

Chars Livelihoods Programme

Baseline findings: comparing first and second tier CPHHs of cohort 2.2

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Aid Program



Acronyms

BMI	Body Mass Index
CDO	Community Development Organiser
CED	Chronic Energy Deficiency
CLP	Chars Livelihoods Programme
CP	Core Participant
CPHH	Core Participant Household
DFID	Department for International Development
GBF	Grameen Bikash Foundation
HAZ	Height for age Z score (stunting)
Hb	Haemoglobin
HWZ	Height for weight Z score (wasting)
IML	Innovation, Monitoring and Learning Division
IMO	Implementing Organisation
NSS	Nutritional Status Survey
pppd	Per person per day
RTI	Respiratory Tract Infection
WAZ	Weight for age Z score (underweight)

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Executive Summary

During its second phase, the Chars Livelihoods Programme (CLP) targets assistance to 67,000 core participant households (CPHHs). These CPHHs receive an integrated package of support that includes a significant income generating asset, access to social development modules and to savings groups, clean water and a sanitary latrine as well as access to a raised plinth. In order to qualify for the programme, CPHHs must meet strict selection criteria. They must essentially be jobless, assetless, and landless.

The CLP's selection criteria were developed in 2005 and have not been radically adjusted since. One of the criteria, namely the asset threshold of Tk 5,000¹, is extremely low and has not been adjusted for inflation meaning that each, annual recruitment of participants requires households to be poorer and poorer to qualify.

The CLP is therefore piloting a 'second tier' of core households in which an initial 1,000 families will receive a smaller package of support e.g. an income generating asset valued at Tk 9,000 instead of Tk 15,500 that first tier CPHHs receive. These second tier households will be allowed to own and share crop up to 5 decimals and 33 decimals of land respectively.

There has been some concern voiced about the adoption of the second tier and thus the current report documents the socio-economic and nutritional baseline status of first and second tier households and compares the relative data that were collected in January 2011.

First and second tier households are similar in many respects:

- Average first and second tier households are well below the poverty line of Tk 32 per person per day². There are no significant differences between incomes with first tier having an income of Tk 22 pppd compared to Tk 23 pppd for the second tier. Thus both cohorts fall some 30% below the extreme poverty threshold.
- Very small proportions of both first and second tier households possess any savings (4.3% and 3.3% respectively).
- Education levels of first and second tier household heads and the core participants themselves are minimal with no significant difference between the two tiers (77.4% of household heads in the first tier and 74.2% of the second tier have received no education).
- Daily wage labour is equally important for both tiers of households (84.8% of first tier and 83.8% of the second).
- Access to clean water and a sanitary latrine is low for both first and second tier households. Only 6.7% and 7.7% of first and second tier households respectively have access to a tubewell with a platform on a raised plinth. While only 10.4% and 13.8% of first and second tier households have access to a sanitary latrine.
- There is no difference in the nutritional status of mothers or children <5 years of age (with the exception of child anaemia being marginally less in the second tier

¹ Selected households may not own more than 2 goats/sheep, 10 fowl & 1 shared cattle

² CLP2 Log Frame (as advised by DFID economists)

households). The mean Body Mass Index of mothers from first and second tier households is 19.13 and 19.12 respectively. 41.1% of children <5 years old from first tier and 36.9% from second tier households are stunted.

However, given the differences in selection criteria, there do exist some differences between first and second tier households³; the most important being:

- First tier households have less assets (averaging Tk 633) than the second tier (Tk 5,574). They also have lower savings (Tk 77 for first tier and Tk 108 for second tier).
- Fewer first tier households are share croppers (49.1% of second tier and only 0.9% of the first tier).
- First tier households are less likely to live on a raised plinth (52.9% of second tier compared to 44.4% of the first tier).
- The first tier has more female heads (21.5% compared to 10.5% of second tier) and have a higher proportion of children of school going age with no education (48.7% compared to 37.8% respectively).
- Members of first tier households are also more likely to practice open defecation (e.g. 36.2% of adult males from the first tier report that they practice open defecation compared to 23.7% of second tier adult males).
- A higher proportion of first tier children <5 years of age are anaemic (47.8% compared to 35.5% of second tier children).
- First tier households are slightly more food insecure than the second tier, as indicated by the mean monthly expenditure on food (Tk 1,298 compared to Tk 1,431), the mean number of food groups consumed (5.8 to 6.1) and the mean number of coping strategies used (2.7 to 2.5) during the 7 days prior to the survey.

Indicators where statistically significant differences exist⁴ between the two tiers are presented in Table 1. Whilst there are statistically significant differences between the two tiers, it should be stressed that second tier households are still extremely poor (mean incomes 30% below the extreme poverty line), adopt similar livelihoods strategies (daily wage labour) and are confronted by the same vulnerabilities as first tier households.

Table 1: Indicators where there is a statistically significant difference between the two tiers

Area of Focus	Indicator	Tier 1 (% hhs)	Tier 2 (% hhs)	P
Socio-demographic	Mean family size	3.41	3.82	<0.001
	Mean age of household head	38.77	40.71	0.001
	Female headed	21.5	10.5	<0.001
	Number of adults			
	1	18.2	8.2	<0.001
2	73.4	78.4		

³ Here and elsewhere in this report the p (probability) value is quoted. A p value of <0.05 implies a significant difference between the items being compared. As the p value becomes smaller so the result becomes more significant. So a p value of 0.025 implies that 1/40 times this result occurs by chance alone, but if the p value was 0.001, then this result only occurs 1/1000 by chance.

⁴ P = <0.05

Area of Focus	Indicator	Tier 1 (% hhs)	Tier 2 (% hhs)	P
	3+	8.4	13.4	
	Number of children 5 to 15 years			
	0	48.7	37.8	<0.001
	1	25.6	27.7	
	2	17.2	21.0	
	3+	8.6	13.6	
	Education - children 5 to 15 years			
	No education	42.9	31.8	<0.001
	1-5 years	52.6	61.1	
	6+ years	4.5	7.1	
Savings	Mean per capita expenditure (Taka)	18.14	19.95	<0.001
	Mean value of cash savings (Taka) for all sampled households	76.8	107.9	<0.002
	Mean value of cash savings (Taka) for households with savings	185.95	279.51	<0.001
Employment (Main occupation of hh head)	Agricultural day labour	63.9	71.5	<0.001
	Off-farm daily wage labour	20.9	12.3	<0.001
House ownership and structure	Homestead on a raised plinth	44.4	52.9	<0.001
	% of hhs with Pucca/brick/CI/Tin sheet roof	85.6	92.3	<0.001
	% of hhs with Pucca/brick/CI/Tin sheet walls	17.0	33.1	<0.001
Land ownership and access	% of hhs access to cultivable land own	0	1.3	<0.001
	% of hhs share cropping	0.9	49.1	<0.001
Household assets	Mean value of productive assets	633	5,574	<0.001
	Mean value of total assets	1,984	7,636	<0.001
	% of households who have shared cattle	7.1	21.1	<0.001
Food Security	Mean household expenditure on food during the 30 days before the survey	1298.40	1430.90	<0.001
	Mean number of food groups consumed during the 7 days before the survey	5.81	6.12	<0.001
	Mean number of food coping strategies used during the 7 days before the survey	2.70	2.48	<0.001
Health and hygiene	Households reporting adult males practice open defecation	36.2	23.7	<0.001
	Households reporting adult females practice open defecation	32.3	21.7	<0.001
	Households reporting children practice open defecation	82.9	75.0	<0.001
	Households with access to a sanitary latrine	10.4	13.8	0.016
	Households where soap or ash is close to the latrine	17.3	13.4	0.013

		Tier 1 (% children)	Tier 2 (% children)	P
Nutritional status of children <5 years	Anaemic	47.8	35.5	0.035

1. Background

The second phase of the Chars Livelihoods Programme (CLP) began on 1st April 2010 with the objective of improving the livelihoods, incomes and food security for one million extremely poor and vulnerable island *char* residents in Nilphamari, Rangpur, Lalmonirhat, Pabna, Tangail, Kurigram and Gaibandha. It is planned that 67,000 extreme poor families (termed core participants or CPHHs) will receive the CLP core package of support (see Annex 5).

The CLP's selection criteria were developed in 2005 and have not been significantly adjusted since. One of the criteria, namely the asset threshold of Tk 5,000⁵, is extremely low and has not been adjusted for inflation meaning that with each, annual recruitment of participants, households must effectively be poorer and poorer to qualify.

The CLP is therefore piloting a 'second tier' of core households in which an initial 1,000 families will receive a smaller package of support e.g. an income generating asset valued at Tk 9,000 instead of Tk 15,500 that first tier CPHHs receive. These second tier households will be allowed to own and share crop up to 5 decimals and 33 decimals of land respectively.

DFID has agreed to a pilot of 1,000 second tier households. These second tier households were selected towards the end of 2010 using the criteria in Table 2 and are to receive a reduced package of support⁶ from February 2011. The main differences in selection criteria are that tier two can have productive assets up to a value of Tk 15,000 (as opposed to Tk 5,000) and own small areas of land (up to 5 decimals) or share crop (up to 33 decimals)⁷. We consider that the over-riding criteria is that of asset ownership since if a family is exploiting, even share-cropping, very fertile land, then the impact should show up in their assets.

Table 3: A comparison of first and second tier selection criteria

	First tier	Second tier
Residency	6 months on island <i>char</i>	
Land ownership	No land ownership	Up to 5 decimals of homestead and 33 decimals share cropping
Productive assets	Up to Tk 5,000	Up to Tk 15,000
Credit	No loan from a micro-finance institute	
Assets and income	Not receiving cash/ asset grants from another programme	

These 1,000 second tier households will come from villages in Kurigram and Lalmonirhat and will be recruited by three IMOs, namely SKS, MJSKS and RSDA (Table 4).

⁵ Selected households may not own more than 2 goats/sheep, 10 fowl & 1 shared cattle

⁶ E.g. 2nd tier households will receive an income generating asset valued at Tk 9,000 as opposed to Tk 15,500 for 1st tier households (see annex 5)

⁷ One decimal is approximately 40 M²

Table 4: Distribution of 2nd tier CPHHs

District	IMO	Number of second tier CPHHs
Kurigram	MJSKS	400
	RSDA	400
Lalmonirhat	SKS	200

In the immediate future, the pilot will essentially test:

- the feasibility (and ease) of selecting a second tier of CPHHs and whether the Programme can scale up this approach;
- whether the selection criteria are appropriate;
- how the second tier households compare with first tier CPHHs in terms of socio-economic and nutritional status.

During the next 18 months first and second tier households will be monitored closely to see how their relative socio-economic and nutritional statuses change over time as well as the relative impacts of their different assistance packages.

2. Methodology

Support to the target of 67,000 core participants will be delivered gradually in six cohorts over the course of CLP-2. As shown in table 5, the first cohort (or CLP 2.1) comprised 5,004 Core Participants (CPs) who started receiving assets in May 2010. The second cohort (CLP 2.2) initially comprised 7,443 CPs who started receiving their assets from November 2010. Additional funding meant that an additional 4,169 CPHHs could be supported and consequently cohort 2.2 comprises ‘original’ plus ‘additional’ first tier CPHHs. It also comprises the 1,000 second tier CPHHs.

Table 5: Cohort information

Cohort	Number of CPHHs	Asset transfer period	Baseline data collected
2.1	5,004	May – July 2010	April to May 2010
2.2 1 st tier ‘original’	7,443	November 2010	October 2010
2.2 1 st tier ‘additional’	4,169	From February 2011	January 2011
2.2 2 nd tier	1,000	From February 2011	January 2011

Prior to receipt of assets the Innovation, Monitoring and Learning (IML) Division coordinates the collection, analysis and reporting of baseline data. Baseline data are categorised into three groups: socio-economic, nutrition and empowerment.

This report presents the socio-economic and nutritional baseline status of CLP 2.2 second tier CPHHs and CLP 2.2 first tier CPHHs (‘additional’). At the time of preparing this report ‘empowerment’ related baseline data are in the process of being collected. Table 6 provides information on sample sizes.

Table 6: Sample sizes from CLP 2.2

	Socio-economic (CPHHs)	Nutrition	Empowerment (CPHHs)
1st tier ‘additional households’	1,303	274 CPs and 163 children <5 years	250
2nd tier	1,000	272 CPs and 141 children <5 years	250

Socio-economic data were collected during January 2011 by CLP’s Community Development Organisers (CDOs). Nutritional data were also collected during January 2011 but by enumerators from a private data collection company called Grameen Bikash Foundation (GBF). All enumerators received appropriate training and the majority had previous experience with the data collection tools.

Measuring nutrition status

There are three ways to measure nutritional status (a) anthropometry (b) biochemical assay and (c) clinical examination. Anthropometry is non-invasive and provides information on childhood acute (weight-for-height) and chronic (height-for-age) undernutrition as well as adult Body Mass Index (BMI). However anthropometry does not provide any information on anaemic status (or level of iron in the blood) which is a severe problem in Bangladesh for both adults and children. So an individual could be anaemic but show no signs of undernutrition as measured by anthropometry. IML measured nutrition status by anthropometry and haemoglobin level (anaemic status) by a finger prick of blood.

All parents/guardians were told that a small blood sample obtained from a finger prick would provide an immediate and accurate indication of the anaemic status of adults and under 5 year old children. No one was coerced to provide a finger prick of blood and they could refuse without problem. The entire process takes about one minute and all participants are told their haemoglobin level and whether they are anaemic according to international levels. Anyone severely anaemic (<70 g/l) is referred to a doctor/hospital for immediate treatment. Ethical approval was obtained from the Bangladesh Medical Research Council.

Annex 4 shows those villages where sampled households originated. Many of the sampled first and second tier households came from the same villages.

3. Results

Socio-demographic characteristics

Household sizes of both first and second tier households remain below the national average of 4.9 members. There is a very small difference in the mean household size of first and second tier households which comprise on average 3.4 and 3.8 members respectively. There are however significantly more female headed first tier households (21.5%) than female headed second tier households (10.5%). Consequently, a significantly higher proportion of first tier households have only one adult member (18.2%) compared to second tier households (8.2%).

Education

Education levels are poor for members of both first and second tier households. Between the two tiers there is no significant difference in levels of education of household heads or the core participants themselves. 77.4% and 74.2% of first and second tier household heads respectively have no education. 68.7% and 65% of first and second tier core participants (CPs) have no education respectively. There is however a significant difference between the levels of education of first and second tier school age children (5-15 years). 42.9% of first tier children aged 5-15 years have no education compared to 31.8% of second tier children.

Employment

The main occupation of both first and second tier household heads is agricultural day labour followed by off-farm daily wage labour. Significantly more second tier household heads (71.5%) are involved in agricultural day labour compared to first tier household heads (63.9%). The converse is true for off farm daily wage labour with significantly more first tier household heads occupied in off farm wage labour (20.9%) compared to second tier household heads (12.3%).

House ownership and structure

The majority of first (95.5%) and second tier (97.4%) households live in their own house. The small percentage of households that do not live in their own house are living either with relatives or in other households. More second tier households (52.9%) live on a raised plinth than first tier households (44.4%). The difference is significant. Of those households living on a raised plinth, more tier two than tier one households received construction support from another organisation or constructed the plinth themselves.

The majority of both first tier (85.6%) and second tier (92.3%) households have a 'pucca' roof (tin sheet, brick) rather than a 'kancha' roof (jute stick, bamboo, dirt). The majority of both first tier (83%) and second tier (66.9%) households have 'kancha' walls (jute stick, bamboo) rather than 'pucca' walls (tin sheet, brick). However, significantly more second tier households have 'pucca' walls and roofs than first tier households.

Land ownership and access

In line with the selection criteria for first and second tier households (with the exception of very few households) no first tier households own cultivable land or share crop whereas 49% of second tier households are share cropping. The mean area of land share cropped by second tier households is 21.3 decimals. Only 1.3% of second tier households actually own cultivable land.

Household assets

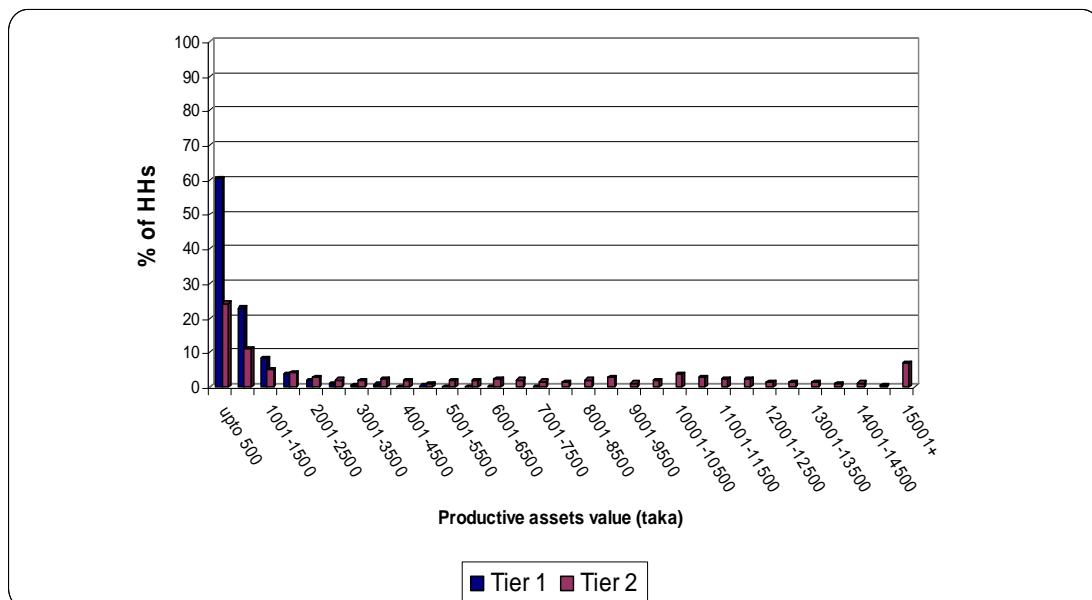
Twenty seven different household assets were identified of which eleven were defined as productive assets (Annex 3).

According to CLP’s selection criteria, first and second tier households may own productive assets up to Tk 5,000 and Tk 15,000 respectively. The data show that 99.5% of first tier households have productive assets valued at less than Tk 5,000 and 92.9% of second tier households have productive assets valued at less than Tk 15,000.

Figure 1 shows the dispersion of first and second tier households by the value of the productive assets they own. A higher proportion of second tier households own more productive assets than first tier households. The overall mean worth of productive assets in second tier households is Tk 5,574 compared to Tk 632 in first tier hhs.

Significantly more second tier households (21.1%) have shared cattle than first tier households (7.1%).

Figure 1: Distribution of 1st and 2nd tier CPHH by value of their productive assets



Income, expenditure and savings

Income per person per day (pppd) does not differ significantly between first and second tier households. Mean per capita income for first tier (Tk 21.96) and second tier (Tk 22.94) households is well below the national poverty line of Tk 32⁸ pppd. 85.6% and 82.7% of first and second tier households are below the per capita income poverty line of Tk 32. First tier households have a slightly lower expenditure (Tk 18.14 pppd) than second tier households (Tk 19.95 pppd).

Figure 2: Distribution of 1st tier CPHH by incomes per person, per day

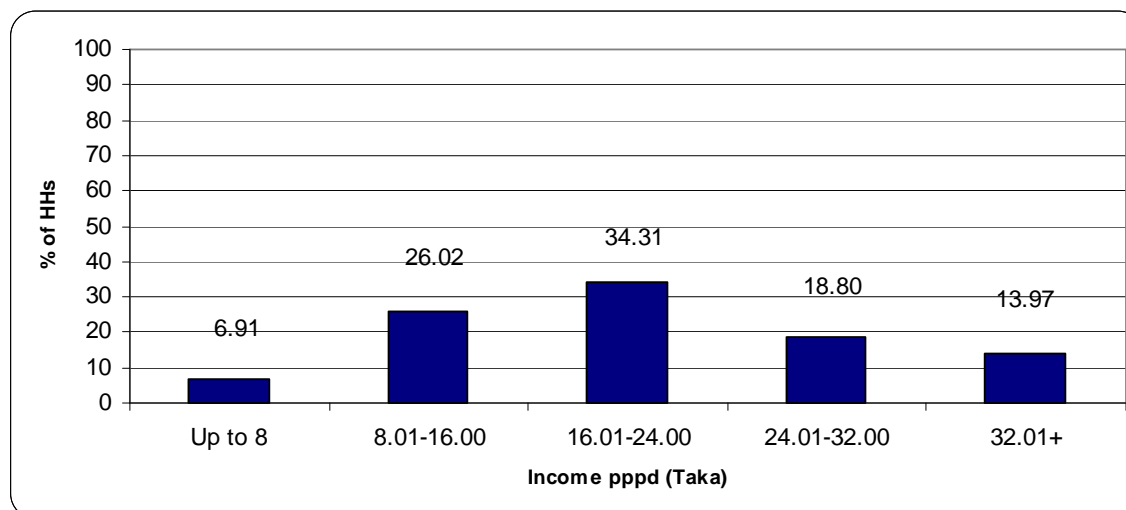
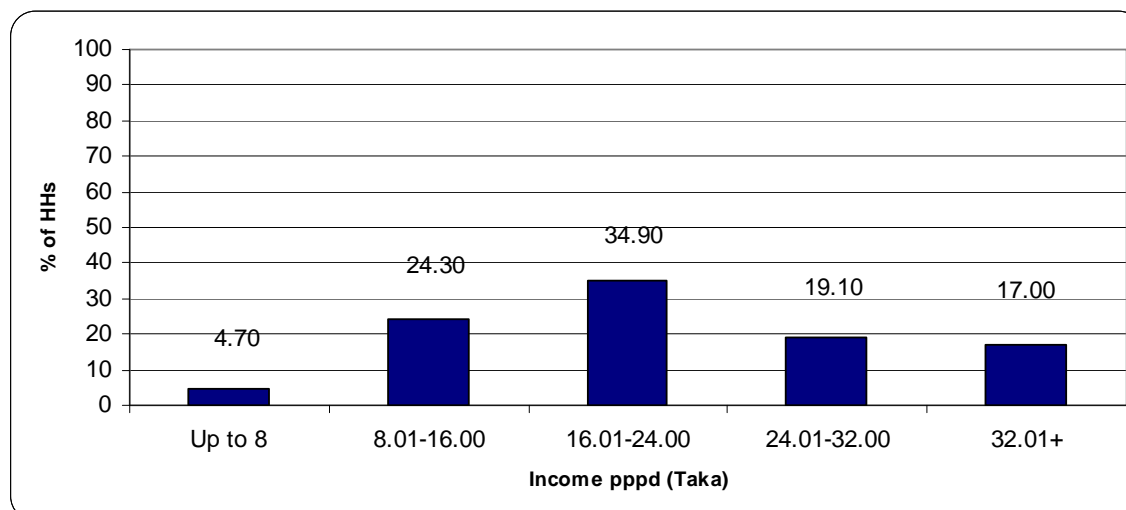


Figure 3: Distribution of 2nd tier CPHH by incomes per person, per day



Very few first tier (2.14%) and second tier (4.13%) households have any savings. However, of the small proportion of households that do have savings, the size of savings is significantly higher in second tier households (Table 7).

⁸ CLP2 Log Frame (as advised by DFID economists)

Table 7: Income, expenditure and savings of first and second tier CPHHs

Income, Expenditure and Savings (Taka)	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
% of households with incomes below Tk 32 pppd	85.6%	82.7%	0.064
Mean per capita income	21.96	22.94	0.126
Mean per capita expenditure	18.14	19.95	<0.001
% of households with cash savings	4.3	3.3	0.232
Mean value of cash savings for all sampled households	76.78	107.89	0.002
Mean value of cash savings for households with savings	185.95	279.51	<0.001

Health and hygiene

The majority of both first and second tier household members (97% for both tiers) do not have any disability.

Just under 50% of both first and second tier households reported that somebody in the household had had at least one infection during the last 30 days. For both tiers, fever, followed by diarrhoea, followed by dysentery were the most commonly reported infections.

Access to clean water and sanitary latrines is low for both first and second tier households. 6.7% of first tier and 7.7% of second tier households have access to a tubewell on a raised plinth protected by a platform. 10.4% of first tier and 13.8% of second tier households have access to a sanitary latrine⁹. Consequently household members report to open defecation or the use of unsanitary latrines. Significantly more adults, both male and female, and children in first tier households reported practicing open defecation than in second tier households (Table 8).

Table 8: Reported Practice of Open Defecation

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
% of households reported that adult males practice open defecation	36.2	23.7	<0.001
% of households reported that adult females practice open defecation	32.3	21.7	<0.001
% of households reported that children practice open defecation	82.9	75	<0.001

The proportion of households where soap or ash was found close to the latrine was low for both first tier (17.3%) and second tier (13.4%) households. This difference is significant.

Food security

There was a difference of Tk 132 in the mean household expenditure on food during the thirty days before the survey between first tier (Tk 1,298) and second tier households (Tk 1,430). The proportion of cash income use for food expenditure was higher in first tier than second tier households (75% and 67% respectively).

⁹ Defined as with 5 rings, a cement platform, an unbroken water seal and a superstructure providing privacy.

Food diversity is generally poor for both tiers. The mean number of food groups consumed during the 7 days before the survey was also similar for tier one (5.81) and tier two households (6.12).

The mean number of food coping strategies used during the last 7 days due to a shortage of food or income was higher in first tier households (2.7) than second tier households (2.48).

Nutritional status of mothers

The Body Mass Index (BMI, weight (kg)/height (m)²) was calculated for a sample of first and second tier households. BMI was categorised into three levels of Chronic Energy Deficiency (CED):

Normal:	18.5+
CED III:	<16.0
CED II:	16-16.9
CED I:	17-18.49

There was no significant difference in mean BMI between mothers in first and second tier households. Similar proportions of mothers living in first tier (40.9%) and second tier households (39%) were CED.

Haemoglobin (Hb) level was obtained from a finger prick of blood. The mean haemoglobin level for both mothers living in first tier (121.78 g/l) and mothers living in second tier households (123.95 g/l) was above the anaemic threshold of 120 g/l. Haemoglobin levels in females were categorised as severely anaemic <70 (g/l), anaemic 70 – 119.9 and normal ≥120. Similar proportions of mothers from both first (39%) and second tier households (39.5%) were anaemic.

Nutritional status of children <5 years

From the measured height and weight of each child, the z-scores of height-for-age (HAZ), weight-for-age (WAZ) and weight-for-height (WHZ) were computed. For example,

$$\text{z-score for height} = \frac{(\text{observed height} - \text{median standard height})}{\text{standard deviation of height}}$$

Low height-for-age (or length-for-age for children below 2 years of age) is a measure of past (chronic) undernutrition. Infants and children with z-scores <-2.00 are said to be stunted and those <-3.00 severely stunted (Table 9). Low weight-for-age reflects both past (chronic) and present (acute) undernutrition but is unable to distinguish between them. Infants and children with z-scores <-2.00 are said to be underweight and <-3.00 severely underweight. Low weight-for-height is a measure of current or acute undernutrition and infants and children with z-scores <-2.00 are said to be wasted and <-3.00 severely wasted.

Table 9: Cut-offs for z-scores of height-for-age, weight-for-age and weight-for-height

Nutritional indicator	Very severe	Severe	Normal
Height-for-age (stunting)	<-3.00	-2.00 to -2.99	≥-1.99
Weight-for-age (underweight)	<-3.00	-2.00 to -2.99	≥-1.99
Weight-for-height (wasting)	<-3.00	-2.00 to -2.99	≥-1.99

Differences in stunting, wasting and underweight are not significantly different between children <5 living in first and second tier households (Table 10)

Table 10: Nutritional status of children <5 years from first and second tier CPHHs

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
% stunted	41.1	36.9	0.481
% underweight	38.7	39.0	1.000
% wasted	6.1	8.5	0.508
% anaemic	47.8	35.5	0.035

Haemoglobin level was also determined in children <5 years old. The threshold for severe anaemia is 70 g/l and anaemia is defined by a haemoglobin level between 70-109.9 g/l. **Significantly more children <5 years old were anaemic in first tier households (47.8%) than children <5 years old in second tier households (35.5%).**

Annex 1: Case Studies (First and Second Tier CPHHs)

The following case studies are the first in a series of longitudinal case studies, which will follow the progress of first and second tier households under CLP2.2. The stories presented were provide a baseline comparison between tier 1 households, who will receive the full package of CLP support and tier 2 households who will receive a reduced package. The main differences in the selection criteria are that tier 2 can have productive assets up to the value of 15,000 Tk (as opposed to 5,000 Tk) and can own small areas of land (up to 5 decimals) or share crop (up to 33 decimals)¹⁰. The households were randomly selected, therefore may not represent a ‘typical’ household situation.

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¹⁰ One decimal is approximately 40m²

First Tier Households

Second Tier Households



The case of Rezia (Khariz a Natsala, Ulipur, Kurigram)

Rezia (72) lives in a jute stick

house, with a tin roof, whilst she shares the same yard with her daughter and son-in-law. Rezia cooks separately. She earns 60 Tk a day working as a day labourer. During crisis periods, when there is no work available Rezia resorts to begging and struggles to get food for herself. Most of the time she eats rice with potatoes and leafy vegetables. She cannot afford meat, eggs, milk or fish.

Income: Tk 23.3 pppd
Expenditure: Tk 22.07 pppd
Savings: 0
Productive assets: 0

% of cash income spent on food: 97.32%
Mother's BMI: 18.82

The case of Bobita (Poshchim Holdibari, Hatibandha, Lalmonirhat)

Bobita (54) has a son (35) and four

daughters (32, 30, 25 and 18), two of which are married and one works as a maid in Dhaka. Bobita lives with her remaining daughter, son and daughter-in-law. Since her husband died, she has worked as a day labourer earning 80-100 Tk per day, sometimes with food for breakfast and lunch. Bobita rears a share-goat and owns one chicken. Usually her family eats rice with green leafy vegetables and has fish once a month but cannot afford milk or eggs.

Income: Tk 40 pppd
Expenditure: Tk 36.9 pppd
Savings: 0
Productive assets: 1,000 Tk

% of cash income spent on food: 50.35%
Mother's BMI: 18.44



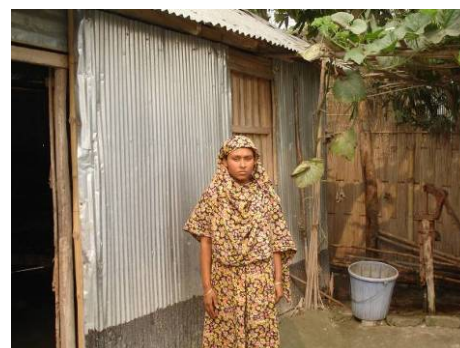
The case of Yearon (Joansatra, Ulipur, Kurigram)

Yearon (60) lives alone in a *chatai* (bamboo) house with a tin roof, on her cousin's land. She has five sons, who have all settled in Dhaka with their own families. Yearon works as a maid to earn her daily food and sometimes other households give her some rice or 10 -

20 Tk in cash. During crisis periods she receives government relief and is sometimes given food from generous members of the community. Usually Yearon eats rice with potatoes or leafy vegetables but she is unable to afford eggs, milk, fish or meat.

Income: Tk 10.5 pppd
Expenditure: Tk 9.42 pppd
Savings: 0
Productive assets: 600 Tk

% of cash income spent on food: 92.73%
Mother's BMI: 17.88



The case of Afroza (Joansatra, Ulipur, Kurigram)

Afroza (18) lives with her husband and

daughter (1½) in a tin house. Her husband – the only earning member of the family, is a day labourer, earning 100 Tk per day. During *monga* and the rainy season Afroza's husband migrates to Dhaka to find work and they borrow money from family. Afroza manages one share-chicken and her family usually eat rice with potatoes and leafy vegetables. They can afford to buy egg, milk, meat or fish once a month.

Income: Tk 26.67 pppd
Expenditure: Tk 21.67 pppd
Savings: 0
Productive assets: 1,150 Tk

% of cash income spent on food: 96.67%
Mother's BMI: 22.11
Stunted growth of child: yes

Annex 2: Output Tables

Socio-demographic characteristics

Table A1: Socio-demographic characteristics of first and second tier CPHHs

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
Mean family size	3.41	3.82	<0.001
% with a female head	21.5	10.5	<0.001
Mean age of household head	38.77	40.71	0.001
Number of adults (% of hhs)			
1	18.2	8.2	<0.001
2	73.4	78.4	
3+	8.4	13.4	
Number of children 5 to 15 years (% of hhs)			
0	48.7	37.8	<0.001
1	25.6	27.7	
2	17.2	21.0	
3+	8.6	13.6	
Number of children <5 years (% of hhs)			
0	48.7	49.6	0.729
1	41.5	41.7	
2+	9.7	8.8	

Education

Table A2: Education characteristics of first and second tier CPHHs

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
Education – Household head			
No education	77.4	74.2	0.170
1-5 years	16.8	18.7	
6+ years	5.8	7.1	
Education – Core Participant			
No education	68.7	65.0	0.145
1-5 years	25.3	27.7	
6+ years	6.0	7.3	
Education - children 5 to 15 years			
No education	42.9	31.8	<0.001
1-5 years	52.6	61.1	
6+ years	4.5	7.1	

Employment

Table A3: Employment characteristics of first and second tier CPHHs

Main occupation of household head	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
Own agricultural work	.2	1.3	<0.001
Agricultural day labour	63.9	71.5	
Off-farm daily wage labour	20.9	12.3	
Rickshaw/van puller	3.6	3.9	
Household work/unemployed	4.9	5.2	
Beggar	2.0	1.1	
Small Trader	1.5	3.0	
Others	2.9	1.7	

House ownership and structure

Table A4: House ownership and housing structure of first and second tier CPHHs

Ownership of living house	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
% of households live in own house	95.5	97.4	0.019
% of households live in relatives/others house	4.5	2.6	
Material used in roof			
Pucca/brick/CI/Tin sheet	85.6	92.3	<0.001
Kancha/Dirt/Banmoo/wood/jute stick etc	14.4	7.7	
Material used in wall			
Pucca/brick/CI/Tin sheet	17.0	33.1	<0.001
Kancha/Dirt/Banmoo/wood/jute stick etc	83.0	66.9	
% of households on raised plinth	44.4	52.9	<0.001

Land ownership and access

Table A5: Land ownership and access by first and second tier CPHHs

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
% of hhs access to cultivable land own	0	1.3	<0.001
% of hhs access to cultivable land mortgage out	0	0	NA
% of hhs access to cultivable land mortgage in	0	0.6	0.007
% of hhs access to cultivable land share out	0	0.5	0.015
% of hhs access to cultivable land share in	0.9	49.1	<0.001
% of hhs access to cultivable land lease out	0	0	NA
% of hhs access to cultivable land lease in	0.1	0	NA
% of hhs access to cultivable land khas	0.2	0	0.508

Household assets

Table A6: Value of assets of first and second tier CPHHs

Indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>p</i>
Mean value of productive assets	632.99	5574.05	<0.001
Mean value of total assets	1983.85	7636.09	<0.001
% of households who have shared cattle	7.1	21.1	<0.001
% of first tier CPHHs with assets less than Tk 5,000	99.5	NA	NA
% of second tier CPHHs with assets less than Tk 15,000	NA	92.9	NA

Income, expenditure and savings

Table A7: Reported income/ expenditure and savings of first and second tier CPHHs

Income/ Expenditure/ Savings	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
% of households with incomes below Tk 32 pppd	85.6%	82.7%	0.064
Mean per capita income (Taka)	21.96	22.94	0.126
Mean per capita expenditure (Taka)	18.14	19.95	<0.001
% of households with cash savings	4.3	3.3	0.232
Mean value of cash savings (Taka) for all sampled households	76.78	107.89	<0.002
Mean value of cash savings (Taka) for households with savings	185.95	279.51	<0.001

Health and hygiene

Table A8: Reported disability within first and second tier CPHHs

Disability	Tier 1 (% of population)	Tier 2 (% of population)	<i>P</i>
Without disability	97.4	97.6	0.652
Blind	0.6	0.4	
Physical disability	0.5	0.5	
Psychological disorder	0.1	0.2	
Deaf	0.4	0.4	
Dumb	0.2	0.1	
Chronic illness	0.7	0.6	
Other	0.2	0.2	

Table A9: Reported health status of household members during the last 30 days by first and second tier CPHHs

Reported illness	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
Mean number of infections reported by household during the 30 days before the survey	0.66	0.66	0.927
% of households reported as having 1+ infections	48.8	49.5	0.769
% of households reported having Diarrhoea in the 30 days before the survey	10.1	9.2	0.523
% of households reported having Dysentery in the 30 days before the survey	5.7	7.8	0.051
% of households reported having Fever in the 30 days before the survey	39.8	39.0	0.699
% of households reported having RTI in the 30 days before the survey	6.2	6.2	1.000
% of households reported having Skin Infection in the 30 days before the survey	1.6	2.6	0.103
% of households reported having Passed Worms in the 30 days before the survey	2.3	1.2	0.059

Table A10: Access to a tubewell and sanitary latrine by first and second tier CPHHs

	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
% of households with access to a tubewell with a platform on a raised plinth	6.7	7.7	0.369
% of households with access to a sanitary latrine	10.4	13.8	0.016

Table A10: Evidence of soap/ ash and reported use of soap/ ash by first and second tier CPHHs

	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
% of households where soap or ash is closed to the latrine	17.3	13.4	0.013
% of households where the female reports using soap or ash before preparing food	4.6	5.1	0.624
% of households where the female reports using soap or ash after cleaning a child's anus	9.1	8.6	0.712

Table A11: Reported open defecation by members of first and second tier CPHHs

Reported open defecation	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
% of households reported that adult males practice open defecation	36.2	23.7	<0.001
% of households reported that adult females practice open defecation	32.3	21.7	<0.001
% of households reported that children practice open defecation	82.9	75.0	<0.001

Food Security

Table A12: Food security status of first and second tier CPHHs

Food security indicator	Tier 1 (% of hhs)	Tier 2 (% of hhs)	<i>P</i>
Mean household expenditure on food during the 30 days before the survey	1298.40	1430.90	<0.001
Mean number of food groups consumed during the 7 days before the survey	5.81	6.12	<0.001
Mean number of food coping strategies used during the 7 days before the survey	2.70	2.48	<0.001

Nutritional status of mothers

Table A13: Nutritional status of mothers from first and second tier CPHHs

Nutrition indicators	Tier 1 (% of mothers)	Tier 2 (% of mothers)	<i>P</i>
mean BMI	19.13	19.12	0.933
% with BMI < 18.5	40.9	39.0	0.663
mean haemoglobin level	121.78	123.95	0.055
% anaemic	39.5	39.0	0.368

Nutritional status of children <5 years

Table A14: Nutritional status of children <5 years from first and second tier CPHHs

Nutrition indicators	Tier 1 (% of <5s)	Tier 2 (% of <5s)	<i>P</i>
mean height-for-age z-score	-1.58	-1.60	0.874
% stunted	41.1	36.9	0.481
mean weight-for-age z-score	-1.72	-1.81	0.379
% underweight	38.7	39.0	1.000
mean weight-for-height z-score	-0.92	-1.01	0.348
% wasted	6.1	8.5	0.508
mean haemoglobin level	109.91	112.35	0.089
% anaemic	47.8	35.5	0.035

Annex 3: Calculation of Worth of Assets, Income and Expenditure

Assets

Twenty-seven different household assets were identified:

1. Land – (Owned & Mortgaged Out)
2. Land (Mortgaged-In)
3. Cattle
4. Goats and Sheep
5. Chicken / Duck / Pigeon
6. Rickshaw / Van
7. Boat
8. Fishing Net
9. Sewing Machine
10. Wood / Fruit Tree
11. Bed – *Khat*
12. Cot – *Palang*
13. Blanket / Warm Clothes
14. Brass / Aluminium / Steel Utensils
15. Metal Trunk / Wooden Box
16. Mosquito Nets
17. Chair / Table / Self
18. Radio
19. TV
20. Jewellery
21. Bicycle
22. Cattle / Goat Shed
23. Poultry Shed / Case
24. Mobile
25. Homestead Building Material (e.g. tin sheets, bamboo and wood)
26. Tools
27. Other Major Assets (specify)

of which items 1-10 and 20 were defined as productive assets.

The Taka value of each asset was determined from and the total value of household assets (sum of Taka value of all 27 items) and total value of all productive assets (sum of Taka value of 11 items) were calculated.

Income

Household income has been based on six items:

- Household total cash income earned over the 30 days prior to the survey for all household members (adults and children) from all **regular** activities.
- Household total in-kind income earned over the 30 days prior to the survey for all household members (adults and children) from all **regular** activities.
- Household total cash income earned over the 30 days prior by all household members from all **irregular** activities.
- Household total in-kind income earned over the 30 days prior to the survey for all household members from all **irregular** activities.
- (irregular activities were defined as cash or in-kind from the following sources:-
- Manure sale, Milk sale, Ploughing sale, Insemination service sale, Livestock sale, Poultry Product sale, Poultry sale, Fish sale, *Kantha* Sewing, Shop / Business, Tree (other than fruit) sale, Fruit sale, Spices sale, Field Crop sale, Vegetable Crop sale, NGO (other than CLP), GoB Stipend / Relief / Pension, CLP, Dowry, Begging, Remittance, Gleaning, Gift, Help, Income from Service, Other activities)
- Any loan(s) taken.
- Cash loan repayment received.

Expenditure

Household expenditure has been based on 5 items:

- Expenditure of Food items in the 30 days prior to the survey. Expenditure on food and food related items (Rice, Wheat /Other Cereals, Pulses/Beans/Nuts, Milk/Milk Products, Meat, Poultry, Eggs, Fish & Seafood (fresh/dried), Potato (including Sweet Potato), Dark Green Vegetables – Leafy, Other Vegetables, Sugar/Honey, Fruits, Oil, Spices, Fuel (firewood, kerosene, cow dung), and Other Food Items) were obtained and sum of all 17 food expenditure items was calculated.
- Expenditure on Household, Agriculture and Social Events in the 30 days prior to the survey. Expenditure on the following items Health Costs, Education, Clothes, Household Goods, Agricultural Inputs, Transport, Livestock Feed and Treatment Costs, Livestock Purchase, Poultry feed and treatment costs, Poultry purchase, Land or Pond share/ lease/ mortgage /purchase, House Repair/ Materials, Own Marriage Cost (including dowry out), Social occasions, Tobacco/betel nut/betel leaf, Cosmetics (oil, soap, creams, etc.), and Other Expenditures were obtained and the sum of all 17 items was calculated.
- Amount of cash loan(s) the household repaid in the 30 days prior to the survey.
- Amount household lent to others in the 30 days prior to the survey.
- Amount the household saved in cash in the 30 days prior to the survey.

Annex 4: Location of CLP 2.2 ‘additional’ 1st tier CPHHs & 2nd tier households

District	IMO	Upazila	# ‘additional’ 1 st tier	# ‘additional’ 2 nd tier	# 1 st tier sampled		# 2 nd tier sampled	
					Socio-economic	Nutrition survey	Socio-economic	Nutrition survey
Kurigram	AC	Phulbari	189	-	6	-	-	-
Kurigram	AC	Nageshwari	214	-	97	-	-	-
Kurigram	BDSC	Nageshwari	400	-	150	-	-	-
Kurigram	MJSKS	Ulipur	450	400	450	111	400	106
Kurigram	RDRS	Raumari	450	-	200	-	-	-
Kurigram	RSDA	Raumari	200	400	200	111	400	114
Kurigram	ZIBIKA	Kurigram Sadar	300	-	-	-	-	-
Lalmonirhat	SKS	Aditmari	221	-	-	-	-	-
Lalmonirhat	SKS	Hatibandha	-	200	-	-	200	52
Lalmonirhat	SKS	Kaliganj	544	-	200	52	-	-
Total			2,968	1,000	1,303	274	1,000	272

Annex 5: Package of support for first and second tier CPHHs

Components of package	First Tier Households	Second Tier Households
SD group training	Full modules	Full modules
Asset value (Taka)	15,500	9,000
Monthly asset maintenance stipends	250	250
Family income support stipend	350	0
AI vouchers	300	0
Vaccination and de-worming support	400	200
Vegetable seed	900	60
HG training	425	170
Livestock training	595	595
Raised plinth	Yes	Yes, but not guaranteed
Latrine grant	5,500	1,500
Health vouchers	1,500	0