

SC Burma (Myanmar) FY19 EFSP Baseline Report

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Acronyms

ACF	Action Contre La Faim
CAPI	Computer-assisted personal interviewing
CfW	Cash-for-Work
CI	Confidence Interval
DSW	Department of Social Welfare
EFSP	Emergency Food Security Program
FCS	Food Consumption Score
FFP	Food for Peace
HH	Households
HHS	Household Hunger Scale
IDP	Internal Displaced Person
LB	Lower Bound (95% Confidence Interval)
MEAL	Monitoring, Evaluation, Accountability and Learning
MCCT	Mother and Children Cash Transfer Program
MEAL	Monitoring, Evaluation, Accountability and Learning
NGOs	Non-Governmental Organizations
NRS	Northern Rakhine State
OTP	Outpatient Therapeutic Care Program
PIRS	Performance Indicator Reference Sheet
rCSI	Reduced Coping Strategies Index
SC	Save the Children
SD	Standard Deviation
SRS	Simple Random Sampling
UB	Upper Bound (95% Confidence Interval)
UCT	Unconditional Cash Transfer
WFP	World Food Program

Executive Summary

As a result of communal violence between Muslim and Buddhist populations in Rakhine State, the massive displacement of around 128,000 people (both registered and non-registered) has occurred. Among those internally displaced persons (IDPs), majority were Muslims, who are currently residing in IDP camps within the Muslim and Rakhine host communities in five townships. The majority of the IDP camps locations are in Sittwe and Pauktaw townships. Protracted displacement and tightly restricted movement is restraining access to markets, livelihoods and basic services (such as health and education) for both IDPs and host populations.

Save the Children (SC) is supporting both host communities and IDPs in the townships of Sittwe and Pauktaw, to meet their immediate food security needs, which will help households mitigate the need to engage in negative coping strategies or behaviours. SC is implementing unconditional cash transfer program (UCT) in Sittwe and conditional cash transfer (cash for work) in Pauktaw Township.

The baseline survey was conducted with a representative sample of families to document the initial situation of households prior to receiving cash assistance from Save the Children and to determine the current levels of food insecurity among targeted households. The main objective of the baseline survey is to set the benchmarks for food security outcome indicators, namely food consumption score (FCS), reduced coping strategies index (rCSI), and household hunger scale (HHS). The key baseline questions are around these indicators. This survey collected data regarding general household characteristics, consumption of household food, and utilization of negative coping strategies in the absence of food.

The sample size of 678 (Sittwe, 339 and Pauktaw, 339) households (HHs) was determined using a stratified simple random sampling (SRS) design and the USAID/Food for Peace (FFP) “comparative for proportions” formula based on the September 2018 USAID Beneficiary-Based Sampling Guidance, and utilised a quantitative approach. The final sample size achieved is 698,350 HHs from Sittwe and 348 HHs from Pauktaw. While HHs for UCT were selected randomly from a participant list (participant-based), the HHs for CfW sample were selected randomly in the targeted villages (population-based).

In Sittwe, a total of 350 UCTs beneficiaries participated in the survey and approximately 44% of the respondents were from Dar Paing camp. The remaining 56% of respondents were from Say Tha Mar Gyi camp. The average household size of the participants' is 5.2 members, and approximately one-third (32.9%) of the respondents reported that their households were headed by females.

The average FCS score for IDPs (UCT beneficiaries) is 35.5; approximately 9% of households had a 'poor' FCS, 43% had a 'borderline' FCS, and 48% had an 'acceptable' FCS. Very few households consumed dairy and fruits groups in the week prior to the survey, while almost all of HHs reported consuming main staples, vegetables and sugar, and three in every four HHs reported consuming meat and fish. The male-headed household had better food consumption scores compared to female-headed households (male-headed HHs' FCS: 36.6 vs female-headed HHs' FCS: 33.4), and also reported better consumption on fruits, meat/fish and sugar food groups. The household size did not seem to impact the condition of household food condition score.

The average rCSI score for HHs in Sittwe, used as coping strategies when HHs do not have food or the resources for purchasing food, is 16. Approximately 67% of the HHs reported using the two severe strategies in the week prior to the survey; for instance, 76% of HHs borrowed food or relied on help from a relative or friend and 58% of HHs restricted consumption of adults to prioritize children's consumption.

The results of this survey show that approximately half (51%) of IDP HHs experienced severe or moderate hunger and 49% experienced little to no hunger in the month prior to the survey. However, more, (52%) male-led households experienced less hunger than female-headed HHs (41%). The analysis shows that there is no relationship between HHs size and household hunger.

In Pauktaw, 346 HHs from the conditional cash transfer program (CfW) in the targeted 15 villages participated in the survey; there were only two HHs who refused to participate in the survey. The average household size was 5.1. Approximately 23% of HHs who participated in the survey are led by females. Evidence¹ from existing literature suggests that female-headed

¹ Dreze and Srinivasan, 1997, Meenakshi and Ray, 2002, and Gangopadhyay and Wadhwa, 2003

HHs experience more extreme poverty than male-headed HHs; for instance, the baseline shows that among individual food group consumption, the female-headed households (66.3%) consumed more pulses than male-headed household (48.1%).

The average FCS score for the sampled HHs from host community is 32.6; approximately 20% of households have a 'poor' FCS, 39% have a 'borderline' FCS, and 41% have an 'acceptable' FCS. The average number of days for most household consumed food, vegetables, meat/fish, and sugar were 3 days a week in prior week, except main staple which was consumed 5 days on average.

The average rCSI in Pauktaw is 10 and the majority of households (79.5%) relied on less preferred and less expensive foods. However, as estimated 60% of HHs also reported borrowing food (second most severe strategy) and 40% of HHs limited portion sizes. The average rCSI score for male-headed HHs was lower than the female-headed HHs.

Approximately, three in every four households (71.1%) from Pauktaw experienced little to no hunger in the month prior to the survey. There was no significant difference between male- or female-headed HHs' hunger levels.

1.0 BACKGROUND INFORMATION

The situation in Rakhine State is a complicated mix of long-standing tensions between religious communities and further compounded by long-term under-development and poverty. Tensions between Muslim and Buddhist populations in Rakhine State escalated into violent clashes in 2012, resulting in the displacement of around 128,000 people (both registered and non-registered), mainly Muslims, who now reside in internally displaced people (IDP) camps and within Muslim host communities in five townships. The majority of these locations are in Sittwe and Pauktaw townships. As of October 2018, 101,627 IDPs (18,825 HH) were living in 15 locations in Sittwe Township and 22,256 IDPs (5,124 HH) in five locations in Pauktaw Township. Protracted displacement and tightly restricted movement are restraining access to markets, livelihoods and essential services (such as health and education) for both IDP and host Muslim populations. The poorest Rakhine within conflict areas also face lost incomes and constrained livelihoods owing to the ongoing conflict. Generally, the poorest HHs are landless and reliant on seasonal labour incomes. Following the 2012 conflict, many Muslim poor lost

access to Rakhine villages where they accessed agriculture labour incomes. Since August 2017, further outbreaks of the conflict in Northern Rakhine State (NRS) have led to the displacement of approximately 720,000 people.

In the Muslim camps of Sittwe, 27% of the displaced are not receiving assistance from WFP². In most cases, these individuals were not registered for assistance following the 2012 displacements, as Rakhine authorities determined that only households considered to be ‘genuinely displaced’ could be eligible for food assistance and registered on beneficiary lists. In practice, this has most often meant that only households whose homes were burned and/or were displaced immediately with the conflict were registered for food assistance. Those not meeting these criteria, even though facing the same shocks and stresses, were not registered to receive government-endorsed assistance for food, shelter and other in-kind materials. These unregistered households now generally live in makeshift shelters, in separate and distinct parts of the camps or villages where the “official” IDPs have settled.

The households excluded from current food assistance rely on individual strategies to cover their most basic food needs. However, these strategies - mainly low paid unskilled casual work and small-scale fishing - are not sufficient to cover household needs and lead to repeated use of negative coping strategies (accumulating high debt, reduction of food quality and quantities). Data collected in 2016/17 during the Sittwe Camps profiling exercise highlighted that 29% and 35% of the displaced in Muslim villages and camps respectively had inadequate diets. Comparatively, these rates were 4 and 2%, respectively, in Rakhine villages and relocation sites.

Inadequate food consumption was more prevalent in locations (i.e. camps and villages) where more displaced households reported not receiving any food assistance, highlighting the protective impact of the regular food assistance. For example, in Dar Paing informal settlements, only 11% of the displaced reported receiving any food assistance and 58% reported inadequate diets (55% borderline, 3% poor). Poor diets are characterized by the consumption of rice every day, vegetables every other day, and fish or meat once every two weeks. In addition to poor diets, people in makeshift shelters generally have lower socio-economic status

² As noted in the Sittwe Camp Profiling Report, https://reliefweb.int/sites/reliefweb.int/files/resources/sittwe_camp_profiling_report_lq.pdf

and rate below the Sittwe rural camp populations on many indicators, in particular health and education.

Without access to land, and with depleted productive and financial assets and resources, displaced populations have limited options to generate income and frequently resort to using negative coping strategies. For Muslim communities, severe restrictions of movement remain in place for both camp and host communities as they face checkpoints, border fences and restricted access. Additionally, the denial of the rights belonging to citizenship to most Muslims means they lack other basic rights, including freedom of movement and the ability to access basic services and livelihoods. Construction, fishing/agriculture and mechanic work (in small workshops) are the most available livelihoods opportunities. Close to two thirds of households rely on casual labor as a primary source of income. The labor market is highly saturated, and competition for employment is fierce, resulting in limited incomes: in 2016, half of all displaced Muslim households in camps generated 25,000 MMK (\$18.50/USD) or less/month.

In Pauktaw Township, poor and very poor households across livelihoods zones purchase almost all of their food needs from local markets with up to 60% of their income spent on food, half of those on staple foods. Poor and very poor households are landless and rely on small-scale fishing, seasonal casual daily work, and self-employment activities for income to obtain food. Reducing expenditures in bad years/difficult times is a common strategy for the better off groups, which affects income options for the poorest. Low social cohesion can often result in poor infrastructure maintenance and lower labour offerings at the community level. This inordinately affects the poor and impoverished households who rely on casual labour for income. To respond to such difficult situations, poor and very poor households resort to several strategies including removing children from school, labour migration, increased debts, or advance selling of labour (at up to 50% lower rates than the prevailing wage). Those strategies are detrimental and have lasting impacts on nutrition, education, and health.

Unconditional Cash Transfers in Sittwe

In Sittwe IDP camps, SC proposes to provide monthly cash transfer to 1,733 HHs (8,781 individuals) for 12 months. The transfer cash amount of \$9.90/USD per month (15,000MMK)/per person (\$49.50/month per HH).is equivalent to the value of average combined nutritional ration calculated using NutVal 4.0 tool. SC proposes to provide assistance to displaced individuals that are not beneficiaries of the WFP General Food Distribution (GFD).

Conditional Cash Transfers in Pauktaw

SC proposes to target 500 HHs (2,250 individuals) directly, but 1,142 HHs (5,368 individual) will be indirectly impacted by the activities and benefit from them in both Rakhine and Muslim communities for CfW activities, which cover the following, scope of work at communities: rehabilitation of land and water resources; paddy embankments; jetties; and small village paths, roads, and bridges. The geographic selection criteria included conflict-affected villages with limited land resources and limited access to services. The household with poor and very poor socioeconomic status but have labour resources were target and the work schedules were organized to avoid overlap with the other existing seasonal labour opportunities. For the women beneficiaries, the appropriate work scheme will be considered and which will also need to not compromising with women priority on child-care responsibilities and other household domestic works.

1.1 BASELINE PURPOSE & QUESTIONS

The main objective of the baseline survey is to set the benchmarks for food security outcome indicators, namely food consumption score (FCS), reduced coping strategies index (rCSI), and household hunger scale (HHS). This survey collected data regarding general household characteristics, consumption of household food, and utilization of negative coping strategies in the absence of food.

1.1.1 BASELINE QUESTIONS

The baseline assessment utilised a quantitative approach. The assessment data collection was based on well-defined and structured questionnaire using Food for Peace (FFP) emergency food security program PIRS. Data was collected using Kobo Collect application on Android tablets, and processed and analysed using MS Excel and STATA (statistical software). The following key outcome indicators are measured as part of the baseline:

1. **Food Consumption Score (FCS):** Percentage of households with poor, borderline, and acceptable food consumption score
2. **Reduced Coping Strategy Index (rCSI):** Mean, standard deviation, confidence interval (95%), and median
3. **Household Hunger Score (HHS):** Prevalence of households with moderate or severe hunger

The detail explanation on questionnaires and the calculation of key outcome indicators to answer the above questions are outlined in the next sections on methodology.

2.0 BASELINE METHODOLOGY & LIMITATIONS

The baseline study used a quantitative approach; a participant-based sampling methodology was used for surveying households for unconditional cash transfer (UCT), while a population-based approach was used for surveying households for cash for work (CfW) activities. In addition to providing baseline values for key food security outcome indicators, the baseline also provided benchmarks for these key indicators that will be used to measure the progress of the intervention. The same households surveyed as part of the baseline will be surveyed at the endline (pre-post panel design) to allow the team to test for difference (statistical inference).

2.1 Sample Size Determination

The team used a beneficiary-based SRS design based on the proximity of the HHs within the camps in Sittwe and used a population-based SRS design for CfW in Pauktaw. The team used the sampling methodology detailed in the [Sept. 2018 USAID Beneficiary-Based Sampling Guidance](#) (see pgs. 57-59). A one-stage SRS design is advantageous because it is an equal probability of selection method and data is self-weighted, which is necessary to generate unbiased estimates. Data collection in an SRS is simpler to implement, and the resultant data is easier to analyse, reducing the chance of process and analytical errors. The team will use the same set of beneficiaries for the baseline and final evaluation (panel design), which will help SC better compare trends in food security indicators throughout the program.

The team used the FFP recommended minimum sample size of 339 respondents for its one-stage SRS sampling design for each strata – UCT and CfW – totalling 678 HHs. This is based on the sample sizes FFP has calculated for FCS and HHS, and uses the largest sample size between the two. The following table explains the parameters applied in the sample size determination for this baseline study.

Table 1: Parameters and values applied in sample size determination

Parameters	Parameters	Explanation
P_{1,est}	50% (0.5)	The 2019 Myanmar EFSP will be working with new beneficiaries, and an estimate is not available for these households so we have used the FFP recommended value of 50% (0.5) for ‘moderate/severe’ HHS and ‘acceptable’ FCS.
P_{2,est}	40% (0.4)	The 2019 Myanmar EFSP has set targets for a change of 15% in

‘moderate/severe’ HHS and ‘acceptable’ FCS by endline, but will use the FFP 10% change, which would be 40% (0.4)]

Z_{1-α}	95% (1.64)	the corresponding value is $Z_{0.95} = 1.64$
Z_{1-β}	80% (0.84)	the corresponding value is $Z_{0.80} = 0.84$
Dest	1	Default value for one State Simple Random Sampling
n_{initial}	305	Minimum sample size with no consideration on non-response rate
Non-response adjustments	10%	10% non-response rate were applied as default rate for survey in Myanmar
N_{final/planned}	339	Planned sample size
Actual used		348 and 350 for Sittwe and Pauktaw respectively.

2.2 Sampling Frame and Sample Selection

The sampling frame for the baseline study includes a list of targeted villages and targeted in the FFP project design. The study population includes targeted population for conditional cash transfer and registered programme participants for the unconditional cash transfer model. While a sample of 339 HHs for each site (Sittwe and Pauktaw) was targeted, the final sample size achieved was 698 – 350 HHs in Sittwe and 348 HHs in Pauktaw.

2.3 Data Collection Tool

The survey questionnaires were composed of four main modules as explained in the following table.

Table 2: Questionnaires Structure

Module	Description
Respondent and Household Information	Geographical information of household, respondent demographic information and some basic information of the household as having mobile phone or not, the household size and female- or male-headed households
Food Consumption Score	7 days diet recall of 8 food groups for food consumption score calculation <ol style="list-style-type: none"> 1. Main Staples 2. Pulses 3. Vegetables 4. Fruits 5. Meat/Fish

6. Diary
7. Oil
8. Sugar

Reduced Coping Strategies Index The list of five food-related coping strategies that the household used in the seven days prior to the survey

1. Rely on less preferred and less expensive foods
2. Borrow food or rely on help from friends or relatives
3. Limit portion size at mealtime
4. Restrict consumption by adults in order for small children to eat
5. Reduce the number of meals eaten in a day

Household Hunger Scale The frequency of three events related to food deprivation were experienced by any household member in the last four weeks (30 days)

1. No food at all in the house
2. Went to sleep hungry
3. Went all day and night without eating

2.4 Data Collection

A quantitative questionnaire was used to collect data from the sampled participants. Data collection was done using KoBoCollect application via Android tablets. The surveyors were trained on survey objectives, tablet use, and the online KoBO collect programmed questionnaire. In addition, the surveyors were oriented on each indicator and the importance of data quality, and ethical principles (i.e privacy, confidentiality, professionalism, integrity). The data collection was completed at the end of October for Sittwe Township (UCT) and by mid-January for Pauktaw Township (CfW).

2.5 Data Quality Assurance

The project coordinator and the project MEAL officer, with additional support and guidance from headquarter-based MEAL Specialist, supervised the data collection. The built-in validation checks in the [KoBO Collect](#) questions were also key in ensuring complete datasets were collected. The collection of geo codes allowed for double checking on whether data was collected in the sampled villages and camps. The project team closely monitored the progress of data collection in the field and, prepared and shared the progress report with MEAL team and Yangon office. And, those field progress reported data were validating with the number of survey submitted to KoboToolbox servers by MEAL team.

2.6 Data Analysis

The data analysis plan was developed based on review of the existing project monitoring and evaluation plan related and the questionnaires applied in baseline study. The baseline value indicator estimation was performed based on the FFP Guidance for a Baseline Study and Final Evaluation for Emergency Programs and each indicator was calculated for the point estimation with the respective standard error value and interval estimation, per the respective PIRS.

Data cleaning and analysis were performed using Stata 15.1 statistical software. All system missing and human error missing were properly coded. Summary statistic for key outcome indicator from project M&E plan were calculated as part of descriptive analysis. Both points and interval estimation were performed for summary statistic figure and following formulas were application of 95% confidence interval estimation. Chi-square test was applied for the relationship of main outcome variables (category variable) and to examine the association of continuous variable, correlation test was performed³.

2.6.1 Indicator Definitions

Food Consumption Score

The Food Consumption Score (FCS) is a proxy indicator for the food intake and it is a composite score based on dietary diversity, food frequency, and the relative nutritional importance of different food groups. The nine food groups are applied in calculation of food consumption score and the frequency of household consumption in last 7 days were asked in the questionnaires. To calculate the FCS, the consumption frequencies are summed and multiplied by the standardized food group weight (see table – 3 below). Based on the food consumption score, the World Food Programs recommended cut-off points⁴ were applied to determine the household food consumption condition into three groups; poor, borderline, or acceptable (see table 4).

Table 3: FCS food groups and relative weights

Food Group	Weight	Food Items
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³ Bruin, J. 2006. newtest: command to compute new test. UCLA: Statistical Consulting Group. <https://stats.idre.ucla.edu/stata/ado/analysis/>.

⁴ Vulnerability Assessment and Mapping World Food Programme. 2008. “Food consumption analysis: Calculation and use of the food consumption score in food security analysis.”

Main Staples	2	Maize, rice, sorghum, other cereals; tubers; plantains
Pulses	3	Beans, peas, groundnuts and cashew nuts
Vegetables	1	Vegetables, and leaves
Fruit	1	Fruits
Meat/fish	4	Beef, goat, poultry, pork, eggs, and fish
Milk	4	Milk, yogurt and other dairy
Sugar	0.5	Sugar and sugar products, honey
Oil	0.5	Oils, fats, and butter
Condiments	0	Spices, tea, coffee, salt, fish powder, small amounts of milk for tea

Table 4: FCS classification thresholds

Raw Score	Category
0 - 21	Poor
21.5 - 35	Borderline
> 35	Acceptable

Reduced Coping Strategies Index (rCSI)

The reduced coping strategy index (rCSI) measure the frequency and severity of the coping behaviours, what people do when they cannot access enough food. It is composed with the series of questions about how the households manage to cope with a shortfall in food for consumption, and the frequency on each experience is recorded to get the simple numeric score. The rCSI is based on a list of five food-related coping strategies that the household used in the seven days prior to the survey. The rCSI raw scores are calculated by multiplying the frequency with which a behaviour was used by the universal severity weight, then summing the weighted scores for each coping strategy (see table 5). The maximum raw score for the rCSI is 56, i.e. a household that used all five strategies every day for the last 7 days would have a raw score of 56.

Table 5: Reduced CSI strategies/behaviours and their corresponding severity weights

Behaviours/Strategies	Severity Weight
Rely on less preferred and less expensive food	1
Borrow food or rely on help from a relative or friend	2
Limit portion size at mealtimes	1
Restrict consumption by adults in order for small children to eat	3

Household Hunger Scale

The Household Hunger Scale⁵ (HHS) is a food deprivation scale that measures the percent of households experiencing hunger. The person in the household in charge of food preparation is asked about the frequency with which three events were experienced by any household member in the last four weeks (30 days):

1. No food at all in the house
2. Went to bed hungry
3. Went all day and night without eating

If the event is reported as having not been experienced in the last four weeks, the response is coded as “never” (value = 0). If the event is reported as having been experienced in the last four weeks, a frequency of occurrence question is asked to determine how often the event was experienced; see table 6 for each frequency of occurrence question and possible responses. For tabulation purposes, the responses are then recoded into three frequency categories (table 7).

Table 6: Household Food Deprivation Experiences

Question	Response Option
No food at all in the house	1 = Rarely (1–2 times)
How often did this happen in the past [4 weeks/30 days]?	2 = Sometimes (3–10 times)
	3 = Often (more than 10 times)
Went to bed hungry	1 = Rarely (1–2 times)
How often did this happen in the past [4 weeks/30 days]?	2 = Sometimes (3–10 times)
	3 = Often (more than 10 times)
Went all day and night without eating	1 = Rarely (1–2 times)
How often did this happen in the past [4 weeks/30 days]?	2 = Sometimes (3–10 times)
	3 = Often (more than 10 times)

⁵ Ballard, Terri; Coates, Jennifer; Swindale, Anne; and Deitchler, Megan. Household Hunger Scale: Indicator Definition and Measurement Guide. Washington, DC: Food and Nutrition Technical Assistance II Project, FHI 360.

Values for the three questions are summed for each household, producing a HHS score ranging from 0 to 6. The raw scores are then tabulated into the following categories.

Table 7: HHS Categorical Indicator

Household Hunger Score	Household Hunger Categories
0–1	Little to no hunger in the household
2–3	Moderate hunger in the household
4–6	Severe hunger in the household

2.7 Limitations

Due to complexities in the implementation area, majorly longer approval processes, some limitations were experienced and addressed accordingly to ensure successful and timely execution of the baseline. First and foremost, by the time the baseline was commissioned, the programme could not complete selection of beneficiaries in Pauktaw area. Therefore, the programme adopted a population based sampling methodology. This was not anticipated as beneficiaries’ selection in Sittwe was successful and baseline was completed based on targeted beneficiaries sampling. This affects regional comparisons of outcome indicators, and the data has been analysed and discussed separately for Sittwe and Pauktaw.

3.0 FINDINGS, CONCLUSIONS & RECOMMENDATIONS

Because the UCT survey and CfW look at different populations – UCT surveyed program beneficiaries while CfW conducted a population-based survey – the analyses have been separated by activity type and no comparisons has been drawn between the two populations.

3.1 FINDINGS – SITTWE

Respondent Information

There were 350 respondents surveyed from Sittwe, who are beneficiaries of UCTs. Approximately 44% of the respondents were from Dar Paing camp and the remaining 56% from Say Tha Mar Gyi camp. All respondents from the Sittwe township consented to participate in the survey. The average ages of the respondents is 33.4 years and the average household size of the respondents’ is 5.2 members. Only 5.7% of participants from Sittwe

reported that their household owned a mobile phone. Approximately one-third (32.9%) of the respondents reported that their households were headed by females.

Table 8: Respondent information – Sittwe – Unconditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Respondent Information</i>						
Provided consent yes	350	100.0%	-	100.0%	100.0%	350
Female Respondent	245	70.0%	0.5	65.2%	74.8%	350
Male Respondent	105	30.0%	0.5	25.2%	34.8%	350
Respondent age (average)		33.4	13.2	32.0	34.8	350
Respondent is Household Head	180	51.4%	0.5	46.2%	56.7%	350
<i>Household Information</i>						
Household Size (average)		5.2	1.7	5.0	5.3	350
Household with mobile phone	20	5.7%	0.2	3.3%	8.2%	350
Female-headed HH	115	32.9%	0.5	27.9%	37.8%	350
Male-headed HH	235	67.1%	0.5	62.2%	72.1%	350

Food Consumption Score

The household's food consumption score measures food security through a aggregating food intake relative to dietary diversity, food frequency and nutrition values (see section 2.6.1 for detailed definition). WFP clarifies households as having food security when the cut-off point >35, acceptable which is interpreted to mean that daily per capita calories of around 1950 kilocalories. While a cut-off point below < 21 is classified as poor food security, a cut of 21-35 is considered to be on the borderline. The baseline findings indicates that 52% of the HHs are experiencing unacceptable food security level with an average FCS score of 35. Specifically, approximately 9% of households have poor food security, 43% on the borderline, and 48% have an 'acceptable' FCS (Table 9 below). On average, over 52% of the sampled HHs are vulnerable to poor food quality and insufficient quantities. This could mean that some HHs are food poor and could be having lower than recommended average dietary energy consumptions. Descriptively, very few households (3%) had intake of vitamin A and proteins from consumed dairy groups in the week prior to the survey. While majority of the households had proteins and carbohydrates (98%) intake from beef and fish (83%), very high number of households (approximately 75%) were consuming fats and oils (57%) and sugars (93%) which have low nutritional value. The second least consumed food group was fruits group (17%).

The high intake of fish could be related to fishing practices among the Rakhine community due to proximity to the Bay of Bengal⁶. The high intake of vegetables could be due to seasonality as most vegetables are widely available in the winter (October to February). In addition to the availability of vegetables, staples like rice and fish are quite abundant in the local markets as well⁷.

Table 9: Food Consumption Score for Sittwe – Unconditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Food Consumption Score</i>						
Household Food consumption score (mean)		35.5	11.82	34.3	36.8	350
HH with Acceptable FCS	168	48.0%	0.50	42.7%	53.3%	350
HH with Borderline FCS	152	43.4%	0.50	38.2%	48.6%	350
HH with Poor FCS	30	8.6%	0.28	5.6%	11.5%	350
<i>IPC on the basis of FCS</i>						
HHs in IPC 1/2 - Minimal/Stressed	168	48.0%	0.50	42.7%	53.3%	350
HHs in IPC 3 - Crisis	152	43.4%	0.50	38.2%	48.6%	350
HHs in IPC 4/5 - Emergency/Famine	30	8.6%	0.28	5.6%	11.5%	350

Table 10: Household Food Consumption Practices for Sittwe

	n	%	sd	95% CI		N
				lb	ub	
<i>Household Food Consumption – proportion of HHs reporting consuming each food group in the last week</i>						
Main Staples	344	98.3%	0.1	96.9%	99.7%	350
Pulses	155	44.3%	0.5	39.1%	49.5%	350
Vegetables	344	98.3%	0.1	96.9%	99.7%	350
Fruits	60	17.1%	0.4	13.2%	21.1%	350
Meat/Fish	290	82.9%	0.4	78.9%	86.8%	350
Diary	12	3.4%	0.2	1.5%	5.3%	350
Oil	199	56.9%	0.5	51.6%	62.1%	350
Sugar	325	92.9%	0.3	90.1%	95.6%	350
<i>Household Food Consumption Frequency (mean)</i>						
Main Staples		6.4	1.6	6.2	6.5	350
Pulses		1.0	1.4	0.9	1.2	350
Vegetables		4.5	2.1	4.3	4.8	350
Fruits		0.4	1.1	0.3	0.5	350
Meat/Fish		2.8	2.2	2.6	3.0	350

⁶ Tat Lan Sustainable Food Security and Livelihoods Program Baseline Assessment, November 2014

⁷ Three Livelihood Zones in Tatlan Project Areas of Rakhine State, Myanmar. Assessed Using the Household Economy Approach (HEA) November 2013

Diary	0.1	0.4	0.0	0.1	350
Oil	1.9	2.1	1.7	2.1	350
Sugar	5.0	2.3	4.8	5.2	350

The same patterns of consumption were also observed for the frequency of each food group. While 90% of HHs reported having consumed meat/fish in the week prior to the survey, they were only consumed approximately 3 out of 7 days. In Sittwe, HHs reported having consumed main staples and sugar almost every day of their household diet and vegetable was only consumed 4 days a week.

Table 11: Table 11: Household Food Consumption Practices for Sittwe by HH Head Gender Status

	Women Lead HH			Men Lead HH		
	n	%	N	n	%	N
<i>Household Food Consumption</i>						
Main Staples	115	100.0%	115	229	97.4%	235
Pulses	51	44.3%	115	104	44.3%	235
Vegetables	113	98.3%	115	231	98.3%	235
Fruits *	13	11.3%	115	47	20.0%	235
Meat/Fish *	88	76.5%	115	202	86.0%	235
Diary	1	0.9%	115	11	4.7%	235
Oil	58	50.4%	115	141	60.0%	235
Sugar	106	92.2%	115	219	93.2%	235
<i>Household Food Consumption Frequency (mean)</i>						
Main Staples		6.6	115		6.3	235
Pulses		1.0	115		1.0	235
Vegetables		4.6	115		4.5	235
Fruits		0.3	115		0.5	235
Meat/Fish **		2.3	115		3.0	235
Diary		0.0	115		0.1	235
Oil		1.5	115		2.1	235
Sugar *		4.7	115		5.1	235
<i>Household Food Consumption – proportion of HHs reporting consuming each food group in the last week</i>						
Household Food consumption score (mean)*		33.4	115		36.6	235
HH with Acceptable FCS	47	40.9%	115	121	51.5%	235
HH with Borderline FCS	57	49.6%	115	95	40.4%	235
HH with Poor FCS	11	9.6%	115	19	8.1%	235

* $p < 0.05$, ** $p < 0.01$

The proportions of household in each food consumption score categories were not significant by household head gender, but the male lead household had better off food consumption score

compare to female-headed HHs. In general, male headed household had better consumption on fruits, meat/fish and sugar food groups. The household size did not explain the condition of household food condition score.

Reduced Coping Strategies Index (rCSI)

Households use different types of coping strategies when they do not have food or the resources for purchasing food. The rCSI reflects both the frequency of each strategy or behaviour and the severity. The average rCSI score for HHs in Sittwe is 16; approximately 36% of HHs displayed characteristics consistent with IPC⁸ Phase 3/4/5 (crisis/emergency/famine) indicating prevalence of food consumption gaps that are reflected by high or above-usual acute malnutrition; or are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies. 59% of HHs displayed characteristics consistent with IPC Phase 2 (stressed) indicating that approximately 6 out of 10 households surveyed have minimally acceptable food consumption with limited capacity to afford essential non-food expenditures (See table 12 for details). Only 5% of the surveyed households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income (IPC 1 (minimal)). While nearly half of the respondents had an 'acceptable' FCS, meaning these respondents have access to and consume diverse foods, likely in small quantities, because the rCSI highlights the continued challenges the HH may be facing in consistently consuming these foods. An average of 74% of the sampled HHs were using negative coping mechanisms (Table 13). With approximately 67% relying on the two most severe negative coping strategies of restricting food consumption by adult for children to eat and borrowing food. Specifically, approximately 88% of the surveyed HHs reported consuming less expensive and less preferred foods items, while 76% either borrowed food from a friend or relative or limiting food portions during meal times. This indicates the vulnerability of household to food insecurity given that the available food is insufficient to sustain the entire household size. This behaviours could be related to limited

⁸ **IPC 5:** Households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution, and extremely critical acute malnutrition levels are evident. **IPC 4:** Households either have large food consumption gaps, which are reflected in very high acute malnutrition and excess mortality; or are able to mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation. **IPC 3:** Households either have food consumption gaps that are reflected by high or above-usual acute malnutrition; or are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies. **IPC 2:** Households have minimally acceptable food consumption but are unable to afford some essential non-food expenditures without engaging in stress-coping strategies. **IPC 1:** Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income.

foods availability at HHs level. FFP cash support might cushion the households from applying these coping mechanisms.

Table 12: rCSI in Sittwe – Unconditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Reduced Coping Strategies Index Score</i>						
Average rCSI (mean)		16.0	8.7	15.1	16.9	350
HH with above CSI Score 19 points	116	33.1%	0.5	28.2%	38.1%	350
<i>IPC on the basis of rCSI</i>						
HHs in IPC 1 - Minimal	19	5.4%	0.2	3.0%	7.8%	350
HHs in IPC 2 - Stressed	205	58.6%	0.5	53.4%	63.8%	350
HHs in IPC 3/4/5 - Crisis/Emergency/Famine	126	36.0%	0.5	30.9%	41.1%	350

Table 13: Household Coping Strategies in Sittwe – Unconditional Cash Transfer

	n	%	sd	95% CI		N	
				lb	ub		
<i>Household Usage of Each Coping Strategy</i>							
Rely on less preferred and less expensive foods	309	88.3%	0.3	84.9%	91.7%	350	
Borrow food, or rely on help from a friend or relative	268	76.6%	0.4	72.1%	81.0%	350	
Limit portion size at mealtimes	267	76.3%	0.4	71.8%	80.8%	350	
Restrict consumption by adults in for small children to eat	202	57.7%	0.5	52.5%	62.9%	350	
Reduce number of meals eaten in a day	248	70.9%	0.5	66.1%	75.6%	350	
<i>Household Usage of Each Coping Strategy Frequency (Mean)</i>							
Rely on less preferred and less expensive foods			3.1	1.9	2.9	3.3	350
Borrow food, or rely on help from a friend or relative			2.0	1.6	1.8	2.1	350
Limit portion size at mealtimes			2.1	1.5	1.9	2.2	350
Restrict consumption by adults for small children to eat			1.7	1.8	1.5	1.9	350
Reduce number of meals eaten in a day			1.8	1.5	1.7	2.0	350

The rCSI score and coping strategy behaviours were not significant different between men and female-headed HHs. And, the household size also did not determine the rCSI score.

Table 14: Household Coping Strategies in Sittwe by HH Head Gender Status

	Female headed HH			Male headed HH		
	n	%	N	n	%	N
<i>Household Usage of Each Coping Strategy</i>						
Rely on less preferred and less expensive foods	102	88.7%	115	207	88.1%	235
Borrow food, or rely on help from a friend or relative	86	74.8%	115	182	77.4%	235
Limit portion size at mealtimes	88	76.5%	115	179	76.2%	235
Restrict consumption by adults in for small children to eat	60	52.2%	115	142	60.4%	235

Reduce number of meals eaten in a day	87	75.7%	115	161	68.5%	235
<i>Reduced Coping Strategies Index Score</i>						
Average rCSI (mean)		15.5	115		16.3	235
HH with above CSI Score 19 points	34	29.6%	115	82	34.9%	235
<i>IPC on the basis of rCSI</i>						
HHs in IPC 1 - Minimal	5	4.3%	115	14	6.0%	235
HHs in IPC 2 - Stressed	71	61.7%	115	134	57.0%	235
HHs in IPC 3/4/5 - Crisis/Emergency/Famine	39	33.9%	115	87	37.0%	235

* $p < 0.05$, ** $p < 0.01$

Household Hunger Scale (HHS)

The HHS observes the prevalence of hunger at household level. The results of this survey show that approximately half (51%) of IDP HHs experienced severe or moderate hunger and 49% experienced little to no hunger in the month prior to the survey. Results also show that approximately 1% of HHs exhibited characteristics consistent with IPC Phase 5 (famine), 3% displayed characteristics with IPC 4 (emergency), 47% with IPC 3 (crisis), 31% with IPC 2 (stressed) and 17% with IPC 1 (minimal).

Table 15: HHS in Sittwe – Unconditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Household Hunger Experience (In the past 30 days)</i>						
No food to eat	202	57.7%	0.5	52.5%	62.9%	350
Go to sleep at night hungry	219	62.6%	0.5	57.5%	67.7%	350
Go a whole day and night without eating anything	105	30.0%	0.5	25.2%	34.8%	350
<i>Household Hunger Scale (mean score)</i>						
Little to no hunger		48.6%	0.5	43.3%	53.8%	350
Moderate hunger		46.9%	0.5	41.6%	52.1%	350
Severe hunger		4.6%	0.2	2.4%	6.8%	350
<i>IPC on the basis of HHS</i>						
HHs in IPC 1 - Minimal	61	17.4%	0.4	13.4%	21.4%	350
HHs in IPC 2 - Stressed	109	31.1%	0.5	26.3%	36.0%	350
HHs in IPC 3 - Crisis	164	46.9%	0.5	41.6%	52.1%	350
HHs in IPC 4 - Emergency	12	3.4%	0.2	1.5%	5.3%	350
HHs in IPC 5 - Famine	4	1.1%	0.1	0.0%	2.3%	350

More male-headed HHs less experienced household hunger conditions as 52% of male headed household had little to no hunger, but the female-headed HHs had only 41% of household with little or no hunger. In term of IPC phase 3 – Crisis, the proportion of male lead household were 11.8 percent points less than female-headed HHs.

Table 16: Table 15: HHS in Sittwe – Unconditional Cash Transfer by HH Head Gender Status

	Women Lead HH			Men Lead HH		
	n	%	N	n	%	N
<i>Household Hunger Experience (In the past 30 days)</i>						
No food to eat	71	61.7%	115	131	55.7%	235
Go to sleep at night hungry	77	67.0%	115	142	60.4%	235
Go a whole day and night without eating anything	38	33.0%	115	67	28.5%	235
<i>Household Hunger Scale (mean score)</i>						
Little to no hunger *	47	40.9%	115	123	52.3%	235
Moderate hunger *	63	54.8%	115	101	43.0%	235
Severe hunger	5	4.3%	115	11	4.7%	235
<i>IPC on the basis of HHS</i>						
HHs in IPC 1 - Minimal	16	13.9%	115	45	19.1%	235
HHs in IPC 2 - Stressed	31	27.0%	115	78	33.2%	235
HHs in IPC 3 - Crisis *	63	54.8%	115	101	43.0%	235
HHs in IPC 4 - Emergency	4	3.5%	115	8	3.4%	235
HHs in IPC 5 - Famine	1	0.9%	115	3	1.3%	235

* $p < 0.05$, ** $p < 0.01$

There was no associate with household size and household hunger scale.

3.2 FINDINGS – PAUKTAW

Respondent Information

The conditional cash transfer program (CfW) surveyed 348 respondents (a mix of beneficiaries and non-beneficiaries) from the township of Pauktaw. Two respondents did not consent to participate in the survey from Pauktaw Township. The average age of the respondents was 39.3 years and the average household size was 5.1. Approximately 15% of participants from Pauktaw reported that their household owned a mobile phone, and approximately 23% of the respondents reported that their household were headed by females.

Table 17: Respondent information – Pauktaw – Conditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Respondent Information</i>						
Provided consent yes	346	99.4%	0.1	98.6%	100.2%	348
Female Respondent	223	64.5%	0.5	59.4%	69.5%	346
Male Respondent	123	35.5%	0.5	30.5%	40.6%	346
Respondent age (average)		39.3	13.5	37.9	40.8	346

Respondent is Head of HH	172	49.7%	0.5	44.4%	55.0%	346
<i>Household Information</i>						
Household Size (average)		5.1	2.1	4.9	5.3	346
Household with mobile phone	51	14.7%	0.4	11.0%	18.5%	346
Female-headed HH	80	23.1%	0.4	18.7%	27.6%	346
Male-headed HH	266	76.9%	0.4	72.4%	81.3%	346

Food Consumption Score

The household's food consumption score measures food security through a aggregating food intake relative to dietary diversity, food frequency and nutrition values (see section 2.6.1 for detailed definition). WFP clarifies households as having food security when the cut-off point >35, acceptable which is interpreted to mean that daily per capita calories of around 1950 kilocalories. While a cut-off point below < 21 is classified as poor food security, a cut of 21-35 is considered to be on the borderline. On average, the sampled host community in Pauktaw are on the borderline (32.6 FCS). Approximately 20% of households have poor food security, implying limited access to food and insufficient intake of nutritious foods. 39% have a 'borderline' FCS, and 41% have an 'acceptable' FCS (Table 18). Over 59% of the surveyed households have unacceptable food daily per capita calories intake. Descriptively, the most consumed (91% of the HHs) highly nutritious food (protein and hem iron rich) items include meat/fish. Very few households consumed dairy products (8%) the two week prior to the survey, despite this being a main source of vitamin A and protein. The second nutritional value ranking consumed food item was main staples (~94%) and the average number of days for most household consumed food, vegetables, meat/fish and sugar, were 3 days a week in prior week, except main staple which was consumed 5 days in average (Table 19).

Table 18: Food Consumption Score for Pauktaw – Conditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Food Consumption Score</i>						
Household FCS (mean)		32.6	14.11	31.1	34.1	346
HH with Acceptable FCS	142	0.49	0.03	35.8%	46.2%	346
HH with Borderline FCS	135	0.49	0.03	33.9%	44.2%	346
HH with Poor FCS	69	0.40	0.02	15.7%	24.2%	346
<i>IPC on the basis of FCS</i>						
HHs in IPC 1/2 - Minimal/Stressed	142	0.49	0.03	35.8%	46.2%	346
HHs in IPC 3 - Crisis	135	0.49	0.03	33.9%	44.2%	346

HHs in IPC 4/5 - Emergency/Famine 69 0.40 0.02 15.7% 24.2% 346

Table 19: Household Food Consumption Practices for Pauktaw

	n	%	sd	95% CI		N
				lb	ub	
<i>Household Food Consumption</i>						
Main Staples	325	93.9%	0.2	91.4%	96.5%	346
Pulses	181	52.3%	0.5	47.0%	57.6%	346
Vegetables	341	98.6%	0.1	97.3%	99.8%	346
Fruits	100	28.9%	0.5	24.1%	33.7%	346
Meat/Fish	315	91.0%	0.3	88.0%	94.1%	346
Diary	28	8.1%	0.3	5.2%	11.0%	346
Oil	154	44.5%	0.5	39.2%	49.8%	346
Sugar	314	90.8%	0.3	87.7%	93.8%	346
<i>Household Food Consumption Frequency (mean)</i>						
Main Staples		5.2	2.4	5.0	5.5	346
Pulses		1.1	1.3	1.0	1.3	346
Vegetables		3.3	1.5	3.2	3.5	346
Fruits		0.5	0.9	0.4	0.6	346
Meat/Fish		3.0	1.8	2.8	3.2	346
Diary		0.1	0.5	0.1	0.2	346
Oil		1.0	1.5	0.9	1.2	346
Sugar		3.5	2.1	3.3	3.7	346

The proportion of man lead household with Poor FCS (20.7%) was higher than female-headed HHs (17.5%). Among individual food group consumption, the female-headed HHs consumed pulses more than male lead household.

Table 20: Household Food Consumption Practices for Pauktaw by HH Head Gender Status

	Female-Led HH			Male-Led HH		
	n	%	N	n	%	N
<i>Household Food Consumption</i>						
Main Staples	76	95.0%	80	249	93.6%	266
Pulses **	53	66.3%	80	128	48.1%	266
Vegetables	79	98.8%	80	262	98.5%	266
Fruits	18	22.5%	80	82	30.8%	266
Meat/Fish	72	90.0%	80	243	91.4%	266
Diary	5	6.3%	80	23	8.6%	266
Oil	34	42.5%	80	120	45.1%	266
Sugar	73	91.3%	80	241	90.6%	266
<i>Household Food Consumption Frequency (mean)</i>						
Main Staples		5.3	80		5.2	266
Pulses **		1.6	80		1.0	266
Vegetables		3.3	80		3.3	266
Fruits		0.4	80		0.5	266
Meat/Fish		3.0	80		3.0	266
Diary		0.1	80		0.1	266
Oil		0.9	80		1.1	266
Sugar		3.6	80		3.5	266
<i>Food Consumption Score</i>						
Household Food consumption score (mean)		34.1	80		32.2	266
HH with Acceptable FCS	42	52.5%	80	100	37.6%	266
HH with Borderline FCS	24	30.0%	80	111	41.7%	266
HH with Poor FCS *	14	17.5%	80	55	20.7%	266

* $p < 0.05$, ** $p < 0.01$

The positive medium correlation was identified between household size and household food consumption score in female-headed HHs ($r = 0.3$). However, it cannot literally be translated that more household members in female-headed HHs can have better household consumption score. Because, the female-headed HHs had less household members than male-headed HHs in Pauktaw township.

Reduced Coping Strategies Index (rCSI)

In Pauktaw, the average rCSI is 10; approximately 17% of HHs displayed characteristics consistent with IPC⁹ Phase 3/4/5 (crisis/emergency/famine), 54% of HHs displayed characteristics with IPC Phase 2 (stressed), and 30% with IPC 1 (minimal) (Table 21).

⁹ **IPC 5:** Households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution, and extremely critical acute malnutrition levels are evident. **IPC 4:** Households either have large food consumption gaps, which are reflected in very high acute malnutrition and excess mortality; or are able to mitigate large food consumption gaps but only by employing emergency

Table 21: rCSI in Pauktaw – Conditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Reduced Coping Strategies Index Score</i>						
Average rCSI (mean)		10.0	9.4	9.0	11.0	346
HH with above CSI Score 19 points	51	14.7%	0.4	11.0%	18.5%	346
<i>IPC on the basis of rCSI</i>						
HHs in IPC 1 - Minimal	102	29.5%	0.5	24.7%	34.3%	346
HHs in IPC 2 - Stressed	187	54.0%	0.5	48.8%	59.3%	346
HHs in IPC 3/4/5 - Crisis/Emergency/Famine	57	16.5%	0.4	12.5%	20.4%	346

Although almost half of the household had acceptable FCS, there are struggles with some coping behaviours to attained that FCS condition. For instance, majority of households (80%) relied on less preferred and less expensive foods, 60% borrowed food, 40% limited portion sizes, and approximately one in three households restricted consumption of adults and prioritized children’s consumption and/or reduced the frequency or number of meals in a day.

Table 22: Household Usage of Negative Coping Strategies in Pauktaw

	n	%	sd	95% CI		N
				lb	ub	
<i>Household Usage of Each Coping Strategy</i>						
Rely on less preferred and less expensive foods	275	79.5%	0.4	75.2%	83.8%	346
Borrow food, or rely on help from a friend or relative	211	61.0%	0.5	55.8%	66.1%	346
Limit portion size at mealtimes	139	40.2%	0.5	35.0%	45.4%	346
Restrict consumption by adults for small children to eat	129	37.3%	0.5	32.2%	42.4%	346
Reduce number of meals eaten in a day	115	33.2%	0.5	28.2%	38.2%	346
<i>Household Usage of Each Coping Strategy Frequency (Mean)</i>						
Rely on less preferred and less expensive foods		2.5	1.8	2.3	2.6	346
Borrow food, or rely on help from a friend or relative		1.3	1.3	1.2	1.5	346
Limit portion size at mealtimes		1.0	1.5	0.9	1.2	346
Restrict consumption by adults for small children to eat		1.0	1.6	0.8	1.2	346
Reduce number of meals eaten in a day		0.9	1.4	0.7	1.0	346

livelihood strategies and asset liquidation. **IPC 3:** Households either have food consumption gaps that are reflected by high or above-usual acute malnutrition; or are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies. **IPC 2:** Households have minimally acceptable food consumption but are unable to afford some essential non-food expenditures without engaging in stress-coping strategies. **IPC 1:** Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income.

The average rCSI score for male-headed HHs (9.2) was lower than female-headed HHs (12.9). The female-headed HHs were practicing more on some coping behaviours; relied on less preferred and less expensive foods, limited portion sizes, and reduced the frequency or number of meals in a day.

Table 23: Household Usage of Negative Coping Strategies in Pauktaw by HH Head Gender Status

	Women Lead HH			Men Lead HH		
	n	%	N	n	%	N
<i>Household Usage of Each Coping Strategy</i>						
Rely on less preferred and less expensive foods *	71	88.7%	80	204	76.7%	266
Borrow food, or rely on help from a friend or relative	56	70.0%	80	155	58.3%	266
Limit portion size at mealtimes *	40	50.0%	80	99	37.2%	266
Restrict consumption by adults for small children to eat	35	43.8%	80	94	35.3%	266
Reduce number of meals eaten in a day *	34	42.5%	80	81	30.5%	266
<i>Household Usage of Each Coping Strategy Frequency (Mean)</i>						
Rely on less preferred and less expensive foods **		3.0	80		2.3	266
Borrow food, or rely on help from a friend or relative *		1.7	80		1.3	266
Limit portion size at mealtimes **		1.5	80		0.9	266
Restrict consumption by adults for small children to eat		1.3	80		0.9	266
Reduce number of meals eaten in a day		1.1	80		0.8	266
<i>Reduced Coping Strategies Index Score</i>						
Average rCSI (mean) **		12.9	80		9.2	266
HH with above CSI Score 19 points	18	22.5%	80	33	12.4%	266
<i>IPC on the basis of rCSI</i>						
HHs in IPC 1 - Minimal	17	21.3%	80	85	32.0%	266
HHs in IPC 2 - Stressed	45	56.3%	80	142	53.4%	266
HHs in IPC 3/4/5 - Crisis/Emergency/Famine	18	22.5%	80	39	14.7%	266

* $p < 0.05$, ** $p < 0.01$

Household size did not explain the household rCSI score.

Household Hunger Scale

The results show that 71% of households from Pauktaw experienced little to no hunger in the month prior to the survey. Results also show that approximately 1% of HHs exhibited characteristics consistent with IPC Phase 5 (famine), 3% displayed characteristics with IPC 4 (emergency), 25% with IPC 3 (crisis), 37% with IPC 2 (stressed) and 34% with IPC 1 (minimal).

Table 24: HHS in Pauktaw – Conditional Cash Transfer

	n	%	sd	95% CI		N
				lb	ub	
<i>Household Hunger Experience (In the past 30 days)</i>						
No food to eat	228	65.9%	0.5	60.9%	70.9%	346
Go to sleep at night hungry	94	27.2%	0.4	22.5%	31.9%	346
Go a whole day and night without eating anything	56	16.2%	0.4	12.3%	20.1%	346
<i>Household Hunger Scale (mean score)</i>						
Little to no hunger	246	71.1%	0.5	66.3%	75.9%	346
Moderate hunger	85	24.6%	0.4	20.0%	29.1%	346
Severe hunger	15	4.3%	0.2	2.2%	6.5%	346
<i>IPC on the basis of HHS</i>						
HHs in IPC 1 - minimal	117	33.8%	0.5	28.8%	38.8%	346
HHs in IPC 2 - stressed	129	37.3%	0.5	32.2%	42.4%	346
HHs in IPC 3 - crisis	85	24.6%	0.4	20.0%	29.1%	346
HHs in IPC 4 - emergency	11	3.2%	0.2	1.3%	5.0%	346
HHs in IPC 5 - famine	4	1.2%	0.1	0.0%	2.3%	346

There was no significant difference between male- and female-headed households on household hunger scale. However, female-headed households were experiencing more on the two out of three hunger experiences compared to households headed by men: women-headed households were more likely to go to sleep at night hungry and/or went a whole day and night without eating anything in the month before survey.

Table 25: HHS in Pauktaw – Conditional Cash Transfer by HH Head Gender Status

	Women Lead HH			Men Lead HH		
	n	%	N	n	%	N
<i>Household Hunger Experience (In the past 30 days)</i>						
No food to eat	52	65.0%	80	176	66.2%	266
Go to sleep at night hungry *	30	37.5%	80	64	24.1%	266
Go a whole day and night without eating anything **	22	27.5%	80	34	12.8%	266
<i>Household Hunger Scale (mean score)</i>						
Little to no hunger	52	65.0%	80	194	72.9%	266
Moderate hunger	25	31.3%	80	60	22.6%	266
Severe hunger	3	3.8%	80	12	4.5%	266
<i>IPC on the basis of HHS</i>						
HHs in IPC 1 - Minimal	28	35.0%	80	89	33.5%	266
HHs in IPC 2 - Stressed	24	30.0%	80	105	39.5%	266
HHs in IPC 3 - Crisis	25	31.3%	80	60	22.6%	266
HHs in IPC 4 - Emergency	2	2.5%	80	9	3.4%	266
HHs in IPC 5 - Famine	1	1.3%	80	3	1.1%	266

* $p < 0.05$, ** $p < 0.01$

There was no association of number of household members and household hunger scale.

3.3 Relationship Among FCS, rCSI and HHS

Sittwe – Unconditional Cash Transfer Program

The results explained that households with borderline food consumption status were significantly higher in practicing coping strategy behaviours compared to the acceptable group ($p < 0.01$). There may be some potential explanation that some household with borderline FCS score were exercising coping mechanisms to reach the higher levels of food consumption in their household. In the meantime, the households with poor FCS scores may have had very limited resources or capacity to practice negative coping strategies; for that reason, they had lower food consumption and scored lower rCSI score at the same time.

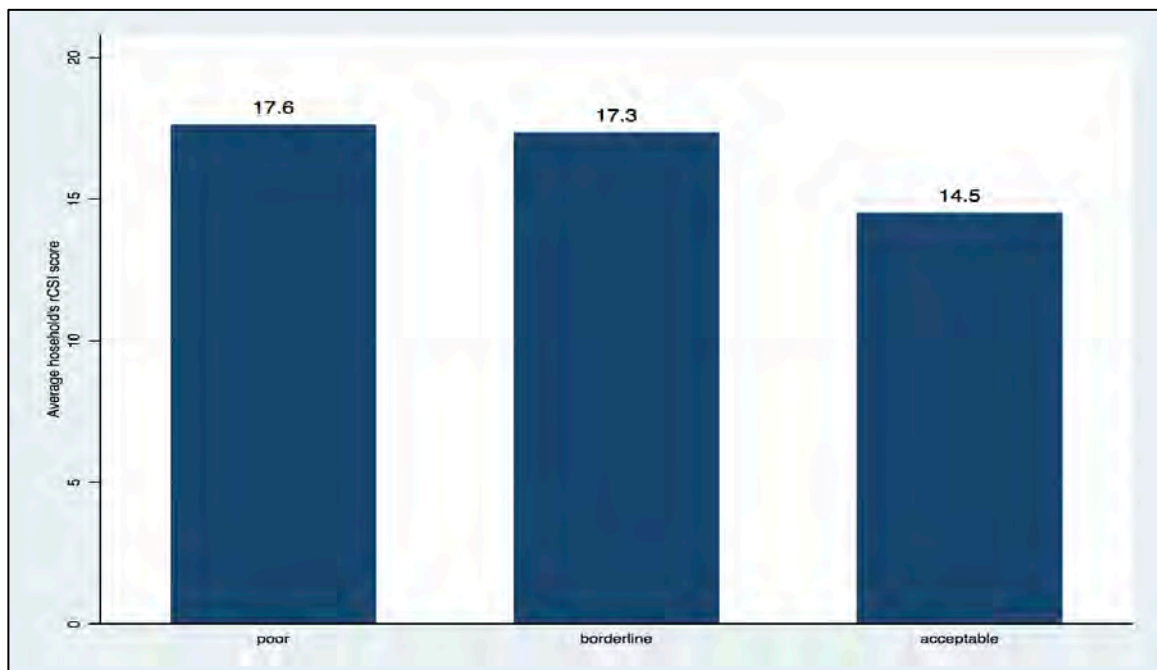


Figure 1: rCSI score by FCS Status in Sittwe

The severe hunger household had lowest household food consumption score compared to household which were little to no hunger and/or moderate hunger household. ($p < 0.01$). The household severe hunger had consumed even less than a day in the week prior survey; pulses (0.9), fruits (0.3), dairy (0.3). Vegetable was consumed approximately 5 days week prior a week before data collection, but meat and fish were consumed only 2 days.

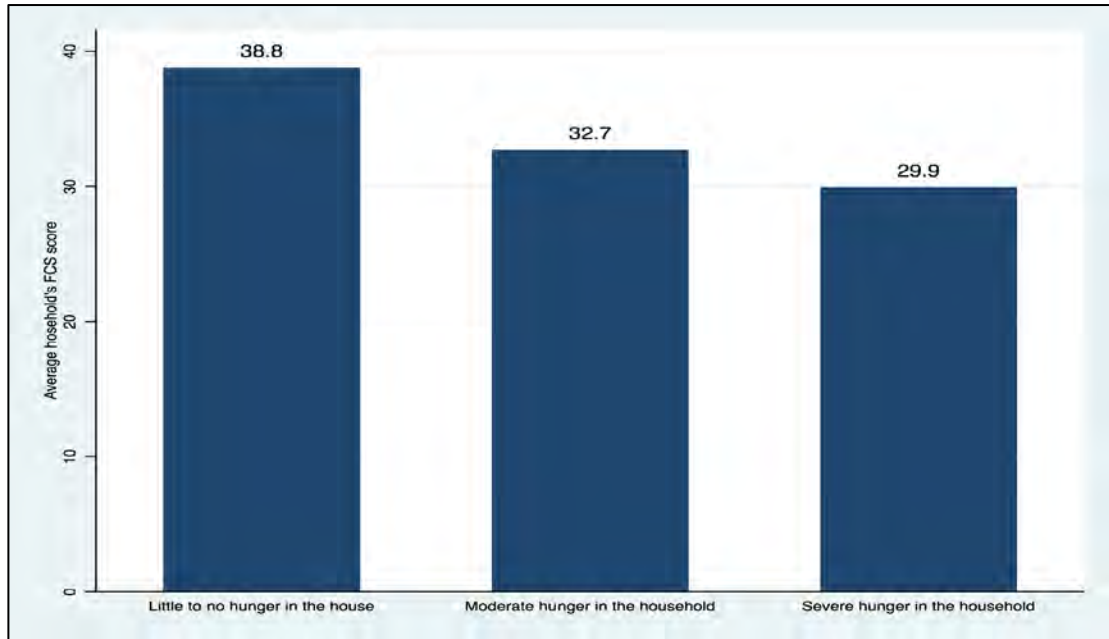


Figure 2: Food Consumption Score by HH Hunger Status in Sittwe

The similar pattern was also observed with the relationship between the coping strategies index score and household hunger status. Households with ‘severe’ hunger status had the highest rCSI scores ($p < 0.01$), and those household applied approximately 3 days in the week prior data collection for all the coping strategy behaviours, expect for the strategy ‘relied on less preferred and less expensive foods’ (4 days).

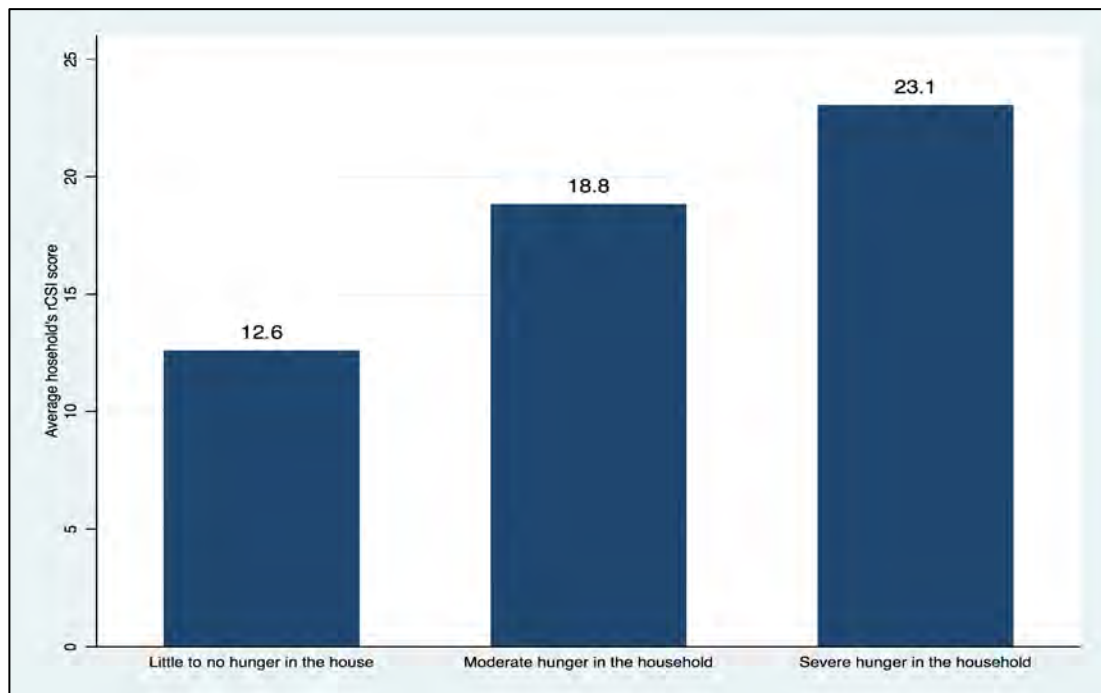


Figure 3: rCSI score by HH hunger status in Sittwe

Pauktaw – Conditional Cash Transfer Program - CfW

The average rCSI score for households with ‘borderline’ FCS score was 12.2, a significantly higher rCSI score than the FCS ‘acceptable’ group ($p < 0.01$). The poor FCS score households had average 9.8 rCSI score, but not significantly different from the other remaining two groups.

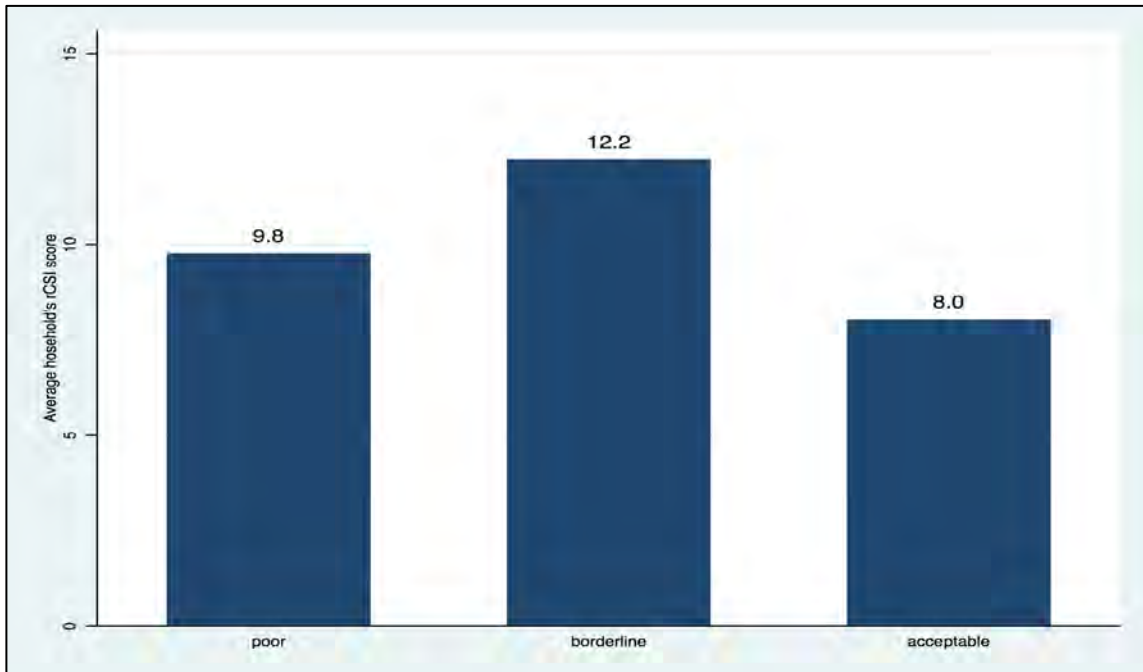


Figure 4: rCSI score by FCS Status in Pauktaw

Households from three different HHS groups had no difference on average FCS score.

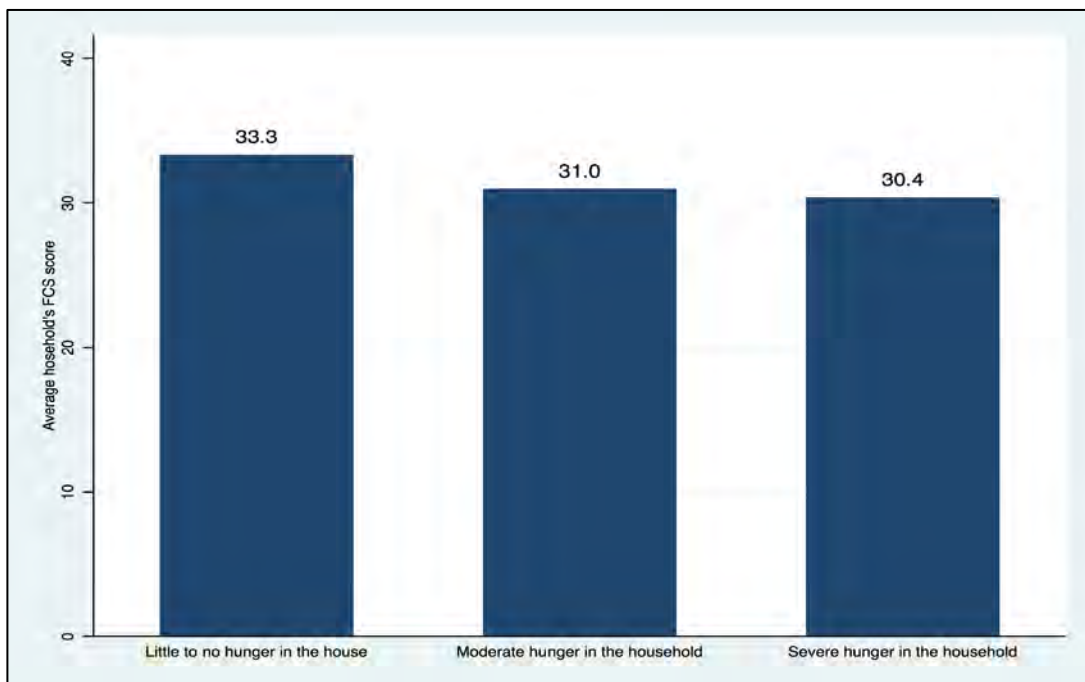


Figure 5: Food Consumption Score by HH Hunger Status in Pauktaw

The household with little to no hunger had the lowest average rCSI score (6.2), significantly lower than the rCSI score of moderate hunger households (18.7) and severe hunger households (22.5) ($p < 0.091$). Households with the severe hunger score applied approximately 3 days in the week prior data collection for all coping strategy behaviours.

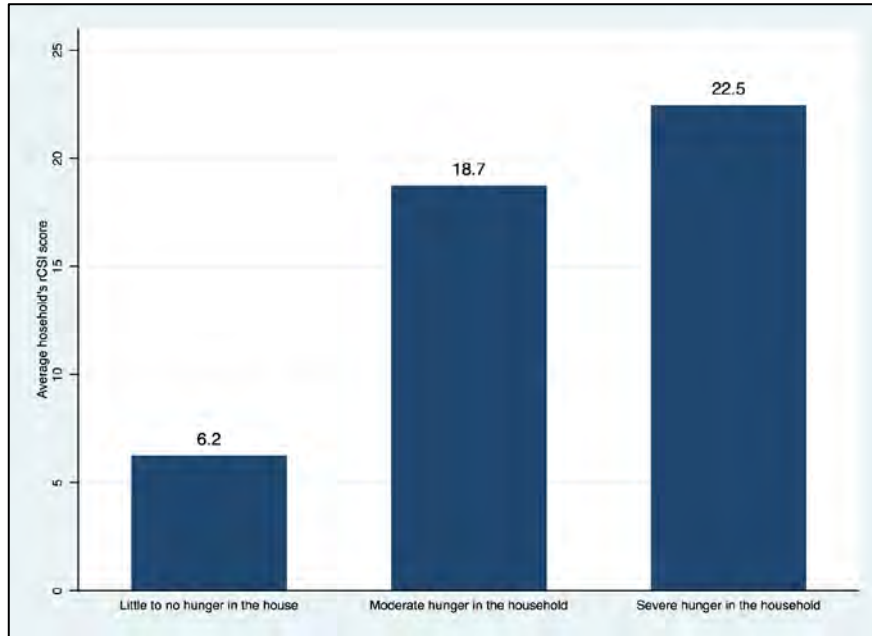


Figure 6: rCSI score by HH hunger status in Pauktaw

3.4 CONCLUSIONS

Sittwe – Unconditional Cash Transfer Program

Approximately one in every two households were not in the condition of little to no hunger, and female-headed HHs had a high possibility of suffering from household hunger status. These households had the lowest household food consumption score and more frequently used coping strategy behaviours. ‘Severe’ and/or ‘moderate’ hunger household’s diet can be determined as having consumed fruit and dairy for less than a day, pulses for approximately one day, and fish and meat for only 2 days, where there were approximately 5 days a week where households ate vegetables and main staple foods.

In general, a very small proportion of households from Sittwe consumed dairy (3%), and fruits followed in second position at 17%. Fish is common meal in this area; approximately one in every two households consumed it. Household head gender status also had influence on HHS and FCS. The male-headed households were in better off conditions compared to female-

headed HHs for both of these indicators, although household size did not seem to have any impact on these conditions.

While nearly half of the respondents had an ‘acceptable’ FCS (meaning these respondents have access to and consume diverse foods), the rCSI highlights the continued challenges households may be facing in consistently consuming these foods. Additionally, each food group is weighted differently, which can skew the scores if higher weighted foods are common in the IDP diet – such as fish and vegetables – and, therefore, consumed more regularly. Even if these foods are only consumed a couple of days a week, it can result in a higher overall FCS.

From the different food security indicators (FCS, rCSI and HHS), the results show that approximately 50% of HHs exhibited characteristics consistent with IPC Phase 4 (emergency) and/or IPC¹⁰ Phase 5 (famine), and there is only a small proportion of households with IPC 1 (minimal).

Table 26: HHs with IPC phase by three different Food Security Indicators in Sittwe

	<i>IPC on the basis of HHS</i>	<i>IPC on the basis of rCSI</i>	<i>IPC on the basis of FCS</i>
HHs in IPC 1 – minimal	17.4%	5.4%	48.0%
HHs in IPC 2 – stressed	31.1%	58.6%	
HHs in IPC 3 - crisis	46.9%	36.0%	43.4%
HHs in IPC 4 - emergency	3.4%		8.6%
HHs in IPC 5 - famine	1.1%		

Pauktaw – Conditional Cash Transfer Program - Cfw

Approximately one in every three households were not in the condition of little to no hunger, and female-headed HHs experienced higher percentage of individual HHS’s behaviours, such as going to sleep at night with hungry and/or going a whole day and night without eating anything in the month before survey. Those households also had higher rCSI score. The severe and/or moderate hunger household’s diet can be determined as consumed pulses, fruit and diary

¹⁰ **IPC 5:** Households have an extreme lack of food and/or other basic needs even after full employment of coping strategies. Starvation, death, destitution, and extremely critical acute malnutrition levels are evident. **IPC 4:** Households either have large food consumption gaps, which are reflected in very high acute malnutrition and excess mortality; or are able to mitigate large food consumption gaps but only by employing emergency livelihood strategies and asset liquidation. **IPC 3:** Households either have food consumption gaps that are reflected by high or above-usual acute malnutrition; or are marginally able to meet minimum food needs but only by depleting essential livelihood assets or through crisis-coping strategies. **IPC 2:** Households have minimally acceptable food consumption but are unable to afford some essential non-food expenditures without engaging in stress-coping strategies. **IPC 1:** Households are able to meet essential food and non-food needs without engaging in atypical and unsustainable strategies to access food and income.

for less than a day, vegetable and fish/meat for 3 days and main staple foods for approximately 5 days a week.

In general, a very small proportion of households from Pauktaw consumed dairy (8%), followed by the fruits group at 29%. Household head gender status also had influence on HHS and FCS. The man-headed households were in better off conditions for those indicators compared to female-headed HHs, and again household size did not have any relationship to those conditions.

Although almost half of the household had acceptable FCS, there were struggles with some coping behaviours to attain these FCS condition. The majority of households (80%) relied on less preferred and less expensive foods, 60% borrowed food, 40% limited portion sizes, and approximately one in three households restricted consumption of adults and prioritized children’s consumption and/or reduced the frequency or number of meals in a day. Especially in female-headed HHs, some coping behaviours were more commonly used, including ‘relied on less preferred and less expensive foods’, ‘limited portion sizes’, and ‘reduced the frequency or number of meals in a day’.

From the different food security indicators (FCS, rCSI and HHS), results showed that approximately one in every four households was at the IPC Phase 1 (minimal) and the remainder were distributed across IPC Phase 2/3/4/5/ (stressed, crisis, emergency and famine).

Table 27: HHs with IPC phase by three different Food Security Indicators in Pauktaw

	<i>IPC on the basis of HHS</i>	<i>IPC on the basis of rCSI</i>	<i>IPC on the basis of FCS</i>
HHs in IPC 1 - minimal	33.8%	29.5%	41.0%
HHs in IPC 2 - stressed	37.3%	54.0%	
HHs in IPC 3 - crisis	24.6%	54.0%	39.0%
HHs in IPC 4 - emergency	3.2%		19.9%
HHs in IPC 5 - famine	1.2%		

3.5 RECOMMENDATIONS

INDICATORS TARGETING

Household hunger scale indicator

The baseline study shows that 51.5% of UTC HHs and 28.9% of CfW HHs experience moderate or severe hunger. The team initially proposed a target of 15 percentage points lower than the baseline value; however, given the actual baseline values, the programme is recommending a decrease of 10 percentage point in the proportion of HHs experiencing

moderate or severe hunger among both UCT and CfW populations. Additionally, among the HHs experiencing moderate hunger (32.7% in UCT and 24.6% in CfW), most have an average score of two (2) points. The programme assumes that food assistance will enable these HHs to move from moderate to little/no hunger.

Reduced Coping Strategies Index (rCSI)

The baseline observed an average rCSI score of 16 points for UCT HHs and 10 points for CfW HHs. Prior to the baseline results, the team recommended a 10 point decline assuming HHs would have higher average scores; however, based on the actual baseline values, the programme is recommending a 3-point (average) reduction from baseline to endline for both CfW and UCT. The targeting is based on the fact that in the UCT program area, the average score is almost identical to the second quantile value, and there was five-digit points difference between second and first quantile values. In the CfW program area, the average score is located around 60 percentiles, and the gap between this average value and second quantile value was three-digit points. The standard deviation from both program areas is approximately nine digits point. In this context, while the recommended FFP target is a five average point reduction, this will be challenging to achieve, and three-digit average points reduction will be the best estimation for mean score reduction in the use of coping strategies on average.

Acceptable Food Consumption Score (FCS)

The study shows that 48% of UCT HHs and 41% of CfW HHs have an ‘acceptable’ FCS. While the FFP-recommended baseline target is a reduction of 15 percentage points from baseline value, the distribution of data shows a minimal chance of realising this target. In both populations, the cut-off point value for acceptable FCS is around the second quantile, and the gap is huge between the average values and first quantile value (approximately eight digit points). The standard deviation of FCS indicators of both areas was more than 10. As such, the most realistic and feasible target is a 10 percentage point increase in the proportion of households with ‘acceptable’ FCS.

PROGRAM BENEFICIARIES TARGETING

The household size was not recommended as the criteria for program beneficiary selection as it did not have any effect on the HHS, FCS and rCSI food security indicators. The female-led HHs should be prioritized in targeting, especially for conditional case transfer activities.

NUTRITION PROMOTION KNOWLEDGE

Although a high proportion of households reported high vegetable and meat/fish consumption, the average frequency was limited. On the other hand, low consumption was reported for pulses and legumes. As such, additional nutrition informational sessions could be added, or beneficiaries from this project could be linked with other SC Myanmar nutrition promotion activities, to promote the awareness and importance of consumption of diverse foods. This could be in the form of soft conditions to targeted project participants such as conducting short education sessions on healthy diets before distribution or sharing IECs with nutrition-promoting messages. Building from Save the Children's experiences in the Mother and Child Cash Transfer project, a light Behaviour Change and Communication (BCC) component could be added to the design and integrated in cash distribution events. Specifically, the key priority messages to can include consumption of foods items from the pulses and legumes group, as these have high nutritional values and are hence heavily weighted in the calculation of FCS score. Approximately 50% of the sampled households reported that they consumed pulses and legumes in the last week, with the average frequency of consumption being only once.

LINKAGES WITH GOVERNMENT SOCIAL PROTECTION PROGRAM

According to the Department of Social Welfare (DSW) program implementation information, the Rakhine state is included in the area of Government Lead Mother and Children Cash Transfer Program. Linkages to that program could provide additional benefits for beneficiaries on top of having income that is more regular for some vulnerable households (with pregnant mother or under two-year-old children). In addition to the MCCT program, the social pension program also covers the whole country and supports people ages 85 years or older. This could be useful for HHs with elderly people and could reduce the strain on available HHs resources. In Rakhine the government-led cash transfer for the elderly is implemented by the State level DSW office. The programme should link up with the DSW Office in Sittwe and discuss the possibilities of having programme beneficiaries considered for cash **distribution**.

4.0 Annex

Annex 1: Baseline Questionnaire