-Governmental Organization
PLW	Pregnant and Lactating Women
RSB	Rice Soya Blend
SAM	Severe Acute Malnutrition
SCI	Save the Children International
U2	Under two years old
U5	Under five years old
UN	United Nations
UNHCR	United Nation High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNOCHA	United Nations Office for the Coordination of Humanitarian Affairs
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme
WPN	Wun Pawng Ninghtoi

### 1. Background

The renewed fighting between the Kachin Independence Army (KIA) and the Myanmar Army in June 2011 led to the displacement of many families taking shelters in various camps across Kachin State and Northern Shan State. As of September, 2013 the number of registered Internally Displaced People (IDPs) was nearly 91,000 including over 52,000 IDPs (> 55%) in areas beyond the Government's control.<sup>12</sup>

The conflict also caused civilian casualties as well as substantial infrastructural damage affecting population access to health, water and sanitation, food security and livelihoods - rendering families highly dependent on humanitarian assistance. While IDPs in Government controlled areas (GCA) receive regular support by the local authorities and institutions as well as national and international organisations, according to recent reports direct international assistance in Non-Government Controlled Areas (NGCA) had reached only approximately 58% of the IDPs (>30,000 out of 52,000) between December 2011 and September 2013<sup>2</sup>. This support has been provided through 15 interagency missions with some cancelled due to insecurity and poor road conditions.

Local relief organisations have therefore been the only regular source of assistance in the NGCA since the beginning of the crisis and have been supporting IDP families with the help from international organizations. However, access limitations of international organizations have resulted in a variation in the quality and quantity of assistance provided to those within Government areas, compared to those beyond. As a result and despite the enormous efforts of the local Non-Governmental Organizations (NGOs), not all needs in NGCA have been met.

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 NGCAs around Mai Ja Yang (Kachin) by supporting Wun Pawng Ninghtoi (WPN) – a local NGO - since September 2011.

### 2. Situation in SCI/WPN intervention area

At the time of the survey, SCI and WPN were intervening in 4 camps in Nam Hkam township and 5 in May Ja Yang area and provide assistance to an estimated 8,828 people including 4,896 women and 488 children under the age of two years (U2).

Other organizations are also intervening in these two areas covering several sectors although they do not provide the same level or type of assistance in all camps present in the same township. Many local NGOs/charities depend on one private donor and also face other operational challenges. As result, significant disparities in needs coverage (basic and secondary) may be observed from one camp to another.

### **2.1 Education and Protection**

A recent assessment released by the United Nations Office for the Coordination of Humanitarian Affairs (UNOCHA) mentioned that students and schools currently require more qualified teachers, textbooks, stationery, and furniture. Access to school is still limited particularly in Mai Ja Yang area where there is a lack of assistance for middle school and high school students. Results of matriculation exams from the Mai Ja Yang area are also not recognised, as it is the case for all of those living in the areas beyond Government control. This raises concern about future competence and ability to compete with other regions' candidate that may lead to insufficient access to stable jobs providing the necessary income to sustain their family.

In Nam Hkam IDP camps, education can be access through the town Basic Education High School. The fee is partially supported by local donors through an education fund, managed by the camp committees. The rest of the school fee is therefore the responsibility of the IDP community.

In term of protection, the absence of women and child protection programmes and the poor amenities of the camps are not in favour of creating a safe and private environment for women and concerns have been raised by the community in NGCA on the increase risk of human trafficking targeting women.

<sup>&</sup>lt;sup>1</sup> Myanmar: International Displacement Snapshot – Kachin and northern Shan States, September 2013

<sup>&</sup>lt;sup>2</sup> Inter-agency assessment mission to Laiza and Mai Ja Yang areas in Kachin State, UNOCHA, September 2013

#### 2.2 Shelter and Non-Food Items (NFI)

Conditions in camps are stable though quite precarious with crowded settlements without segregated spaces for girls and boys and in general little privacy. As it is often the case in longer term displacement, more space and rehabilitation/ construction of new shelters is necessary. New facilities such as cooking areas or washing area are required to cope with the population needs.

NFIs such as bet nets, cooking utensils and clothes were last distributed comprehensively in some camps of May Ja Yang during September 2013. However, the population still lacks some other basic commodities such as firewood for cooking, blankets and warm clothes for the coming winter. Firewood availability is reduced in the camps surroundings (deforestation has led to the cutting of young trees and bamboos which are now beginning to become scarce) In addition, IDPs do not want to be exposed to the risk of landmines and UXOs while collecting firewood in more remote areas.

SCI distributes warm clothes as NFI in Mai Ja Yang Area. Other actors such as Health Poverty Action (HPA), the Cooperative for Assistance and Relief Everywhere (CARE), the Danish Refugee Council (DRC), Karuna Myanmar Social Services (KMSS), the United Nation High Commissioner for Refugees (UNHCR) or the Kachin Baptist Convention (KBC) among others are also supporting shelter construction/rehabilitation and NFIs kits distribution.

#### 2.3 Water Sanitation and Hygiene (WASH)

In its December 2012 Humanitarian Bulletin UNOCHA highlighted the slow progress of WASH services in NGCA areas, and the fact that population movements caused by recent instability has further increased the need for WASH facilities including access to safe water and latrines. Hygiene and sanitation facilities in camps are often becoming overwhelmed by extended periods of use and need regular maintenance and/or replacement. In addition there is still an insufficient number of latrines in many camps, increasing potential risk for disease.

SCI's January 2013 WASH KAP Survey supported these findings and highlighted the need for awareness raising on hygiene with nearly half of the communities in surveyed camps having insufficient potable drinking water, only 66.7% using safe latrine, 23% practicing hand-washing after defecation and only 25% showering regularly.

September 2013 inter-agency assessment report from UNOCHA predicted water shortages in Mai Ja Yang area for the dry season due to the nature of some camps' water source (hand dug-wells) as well as sanitation maintenance. It also again raised concern on personal hygiene and the need for further awareness raising activities.

SCI/WPN is conducting regular community-based hygiene promotion sessions with the aim to mitigate the impact of inadequate WASH conditions on health and nutritional status. UN agencies such as WFP and UNICEF are supporting local relief organisations such as KMSS and KBC in the implementation of WASH activities. Other international organizations like CARE and local associations such as the Local Development Organisation (LDO) are also providing assistance. Support includes hygiene kits distribution, construction/rehabilitation of latrines, well rehabilitation, provision of water storage tank and facilities in addition to awareness raising activities.

#### 2.4 Health,

In last September 2013 inter-agency assessment, health was identified to be the biggest concern for IDPs in Mai Ja Yang area. Health staff present and running clinics in camps are from the Kachin Independence Organisation (KIO). Local NGOs such as WPN or HPA are supporting KIO staff by running health education session, detecting sick patients, referring emergency cases and supplying clinic with medicines on a monthly bases. HPA is also providing medicines in addition to immunization in camps, capacity building of KIO staffs and referral of high risk pregnancy. However, only basic services are available in these camp clinics that sometimes lack essential medicines and equipment. When necessary and if the family can afford it, care can be sought across the border in China in private clinics and hospital (Je Khaung, 45 minutes to 3 hours' drive depending on the camps' location).

In Nam Hkam area, IDPs have access to government health care system. The closest health facility is Nam Hkam Township hospital (30 min drive) followed by Muse Township hospital located 1h30 minute drive from the camps. Children and pregnant mothers can access immunization services in Nam Hkam Township Hospital, although no figures on immunization coverage are available. CARE Myanmar and KMSS are supporting health indirectly by covering emergency referral fees while KBC provides essential medicines in Jaw camp. Nurses from the Township hospital are also visiting the camps weekly to provide medical care.

#### 2.5 Food security and Livelihood (FSL)

Limited comprehensive information is available about FSL as there is no systematic data gathering and compilation. Regular missions however highlighted that employment opportunities seem scarce or insufficient to cover all needs. For some IDP families, access to their land appears limited or impossible due to insecurity or risk of being exposed to landmines. Therefore, there is a need for more information on income and expenditures as well as other FSL topics.

Given partial or total loss of income sources and assets, families have to rely almost exclusively on food assistance. KMSS is carrying monthly general food distribution (GFD) and blended food ration distribution from the World Food Programme (WFP) in Nam Hkam and May Ja Yang camps ensuring that minimum energy requirements are covered<sup>3</sup>. Unfortunately, the irregular access to NGCA sometimes disrupts distribution in Mai Ja Yang camps.

KMSS is also supporting the distribution of 6000 MMK/household/month to each IDP family to buy firewood, curry and other items they may need. This amount does not cover other expenses such as school fees, specific medical care, etc.

SCI supports WPN in the distribution of a top-up food ration in May Ja Yang camps, adapted according to the season and demand, and including items such as potato, garlic, dry fish, dry beef, chick pea (bean), chili and soy bean paste. Kitchen gardening activities are also supported by SCI in these camps with the aim of providing condiments, some vegetables and pulses.

Some small scale small scale income generating activities (IGA), of variable impact, are also present in some camps of Nam Hkam and May Ja Yang (Juice, Liquid soap, candy, traditional bag/hat, pig farming run by Oxfam and Shalom among others).

#### 2.6 Nutrition and IYCF

The nutritional situation is monitored by SCI and WPN through monthly MUAC screening carried out among children aged 6-59 months living in Nam Kham and May Ja Yang camps. Close monitoring of this age group is used for early detection of nutritional problems as they are among the most vulnerable and first hit by any nutritional crisis.

As there is no data available on acute malnutrition according to weight-for-height (wasting) or chronic malnutrition or stunting (height-for-age), this monitoring only provides a partial picture of the nutritional situation in SCI/WPN intervention areas. Last October 2013 MUAC screening still indicated that U5 acute malnutrition rates remain low and stable which is a positive sign. They were only 0.9% affected by moderate acute malnutrition (MAM) and 0.1% suffering from severe acute malnutrition (SAM)<sup>4</sup>.

Despite this low level of acute malnutrition and seemingly resilience of the IDP community, U5 nutrition remains a concern when considering families' current living conditions. Indeed, scarce access to food and increased risk of disease contraction given the crowed setting, the poor WASH conditions, low immunization coverage and limited access to health care jeopardize U5 nutritional status in the short and the long term. This is of a significant concern since there is no operational facilities providing acute malnutrition treatment and that could absorb an increase in cases.

In these conditions positive practices in Infant and Young Child Feeding (IYCF) are a key factor in preserving children nutritional status (especially U2) and help maintain a low GAM rate. The 2009-2010 MICS survey demonstrated poor IYCF practices nationwide<sup>5</sup>, highlighting the need for more work to improve breast feeding practices and complementary feeding, maximizing the use of the complementary food ration and improving children's dietary diversity and balancing.

SCI and WPN are the only actors in nutrition with ongoing regular activities. Since 2012, the main focus has been to target U2 children through IYCF programme for all camps in Nam Hkam and May Ja Yang area. Through these activities, the population benefits from education sessions targeting specific groups such as pregnant and lactating women (PLW), mothers/mother-in-law, men, older children SCI and WPN have also established a network of community based Peer-breastfeeding counsellors to support lactating women and help them avoid/overcome potential breastfeeding difficulties that may occur as well as promoting positive IYCF practices.

<sup>&</sup>lt;sup>3</sup> Standard ration 13.5kg fortified rice, 1.8kg pulse 0.5Kg fortified cooking palm oil, 0.15Kg salt per person/month and covering 2100 Kcal/day. PLW and 6-24 months children also receive 1.9Kg Rice Soy Blend with sugar and oil per month each.

<sup>&</sup>lt;sup>4</sup> MAM: 115mm≤MUAC<125mm and no bilateral pitting oedema, SAM: MUAC<115mm and/or bilateral pitting oedema

<sup>&</sup>lt;sup>5</sup> Myanmar Multiple Indicators Cluster Survey 2009-2010, Ministry of National Planning and Economic Development/Ministry of Health/UNICEF, October 2011

### 1. Objectives

#### 1.1 Main objective

To determine IYCF baseline indicator for children aged 0 to 23 months living in Nam Hkam and May Ja Yang IDP camps in northern Shan State and Kachin State, and collect additional information on nutrition, food security and livelihood.

#### **1.2 Specific objectives**

- To establish IYCF baseline indicators for children aged from 0 to 23 months;
- To obtain additional qualitative information on IYCF practices and beliefs;
- To assess caregivers' perception of current SCI/WPN nutrition interventions and their knowledge on IYCF;
- To collect information on food security and livelihoods;

Data collection took place from the 5<sup>th</sup> to the 15<sup>th</sup> of November 2013 in Nam Hkam 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.

### 2. Sample size and individual selection

#### 2.1 Sample size

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.

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.

Due to the current population movements, access to the field and volatile context among others, programs is not always running at its full potential and only a mild impact on the behaviour changes is to be expected. Discussions with partner and field team led to expected prevalence summarized in table 1 below. As a result, preliminary calculations required the number of U2 to be covered to be larger than the actual population (488 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 ("baseline")	Estimated prevalence, point 2 (end-line)
Timely initiation of breastfeeding (children 0-23 months)	30%	40%
Exclusive breastfeeding under 6 months	5%	10%
Timely complementary feeding	2%	5%
Introduction of solid, semi-solid or soft foods	50%	60%
Continued breastfeeding at 1 year	10%	20%
Minimum dietary diversity	50%	60%
Minimum meal frequency	80%	85%
Minimum acceptable diet	50%	60%
Consumption of iron-rich or iron-fortified foods	50%	70%
Bottle feeding	0.5%	0.5%

#### 2.2 Individual selection and field case scenario

All living children aged from 0 to 23 months old were part of the sample for this assessment. 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 neighbours 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. Training and supervision

A total of 10 people were trained during 3 days: 7 SCI staff including 3 from another emergency project and 3 from WPN (60% women, 40% men). Theoretical training covered assessment methodology, sampling options, questionnaires and interview technique. Theory was completed by several practical exercises (role play) that allowed correction and other adjustments. Due to security, time constraints as well as nature of the sampling (exhaustive) no field test was organized but the number of role plays were increased accordingly.

The KAP team dispatched in Nam Hkam and May Ja Yang was composed of five people overviewed by two field supervisors to check the quality of the interview as well as the completed questionnaires and one person to enter the data every evening. During data collection period teams were supervised by SCI at least once a day.

Data collected were entered every evening under Windows Microsoft Excel<sup>®</sup> and the updated database was sent to the consultant every second day for quality checking. A meeting was then held the next day to comment results on the and make readjustments when necessary.

### 4. Data analysis

The survey questionnaires are provided in annex of this report. Excel was used to perform data analysis and Chi<sup>2</sup> test conducted in order to explore statistical linkages between parameters (when relevant).

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

#### 4.1 Program targets and indicators

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

- early initiation (within one hour of birth) of exclusive 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.

Knowledge on these 4 aspects was assessed during this KAP survey. It is expected that by the end of the project at least <u>80% of the respondent participating to the program will know at least 3 of these IYCF principles.</u> Analysis will also look at knowledge among the whole surveyed population to ascertain to what extent the program has also impacted mothers not participating in the activities.

In relation to food security, this project aims to improve <u>IDPs households' diet dietary diversity</u>. Although this comprises many aspects that were not covered in this KAP survey, the origin of the food (food assistance or purchased with income from Cash grants) and food consumption score will provide a good indication of household's situation on the matter.

A household with a satisfactory FCS and most of the items coming from humanitarian assistance (for example, through kitchen gardening) will be considered as having improved their dietary diversity – with a contributable link to SCI/WPNs direct support.

#### 4.2 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)

This definition follows WHO 2001 recommendation<sup>6</sup>.

Children 0-5 months who received breast milk in the past 24 hours and did not receive any other foods or liquids in the past 24 hours

Total number of infant 0-5 months old

*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).

Number of infant 6-9 months who were breastfed in the past 24 hours and who also received at least one food in the past 24 hours

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.

Number of infant 6-8 months who received at least one food in the past 24 hours

Total number of infant 6-8 months

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

Number of children 12-15 months who received breastmilk in the past 24 hours

Total number of children 12-15 months

This report also considers an alternative indicator suggested by WHO: continued breastfeeding at 2 years of age (when children are 20-23 months)

<sup>&</sup>lt;sup>6</sup> WHO (2001): The optimal duration of exclusive breastfeeding. Report of an Expert Consultation.

*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.

Number of children 6-23 months who received food from 4 or more of the 7 food groups in the past 24 hours

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.

Number of children 6-23 months who received solid, semi-solid or soft foods the minimum number of times or more during the previous day

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.

Number of children 6-23 months who had at least the minimum dietary diversity and minimum meal frequency in the past 24 hours

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.

Number of children 6-23 months who received at least one iron-rich or iron-fortified food

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.

Number of children 6-23 months who were fed with a bottle during the previous 24 hours

Total number of children 6-23 months

#### 4.3 Food security and livelihood

The food security situation is usually assessed through a set of indicators<sup>7</sup>. This KAP only used the part of these standard indicator in order to ascertain a snapshot overview of the FSL situation in these IDP camps. Some questions were also modified to match the current context (emergency setting).

<sup>&</sup>lt;sup>7</sup> Recommended Minimum Package of Food Security Indicators, November 2012 update, Food Security Information Network (FSIN) Myanmar

The questionnaire covered the following aspects:

- Livelihood, main source of income and average income
- Source of food and contribution of food and cash assistance, expenditure on food and other commodities
- Debts
- Coping mechanisms (past and present)
- Household's 7 days recall Food Consumption Score (FCS) and main source of food

The FCS is calculated using below formula and table 2.

## FCS= (cereals and tubers freq.\*2) + (pulses freq.\*3) + (vegetables freq.\*1) + (fruits freq.\*1) + (Meats and fish freq.\*4) + (dairy products freq.\*4) + (fats and cooking oils freq.\*0.5) + (sugars freq.\*0.5)

#### Table 2 : Food Consumption Score calculation and thresholds

Food Groups	Weighting System	g System Recommended Thresholds <sup>8</sup>		
Cereals and tubers	2	Shan State	0.24 E Deer	
Pulses	3	Kachin State	0-24.5= Poor 24.6-38.5= Borderline	
Vegetables	1	Magway Division	>38.5= Adequate	
Fruits	1	Mayway Division	>30.5= Adequate	
Meats and fish	4		0.21 Deer	
Dairy products	4	Rakhine State	0-21= Poor 21.5-35= Borderline	
Fats and cooking oils	0.5	Chin State	>35= Adequate	
Sugars	0.5			

The coping strategy index (CSI) captures information on standard coping strategies as shown in the table below. The respondents are asked to inform on the frequency of use of each strategy, over a week (7 days recall). Similar to the FCS, a weight is also allocated to each strategy, as mentioned in table below, based on its severity and negative impact on HH food security. CSI are then obtained by multiplying the score to the frequency for each strategy and then adding all the "strategies' scores".

#### Table 3 : Coping Strategy Index calculation

	Coping strategies	Weight	Frequency on 7 days		
1	Eating rice porridge	3.0	F1		
2	Prioritize children and elderly for food	3.0	F2		
3	Reducing the number of daily meals	3.0	F3		
4	Reducing the rice portion size	2.0	F4		
5	Consuming only rice at meal times	2.0	F5		
6	Consuming less preferred staples	2.0	F6		
7 Changing curry ingredients / variety / rice quality 1.0 F7					
8	Begging for food	4.0	F8		
9	Borrowing food from neighbors / relatives	2.0	F9		
10	Eating rice seeds stocks	4.0	F10		
11	Eating immature crops	4.0	F11		
12	Eating wild plants or animals	3.0	F12		
13	Purchasing food on credit	2.0	F13		
14	Reducing health expenditures	1.0	F14		
15	Sending children / elderly away to eat	3.0	F15		
CSI=					
3*F1+3*F7+3*F3+7*F7+7*F5+7*F6+1*F7+/*F8+7*F0+/*F10+/*F11+3*F17+3*F13+1*F1/+3*F15					

#### 3\*F1+3\*F2+3\*F3+2\*F4+2\*F5+2\*F6+1\*F7+4\*F8+2\*F9+4\*F10+4\*F11+3\*F12+2\*F13+1\*F14+3\*F15

In line with recommendations, the FSIN has quantitatively assessed the relationship between the CSI and the FCS, in order to ensure that it is an effective proxy. The findings show a statistically significant negative correlation (significant at 0.01), meaning that the CSI score decreases as the FCS increases. In terms of the utilizing the CSI as a proxy of dietary diversity, the FSIN currently recommends that this indicator only be used to classify the dietary diversity of aggregate populations. There is currently no national classification and recommended cut-off for the full CSI.

<sup>&</sup>lt;sup>8</sup> Thresholds differ in certain parts of Myanmar due to differing cooking oil consumption patterns. Cooking oil is consumed almost every day in Shan, Kachin and Magway while it is consumed only 1-2 days per week in Rakhine and Chin States. Thresholds have not been defined for States and Divisions not mentioned above.

### **1. Sample characteristics**

The initial target number was higher than the actual number of eligible persons due to double registration, mistakes in counting children or updating camp data, the inclusion of children who were 24 months old or above as well as the fact that population movements had led to individuals leaving the survey area. Out of the 336 primary caregivers of children U2 eligible, only 3 were absent the day of the interview leading to a non-response rates of 0.9%. The sex ratio of 0.9 is within normal range<sup>9</sup>. Details between Nam Hkam and May Ja Yang can be found in table below.

#### Table 4: Sample non-response rate and sex ratio

	Eligible U2	Completed U2	Non-response rate	Sex ratio Boys/girls
Nam Hkam	37	37	0.0%	0.8
May Ja Yang	299	296	1.0%	0.9
Overall area	336	333	0.9%	0.9

### 2. Infant and Young child feeding situation

#### 2.1 IYCF indicators summary findings

# Table 5 : Summary findings on IYCF CARE indicators compared to expected baseline and endline results

Indicator	Estimated prevalence point 1	Target end-line prevalence	RESULTS POINT 1
Timely initiation of breastfeeding (0-23 months)	30%	40%	<b>60.7%</b>
Exclusive breastfeeding under 6 months	5%	10%	75.0%
Timely complementary feeding	2%	5%	<b>62.5</b> %
Introduction of solid, semi-solid or soft foods	50%	60%	59.5%
Continued breastfeeding at 1 year	10%	20%	90.4%
Minimum dietary diversity	50%	60%	58.7%
Minimum meal frequency	80%	85%	67.4%
Minimum acceptable diet	50%	60%	45.6%
Consumption of iron-rich or iron-fortified foods	50%	70%	61.9%
Bottle feeding	0.5%	0.5%	5.1%

#### 2.2 Breastfeeding practices

#### Initiation of breastfeeding and Exclusive breastfeeding

International recommendations are to start initiating breastfeeding within the first hour after child's birth to contribute to infant optimal nutrition and decrease neo-natal mortality by up to 22%.

## Table 6: Timely initiation of breastfeeding among children aged 0-23 months living in Nam Hkam (N=35) and May Ja Yang (N=298) camps

		Yes		No	
	N	n	%	n	%
Nam Hkam	35	21	60.0%	14	40.0%
May Ja Yang	298	181	60.7%	117	39.3%
Overall	333	202	60.7%	131	39.3%

<sup>&</sup>lt;sup>9</sup> Sex ratio normal range: [0.8-1.2]

The current practice is quite good with 60.7% of the initiation of breastfeeding happening within an hour after birth and no significant difference between areas (p>0.01). This result is already 20% above the project's target of 40% which therefore needs to be re-evaluated to further increase child survival.

Initiation of breastfeeding after birth – within 1 hour or not – was perceived mostly as good for the child (48.0%) or needed (6.3%). Reasons mentioned for delaying initiation were mother's sickness (1.8%), misconceptions around the colostrum regarded as bad milk (1.5%), caesarean (0.6%, 3 days delay). Advice or tradition when mentioned resulted in immediate initiation of breastfeeding (1.2%). However, 40.5% of the respondents did not provide specific information which limits the interpretation and triggers the need for more discussion on the topic.

The main decision maker on when to initiate breastfeeding was the mother in 58% of the cases although results showed that medical staff/nurses impact significantly on the practice (36%). They are facilitating the initiation of breastfeeding within an hour in 56% of the cases, 1 hour after birth in 24% of the cases and later than an hour in 27% of the cases, therefore promoting both positive practices as well as inadequate ones. Family and relatives, traditional birth attendants or nutrition volunteers do not seem to play a major role in the initiation of breastfeeding.

Table 7 : Exclusive breastfeeding rate among children aged 0-5 months living in Nam Hkam (N=9)
and May Ja Yang (N=71) camps

		Yes		No	
	Ν	n	%	n	%
Nam Hkam	9	4	44.4%	5	55.6%
May Ja Yang	71	56	78.9%	15	21.1%
Overall	80	60	75.0%	20	25.0%

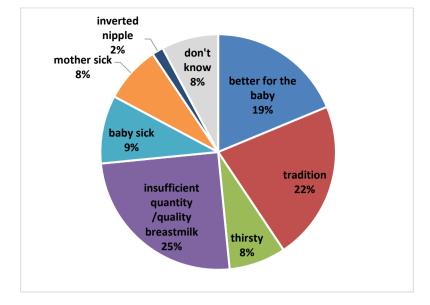
The exclusive breastfeeding (EBF) rate is far above the project's end-line target with 75% of children aged 0-5 months being exclusively breastfed instead of the expected 10%. Only a limited proportion of families introduced liquids shortly after birth (19%). This was mainly sugary water (9%), plain water (3%); animal milk (3%) and infant formula (3%). Results also indicate that the rate of EBF in May Ja Yang is significantly higher than in Nam Hkam ( $p<0.05^{10}$ ) and more information should be gathered to explain the reason for such difference.

Data collected through SCI/WPN's previous IYCF program already demonstrated that some mothers were in doubt about their ability to breastfeed or were not confident that they produced nutritious milk, sometimes believing in its toxicity. However, quantity and quality of breastmilk production is only truly affected in some extreme and rare cases resulting from severe stress whether it is psychological or physiological (for example malnutrition). In addition, thorough examination of mothers is rarely performed by a practitioner at field level to confirm or deny the existence of a problem in breastmilk production and the milk nutritional value is never analysed. Other factors such as traditions also play an important role in when and what other liquids and food in addition to breastmilk mothers bring into the infant's diet independently from personal believes (local drinks provided to follow customs, providing water perceived as beneficial etc.).

The main reasons for introducing liquids within the first 3 days of life can be found in figure 1. Findings suggest that 25% of surveyed mothers believe their breastmilk does not provide for the needs of their new-born. This perception is also often associated with the infant's cries (8% of responses in this KAP). Moreover, 19% of respondents also believe that introducing other liquids than breastmilk is better for the baby and 22% specifically mentioned their traditions as the trigger (recurrence of honey/sugary water). Mother or infant sickness also induces the use of other liquids than breastmilk in 17% of the cases. One case of inverted nipple was mentioned during the KAP survey (2%).

The main decision maker on the subject is the mother (36.8%) followed by nurse and medical persons (32.9%), the grand-mother or mother in-law (22.4%). On some occasions, the elders also intervene in the decision process (5.1%) as well as husbands (1.3%) or traditional birth attendants (1.3%).

<sup>&</sup>lt;sup>10</sup> p=0.0246, χ<sup>2</sup>=5.0



#### Figure 1 : Motivations around the introduction of liquids within 3 days of the infant's life

An overview of the diet of the surveyed children in the last 24 hours (see figure 2 below) presents trends in feeding practices. The large majority of children are exclusively breastfed at birth, liquids are introduced at 2-3 months of age followed by complementary food at 4-5 months of age.

Therefore, EBF rate falls quickly to 66% at 2-3 months, 50% at 4-5 months and only 21% at 6-7 months with more than 70% children provided with mixed feeding at that age (breastfeeding a child while also giving non-human milk and/or fluid or solid food). Some children are also maintained with a liquid based diet until 15 months which is probably impacting negatively on their nutritional status. More details on complementary feeding can be found below.

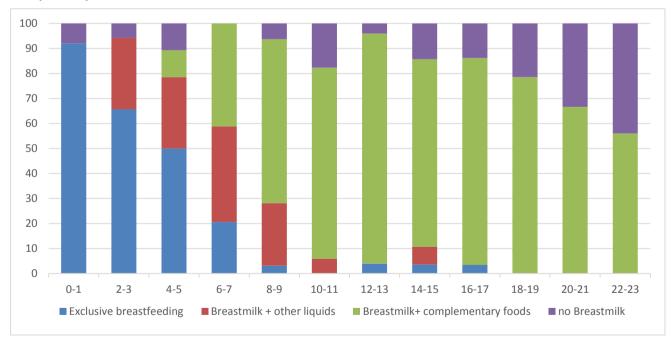


Figure 2: 24 hours recall diet summary of children aged 0 – 23 months living in the intervention area (N=353)

#### Continued breastfeeding

The survey findings show a very good rate of continued breastfeeding at one year with 90.4% of the children still being breastfed at 12-15 months which is also already far above the project's endline target (20%). When looking at continued breastfeeding at 20-23 months, this rate however drops to 61.8% indicating the need for more sensitization on the matter to ensure breastfeeding is extended until children reach at least 24 months. For both indicators, there was no significant difference between Nam Hkam and May Ja Yang (p>0.05).

Table 8 : Continued breastfeeding rate among children aged 12-15 months living in Nam Hkam (N=3) and May Ja Yang areas (N=49)

		Y	′es		No
	Ν	n	%	n	%
Nam Hkam	3	2	66.7%	1	33.3%
May Ja Yang	49	45	91.8%	4	8.2%
Overall	52	47	90.4%	5	9.6%

Table 9 : Continued Breastfeeding rate among children aged 20-23 months living in Nam Hkam (N=12) and May Ja Yang areas (N=43) – WHO indicator

		٢	′es		No
	N	n	%	n	%
Nam Hkam	12	8	66.7%	4	33.3%
May Ja Yang	43	26	60.5%	17	39.5%
Overall	55	34	61.8%	21	38.2%

#### Bottle feeding and impact on breastfeeding

The bottle feeding rate for children aged 0-23 months is higher than expected at 5.1% instead of 0.5%. No children under 6 months were bottle fed indicating mothers probably use a cup or a spoon when providing water or other fluids at that age. In general, the bottle feeding impact on breastfeeding is very limited but 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.

## Table 10 : Bottle feeding rate among children aged 0-23 months and living in Nam Hkam (N=37) and May Ja Yang (N=295) areas

		Y	′es		No
	Ν	n	%	n	%
Nam Hkam	37	0	0.0%	37	100.0%
May Ja Yang	295	17	5.8%	278	94.2%
Overall	332	17	5.1%	315	94.9%

#### 2.2 Complementary feeding

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

Complementary food is introduced between 6 and 9 months for 62.5% of the children living in the intervention area with a significant difference between May Ja Yang and Nam Kham (p>0.05<sup>11</sup>). The SCI/WPN nutrition team had initially expected a much lower rate (5%). Although present result is above expectation, nearly 38% of the children living in Nam Hkam and May Ja Yang camps to do not receive complementary food on time (6 months) which very probably affects their nutritional status. The proportion of children aged 6-8 months receiving solid, semi-solid or soft food in the past 24 hours was 59.5% for the overall area with no significant difference between Nam Hkam and May Ja Yang (p>0.05). This result almost achieves the 60% target for the project endline and target should be achieved with some additional sensitization on the topic.

## Table 11 : Percentage of children aged 6-9 months receiving complementary food living in Nam Hkam (N=6) and May Ja Yang (N=50) areas

		٢	(es		No
	Ν	n	%	n	%
Nam Hkam	6	1	16.7%	5	83.3%
May Ja Yang	50	34	68.0%	16	32.0%
Overall	56	35	62.5%	21	37.5%

## Table 12 : Percentage of children aged 6-8 months receiving solid, semi-sold or soft foods living in Nam Hkam (N=6) and May Ja Yang (N=36) areas

		٢	(es		Νο
	Ν	n	%	n	%
Nam Hkam	6	2	33.3%	4	66.7%
May Ja Yang	36	23	63.9%	13	36.1%
Overall	42	25	59.5%	17	40.5%

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

When looking at the quality of the complementary feeding diet, the results show that only 58.7% of children aged 6-23 months received food from enough food groups, which is under the 60% program target. In addition, the proportion of children reaching the minimum diet diversity is significantly higher in May Ja Yang than in Nam Hkam ( $p<0.01^{12}$ ).

Overall, the satisfactory meal frequency for children aged 6-23 months was under the expected target of 80%. Only 68.0% of children aged 6-23 months receive an adequate number of meals over the day. Furthermore, this minimum meal frequency is significantly higher in May Ja Yang camps compared to Nam Hkam camps (p<0.01<sup>13</sup>).

Taking into account both diet diversity and meal frequency, only 46% of children aged 6-23 months had a minimum acceptable diet, which is under the 60% target and with a significant difference between both areas (p<0.001<sup>14</sup>).

## Table 13 : Percentage of children aged 6-23 months with a minimum diet diversity living in Nam Hkam (N=28) and May Ja Yang (N=224) areas

		Y	'es		No
	N	n	%	n	%
Nam Hkam	28	10	35.7%	18	64.3%
May Ja Yang	224	138	61.6%	86	38.4%
Overall	252	148	58.7%	104	41.3%

## Table 14 : Percentage of children aged 6-23 months with a minimum meal frequency living in Nam Hkam (N=28) and May Ja Yang (N=224) areas

		Y	′es		No
	Ν	n	%	n	%
Nam Hkam	28	12	42.9%	16	57.1%
May Ja Yang	222	158	71.2%	64	28.8%
Overall	250	170	68.0%	80	32.0%

## Table 15 : Percentage of children aged 6-23 months with a minimum acceptable diet living in Nam Hkam (N=28) and May Ja Yang (N=222) areas

		Y	′es		No
	N	n	%	n	%
Nam Hkam	28	4	14.3%	24	85.7%
May Ja Yang	222	111	50.0%	111	50.0%
Overall	250	115	46.0%	135	54.0%

Figure 3 and 4 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' is are the most important due to rice being the staple food in the area. The three other main food groups are vitamin

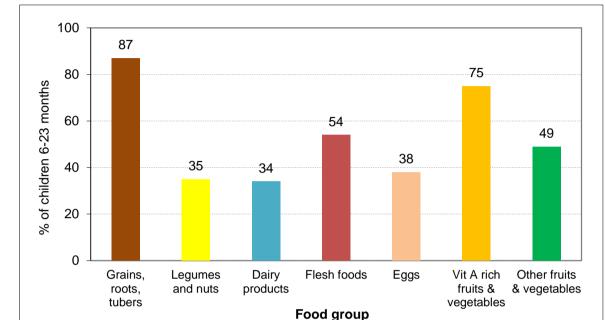
<sup>&</sup>lt;sup>12</sup> p=0.0087, χ<sup>2</sup>=6.9

<sup>&</sup>lt;sup>13</sup> p=0.0025, χ<sup>2</sup>=9.2

<sup>&</sup>lt;sup>14</sup> p=0.0004,  $\chi^2$ =12.8

A rich fruits and vegetables, consumed by 75% of the children in the past 24 hours, flesh food (54%) and other fruits and vegetable (49%).

In addition, 59% of the children consumed food coming from 4 or more groups which is a positive sign and a promising start but a higher proportion of individuals consuming 4 groups or more would be needed to measure 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.



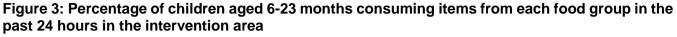
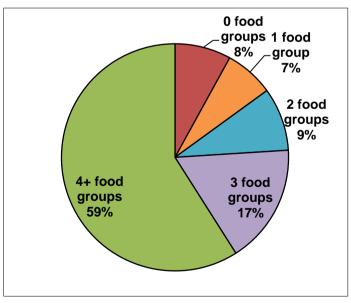


Figure 4: Number of food group consumed by children under 24 months living in the intervention area.



#### Consumption of iron rich fortified food

A total of 61.9% of children aged 6-23 months, with no significant difference between areas (p>0.05), were reported to be fed with iron rich food or fortified food in the past 24 hours. Iron seems to be provided mainly by flesh food (with 54% of children consuming flesh food in the past 24 hours). This result is still under the 70% target objective for this programme but above the expected initial result of 50%.

# Table 16 : Consumption of iron rich fortified food by children aged 6-23 months in the past 24 hours, Nam Hkam and May Ja Yang IDP camps

		Y	′es		No
	N	n	%	n	%
Nam Hkam	28	13	46.4%	15	53.6%
May Ja Yang	224	143	63.8%	81	36.2%
Overall	252	156	61.9%	96	38.1%

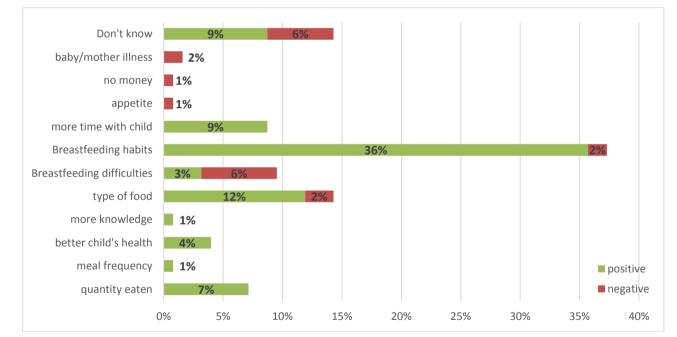
### 3. Nutrition program impact on population and coverage

#### 3.1 Impact of the conflict on IYCF practices

When questioned about the conflict and if it had impacted the way they were feeding their children, 48% of respondent declared there has been a change. No change was noticed for 41% and 11% did not know.

For those who noticed a change (48%, n=157), 65% found the change to be a positive one against 15% who described the change as negative and 20% who did not know. The figure below details the type of change mentioned by the caregiver (whether it was negative or positive). Improved breastfeeding habits is the main positive change noticed by the mothers and is most probably partly the result of the nutrition counselling program. Other positive impacts mentioned are the improvement in the type of food and quantity eaten (impact of food ration) as well as more time available and dedicated to the child (no field work, loss of job).

However, some of the mothers also mentioned an increase of breastfeeding difficulties with an impact on the breastfeeding habits as well as poorer diet diversity and in some cases illness, lack of appetite and shortage of money. More details are presented in figure 5 below.



# Figure 5 : Positive and negative changes in IYCF practices noticed by mothers and resulting from the conflict

#### 3.2 Participation in nutrition education sessions and impact

Among the 332 persons interviewed, 86% participated to nutrition education sessions held by SCI or WPN. In addition, 88% of the mothers reported that their participation to nutrition education and counselling had an impact in the way they were feeding their child. Indeed, 55% of the respondents thought they had a better knowledge on complementary feeding and/or had improved their children's meal content. Finally, 22% also declared that they gave colostrum to their next child and 11% that they extended exclusive breastfeeding (in some case moving back to EBF).

With regards to the impact on the mothers, they also reported a change in their diet (9%), their workload at home (10%) or both (49%). Knowledge acquired during nutrition sessions was the main factor cited

as impacting 86% of changes on both diet and workload, 76% on diet only and 20% on workload only. Some mothers mentioned that a change was made on their workload 'only' because they could not afford to change their diet despite wanting to. For the 24%, who clearly stated that they did not change anything in relation to their diet or workload, the main reason expressed was that they could not afford it. More detail can be found in figures below.

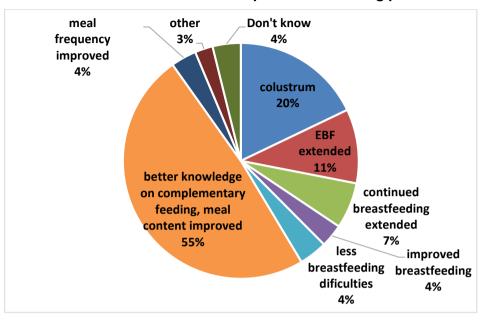
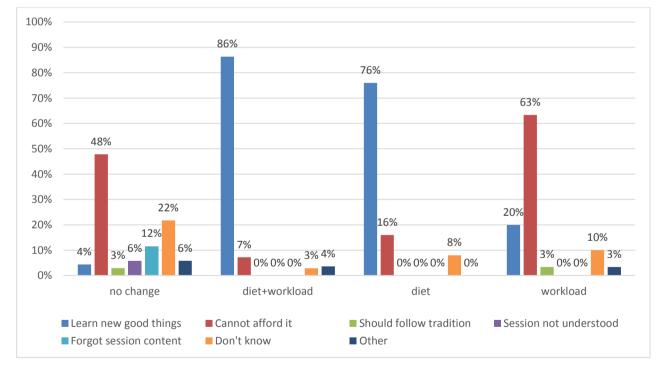


Figure 6: Reported nutrition education session impact on U2 feeding practices

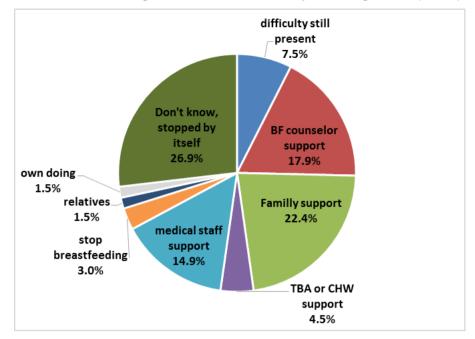




#### 3.3 Breastfeeding difficulties and support

Breastfeeding difficulties are not so common with only 20% (n=67 out of 332) of the mothers in this assessment having experienced them. For most of the mothers (see figure 8), the problem disappeared by itself but results show that close family support as well as BF counsellor and medical staff support (midwife, doctor, nurse) helped to overcome the difficulties.. Only in 3% of the cases did the difficulty result in the interruption of breastfeeding.

Figure 8 : Type of help provided to overcome breastfeeding difficulties encountered by mothers of children aged 0-23 months living in Nam Hkam and May Ja Yang areas (N=67).



#### 3.4 Knowledge of the target mothers on IYCF principles

Ideally, all infants and young children should be fed following optimal IYCF practices:

- 1) Initiation of breastfeeding within 1 hour of birth;
- 2) Exclusive breastfeeding for six completed months (180 days);
- 3) Introduction of adequate and safe complementary foods from 6 months of age;
- 4) Continued breastfeeding for two years and more.

Experience showed that many children in the world are not fed that way, leading to under-nutrition, morbidity and sometimes death. It is also not uncommon to see these optimal infant feeding practices further undermined during emergencies by factors such as donations of breastmilk substitutes (BMS) or misconceptions surrounding the ability of mothers to breastfeed their child, contributing in infant morbidity and mortality increases.

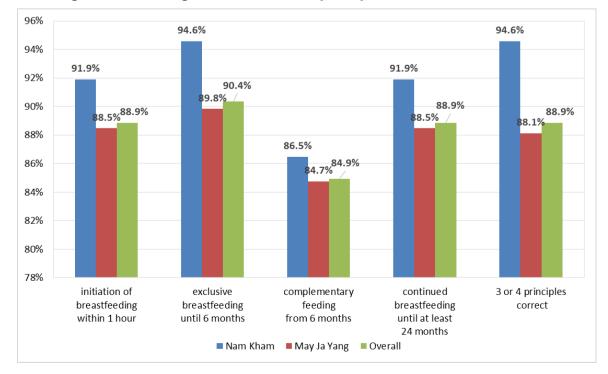


Figure 9: Caregivers' knowledge on the four IYCF principles in SCI/WPN intervention area.

Current SCI/WPN nutrition program aimed at raising caregivers' knowledge (often mother) to promote and preserve positive IYCF practices for U2. Knowledge on the above mentioned 4 IYCF principles has been assessed to ensure that the community possesses the minimum required knowledge before proceeding further into sensitization and working on greater behaviour changes.

This assessment indicates that mothers of children U2 seem to know these 4 IYCF principles quite well with almost 90% of the respondents mentioning at least 3 or them correctly. This result is already above the project's goal of 80%. However, complementary feeding is the least known of the 4 principles (84.9% correct answer).

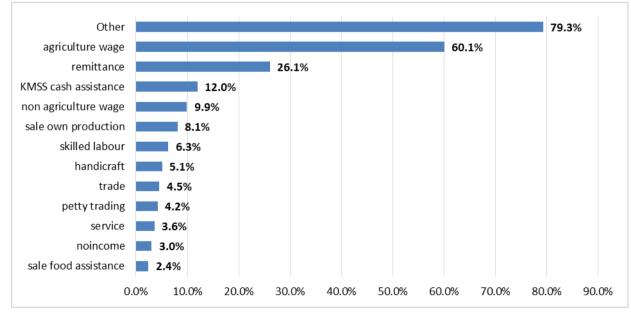
This highlights the need for additional sensitization in May Ja Yang area with a particular focus on complementary feeding. It has to be noted that this lower knowledge on complementary feeding probably impacts on the minimum diet diversity, meal frequency and minimum acceptable diet rates. More information should also be collected on reason why caregivers do not apply the knowledge.

### 4. Food security and livelihood

#### 4.1 Livelihood, level of income and debts

A total of 333 households participated in the food security component, these were the same households as the IYCF component with children U2. The main livelihoods for these families was unspecified (79.3%) which provides an inconclusive overview. Following discussion with SCI/WPN field team and based on contextual knowledge it is thought likely that this source is KMSS cash assistance which covers all IDP families in the intervention area. The questionnaire included a specific source for cash assistance and this type of support from KMSS was specifically mentioned as main source of income by 12% of the HHs. The lack of conclusive data may be related to disparities in understanding and differentiations made by the team regarding the specific categories provided. This has been taken as a key learning from this assessment.

Agriculture wage was the second main livelihood source (60.1%) followed by remittance (26.1%). Jobs linked to the harvest of bamboo shoots, sugar cane, lemongrass or tobacco are available from October until end of April generating movement outside of the camp. SCI and partner staff observe that often one or both parents can be absent during the day or spend up to several months in the fields, leaving the children behind in many cases (field reports include mothers who stop breastfeeding infants and older children at that time period and go to the field). Based on the figure below, with agricultural wage as the main income source, this could affect up to 60% of HHs. Other sources of income were reported but were cited by less than 10% of the families interviewed. More details are presented in figure 10 below.



#### Figure 10 : Source of income in IDP families (N=333)

Most of the IDP families have a quite low income. 75.7% earn less than 50,000 Myanmar Kyat (MMK) on average per month and 9.5% earn between 50,000-75,000 MMK. Only marginally less than 10% reported more than 75,000 MMK per month as an average income (figure 11).

Despite the low level of income most of the HHs did not indicate any level of debt (62.6%). Of this 62.6%, 86% reported that they did not need a loan and 14% did not have one because they did not have access to it. Of the indebted HHs (37.4%) most reported a higher debt compared to the previous year (66%), 11% had the same debt and 22% had less to reimburse. The indebtedness amount is variable between HHs; although many HHs have an income of less than 50,000 MMK per month, only 13% of respondents reported a debt over 100,000 MMK, which is a positive sign. More details on HH debts are presented in figure 12.

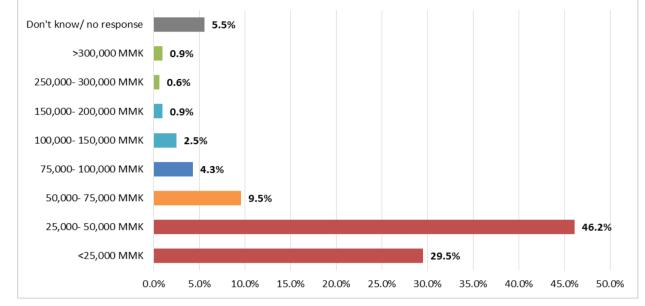
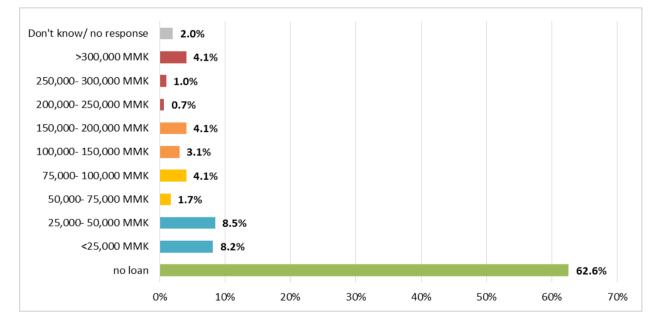


Figure 11: IDPs household average monthly income (N=325)





#### 4.2 Food assistance coverage and expenditure

Most relief distribution operations are focussing on covering basic needs mostly limited to limited food items and some NFIs to ensure the survival of IDPs households. Only a limited number of actors with variable scales of interventions are supporting families on other level such as education, livelihoods and complementary fresh food basket. Complementary fresh food is sometimes perceived as a secondary requirement by international organizations, particularly in emergency settings and when the GFD ration distributed is fortified (WFP) and expected to cover the population needs in micronutrients. Therefore HH perception of needs coverage is variable according to the commodity/service.

As expected, with the distribution of WFP or KMSS food rations, respondent HHs cited that their food needs in terms of rice, pulses and oil were covered at 100%, 94% and 96% respectively. SCI/WPN and

other source such as KMSS, KBC seem to cover 82% of the HH needs in terms of proteins and 48% of other type of food items (curry etc.).

Other food items such as fruits, vegetable and other cereals/staples than rice are not or almost not covered by the GFD and complementary rations and are thus purchased on the market. Respectively 71% and 97% of the families buy fruits and vegetables but only 30% of the households complement the ration with other cereals and staples. This indicates that almost 70% of HHs are not able to meet their 'other cereal/staples' needs, (according to respondent perception triangulated against the quantity needed/purchased for a healthy diet).

Despite the needs in drinking water and firewood/cooking fuel not being covered by relief assistance, HH did not cite that they purchased water/wood to cover the gap. This suggests they may collect/get these items from surrounding natural resources, increasing the risk of diseases and the problem of deforestation, which could also impact surrounding communities' livelihoods. In addition 47% of HHs indicated that they use part of their income to buy betel nut, cigarettes or alcohol (up to 48,000 MMK per month) with 31% of HHs using money from cash assistance. The overall results seem to indicate that the majority of HH food/commodity purchases seem to utilize cash assistance. The breakdown in figure 14 should be interpreted with caution as it is not clear if the respondents made a proper distinction between cash from assistance and cash from livelihoods during the interviews. Families may also not be providing accurate data as they may fear their ration will be cut.

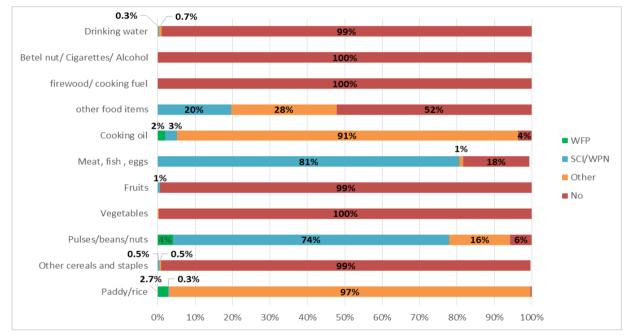
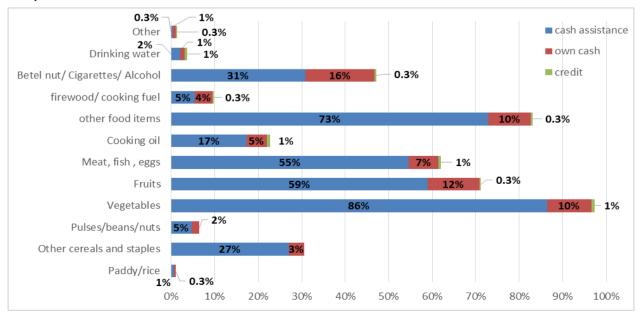




Figure 14: Proportion of households purchasing food and other commodities in the last 30 days (N=295)



When looking at the HH's other expenditures in the last 6 months, the findings suggest that education, celebrations, transportation, health and debt repayments are the main expenditure in the IDP community.

Education, health of U5, celebration and transportation cost represent a large or very large portion of the household expenditure with the average monthly expenditure of approximately 10,000 MMK for education and U5 health and 15,000 MMK for celebrations and transportation. A third of the IDP families seem to have debt payment commitments, reaching up to 62,000MMK/month according to respondents. The survey team found some degree of lack of clarity on the amount of indebtedness from respondents Half of the HH also reported expenditure on health for children above 5 years and adults, with such expenditures representing the third highest.

If only few families use access to credit to cover HH expenditures, debt repayment seems to be the main reason for HHs to contract additional loans meaning that certain vulnerable HHs are sinking deeper into debt. Education is also the second main expenditure to be covered on credit by families. More detailed information can be found in table below.

		milies payin ASH/CREDI	<u> </u>		nonthly amou paid by HH CASH or on C	
	CASH	CREDIT	TOTAL	CASH	CREDIT	TOTAL
Education	66%	10%	76%	6872	3894	10766
Health adult and >5 years	39%	7%	46%	13519	20727	34246
health <5 years	40%	4%	44%	5124	4573	9696
transportation	40%	5%	45%	7783	7200	14983
debt payment	15%	18%	33%	34318	27717	62035
Sending remittances	13%	1%	14%	5771	7750	13521
house construction/maintenance, charges	31%	0%	31%	2247	0	2247
Shop/ trade/ commerce	3%	0.3%	3.3%	30483	4167	34650
Farming, livestock/fish breeding	18%	0%	18%	5171	0	5171
Celebrations/ social events	68%	2%	70%	4472	11733	16206

Table 17 : Household's expenditure on non-food items in the last 6 months (N=295)
---

Overall, 33% (n=108 out of 333) of the household seem to spend more than what they earn (cash and credit counted). However, more information needs to be gathered on income, income sources and spending to better determined the proportion of families sinking deeper into poverty.

#### 4.3 Coping mechanism

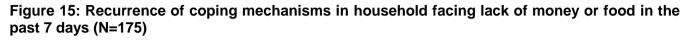
The findings presented in the previous sections suggest that 1) not all HH food needs are covered; 2) other types of expenditure weigh heavily on the family budget, considering the level of income; 3) in some cases expenditures are exceeding income, leading to increased HH debt compared to last year.

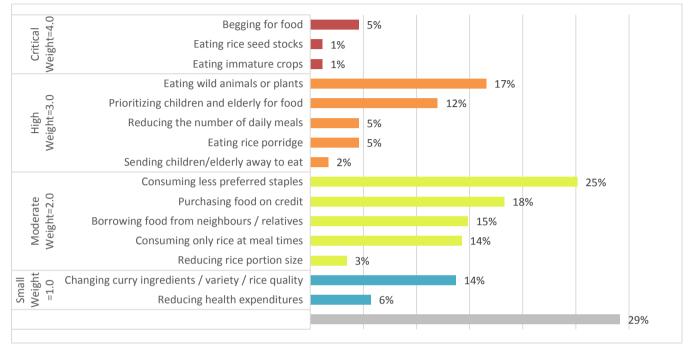
When looking at coping mechanisms, not surprisingly, 53% (n=175) of the surveyed HHs declared they hadn't enough food or money in the past 7 days. However, the results indicate that only a very few percentage of HHs are currently practicing the negative coping mechanisms usually observed in critical situations (i.e. coping mechanism weighting = 4.0 and categorised as red in figure 15). Coping mechanisms including consuming less preferred staples, purchasing food on credit, consuming wild animals or plants and borrowing from neighbours were the most practiced strategies adopted by HHs when faced with lack of money or food. More information should be gathered on others types of coping mechanisms not listed in this survey as 29% of the HH reported find 'other' ways to cope with the lack of money or food than the most common ones in Myanmar (listed by FSIN).

The coping strategy index (CSI) for all HHs ranges from 0 to 62, with an average for the overall area of 3.75. This is quite low but with noticeable difference between Nam Hkam and May Ja Yang (CSI respectively 2.84 and 3.86). The distribution of the sample shows that the 90.9% of the households were in the first quintile indicating a good to moderate food insecurity against 0.3% in the lower quintile indicative of very high food insecurity. However, since 20% of the household interviewed used more than

the daily usage of coping mechanisms (CSI>7) this situation should be closely monitored particularly during rainy season where food items are more limited and/or at times where work is scarce.

Regarding which coping mechanism were adopted prior to the conflict, the eating of wild animals and plants appeared to be the most commonly used (43%), followed by families eating rice stock and borrowing from neighbours (28% each) and purchasing food on credit (19%). Overall, there seems to be no new coping mechanism but some are more or less extensively practiced due to context and feasibility (eating rice stock).





#### 4.4 Household food consumption score

A food consumption score (FCS) was calculated for each family with children U2 and was based on a 7 day recall diet. The frequency of consumption and main origin of the food was also assessed.

The HHs demonstrate a very low proportion (3.1%) as having a borderline FCS in May Ja yang area and quite low (10%) in Nam Hkam area. Overall 96.1% of the household had an adequate FSC for the past 7 days.

The sample also demonstrated that FCS is not only linked to income and the capacity to buy food but also depends on behavior and cultural habits, since families with income above 50,000 MMK have a similar or lower FCS than other earning less than 50,000 MMK per month and facing more difficulty to diversify their diet (figure 16).

			oor 4.5)		lerline 5-38.5)		quate 38.5)
Townships	N	n	%	n	%	n	%
Nam Hkam	38	0	0%	4	10.5%	34	89.5%
May Ja Yang	295	0	0%	9	3.1%	286	96.9%
Overall area	333	0	0%	13	3.9%	320	96.1%

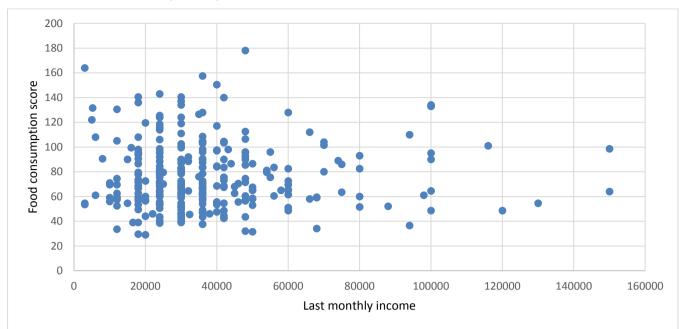


Figure 16 : Distribution of the FCS according to last monthly income in households having earned less than 150,000MMK (N=301)

When looking at the type of food consumed, results indicated that not surprisingly rice is consumed by all families. Vegetables and Potatoes/tubers are present in the diet of more than 90% of the household, pulses, eggs seafood/fish and oil in more than 70% of the HH. On the other hand, other types of food such as maize, protein like beef and mutton or milk and dairy are consumed by less than 20% of the households.

Results also showed that cereals and tubers, oil, fruits and vegetable quantities do not fluctuate much even when the family can afford to buy more and FCS increases. HH rather buy a bit more flesh food and eggs and more pulses, milk and dairy product.

As expected, the main origin of food for households is the relief assistance (total of 52.7% with 22.9% WFP, 29.8% other such as KMSS/SCI/WPN), followed by purchase as second source (41.2%). More details are presented in figure 17, 18 and 19.

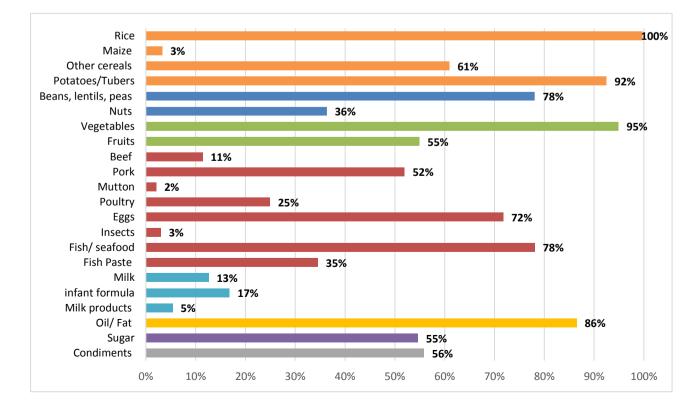


Figure 17 : Consumption of food group in the past 6 days by household (N=333)

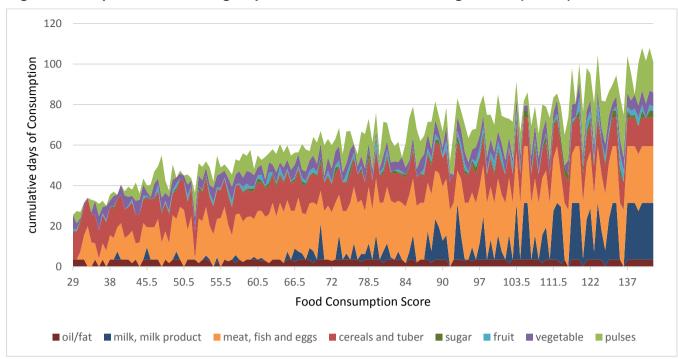
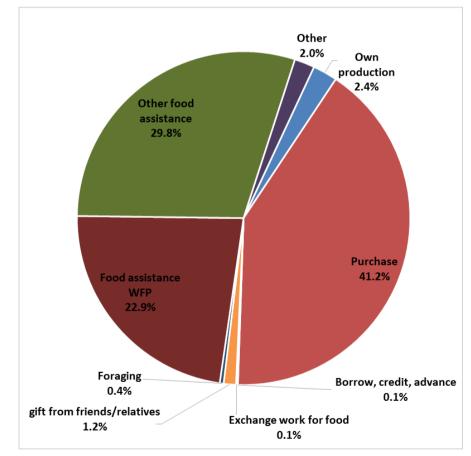


Figure 18 : Importance of food group in household diet according to FCS (N=333)

Figure 19 : Main origin of household's food (N=333)



# Insufficient understanding on IYCF practices in the IDP community highlights the need for more team capacity building

In general, the difference between the expected results and actual findings suggest that the nutrition team and in some circumstances the nutrition volunteers (breastfeeding counsellors) do not have a sufficient understanding of the situation in term of IYCF practices despite more than one year of programming in nutrition. This might partly be due to the fact the personnel are quite new in the position with no or little experience in nutrition and IYCF (as a result of very high turnover). Nevertheless, more understanding of the community and purpose of IYCF-E programming should be acquired by the team in the coming months in order to enable a critical analysis of the current intervention and adequately readjust the approach for the next project cycle.

**Recommendations:** 

- To organize a workshop on IYCF programming in emergency context and enable the nutrition team to have an in-depth critical analysis on the quality and adequacy of current program as well as gap identification to increase positive community impact.
- To continue and reinforce SCI and WPN staff capacity building for improved IYCF/nutrition knowledge, analytical skill and decision making/program management. Regular evaluation and workshop on the work implemented should be maintained.

## Average overall IYCF practices with clear struggle to pursue breastfeeding until two years and ensure adequate complementary feeding

Average IYCF practices are noticed in the area with a particularly low breastfeeding rate at two years and an acceptable minimum diet, due to a combination of an average diet diversity and quite poor meal frequency. This comes on top of an inadequate timing in the introduction of complementary food, mostly introduced too late in the child's diet.

Indeed, despite messaging some children are shifted late to a semi-solid, soft food and some food groups are less present than other. The number of meals is clearly insufficient but more information should be collected on the reason for such limitation in terms of quantity and diversity. Although financial constraints are likely to play a part, beliefs, lack of knowledge among others might also impact heavily on the decision process. A more detailed study of the U2 diet should be performed taking into account seasonality in order to adjust the current intervention and better design/complement future projects.

The average rate of consumption of iron fortified food, exclusive breastfeeding and initiation of breastfeeding should be improved particularly considering the context. Sensitization on breastfeeding practices targeting main decision makers (mothers, medical staff and grand-parents) would increase current rates as well as further supplementation in proteins and iron rich/fortified food among others.

Bottle feeding is above expected endline target and should be monitored. Cases of children bottle fed or fed with infant formula should be investigated to prevent harmful consequences on the child's nutritional status. Strong sensitization should be carried out to promote breastfeeding particularly in cases of unnecessary bottle feeding and even for mother who delivered by caesarean. This will require the involvement of all actors, particularly medical practitioner and relevant authorities.

Some significant differences were noticed on exclusive breastfeeding, minimum diet diversity, meal frequency and acceptable diet between the two areas. Indeed, higher prevalence of positive practices for all these indicators are observed in May Ja Yang camps, in NGCA compared to Nam Hkam 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.

#### Recommendations:

• To identify potential gaps in food availability, look at the complementary ration sustainability/efficiency and study the question of supplementation – seasonal or not – to tackle micronutrients deficiencies likely to exist in the community. A sustainable approach should be considered for this context.

- To understand the reason behind the insufficient number of meals in the U2 diet and adjust the response accordingly (more sensitization, complementary meals).
- To better define reasons/causes for current IYCF practices to gain a better understanding of differences observed between Nam Hkam and May Ja Yang areas and adapt the response appropriately.
- To evaluate and monitor the condition of infant formula use and bottle feeding and increase sensitization on safe use of breastmilk substitutes in education sessions

## Good acceptance and impact of the nutrition education although more effort and time should be allocated to improve knowledge retention and behaviour change

Nutrition education appears to be welcomed by the community and, according to the KAP survey results, proves to initiate positive changes in IYCF practices. However, reports from mothers and caregivers suggest that the content might sometime be too complex or academic and that not enough time is dedicated to topics such as complementary feeding. Lack of practical exercises or their lack of suitability for the context probably prevents mothers from fully integrating their knowledge and improving U2 feeding practices. In addition, less than 20% of the mothers experiencing breastfeeding difficulties overcame the situation with the support of SCI/WPN breastfeeding counsellors which raises questions about their involvement, efficiency and relevance of such network in the community.

Nutrition programme should continue to target mothers/caregivers and grand-parents but also include medical staff and nurses since they seem to be among main decision makers on initiation of breastfeeding, exclusive breastfeeding

Nutrition education also helped families to cope with the side effects of the conflict. An impact on feeding practices is noticed by half of the families although surprisingly this change is mostly perceived as positive (65%). On top of improved breastfeeding practices achieved thanks to the support groups and counselling, there is likely to be an effect of the humanitarian assistance particularly the GFD. The GFD indeed ensures a more stable minimum quantity of food throughout all year, which might be a significant improvement, particularly for families originating from a poor socio-economic environment, often highly food insecure.

#### Recommendations:

- To review the timeline, tools and practical exercises of the nutrition education. It is vital that the staff animating the session fully master the package and behaviour change in community techniques (interactive session)
- To refocus the nutrition education sessions and include medical staff and grand-parents as well as mothers/primary caregivers
- To increase the involvement of the mothers in the cooking demonstrations and make them participate in the design of recipes. This would allow mothers to use the knowledge acquired during education sessions (on topics such as balanced meals and diet over time, diversification of food groups and within each group). This would also provide an opportunity for SCI/WPN staff to create more sustainable recipes, adapted to the culture, context and seasonality as well as those that are financially accessible. This would complement those designed to maximize the use and benefit of the GFD and RSB rations, when available.
- To integrate sessions addressing the socio-economic issues faced by mothers/caregivers and work on potential way of mitigating their negative impact on U2 nutritional status. Identification of blockages preventing positive changes in U2 feeding despite the nutrition education should be carried out.
- To increase the acceptance and involvement of SCI/WPN peer breastfeeding counsellors for improved detection and support of breastfeeding difficulties. An in-depth work on counselling skills should be done completed with regular evaluations of their achievements.

## Coordination of nutrition IYCF intervention with food security and livelihood interventions to effectively tackle obstacles to positive change in feeding practices

No IYCF baseline assessment was conducted when the first IDP arrived in the area. Therefore it is not possible to determine how much the practices improved. If knowledge acquired through nutrition session has proven to initiate changes in many cases, not all families are actually changing the way they feed their child despite their new awareness.

The financial aspect and burden of some IYCF changes on the family seems to be a major factor limiting behaviour change. This particularly since most of the households interviewed reported to earn less than 50,000 MMK on average per month and that education, health among other costs are weighing heavily on the family budget. However more detailed information should be collected on the type of income and the seasonality (fluctuation of income over 12 months).

Although 96.1% of the households had an adequate FCS, this does not necessarily impact on the child's diet per se as he/she may have eaten from a different plate, eaten specific elements from that plate and/or in insufficient quantity. In addition, even though an average consumption of pulses and meat product is reported by the caretaker a low consumption of milk and dairy product is observed in both HH and U2, when looking more in detail into the FCS and the U2 diet's recall. More information should be collected to determine how finance, knowledge, time and personal choice are impacting on the U2 diet (over a longer period than 24 hours) and the importance of each in the decision process. Including a detailed study of U2 diet could also help identified specific deficiencies present in that population and determine an adequate strategy for complementary feeding taking into account local context and cost of such diet.

Mothers from families with low income cannot always afford to stay home. On one hand, working mothers may struggle more to follow IYCF principles on breastfeeding, non-working mothers on the other hand may be more likely lack the income to buy fresh food and diversify the U2 diet appropriately. Since both case scenarios are present in the area, any intervention to increase the income of the family should be carefully designed and coordinated with partners in order to promote and protect IYCF practices. This requires an in-depth analysis of the socio-economic context and concentration with the IDP community to prevent harmful consequences on children nutritional status.

Recommendations:

- To carry out a more extensive assessment on food security and livelihoods to better understand the impact on household capacity to diversify their diet and identify the main determinants limiting the impact of the current nutrition programme. Such a survey should cover topics such as expenditure, prioritization of a certain type of expenditure, availability of foods on the market and cost/feasibility of a balance diet throughout the year.
- To coordinate IYCF programming with other Food Security and Livelihood interventions to tackle the financial limitation most vulnerable families are facing to diversify household and U2 diets. Cash based activities or income generating activities could be considered but, if considered, should be carefully designed to preserve/promoted positive IYCF practices and particularly tackle the issue of continued breastfeeding at 2 years and complementary feeding.
- To monitor reassess the IYCF situation through another KAP survey in 6 to 12 months.

### ANNEXES

Annexe 1: Questionnaire - English version

#### Feeding QUESTIONNAIRE Children 0-23 months

Camp \_\_\_\_\_ Interviewer ID \_\_\_\_\_ Result \_\_\_\_\_ (1=complete; 2= partially complete; 3=refused to take the survey)

Date of Interview \_\_\_\_\_ Unique Serial number \_\_\_\_\_ Household Number \_\_\_\_ Child Number \_\_\_\_\_ Child Number \_\_\_\_\_ Interview \_\_\_\_\_ Assessing IYCF behaviors, assign unique numbers to each household and child.

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  $2^{nd}$  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 a FULL questionnaire 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	tion you provide. Do you agree to p	articipate in this survey?									
Wait for the oral consent of the person and then start the questionnaire.											
	AGREED ?	YES	NO								

#### **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 the entire interview for the 2<sup>nd</sup> child, substituting the correct NAME for this child.

1.	Date of birth of child [There are various sources for documenting date of birth of child including identification cards, health or immunization cards, birth certificates and baptismal certificates. Copy date of birth from one of these sources, if available. If there is no document showing the child's DOB, ask the mother if she knows the child's DOB. Record her response. 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.	D	// D MM YY		
		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 2 8	Card $\rightarrow$ Caregiver	Go to 4 Go to 3 Go to 3	
3.	How many months old is [NAME]? 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.	Sex of child	1 2	Boy Girl		

#### **SECTION 2: FEEDING HISTORY**

#	Question	Code		Action
		Circle n	umbers not responses	
5.	Sometimes babies are fed breastmilk in different ways; for example, the baby may be breastfeed by his/her mother or given breastmilk by spoon, cup or bottle. Giving breastmilk from a spoon, cup or bottle may happen when the mother cannot always be with her baby. Sometimes babies are breastfed by another woman, or given breastmilk from another woman by spoon, cup or bottle or some other way. This can happen if a mother cannot breastfeed her own baby.	1 0 8	Yes No DK	Go to 6 Go to 7 Go to 7

	Has [NAME] ever consumed breastmilk in any of these ways?			
6.	How long after birth did you first put [NAME] to the breast?	$\rightarrow$	Immediately	
	If respondent reports she put the infant to the breast immediately after			
	birth, circle IMMEDIATELY.		OR	
	If less than 1 hour, write '00' for hours. If 1-24 hours, record number of	$\rightarrow$	Hours	
	completed hours from 1 to 23.			
			OR	
	Otherwise, record number of completed days.	$\rightarrow$	Days   _	
	If the respondent doesn't know, circle 'Don't know.'	99	Don't know	Go to (7)
5b	What was the main reason to put [NAME] to the breast after that	1	Early initiation of breastfeeding is good for my baby	
	time?	2	Colostrum is bad for my baby	
		3	My baby had to drink something else before he can	
			receive breast milk	
		4	I was sick and could not breastfeed my baby	
		5	Other, specify	
		8	I don't know	
5c	Who decided about when [NAME] could be breastfed?	1	I did	
		2 3	My mother / mother in law did My husband did	
		5 4	The Traditional Birth Attendant (TBA) did	
		4 5	The nurse or other medical person did	
		6	Other, specify	
7	In the first 3 days after delivery, was [NAME] given anything to drink	0	Nothing	Go to(8)
	other than or in addition to breastmilk?	1	Plain water	
		2	Sugar water or glucose water	
	If yes, circle ALL items that are reported. Simply record all liquids	3	Powdered or fresh animal milk	
	mentioned. Do not read the list of possible responses.	4	Infant formula (add locally available brand names)	
		5	Other (specify)	
7b	What was the main reason to give something else to [NAME]?	1	It is better for my baby	
		2	My baby had to drink something else before he can	
			receive breast milk	
		3	My baby was thirsty	
		4	I don't have enough milk, milk not nutritious enough	
		5	My baby was sick	

					1				
				6	I was sick and co			my baby	
				7	Other, specify				
				8	I don't know				
7c	W	/ho de	ecided about it?	1	I did				
				2	My mother / mo		w did		
				3	My husband did				
				4	The Traditional				
				5	The nurse or oth	er medica	al person o	did	
				6	Other, specify				
8.	Y	esterd	lay during the day or at night, did [NAME] consume	1	Yes				
	b	reastn	nilk from you or another woman, or did anyone give [NAME]	0	No				
	b	reastn	nilk using a spoon, cup or bottle?	8	Don't know				
9.	Ν	ow I v	vould like to ask you about liquids that [NAME] may have had y	esterday	during the day a	nd at nig	ht. I am i	interested	in whether your child had
	th	ie iten	n even if it was combined with other foods.						
	Y	esterd	lay, during the day or at night, did [NAME] receive any of the fol	lowing?					
				8-					
	A	sk abo	but every liquid. If item was given, circle 'Y.' If item was not given,	circle 'N	' If caregiver does	sn't know	. circle 'D	OK.' Everv	line must have a code.
			Category		<u> </u>		ST 24 HC		How many times
									yesterday during the day
									or night did [NAME]
						Y	Ν	DK	consume the item?
		а	Vitamin drops or other medicines as drops			1	0	8	
		b	ORS			1	0	8	
		с	Plain water			1	0	8	
		d	Infant formula (china brand, donation)			1	0	8	times
		e	Milk such as tinned, powdered, or fresh animal milk (Cow Milk,	China Br	and Milk)	1	0	8	times
		f	Juice or juice drinks (China Brand Juice)			1	0	8	
		g	Clear broth or other soup (Corn soup, bean soup)			1	0	8	
		h	Other water-based liquids (rice water, green tea, tea, coffee mix, t	raditiona	l medicine)	1	0	8	
		i	Sour milk or yogurt (Soybean milk)		,	1	0	8	times
		i	Thin porridge (honey, quaker oats mix, )			1	0	8	
10.	Р	lease f	tell me everything that [NAME] ate yesterday during the day or r	night (wł	ether at home	If at lea	st one for	od from the	food group has been given
			ide the home).	-8(,,,1					Y' in the column below. If
			about when [ <u>NAME</u> ] first woke up yesterday. Did [ <u>NAME</u> ] eat ar	vthing 9	t that time?				s been given, circle 'N.' If
			obing 'Anything else?' until the respondent says 'nothing else.' If not						't know, circle 'DK.'
		· ·	e child first got up, ask:				ie respon	aont a00511	
	vv	iicii til	e enne mot got up, usk.						

What did [NAME] do after that? Did [NAME] eat anything at that time?         If yes, ask: Please tell me everything [NAME] ate at that time. Probe: 'Anything else?' until respondent says 'nothing else.'         If respondent mentions mixed dishes like a sauce or stew, probe: What ingredients were in that [MIXED DISH]? Probe: 'Anything else?' Until respondent says 'nothing else.'         If foods are used in small amounts for seasoning or as a condiment, include them under the condiments food group.         Repeat questions above until respondent says the child went to sleep until the next day.         INSTRUCTIONS for RECORDING RESPONSES         As the respondent recalls each food, <u>underline</u> the food in the food groups below.         If a food recalled by the respondent is not listed in any of the food groups below, write the food in the box labeled 'other foods' at the end of this section.         Once the respondent tells you everything s/he remembers the child eating yesterday during the day or at night, look at each food group. If one or more foods in a food group is underlined, circle 'Y' in the column to the right.         Now return to the list of foods. Are there any food groups with no 'Y' circled? Read the entire list of food items in that line to the respondent. If s/he indicates that one or more of the foods has been given to the child, circle				
'N.' If the mother does not remember or does not know, circle 'DK.' <b>Every</b> line must have a code.				
# G	T /	AST 24 HOUR	\$	
" Category	Y	N	DK	
aa Bread, rice, noodles, or other foods made from grains, including thick grain-based porridge?	1	0	8	
bb         White potatoes, white yams, manioc, cassava, or any other foods made from roots?	1	0	8	
cc Pumpkin, carrots, squash, or sweet potatoes that are yellow or orange inside?	1	0	8	
dd Any foods made from beans, peas, lentils or nuts, including Plumpy 'nut?	1	0	8	
ee Any dark green leafy vegetables?	1	0	8	
ff Ripe mangoes, ripe papayas or (insert other local vitamin A-rich fruits)?	1	0	8	
gg Any other fruits or vegetables?	1	0	8	
hh Liver, kidney, heart or other organ meats?	1	0	8	
ii Any meat such as beef, pork, lamb, goat, chicken or duck?	1	0	8	
jj Fresh or dried fish, shellfish, or seafood?	1	0	8	
kk Grubs, snails or insects?	1	0	8	

	11	Eggs?		1	0	8
	mm	Cheese, yogurt, or other milk products?		1	0	8
	nn	Any oil, fats or butter, or foods made with any of these?		1	0	8
	00	Foods made with red palm oil, red palm nut and red palm nut pulp sauce?		1	0	8
	pp	Any sugary foods such as chocolates, sweets, candies, pastries, cakes or biscuits?		1	0	8
	qq	Condiments for flavor such as chilies, spices, herbs or fish powder?		1	0	8
	the list a	boods: please write down other foods in this box that the respondent mentioned but are no above. When data are entered into the computer, the other foods will be assigned to one pries of foods:				
11.	<b>yesterd</b> Small sr	any times did [NAME] eat solid, semi-solid or soft foods other than liquids ay during the day or at night? hacks and small feeds such as one or two bites of mother's or sibling's food should not ted. If caregiver answers 7 or more times, record 7. If she/he doesn't know, record 88.		Times		
12.	Now I w whether during	vould like to ask you about other foods [NAME] may eat. I am interested in r your child had the item even if it was combined with other foods. Yesterday, the day or night, did [NAME] consume any iron fortified solid/semi-solid/soft food y designed for infant and young children?	1 0 8	Yes No Don't know		
13.	a powde	ay, during the day or night, did [NAME] consume any food to which you added er or sprinkles like this? acture of sprinkles with packaging.	1 0 8	Yes No Don't know		
14.	Yesterd ?	ay, during the day or night, did [NAME] consume any Plumpy'nut/EeZee Paste	1 0 8	Yes No Don't know		
15.		lay, during the day or night, did [NAME] consume any Nestle, China Brand?	1 0 8	Yes No Don't know		
16.	Did [NA	AME] drink anything from a bottle with a nipple yesterday or last night?	1 0 8	Yes No Don't know		
17	Have yo	ou ever experienced breastfeeding difficulty with NAME	1 0 8	Yes No Don't know		Go to 19 Go to 19
18	How die	d you overcome that difficulty?	0	Still have difficulty		

		1	Support from breastfeeding counsellor	
		2	Support from family	
		3	Support from TBA or CHW	
		4	Support from medical staff (midwife,	
			doctor, nurse)	
		5	Stop breastfeeding	
		6	Other, specify	
		8	I don't know, stopped by itself	
19	Did the way you feed NAME changed since the crisis?	1	Yes	
	If NAME was born after the crisis you can compare with his/her siblings	0	No	Go to 22
		8	Don't Know	Go to 22
20	Would you describe these changes as positive or negative?	1	Positive	
		0	Negative	
		8	Don't know	Skip 21
21	Tell me more about these changes	1	Quantity eaten (voluntary cut/ increase)	<b>^</b>
	8	2	Appetite of the child (involuntary)	
	Do not prompt and Circle all answer mentioned	3	Type of food eaten (diversity)	
		4	Meal frequency (voluntary)	
		5	Breastfeeding difficulties	
		6	Breastfeeding habits	
		7	Other, specify	
		8	Don't know	
22	Before or during your pregnancy, did you ever attend nutrition education group session	1	Yes	
	on IYCF and other topic given by SCI or WPN?	0	No	Go to 27
		8	Don't know	Go to 27
23	Did the participation to the session change your habits regarding the way you are	1	Yes	
	feeding NAME?	0	No	Go to 25
		8	Don't know	Go to 25
24	How did that change?	1	Colostrum given	
		2	Exclusive breastfeeding extended	
		3	Continued breastfeeding extended	
	Do not prompt and Circle all answer mentioned	4	Less breastfeeding difficulties	
		5	Better knowledge on complementary	
			feeding, meal content improved	
		6	Meal frequency improved	
		7	Other, specify:	
		8	Don't know	

25	Did it changed your habits at home regarding the quality/quantity you ate or your	1	Yes, I ate better and worked less	
	workload?	2	I ate better but work as much as before	
		3	I ate the same but worked less	
		0	No	
		8	Don't know	

26	Why?	1 2 3 4 5 6 7	I learned knew/good things I cannot afford to follow things I learned I should follow my tradition/what my mother did I did not believe it is better than my tradition I did not understand the sessions I forgot about what was said in the session Other, specify:
	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	8 Du do at	Don't know
27	Could you tell me, after delivery, when do you need to start breastfeeding your baby?	1 0	Right after /within 1 hour after birth         Other answer/Don't know
28	How long should the baby receive only breastmilk (do not even receive water)?	1	Until 6 months Other answer/Don't know
29	From what age should the baby start eating food?	1	6 months of age Other answer/Don't know
30	How long should the baby continue to receive breastmilk?	1 0	Until 24 months or more Less than 24 months/Don't know

#### **SECTION 4: FOOD SECURITY**

	Livelihood and Income							
52	2 Have the following activities contributed to your household's income over the last 12 months?							
			Activity in the last 12 months	Y	[	Ν	DK	
		А	Sale of own production (paddy, rice, vegetables)	1	1	0	8	
		В	Sale of food assistance (WFP, KMSS, WPN/SCI)	1	1	0	8	
		С	Sale of handicraft (carving, baskets, mats, pottery)	1	1	0	8	
		D	Petty trading (small-scale vendor, selling food harvested in wild)	1	1	0	8	

	E	Agriculture wage labour		1 0 8	
	F	Non-agriculture wage labour			
	G	Skilled labour/artisan (carpentery, masonry)			
	H	Trade, commerce, shop keeper			
	I	Service provider (milling, taxi/bus/trishaw driver)		1 0 8	
	J	Remittances from inside Myanmar and abroad		1 0 8	
	K	Other1, specify	1 0 8		
	L	Other 2, specify		1 0 8	
	М	Other 3, specify		1 0 8	
	N	No income the last 12 months		1 0 8	If N=1 Go to 57
53	Among	the activities above, which ones have been the 2 most important activities	1	Sale of own production	
00		ng your income (in term of amount of money generated) in the last 30 days?	2	Sale of food assistance	
			3	Sale of handicraft	
			4	Petty trading	
	(take the	e code from the list above)	5	Agriculture wage labour	
			6	Non-agriculture wage labour	
			7	Skilled labour/artisan	
			8	Trade/commerce/shop keeper	
			9	Service provider	
			10	Remittance from inside or abroad	
			11	Other 1 Other 2	
			12	Other 2	
			13	Other 3	
54	What ha	as been your household total income in the last 30 days?	<b>→</b>	ММК	
55	Is this a	mount for the last 30 days typical of an average month or does your household	0	Less	
55		earn more or less?	1	The same	
	usually		3	More	
			8	Don't know/not available	
56	What is	the average total income for your household from all sources in a normal	1	Less than Ks 25,000	
50	month?		2	Ks 25,000 – Ks 50,000	
	monum		3	Ks 50,000 – Ks 55,000 Ks 50,000 – Ks 75,000	
			4	Ks 75,000 – Ks 100,000	
	Check th	ne answer is consistent with the 2 previous questions	5	Ks 100,000 – Ks 150,000	
		r r r r r r r r r r r r r r r r r r r	6	Ks 150,000 – Ks 200,000	

8	Ks 250,000 – Ks 300,000	
9	Over Ks 300,000	
99	Don't know/no response	

	Food assistance, expenditure and debts												
57		Did you receive some of these food items through food assistance? If yes, please tell me from whom?											
		Now please, for each items if you have 10 units of food, tell me how many would come from food aid and how many would come from your purchases?											
		HOW TO OPERATE: Present 10 stones to the respondent and ask him/her to show use the proportion he would buy and the proportion he receives from food											
	assistance. Then count the stone in the food assistance category. If you have 0 stones, put 0% ; if you have 8 stones, put 80%,												
	Repeat the operation for each category.												
	How much did your household spend on the following items in the last 30 days?												
	· ·		s cash & purchase on credit)	1		•							
	In	some	case, the family may receive par										
			Expenditures in last 30days	Rece	vive some of it	0	bod	% coming	Amount spent in	Amount	Amount		
								from FOOD	CASH from	purchased in	purchased on		
				WFP	SCI/WPN	Other	No	assistance	assistance	CASH (other)	CREDIT		
		А	Paddy / Rice	1	2	3	0	%	mmk	mmk	mmk		
		В	Other cereals & staples	1	2	3	0	%	mmk	mmk	mmk		
		С	Pulses/beans/nuts	1	2	3	0	%	mmk	mmk	mmk		
		D	Vegetables	1	2	3	0	%	mmk	mmk	mmk		
		E	Fruits	1	2	3	0	%	mmk	mmk	mmk		
		F	Meat, fish, eggs	1	2	3	0	%	mmk	mmk	mmk		
G         Cooking oil         1         2         3         0					%	mmk	mmk	mmk					
		Η	Other food items	1	2	3	0	%	mmk	mmk	mmk		
		Ι	Firewood /cooking fuel	1	2	3	0	%	mmk	mmk	mmk		
		J	Betel nut/Cigarettes/Alcohol	1	2	3	0	%	mmk	mmk	mmk		
		Κ	Drinking water	1	2	3	0	%	mmk	mmk	mmk		
		L	Other, specify	1	2	3	0	%	mmk	mmk	mmk		

58		uch did your household spend on the following items in the last 6 months? es cash & purchase on credit)					
		Expenditures in last 6 months			Amount from CASH	Aı	nount from
					purchase	CRE	DIT purchase
	Α	Education (school fees, books, uniforms)			mmk		mmk
	В	Health for adults and child. > 5 years			mmk		mmk
	С	Health for children < 5 years old	mmk		mmk		
	D	Transportation			mmk		mmk
	E	Debt repayment			mmk		mmk
	F	Sending remittances			mmk		mmk
	G	House construction/maintenance including electricity & water			mmk		mmk
	Н	Shop/trade/commerce			mmk		mmk
	Ι	Farming (seeds, fertilizers, labour costs), Livestock/fish breeding (vaccines, fertilizers, labour costs)	odder)		mmk		mmk
	J	Celebrations/social events			mmk		mmk
59	If you l	had to buy rice now, how much would you pay per pyi?	→		mmk/pyi		
	•		OR				
			8	Don't kno	w/not available		
60	Has you	ur household taken money loans/credits in the last 12 months?	1	Yes	2S		
	-		0	No			-
			8	Don't kno	W		Go to 63
61	If no, w	vhy?	0	No need			Go to 63
			1	No access	to credit		Go to 63
62	If yes, j	please indicate the value of your current debts/loans?	0	Less than 25,000 mmk			
		l l	1	>25,000 -	50,000 mmk		
			2	>50,000 -	75,000 mmk		
			3	>75,000 -	100,000 mmk		
			4		– 150,000 mmk		
			5	>150,000	– 200,000 mmk		
			6		– 250,000 mmk		
			7		– 300,000 mmk		
			8 9	>300,000			
			w/no response/not available				
63	Compa	red to last year, at the same period, is this debt?	0	Less			
			1	The same			
			3	More			
			8	Don't kno	w/not available		

	Co	ping ı	mechanisms								
64	In	the pa	ast 7 days, have there been times when your household did not have enough	1		Yes					
			noney to buy food?	0		No					
						Don't know					
65	Но	w oft	en in the past week has the household had to utilize the following coping mecha	nisms?							
	(Er	nter th	e number of days (0-7) when the mechanisms was used in the last 7 days)								
		Activity					Mechanism	n prese	ent befo		lict?
							Y		Ν	DK	
		А	Eating rice porridge		da	ys	1		0	8	
		В	Prioritizing children and elderly for food		da	ys	1		0	8	
		С	Reducing the number of daily meals		da	ys	1		0	8	
		D	Reducing rice portion size		da	ys	1		0	8	
		E	Consuming only rice at meal times		da	ys	1		0	8	
		F	Consuming less preferred staples		da	ys	1		0	8	
		G	Changing curry ingredients / variety / rice quality		da	ys	1		0	8	
		Н	Begging for food		da	ys	1		0	8	
		Ι	Borrowing food from neighbours / relatives		da	ys	1		0	8	
		J	Eating rice seed stocks		da	ys	1		0	8	
		Κ	Eating immature crops		da	ys	1		0	8	
		L	Eating wild animals or plants		da	ys	1		0	8	
		М	Purchasing food on credit		da	ys	1		0	8	
		Ν	Reducing health expenditures		da	ys	1		0	8	
		0	Sending children/elderly away to eat		da	ys	1		0	8	
		Р	Common kitchen (shared among household)	8	88						
		Q	Household did not use above coping mechanisms in the past 7 days		9						

	nsumption Score st 7 days, state the number of days the following food items consumed by h	oucohold mombors?										
(this does not include foods purchased and eaten outside of the home by individual members)												
	Food items	Number of days of consumption <b>in the</b> <b>past 7days</b>	Main Source of the food (see codes in the list below)									
А	Rice		Source of food:									
В	Maize (millet, corn, etc.)											
С	Other cereals (wheat, noodles)		1 = Own Production									
D	Potatoes/Tubers (sweet potato, taro, Yam, casser, etc.)		(includes fishing with nets)									
E	Beans (lablab bean, lima bean etc.), lentils, peas (chick pea, gram, etc.),		2 = Purchase									
F	Nuts (peanut etc.)		3 = Borrow, credit or									
G	Vegetables (gourd, brinjal, cucumber, tomato, leafy vegetables etc)		advance									
Η	Fruits (banana, orange, apple, pineapple etc.)		4 = Exchange items for									
Ι	Beef (cows, buffalo, wild animal meals)		food									
J	Pork		5 = Exchange work for									
Κ	Mutton (goat, sheep)		food									
L	Poultry (chicken, duck)											
М	Eggs (hen, duck, quail)		6 = Gift from friends/									
Ν	Insects (Cricket, Bamboo Insect, Dragon Fly)		relatives									
0	Fish (fish, prawn, dried fish, frog, etc.)/ seafood		7 = Foraging (incl.									
Р	Fish Paste (if used in amounts in the meal more than 1 teaspoon)		improvised line fishing)									
Q	Milk (tinned powered or fresh animal milk)		8 = Food assistance WFP									
R	Commercially produced infant formula		9 = Kitchen gardening									
S	Milk/ Milk products (e.g. cheese, yogurt, dried milk)		support									
Т	Oil (e.g. groundnut, sesame, palm) / Fat (e.g. butter, animal fat)		10=Other food assistance									
U	Sugar		11=Other									
V	Condiments (including fish paste where it is a small amount in food)											

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.