CHARS LIVELIHOODS PROGRAMME

Chars Livelihoods Programme

Reducing Extreme Poverty on the Riverine Islands of North West Bangladesh

CLP's impact on livelihoods on the chars and its sustainability

October 2014

Innovation, Monitoring, Learning and Communications Division

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MAXWELL STAMP PLC

Australian Aid

UKaid from the British people

Contents

Acronyms

ATP	Asset Transfer Project of CLP-2
CLP-2 (or CLP)	Chars Livelihoods Programme, Phase 2
CP	Core Participant
CPHH	Core Participant Household
DFAT	Australian Department of Trade and Foreign Affairs
EPL	Extreme-Poverty Line
FAO	United Nations Food and Agriculture Organisation
IMLC	Innovation, Monitoring, Learning and Communication Division of CLP
IMO	Implementing organisation
MSP	Maxwell Stamp PLC
PPPD	Per Person Per Day
VSLG	Village, Savings and Loans Group

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Executive Summary

CLP aims to improve the livelihoods, incomes and food security of over one million extreme-poor and vulnerable people by 2016. The second phase of CLP (CLP-2) will run from 2010 to 2016. In this time, a total of 78,000 extreme-poor households will receive CLP's core package of support for a period of 18 months. Key to CLP's objective is to improve household livelihoods in a sustainable way, so that participants and their families do not fall back into extreme poverty.

The objective of this report is to assess the impact of CLP's interventions on household livelihoods. Further, as CLP-2 is ending in 2016, it is also important to understand the sustainability of CLP's impact. Quantitative data was analysed from CLP's Annual Socio-Economic Survey (SES) 2013 and the control group (cohort 2.5) was compared against CLP cohorts to measure impact. To measure the sustainability of CLP's impact, data for Cohort 2.1 was analysed from CLP's Annual SESs 2010, 2011, 2012 and 2013.

Results show that CLP households have significantly increased the value of their productive assets compared to the control group (households that have not participated in CLP). Mean productive assets value for the most recently graduated/completed CPHHs (Cohort 2.4) is Tk. 36,349 and for the oldest (CLP 1), Tk. 65,238 while it is only Tk. 1,675 for the control group. Further, mean productive asset values continue to increase over time, even after households have left CLP (The baseline (2010) productive assets value of Tk. 514 for Cohort 2.1 participants has reached Tk. 47,747 in 2013. The number of households having more than one income source in the last 30 days increases from the control group to households who have participated in CLP, after which point the proportion of households diversifying their income source plateaus. In the control group, households' main income source is day labour. Once cohorts participate in CLP, although this remains the largest component of income, there is a trend towards income generated from livestock and agriculture production.

Mean household income pppd has increased up to Tk. 50.1 for Cohort 2.4 participants compared to the control group's mean income pppd of Tk. 19.5 only, moving households above the extreme poverty line (EPL). Following CLP, results for mean household income decrease slightly (the lowest is Tk. 35.3 for Cohort 2.1) but sustain above the level of the control group and of the EPL (Tk. 25 for the Rajshahi Division). Similar to household income, mean household expenditure pppd in the last 30 days, increases from Tk. 20.2 for the control to Tk. 42.2 for the households that have recently completed CLP. Expenditure levels decrease following CLP but sustain above the level of the control (the lowest is Tk. 32.8 for Cohort 2.1).

For all cohorts, in October 2013, the largest proportion (about 50%) of household expenditure went on food. This is much greater (75.4%) for households that have not participated in CLP then for households that have recently completed the Programme. During households' time with CLP, the proportion of income spent on investment and on household items is seen to increase. The amount of income households spend on food pppd, in the last 30 days, increases from the control group (Tk. 15.2) to households who recently completed CLP (Tk. 19.4). This impact is seen to sustain after households have left CLP.

Results show that mean household cash savings increase significantly during households' time with CLP (Tk. 2199), compared to before their participation in the Programme (Tk. 128.7). Further, mean household cash savings continue to increase in the years after households have participated in the Programme, showing strong signs of sustainability.

Data for income, expenditure and consumption expenditure in 2012 tended to deviate from the general trend. This is largely due to severe and recurrent flooding in the year that reached record highs. This caused a scarcity in agricultural work and damage to land and crops which resulted in a food shortage and an increase in market food prices.

The importance of not looking solely at mean income pppd as an indicator of poverty has been emphasised throughout the report. In 2012, income and expenditure declined, whereas other areas such as the proportion of households with diversified income sources remained stable, and mean productive asset values and cash savings even continued to increase during this period. Although measuring income is an important indicator of poverty levels, to use this data alone can oversimplify and underestimate the poverty situation on the *chars*.

In future research it would be useful to continue to track the composition of income sources for all cohorts due to what seems to be a reversion back to day labour in Cohort 2.1 in this report (and as noted for CLP-1 in Blackie (2012)). By continuing to look in detail at trends, this will provide a greater insight into the impact and sustainability of CLP's interventions.

1. Background

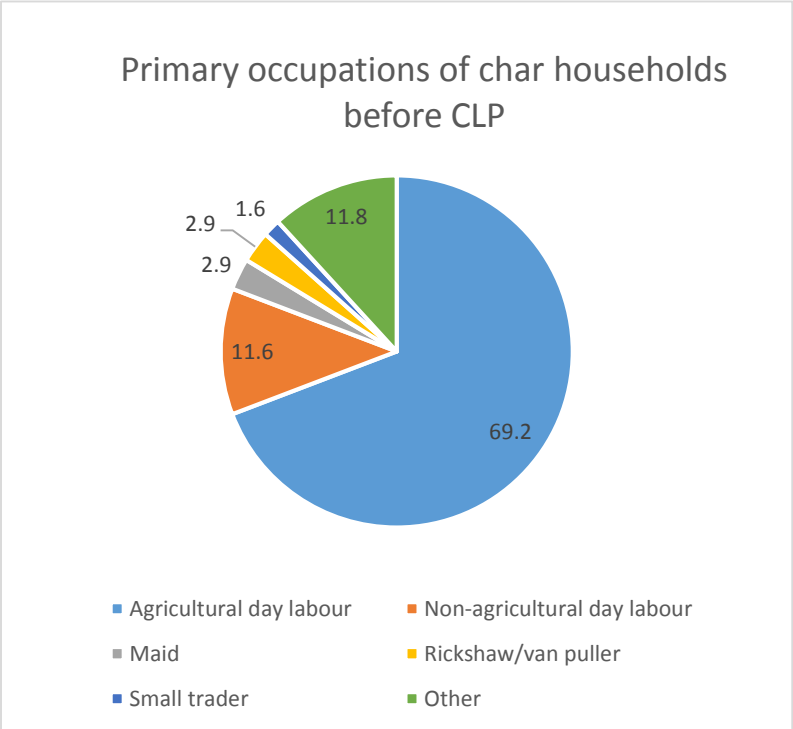
CLP aims to improve the livelihoods, incomes and food security of over one million extreme-poor and vulnerable people by 2016. The second phase of CLP (CLP-2) will run from 2010 to 2016. In this time, a total of 78,000 extreme-poor households will receive CLP's core package of support for a period of 18 months. Households participate in the Programme in six cohorts, each comprising an average of 13,000 households (see Table 2, p.8 for a breakdown of each cohort's start and end date.) Key to CLP's objective is to improve household livelihoods in a sustainable way, so that participants and their families do not fall back into extreme-poverty. All participants begin CLP:

- Having no ownership or access to land;
- Having productive assets worth no more than Tk. 5,000 (around £42);
- Owning not more than two goats/sheep, or 10 fowl or one shared cow;
- Not receiving cash/ asset grants from another programme;
- Having little or no savings; and
- Having no regular source of income.

Before joining CLP approximately 69% of households' primary occupation is day labour (mainly in agriculture). The composition of other livelihood types are shown in Figure 1.[1]

Day labour is low paid and unpredictable. This form of livelihood is particularly vulnerable to seasonality, especially during the 'lean' period. The lean period occurs between September and November, following the planting of the *aman* crop (a type of rice) and before harvesting. During this period, agricultural employment opportunities decrease. In rural areas where, for many, agricultural day labour is the main source of income, this can lead to high levels of food insecurity. A total of 70% of households, before joining CLP, do not have any secondary income source to compensate for income lost during this time.

Figure 1: The breakdown of primary occupations of char households, prior to joining CLP



Central to CLP's support package is the Asset Transfer Project (ATP) which is seen as the first step towards participants building an improved and diversified livelihood. Through the ATP each core participant receives a grant from CLP which they use to purchase an asset of their choice. Each core participant entering the next cohort of

[1] Data taken from 2.5 baseline. The 'other' category includes activities such as weaving (0.7%) fishermen (0.9%), share-cropper (0.9%), salaried wage (2%), small trader (1.6%) and begging (0.7%), as well as activities which do not earn money such as household work/being a housewife (4.3%) and being unemployed (2.3).

CLP, Cohort 2.6, will receive an asset transfer grant of Tk. 17,500 (around £146). Table 1 shows the value of the asset transfer grant for each CLP cohort.

Table 2: The value of asset transfer grants by CLP cohort

	CLP Cohort						
	CLP-1	**2.1**	**2.2**	**2.3**	**2.4**	**2.5**	**2.6**
Asset Transfer Grant Value	13,000-17,000	15,500	15,500	16,000	16,000	16,500	17,500

An average of 98% of core participants, from CLP-1, 2.1, 2.2, 2.3, 2.4 and 2.5, chose to purchase cattle with their asset transfer grant. Second to cattle was land, with an average of 1.48% of core participants investing in this. A smaller proportion (0.3%) fall into the group who invest in 'other assets.' Other assets include small businesses, sewing machines, rickshaws, shallow machines[2] and horse carts.

There are two different livelihoods that can be developed through the purchase of cattle, by choosing either a milking cow or a bull. Of those participants who choose cattle, an average of 69% select milking cows whilst 31% select bulls. In addition to the provision of an asset, CLP provides interventions to participants aimed at promoting livelihoods development, such as livestock training and a monthly stipend for the full 18 months. These are coupled with further interventions that protect and transform participants' livelihoods, as well as preventing livelihood insecurity.[3]

CLP measures its impact on livelihoods in four key ways: through income, expenditure, assets and cash savings. On a broader level, CLP uses its Graduation Criteria to measure its overall impact on core participant households.[4]

When looking at mean household income of CLP participants, data will be compared to the mean income pppd for households at the lower rural poverty line in Rajshahi Division (the Division in which CLP works, in the North West of Bangladesh). Taking into account rates of inflation[5] this is estimated to be Tk.25.[2] This will be referred to as the Extreme-Poverty Line (EPL) throughout this report.

The objective of this report is to assess the impact of CLP's interventions on households' livelihoods. Further, as CLP-2 is ending in 2016, it is also important to understand the sustainability of these impacts. To do this the report will look specifically at:

- The mean value of household productive assets;
- The diversification of household income sources;
- The value and composition of household income;
- Household expenditure and consumption expenditure;
- Income spent on food; and
- Household cash savings;

[2] shallow machines are one kind of pump to pump water from shallow tubewells.
[3] See Annex 1 for CLP's Pathway Model.
[4] Visit the CLP website to learn more about CLP's Graduation Criteria: http://clp-bangladesh.org/wp-content/uploads/2014/08/clp-graduation-learning-note.pdf
[5] The inflation for 2011, 2012 and 2013 were 10.18, 6.51 and 7.47 respectively.

2. Methodology

This report is interested in both CLP's impact on livelihoods and the sustainability of this impact. To measure impact, quantitative data has been analysed from data collected as part of CLP's most recent Annual Socio-Economic Survey (SES). This was conducted in October 2013. A panel sample of 2,700 core participant households (CPHHs), covering all CLP cohorts took part in the survey: CLP-1, 2.1, 2.2, 2.3, 2.4 and 2.5. At the time of the survey Cohort 2.4 was still receiving the CLP support package and Cohort 2.3 had recently completed CLP (see Table 2). The survey was conducted in all ten districts CLP has worked in: Gaibandha, Kurigram, Bogra, Sirajganji, Jamalpur, Tangail, Pabna, Rangpur, Nilphamari, and Lalmonirhat.

Table 2: The status of cohorts during the 2013 Annual SES

Cohort	Cohort start date	Cohort end date	Sample size in survey	Cohort Size	Status in 2013 survey (October)
CLP-1	2004	2010	650	55,000	Completed CLP package between nine and three years prior to the survey
2.1	1st April 2010	31st December 2011	410	5,004	Completed CLP package one year and ten months prior to the survey
2.2	1st July 2010	30th June 2012	410	12,109	Completed CLP support package one year and four months prior to the survey
2.3	1st July 2011	30th June 2013	410	17,435	Completed the CLP support package four months prior to the survey
2.4	1st July 2012	30th June 2014	410	16,309	Were still receiving the CLP support package
2.5 (control group)	1st July 2013	N/A	410	13,579	Had enrolled as CLP's next cohort but had yet to receive the CLP support package

CLP uses a rolling baseline approach to assess the impact of CLP's interventions on CPHHs, by comparing core participants against a control group. This involves using the cohort next in line to receive CLP's support package as the control group, which allows for a control group that consists of respondents who come from the same strata of society as current core participants. Comparisons between these two socio-economic groups – those that have received CLP support and those that have not yet – can therefore indicate the difference that CLP has made. For the Annual SES 2013, Cohort 2.5 acted as the control group. This control group will be compared against cohorts which have received CLP support, to understand the impact of CLP's interventions.

To measure the sustainability of CLP's impact, this report will focus on one cohort's development over time. Cohort 2.1 was selected for this analyses as it was the first cohort of CLP-2. It therefore provides the greatest number of data points in order to see how CLP participants sustain their livelihoods over time. To achieve this, data will be analysed from CLP's Annual SESs 2010, 2011, 2012 and 2013. Table 3 shows when the previous annual surveys were carried out.

Table 3: The timing of CLP-2's Annual Socio-Economic Surveys

	Survey 2010	Survey 2011	Survey 2012	Survey 2013
Month survey was conducted	May	June	October	October

The timings of the surveys can have an impact on the results. In October, during the lean period, results could potentially be more depressed then in the rest of the year. When analysing CLP's impact, only the 2013 Annual SES results will be used and therefore comparisons between cohorts can reliably be made, as data for all cohorts was collected in October. When analysing data for Cohort 2.1 across all the surveys, it is important to take into consideration that two surveys (2012 and 2013) were conducted during the lean period and the 2010 and 2011 surveys were not.

Data relating to income, expenditure and consumption expenditure are analysed in two ways. The first is by taking an average of household data per person per day (pppd) in the last 30 days.[6] Another way is to take the annual mean data pppd. The advantage of the latter is that it allows for an accurate understanding of a household's status throughout the year; thus accounting for seasonality changes. CLP achieves this by using data from its bi-monthly surveys (surveys conducted every two months). Bi-monthly data is only available for 2012 and 2013. Results from data analyses taken in the last 30 days is used within the main body of the report and corresponding annual data analyses can be found in the Annex.

3. Key findings

3.1 Value of household productive assets

One of the key ways to identify if households are improving their livelihood is to observe the change in the value of productive assets households owned before CLP, during their time with CLP and in the years after. SES 2013 provides the average productive asset value for each household. The mean values are displayed in Figure 2.[7] Results show that CLP households significantly increase the value of their productive assets compared to the control group. Further, productive asset values continue to increase over time, even once households have left CLP. This correlation between productive asset values and time since entry to the Programme was also noted in Blackie (2012) who found CLP-1 households had mean productive assets worth Tk. 42,700 (52 times the mean value of the control group at the time). At the time, CLP-1 households had completed CLP between two and eight years prior to the survey.[2] Current analysis shows that even since the Blackie et al report, in 2012, CLP-1 households have continued to increase the value of their productive assets, with their current mean productive asset value being Tk. 65,238.[8]

[6] Throughout the report, when referring to 'in the last 30 days', it means the 30 days just prior to the survey being conducted.

[7] Productive assets used in this analyses include: all types of land ownership including *Khas* land; cattle; goats and sheep; chicken, ducks and pigeons; rickshaw/van; boat; fishing net; sewing machine; wood, fruit, tree, timber and bamboo; jewellery; power tiller; power pump; plough and yoke; deep and shallow tube wells; sprayer; husking machine; ginning machine; engine boat; horse and cart; agriculture tools.

[8] The 2012 analysis of CLP-1 households included household cash savings which this current report does not, thus further demonstrating the significance of this increase.

Figure 2: The mean productive asset value (Tk.) of households by cohort

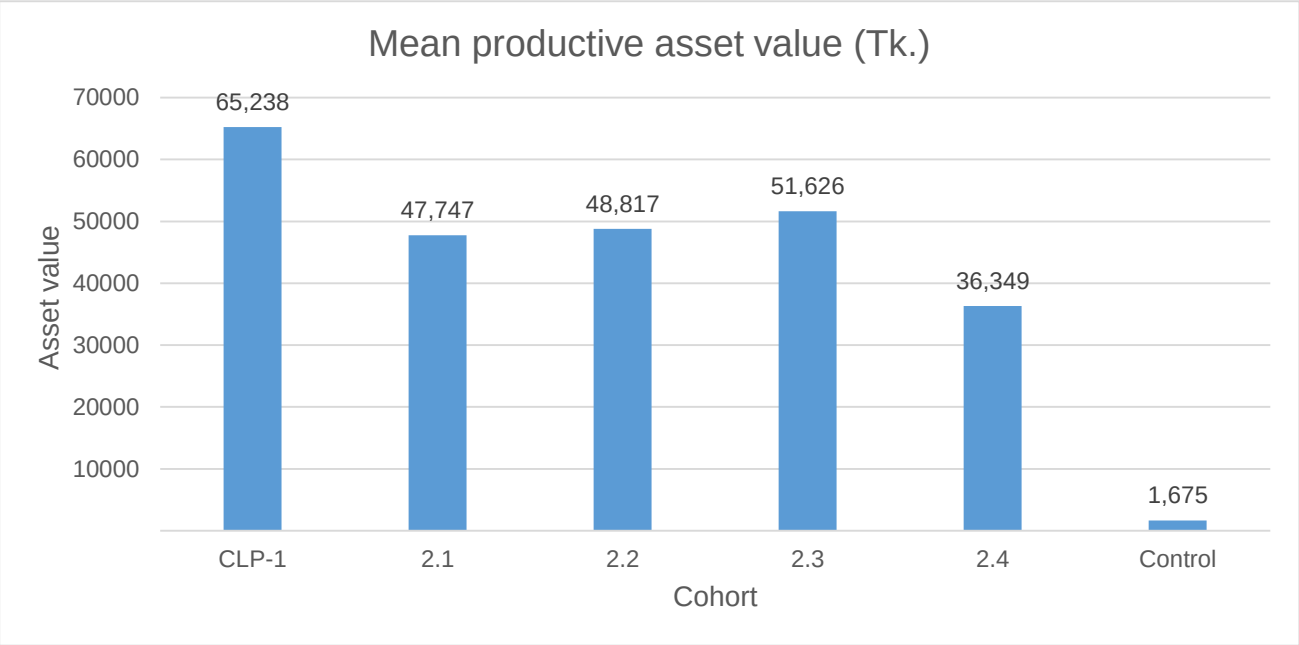
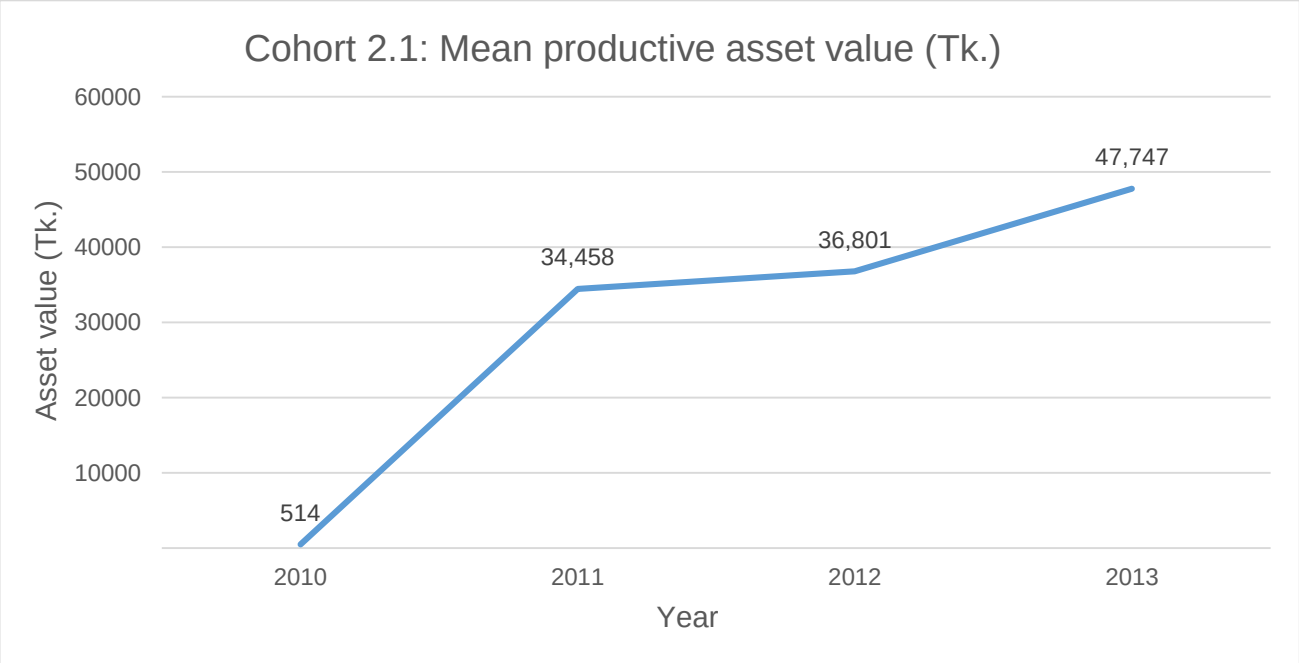


Figure 3 shows the mean value of productive assets for Cohort 2.1 between joining the CLP (2010) and 2013. This shows that the impact CLP has on mean productive asset values is sustainable.

When Cohort 2.1 joined CLP in 2010 the mean asset value of a household was Tk. 514 (around £4). As households were close to the end of their time with CLP (2011), mean asset values had increased significantly to Tk. 34,458 (around £287). At the time of the Annual SES survey in 2013, Cohort 2.1 had completed CLP support one year and ten months previously. Mean productive asset values had however continued to rise to Tk. 47,747 (around £398).

Figure 3: Mean productive asset value (Tk.) for Cohort 2.1 from 2010 to 2013



CLP's logical framework target is to ensure that by January 2015, 43,228 households have doubled the value of the assets they had before joining CLP.[9] Households must have received the CLP asset at least 18 months previously. In Table 4 show results for Cohorts 2.1, 2.2 and 2.3 all of whom received CLP assets 18 months or greater prior to the October 2013 SES.

Table 4: Total number of households who have doubled the value of their assets

	2.1	2.2	2.3	Total
Total # households per cohort	5,004	12,109	17,435	34,548
% households who have doubled the value of their asset	99	99	98	98.6
Total # households who have doubled the value of their asset	4,954	11,988	17,086	**34,028**

By January 2015, Cohort 2.4 households will also have received their CLP assets 18 months previously. If the same percentage of Cohort 2.4 achieves this, then the number will be 50,108. So it is reasonable to conclude that CLP is on track to meet its target.

3.2 Diversification of income sources

In addition to increasing their productive asset base, CLP encourages participants to diversify the types of livelihoods in which they engage. Having more than one income source increases households' resilience to shocks such as flooding, as well as providing them with greater options during the lean period when agricultural day labour is less available.

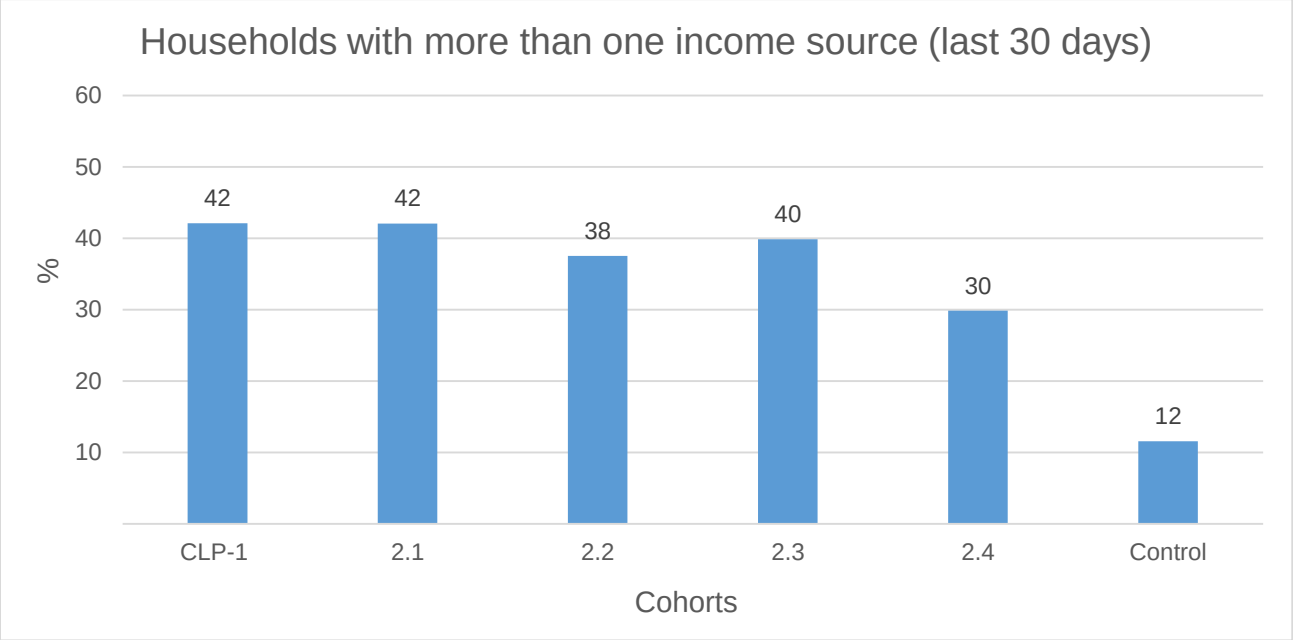
Figure 4 shows the proportion of households, by cohort, that have had more than one source of income, in the last 30 days.[10] In the control group, only 12% of households have more than one income source. This increases to 40% as participants complete CLP (Cohort 2.3 data).

Data for Cohort 2.4 is lower than 2.3. At the time of the survey Cohort 2.4 was still participating in CLP and therefore many households may not have begun diversifying their assets at this time. It seems that once households complete CLP, the percentage of households that diversify plateaus.

[9] CLP log frame Outcome Indicator 4 states "43,228 households with assets doubled in value benefiting 168,157 people" by January 2015.

[10] Income sources in this analyses include: day wage labour; agricultural production; livestock sale/production; fishing; business; remittance; safety net; and salaries. Income sources such as the CLP stipend are not included so as to enable comparisons between the current CLP cohort and cohorts that are not receiving the CLP stipend anymore.

Figure 4: The percentage of households with more than one income source by cohort



Looking at Cohort 2.1 (Figure 5) a similar trend is noted to that in Figure 4. From 2010 to 2011 households begin diversifying. There is a small dip in 2012 but this plateaus out again by 2013. One reason for this decrease could be due to the 2012 and 2013 surveys being conducted in October, during the lean season, and thus income sources available to households are likely to be reduced.

Figure 5: The percentage of Cohort 2.1 households with more than one income source from 2010 to 2013

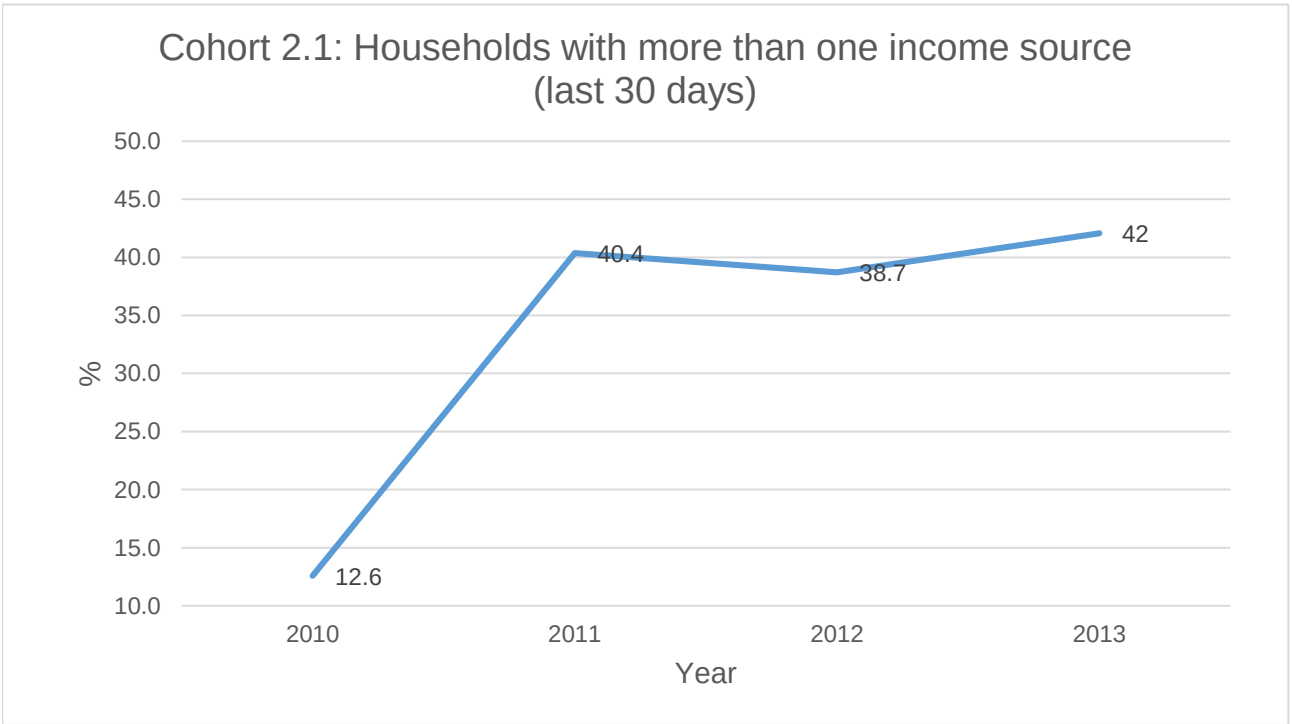
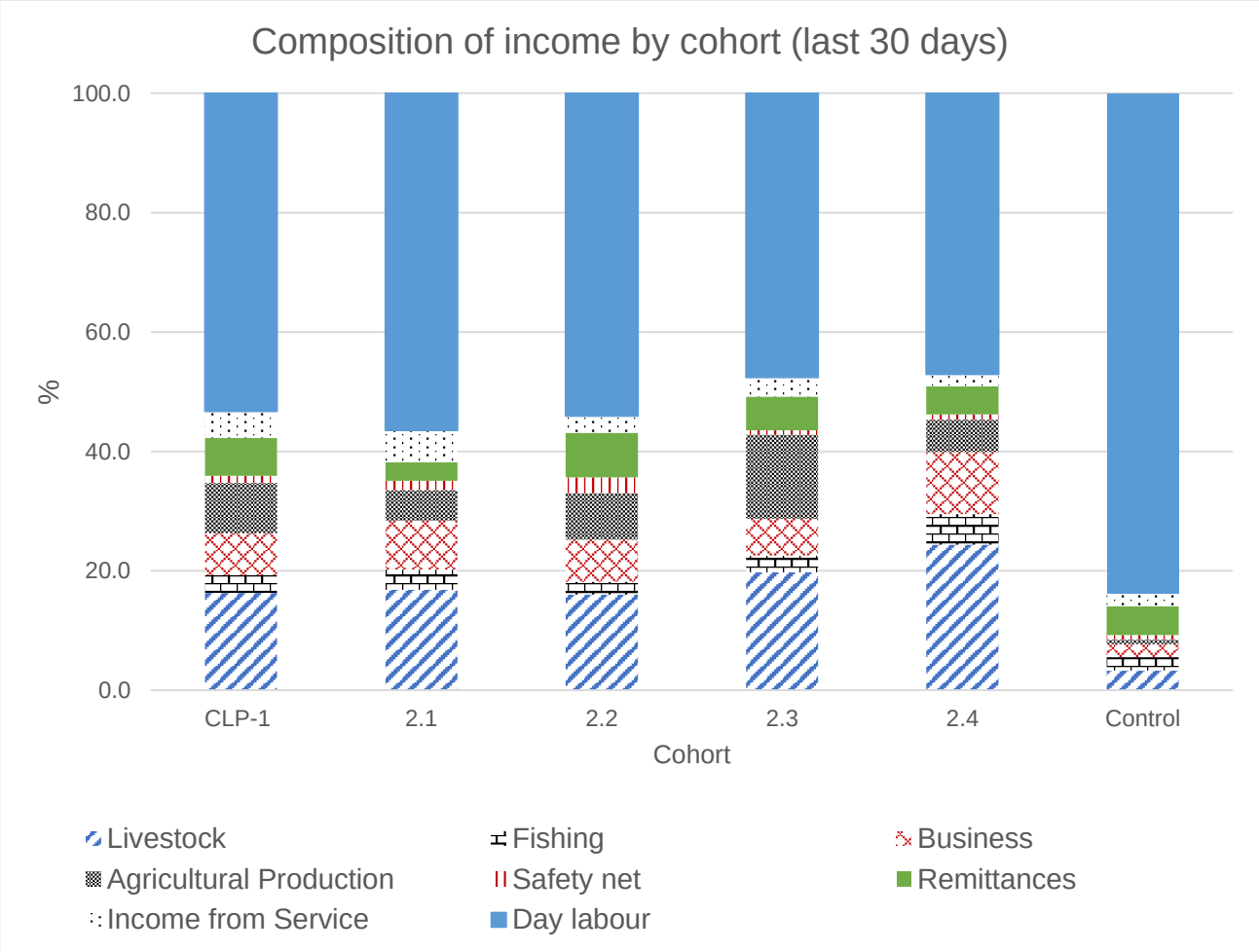


Figure 6 shows the breakdown of the types of income source for households by cohort. There is a clear trend away from day labour, which constitutes the majority of income for the control group (83.7%), towards other forms of income. Day labour is replaced largely by income from the sale of livestock and livestock products, such as milk and manure, and secondly by agricultural production. This is important as it demonstrates that households are moving away from having one predominant income source to diversified income sources. Although this is a positive trend, households still earn the majority of their income from day labour and a large proportion of their income sources are agriculture-based. This is largely due to the limitations of the *chars* environment and the lack of other viable livelihood options. [See Annex 2 for detail table and graphs]

Figure 6: The composition of types of income source for households by cohort



Further, analyses support previous CLP research. Blackie (2012) also found a transition away from day labour, but also its continued importance as a key livelihood source for the majority of households.[2]

The sustainability of CLP's impact on the composition of CPHH's livelihoods is shown in Figure 18, Annex 2. Cohort 2.1 shows that although initially households increased the proportion of income they received from livestock and agricultural production from 2010 to 2011, from 2011 to 2013 this began to reduce and the proportion of income source from day labour gradually began increasing again. Although it did not return to levels seen in the control group, it is important to note that this trend is occurring. Blackie (2012) found a similar trend back to day labour for CLP-1 households. [2]

3.3 Mean household income pppd

One way to measure whether households have moved out of extreme-poverty is to look at mean household income per person per day (pppd).

CLP-2's logical framework target for January 2015 expects that 85% of core participants who have received assets at least 36 months previously would have increased their mean household income by 50%.[11] This applies to Cohort 2.1 and 2.2.

Table 5: Values of mean household income pppd at baseline and October 2013

	2.1	2.2
Start/end date	April 2010/December 2011	July 2010/June 2012
Baseline value (Tk.)	20.8	17.1
Baseline value inflation-adjusted to October 2013 values (Tk.)	26.2	21.6
October 2013 survey values (Tk.)	35.3	36.3

Table 6 shows that an average of 51.8% of core participants so far have achieved the CLP target. In real terms[12], an average of 41% have achieved the CLP target.

Table 6: Percentage of households meeting CLP's logical framework target for mean household income pppd

	Cohort 2.1	Cohort 2.2	Average of Cohort 2.1 and 2.2
Percent of HH income increased 50% or more	45.4	58.1	51.8
Percent of HH income increased 50% or more in real terms	35.4	46.6	41.0

The October 2013 survey was conducted approximately 14 months prior to the January 2015 milestone target. From the current analysis it seems that CLP are not yet on course to meet the January 2015 target of 85%.[13]

Although measuring income is an important indicator of poverty, to use this data alone can oversimplify and underestimate the poverty situation on the *chars*. Unreliable livelihood activities such as day labour, as well as seasonal changes, particularly during the lean period, cause income levels to fluctuate throughout the year. A household's mean income may be above the poverty line at one point during the year but not at another. Further, it does not take into account other factors that CLP's interventions have an impact on, such as: diversified livelihoods; increased savings; water, sanitation and hygiene; women's empowerment; and food security. Thus, using income as a basis for estimating poverty levels can, on its own be too simplistic. CLP looks at poverty reduction holistically; looking not only at income but also at the other factors listed above.

[11] CLP log frame Outcome Indicator 2 states "For those who received assets 36 months previously, mean household per capita income, expenditure and cash savings increase by 50% (in real terms) for 85% of targeted core households" by January 2015.
[12] Analyses in real terms are adjusted taking into account inflation rates.
[13] See Annex 4 for graphs

Figure 8: Mean household income (Tk.) pppd in the last 30 days by cohort

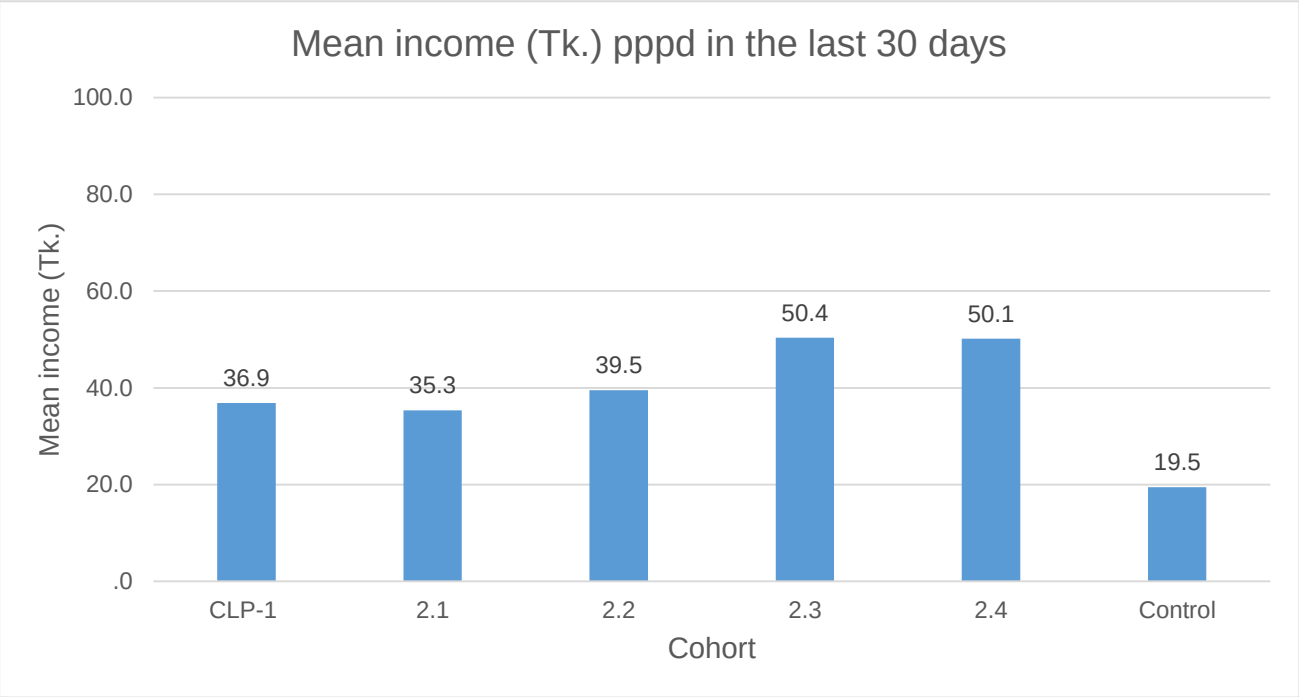
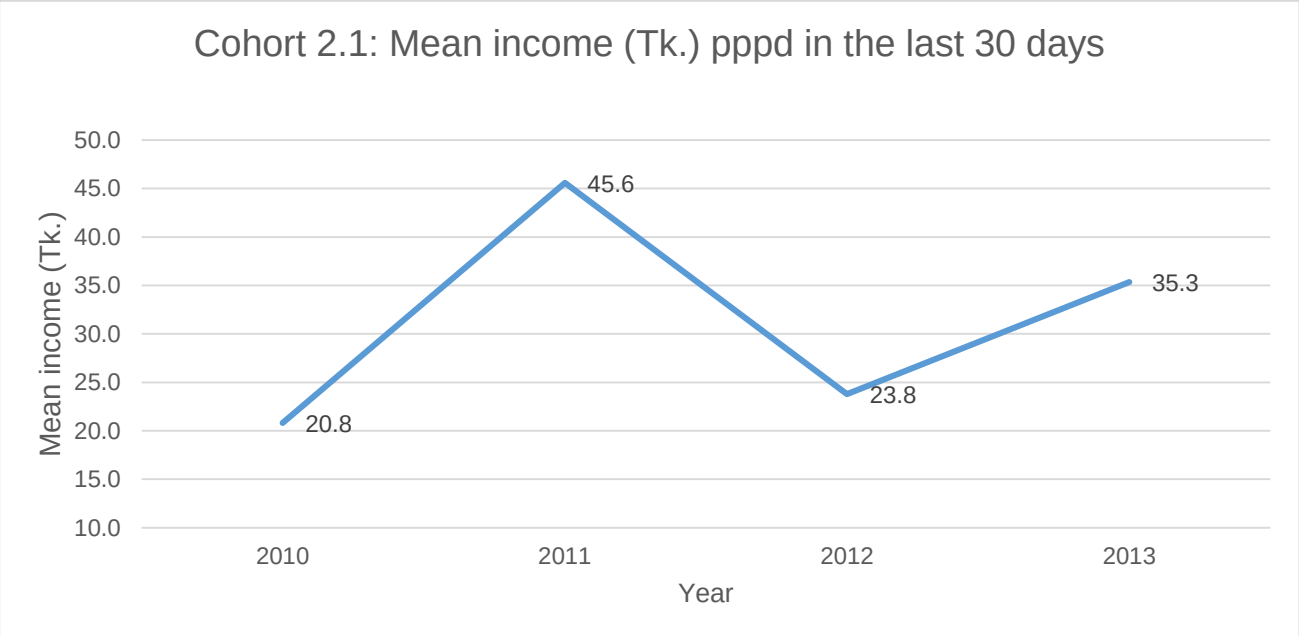


Figure 7 shows the mean household income pppd by cohort. A large increase can be seen from the control group (Tk.19.5 pppd) to Cohort 2.3 (Tk. 50.4 pppd). Mean income pppd does decrease slightly once participants stop receiving CLP support; however, income levels remain above those of the control group who are below the Extreme Poverty Line (EPL) of Tk. 25. It should be noted that Cohort 2.4 have almost equally high results as Cohort 2.3; who had recently completed CLP. Due to Cohort 2.4 still participating in CLP, the monthly stipend they receive as part of CLP's support package, is included in this analyses, which will increase overall household income. Analyses of annual mean income pppd show very similar trends to the monthly data (Figure 20, Annex 3).

Figure 7: Mean household income (Tk.) for Cohort 2.1 from 2010 to 2013



To understand the sustainability of household income, Figure 8 shows Cohort 2.1 households' mean income pppd from 2010 to 2013. Mean household incomes reach a peak in 2011. This is to be expected as this data was taken just before Cohort 2.1 had completed CLP. Between 2011 and 2012 there is a significant drop in mean income. A key reason for this could be due to the overall insecurity on the *chars* in 2012. Severe and recurrent flooding occurred during the year that reached record highs. This caused damage to land and crops which resulted in food shortages. Further, agricultural work was less available and therefore it is expected that income would have been lower than average. This explanation is supported by the fact that income increases again in 2013 when there were fewer shocks that *char*-dwellers had to compensate for. This increase demonstrates that households bounced back after 2012 and continued earning an income closer to the level they were at when they were with CLP. Annual mean income pppd for Cohort 2.1 followed a similar trend (Figure 21, Annex 3).

Although average monthly household income decreased during 2012 there was little change in the number of income sources households engaged in (Figure 5) and mean productive asset value for Cohort 2.1 continued to increase between 2011 and 2012 (Figure 3). This supports the argument for not placing sole emphasis on mean income pppd when determining poverty levels, as it does not take into account other areas of participants' livelihoods that may remain stable or even increase at times when income decreases.

Results for mean household income pppd support findings from previous CLP research conducted in 2012. [1] The 2012 study found that mean incomes pppd increased substantially from the control group, as households took part in CLP. Further, after this initial increase, incomes remained relatively static in the long term.

The 2012 report however did note that CLP-1 incomes were much lower than Cohorts 2.1 and 2.2 for a large part of the study period. [1] This current analysis, however, shows CLP-1 to fit in with the general trend across the cohorts. One reason provided for this in the previous study was that CLP-1 households had become increasingly reliant on day labour since 2010, whilst there was a reduction in the amount of income derived from livestock and land (agricultural production). From the current survey however, as displayed in Figure 6, it seems that CLP-1's reliance on day labour is consistent with that of Cohorts 2.1 and 2.2. The proportion of CLP-1's income taken up by livestock is also very similar and agricultural production is in fact greater than that of Cohorts 2.1 and 2.2. Therefore CLP-1 does not currently seem to be showing a trend back into a reliance on day labour. However due to the findings in the previous research, it is important to continue to monitor this over the next couple of years and understand any changes and fluctuations as they occur.

3.4 Mean household expenditure pppd

As households' mean income pppd increases, it is expected that this will enable households to spend more. As such, it is expected that household expenditure should follow a similar trend to household income.

CLP-2's logical framework target for January 2015 expects that 85% of core participants who have received assets at least 36 month previously, would have increased their mean household expenditure by 50%.[14]

[14] CLP log frame Outcome Indicator 2 states "For those who received assets 36 months previously, mean household per capita income, expenditure and cash savings increase by 50% (in real terms) for 85% of targeted core households" by January 2015.

Table 7: Values of mean household expenditure pppd at baseline and October 2013

	2.1	2.2
Start/end date	April 2010/December 2011	July 2010/June 2012
Baseline value (Tk.)	17.5	15.7
Baseline value adjusted to October 2013 values (Tk.)	22.1	19.8
October 2013 survey values (Tk.)	32.8	33.2

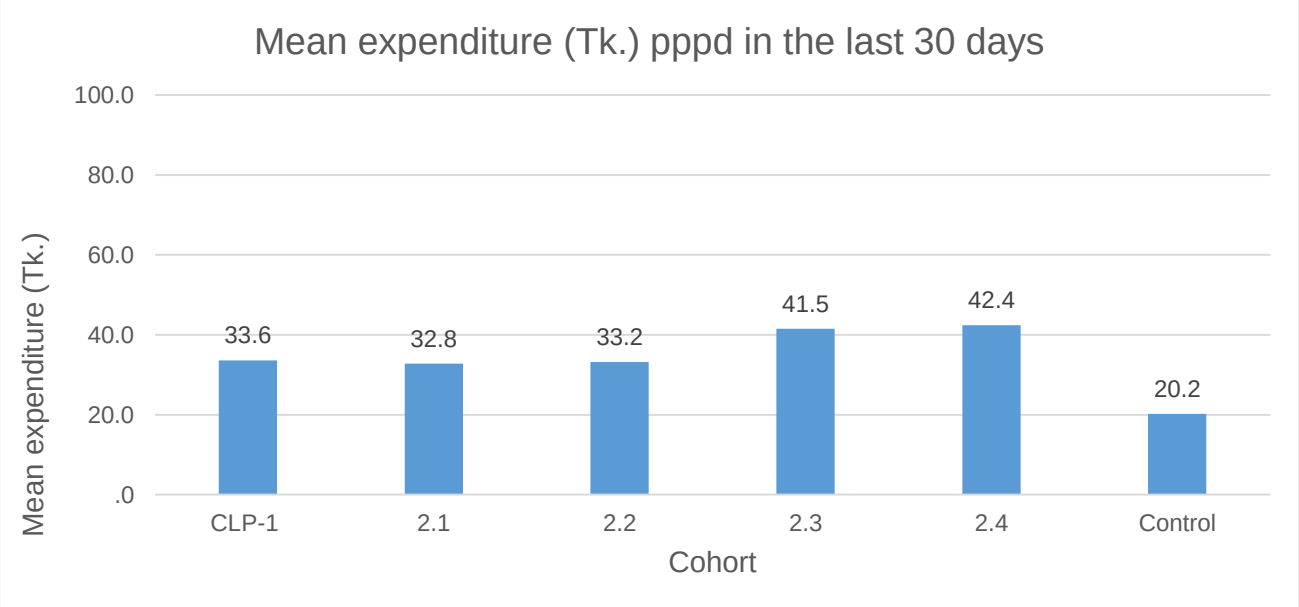
Data from Cohorts 2.1 and 2.2 shows that an average of 62.2% of households have met this target. In real terms, an average of 48.7% have met this target. By January 2015, Cohort 2.3 will also be included in this analysis, however it does not appear that CLP is on track to meet its target of 85%.[15]

Table 8: Percentage of households meeting CLP's logical framework target for mean household expenditure pppd

	Cohort 2.1	Cohort 2.2	Average of Cohort 2.1 and 2.2
Percent of HH expenditure increased 50% or more	59.6	64.7	62.2
Percent of HH expenditure increased 50% or more in real terms	47.2	50.1	48.7

Figure 9 shows the mean household expenditure pppd by cohorts over 30 days. SES 2013 shows that between the control group and Cohort 2.4 (who at the time of the survey were still receiving CLP support) there is an increase, of more than double, in mean household expenditure. This level of expenditure is similar to that of participants who have recently completed CLP (Cohort 2.3). There is a small decrease in cohorts that are more removed from CLP support, however mean household expenditure still remains above that of the control group. Data for expenditure follows the same trend as for income. Further, analysis for annual mean expenditure pppd (Figure 22, Annex 3) is also consistent with the monthly mean expenditure pppd .

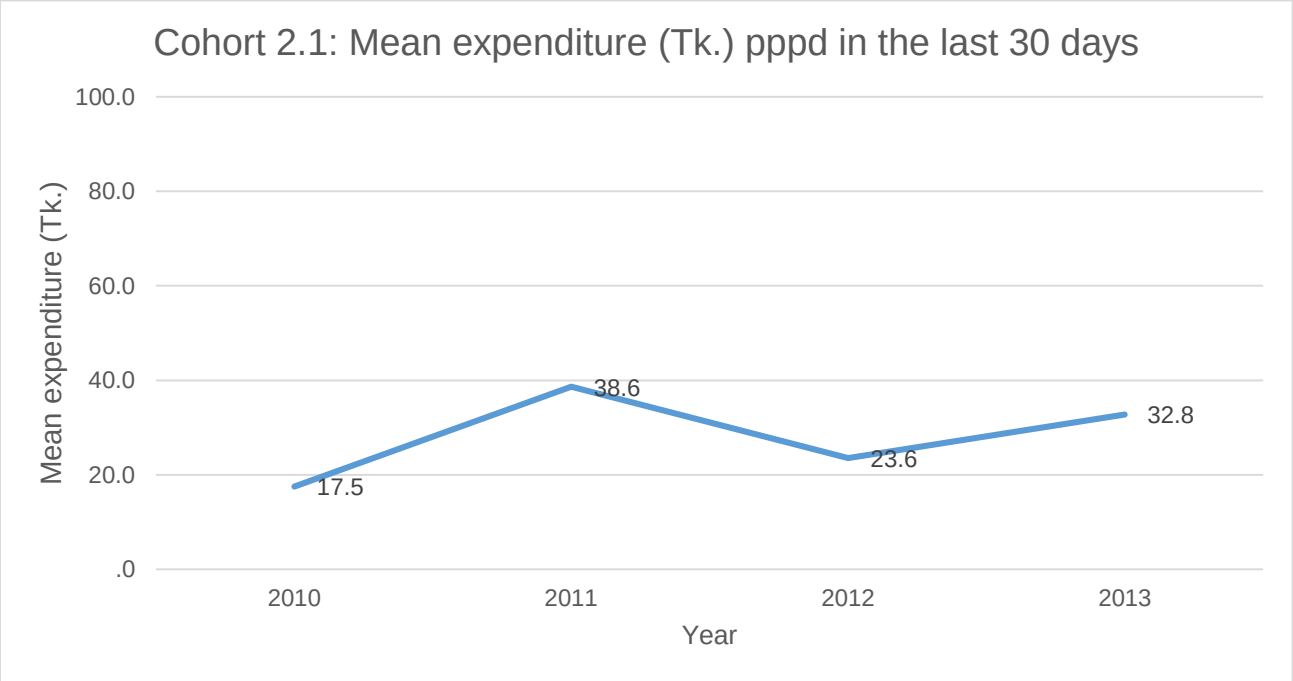
Figure 9: Mean expenditure (Tk.) pppd in the last 30 days by cohort



[15] See Annex 4 for graphs

To determine the sustainability of CLP's interventions on mean household expenditure pppd, Cohort 2.1 was analysed and the results are shown in Figure 10. The data, again, follows the same trend as the data for mean household income for Cohort 2.1, during the same time period. There is a large increase from 2010 (when Cohort 2.1 was not participating in CLP) to 2011. A decline in expenditure is seen in 2012. Due to respondents having less income in this year, it follows that their expenditure would also be less. By 2013, households were regaining their livelihoods, and expenditure (as with income) began to increase. At no point did expenditure drop to the levels of the control, showing that, even during 2012 when households had to contend with a number of shocks, they remained resilient.

Figure 10: Mean household expenditure (Tk.) for Cohort 2.1 from 2010 to 2013



A point to note is that, for all cohorts, mean household income pppd is higher than mean household expenditure pppd. However, for the control group, mean household expenditure is slightly higher than income. This is an important finding as it shows that now household income is increasing, households are more able to save. Results shown in Figure 16 (p.24) support this. The situation of the control group causes households to be stuck in a perpetual cycle of poverty that is almost impossible to move out of.

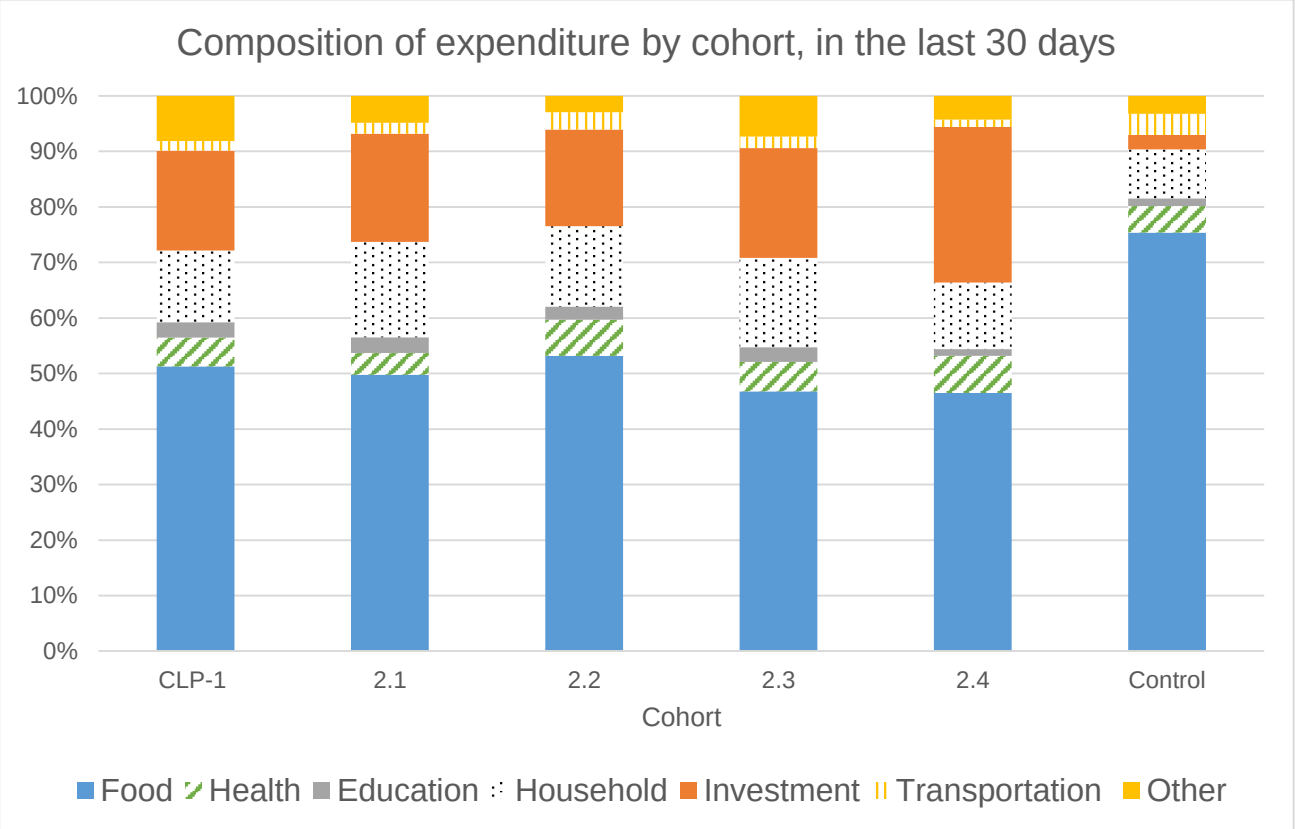
This current analysis on mean household expenditure pppd, supports previous CLP research which also found that overall mean household expenditure levels were significantly higher than the control group at the time. Similar to income, the Blackie et al (2012) report found that CLP-1 expenditure was lower than Cohorts 2.1, 2.2 and 2.3, which this current data does not show. This difference could be explained by findings in the Blackie et al report that showed CLP-1's reversion back to day labour. It was thought that low household income in CLP-1 was a result of this reversion and as such, this change could also have a negative impact on expenditure. [1]

Measuring mean household expenditure pppd is a useful indicator. It provides more reliable results compared to data relating to income, as participants are likely to give more truthful responses. However, there are still issues relating to recall bias and taking this data alone does not take into account the composition of household expenditure. It is important to understand where households are spending their money and how this evolves over time as household's livelihoods improve.

3.5 Consumption expenditure

Consumption expenditure, shown in the composition of types of household expenditure, are shown in Figure 11, is from the last 30 days. Types of expenditure can be categorised into six main groups: food, health, investment, education, transportation, and items for the house (such as clothing, fuel for cooking and lighting. Overall, between cohorts, there is not a large difference in the proportion of income households spend on health, education, and transportation. Significant, however, is the difference between the control group and CLP cohorts in three areas: investment, household and food expenditure. Before joining CLP, on average households spend only 2.6% of their total expenditure on investment. This increases to 19.8% as households complete CLP. Similarly, expenditure on household items increases from the control (8.8%) to Cohort 2.3 (16.1%). Impact remains in previous cohorts and although investment levels and expenditure on household items drop slightly, they remain above the control.

Figure 11: Composition of the types of expenditure by cohort in the last 30 days



The largest proportion of household expenditure goes on food and this is consistent across all cohorts. In the last 30 days, 75.4% of the control group's household expenditure was spent on food. For Cohort 2.4 households that are still part of CLP, this decreases substantially to 46.5% and continues to remain around this level as participants complete the Programme (Cohort 2.3). For cohorts that have left the Programme, data seems to fluctuate very slightly but stays around the 50% mark.

Figure 19 in Annex 2 looks at the changes in composition expenditure for Cohort 2.1 from 2010 to 2013. The most significant change occurred for investments and food expenditure. Expenditure on investment increases substantially between the control 0.9% (October 2010) to 39.3% (October 2011) as they near the end of CLP. However, between 2011 and 2012 (i.e. after leaving CLP) the proportion

of expenditure on investment drops by over half. This proportion begins to increase again by 2013. The proportion of expenditure spent on food decreases from 68.2% in the control to 35.3% during CLP. This increase following CLP, which can be explained by contextual factors during 2012, but begins to decrease again in 2013. On a recent study, Barrett, A (September 2014) founds that more hazards occurred in 2012 which would cause a reduction in the availability of food on the chars, increasing the price of food. Households would then have to spend more to purchase food[5].

3.6 Income spent on food

A key objective of CLP is to increase the food security of households it works with. Through its combination of livelihood interventions, CLP works to ensure participants have greater income to spend on purchasing food. CLP also aims to decrease the proportion of income households spend on food, thus allowing them to spend money on other items such as education, health care or investment. Figure 12 shows the mean income spent on food pppd, over a 30 day period. The amount increases from Tk. 15.2 pppd in the control group to Tk.19.4 pppd for households participating in CLP (Cohort 2.4); an increase of 28%. Although data shows a decrease in previous CLP cohorts, results remain above the control group and seem to plateau out for cohorts CLP-1, 2.1 and 2.2.

Figure 12: Mean household income spent on food pppd, in the last 30 days

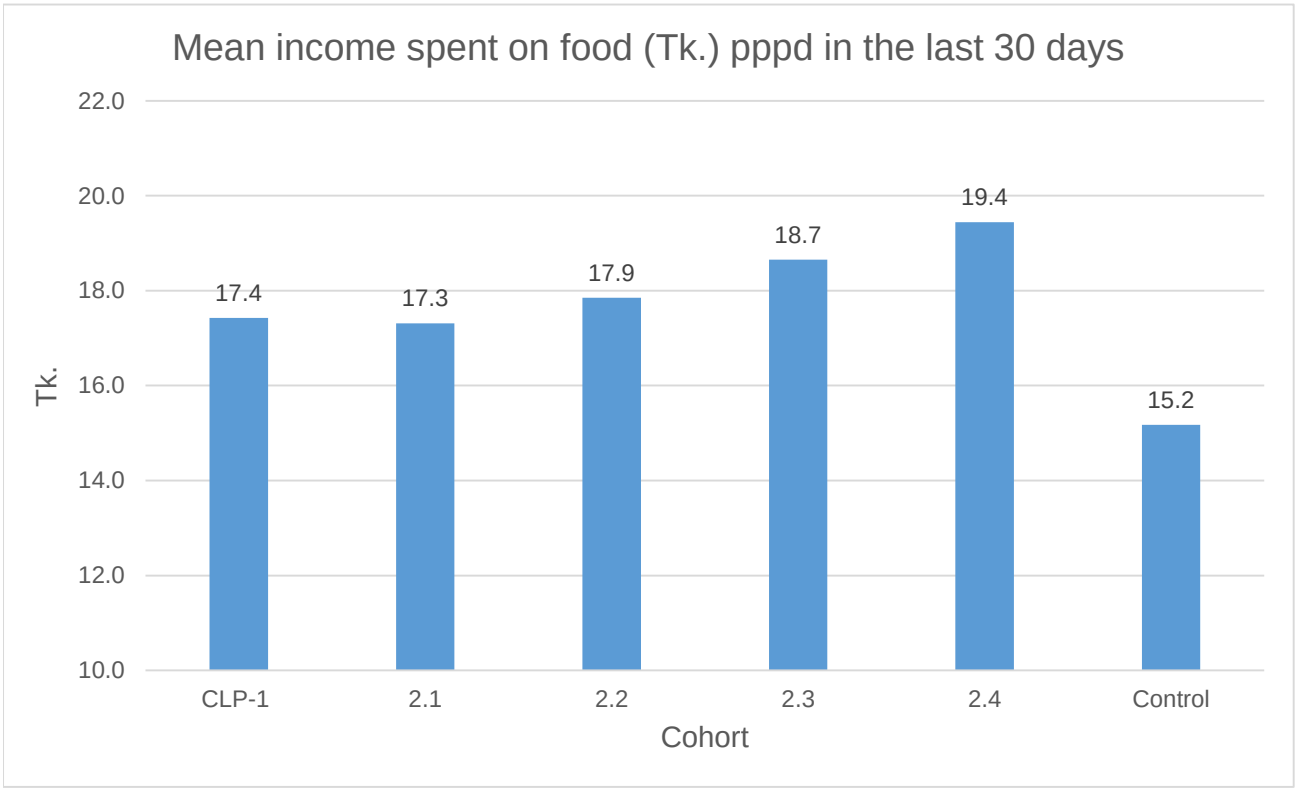
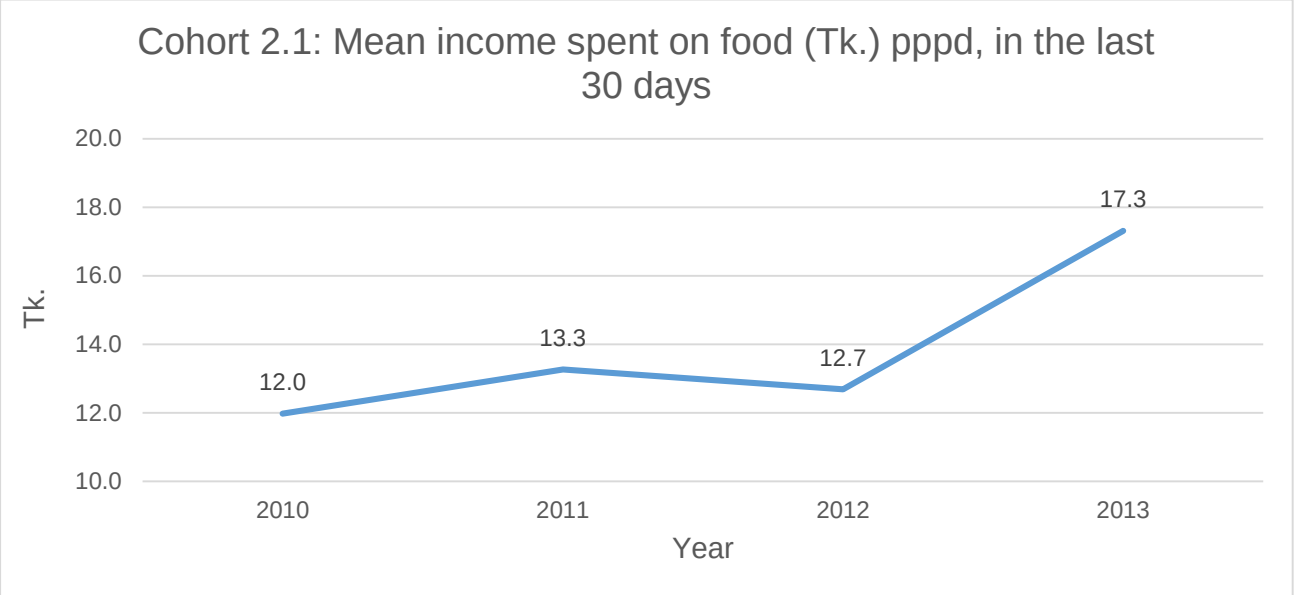


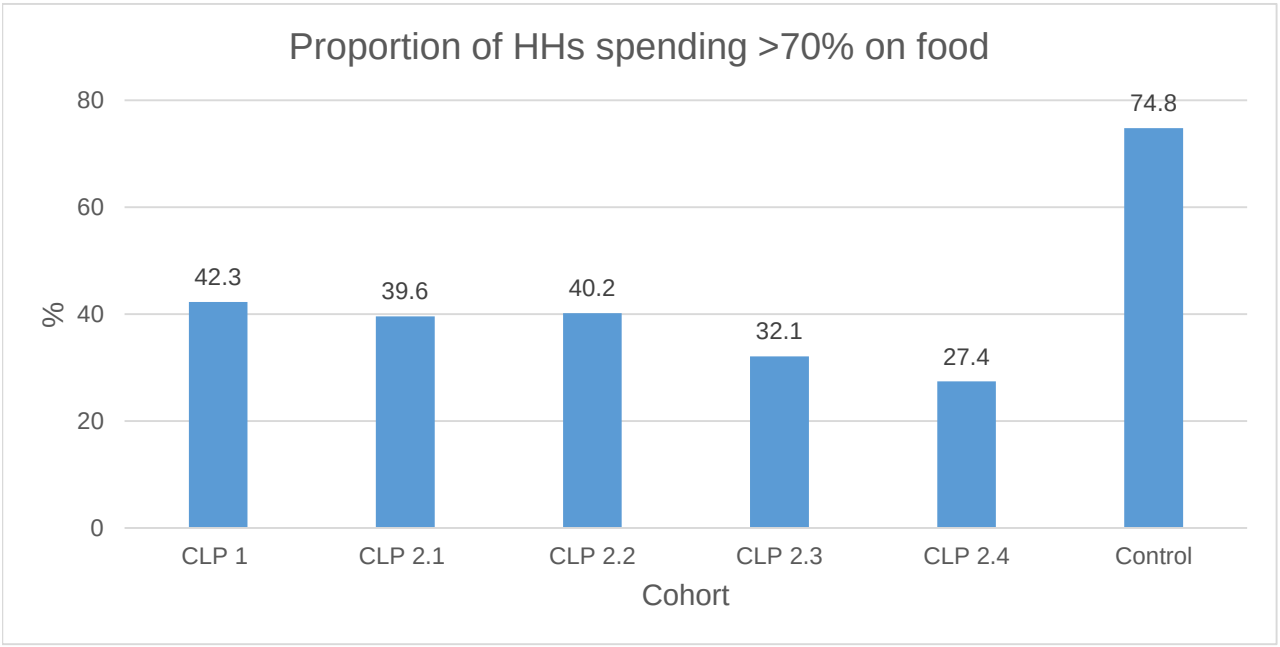
Figure 13 shows that for Cohort 2.1, although households did not increase the amount of income spent on food greatly during their time with CLP (2011), it continued to increase to 2013. Overall, between 2010 and 2013 there was a 44% increase in the amount of money households spent on food.

Figure 13: Mean household income spent on food pppd, for Cohort 2.1 in the last 30 days



Again, we can note a slight decrease in 2012 which goes against the general trend. One explanation for this is that the 2012 survey was conducted during October – the lean season. Results during this period are likely to be lower than at other points of the year. The 2010 and 2011 surveys were conducted in May and June, respectively. Further, as a result of the flooding during the year, damage to crops and the inability to carry out the necessary levels of agriculture production, caused a food shortage. This meant that market food prices increased and although *char*-dwellers were spending

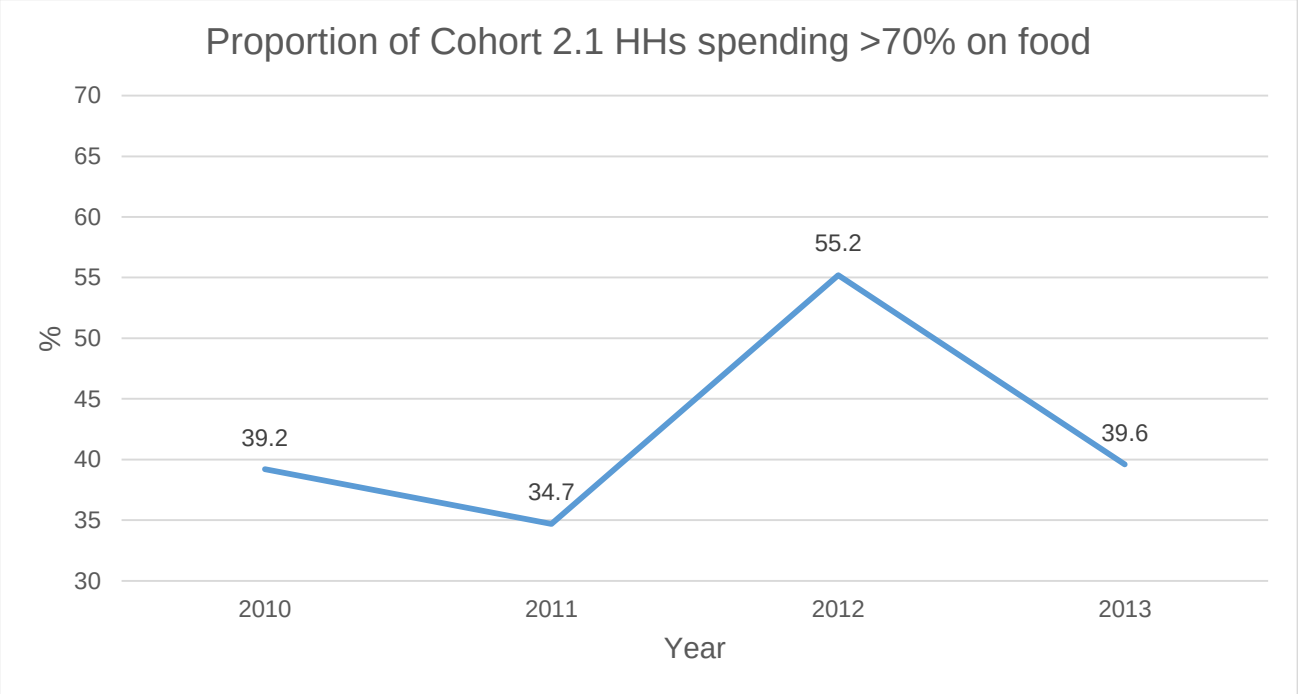
Figure 14: Percentage of households by cohort spending greater than 70% of their income on food



less money on food, due to lower income in this period, this constituted a much greater proportion of their income than in previous years (see Figure 15).

In line with measures suggested by the United Nations Food and Agriculture Organisation (FAO), CLP views households that spend more than 70% of their income on food, as being vulnerable to food insecurity. [4] Figure 14 shows the percentage of households, by cohort, that spend over 70% of their income on food in the last 30 days. The graph shows that before joining CLP, 74.8% of households spend more than 70% of their income on food. This drops substantially to just over one quarter of households (27.4%) in Cohort 2.4. The percentage increases slightly in older Cohorts that have left CLP, but ends up fluctuating around 40% spending more than 70% of income on food. Even though households are reporting spending more money on food compared to the control (Figure 11), mean household income has increased from the control (Figure 7). Therefore overall the proportion of expenditure spent on food is reducing. This reduction also supports findings from previous CLP research. [1]

Figure 15: Proportion of Cohort 2.1 households spending greater than 70% of their income on food



3.7 Household cash savings

Extreme-poor *char*-dwellers often live day-to-day and hand-to-mouth, therefore participants join CLP with little or no cash savings. Cash savings are important because, without financial safety nets, *char*-dwellers are less resilient to disasters such as flooding and are less able to compensate for external shocks e.g. an illness in the family. CLP teaches participants the value of saving through training as well as encouraging participation in village savings and loans groups (VSLGs).

CLP-2's logical framework target for January 2015 expects that 85% of core participants who have received assets at least 36 months previously would have increased their mean household cash savings by 50%.[16] This applies to Cohorts 2.1 and 2.2.

Table 9: Values of mean household cash savings at baseline and October 2013

	2.1	2.2
Start/end date	April 2010/December 2011	July 2010/June 2012
Baseline value (Tk.)	396.6	70.6
Baseline value adjusted to October 2013 values (Tk.)	499.7	89.0
October 2013 survey values (Tk.)	2787.3	2626.5

As at the October 2013 survey (approximately 14 months before the January 2015 milestone target) data for Cohorts 2.1 and 2.2 show an average of 77.7% meeting the target. In real terms, an average of 75.5% meet the target (see Table 10).

Table 10: Percentage of households meeting CLP's logical framework target for mean household cash savings

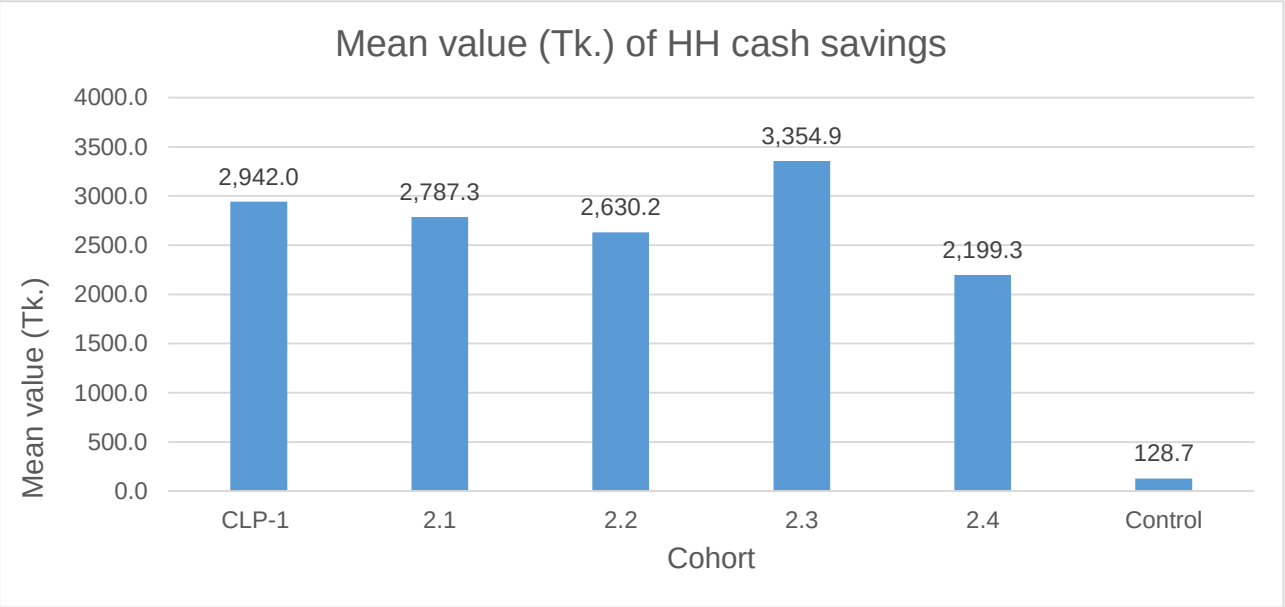
	Cohort 2.1	Cohort 2.2	Average of Cohort 2.1 and 2.2
Percent of HH cash savings increased 50% or more	71.0	84.4	77.7
Percent of HH cash savings increased 50% or more in real terms	68.3	82.6	75.5

Included also in the analyses for the 2015 target will be Cohort 2.3, based on the next Annual SES in October 2014. If Cohort 2.3 follows same average then on average 80% CLP participants will meet the target.[17]

Figure 16 shows the mean value of household cash savings for each cohort. The highest results are for Cohort 2.3 with mean household savings being, on average, Tk. 3,354.9. This value is significantly higher than that of the control group (an average of Tk. 128.7). This is to be expected as, at the time of the survey, these households had just completed CLP. Cash savings are seen to decrease slightly once cohorts are removed from CLP support, however this could be, in part, due to the fact that a large proportion of VSLG's established by CLP are known not to sustain over time. [3] Despite this, there does seems to be an increasing trend between Cohorts 2.2 to CLP-1, demonstrating that the value of savings and the ability to do so must remain with participants even after CLP.
The sustainability of CLP's interventions on cash savings can be seen in Figure 17 which shows results for Cohort 2.1 from 2010 to 2013. Not only do households continue to save following their participation in CLP, but saving continues to increase, and quite substantially. Figure 17 further highlights the value and importance of looking holistically at measuring poverty. As described

[16] CLP log frame Outcome Indicator 2 states "For those who received assets 36 months previously, mean household per capita income, expenditure and cash savings increase by 50% (in real terms) for 85% of targeted core households" by January 2015.
[17] See Annex 4 for graphs.

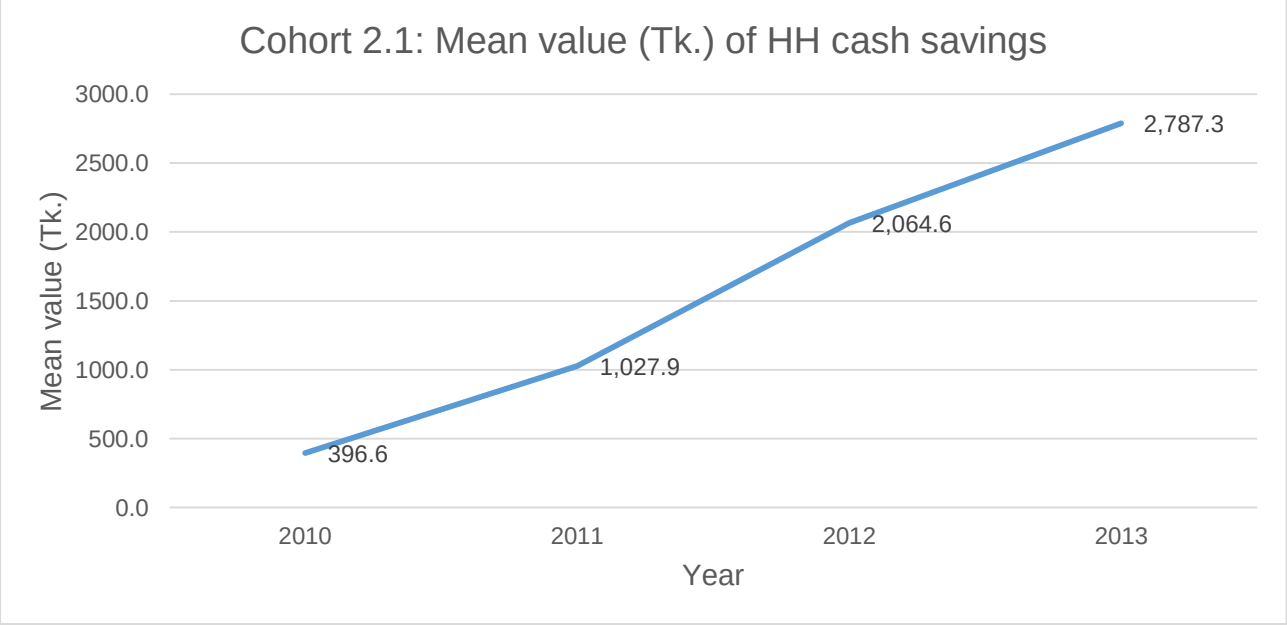
Figure 16: Mean value (Tk.) of household cash savings by cohort



throughout this report, 2012 was a particularly difficult year for *char*-dwellers, and mean household incomes pppd were negatively affected as a result. However, households still managed to increase their cash savings from the year before.

In recent CLP research, Blackie et al (2012) found similar results, in that CLP had a large impact on household cash savings and that this impact sustained. He did however find that 29% of Cohort 2.1 reported having no savings in 2012. Figure 15 however shows a steady increase between 2011 and 2012 in the mean value of savings for the cohort. Blackie concluded that this was due to uneven distributions in household cash savings; whereby some households have little to no savings in this period but others were able to accumulate quite high savings.

Figure 17: Mean value (Tk.) of household cash savings for Cohort 2.1 from 2010 to 2013



4. Conclusion

The findings of this report relate to six key areas of livelihoods:

- The mean value of household productive assets;
- The diversification of household income sources;
- The value and composition of household income;
- Household expenditure and consumption expenditure;
- Income spent on food; and
- Household cash savings;

Results show that CLP households have significantly increased the value of their productive assets compared to the control group (households that have not participated in CLP). Further, mean productive asset values continue to increase over time, even after households have left CLP. The number of households having more than one income source in the last 30 days increases from the control group to households who have participated in CLP, after which point the proportion of households diversifying their income source plateaus. In the control group, households' main income source is day labour. Once cohorts participate in CLP, although this remains the largest component of income, there is a trend towards income generated from livestock and agriculture production.

Mean household income pppd has increased significantly from the control group to households that have recently completed CLP, moving households above the extreme poverty line (EPL). Following CLP, results for mean household income decrease slightly but sustain above the level of the control group and of the EPL. Similar to household income, mean household expenditure pppd in the last 30 days, increases from the control to households that have recently completed CLP. Expenditure levels decrease following CLP but sustain above the level of the control.

For all cohorts, in October 2013, the largest proportion of household expenditure went on food. This is much greater for households that have not participated in CLP then for households that have recently completed the Programme. During households' time with CLP, the proportion of income spent on investment and on household items is seen to increase. The amount of income households spend on food pppd, in the last 30 days, increases from the control group to households who recently completed CLP. This impact is seen to sustain after households have left CLP and is potentially increasing. Results show that CLP is also having a significant positive impact on the proportion of income households are spending on food, with households who have not taken part in CLP spending a much greater proportion of their income on food compared with households who have received CLP support.

Results show that mean household cash savings increase significantly during households' time with CLP, compared to before their participation in the Programme. Further, mean household cash savings continue to increase in the years after households have participated in the Programme, showing strong signs of sustainability.

Data for income, expenditure and consumption expenditure in 2012 tended to deviate from the general trend. This is largely due to severe and recurrent flooding in the year that reached record highs. This caused a scarcity in agricultural work and damage to land and crops which resulted in a food shortage and an increase in market food prices. The importance of not looking solely at mean income pppd as an indicator of poverty has been emphasised throughout the report. In 2012, income and expenditure declined, whereas other areas such as the proportion of households with diversified

income sources remained stable, and mean productive asset values and cash savings even continued to increase during this period. Although measuring income is an important indicator of poverty levels, to use this data alone can oversimplify and underestimate the poverty situation on the *chars*.

In the most part, data supported results from two previous CLP research studies conducted in 2012.[1,2] However, as CLP continues to monitor cohorts through its Annual SESs and bi-monthly surveys, it would be valuable to continue to assess CLP-1 households, particularly in relation to the discrepancies between this report and previous research regarding income levels, expenditure levels and the composition of income sources for CLP-1 households. Further, it would be useful to track the composition of income sources for all cohorts, due to what seems to be a reversion back to day labour in Cohort 2.1 in this report (and as noted for CLP-1 in Blackie (2012)). By continuing to look in detail at trends, this will provide a greater insight into the impact and sustainability of CLP's interventions.

References

[1]Blackie, R. & Alam, Z. (2012) *Review of income and expenditure among CLP core participant households.*

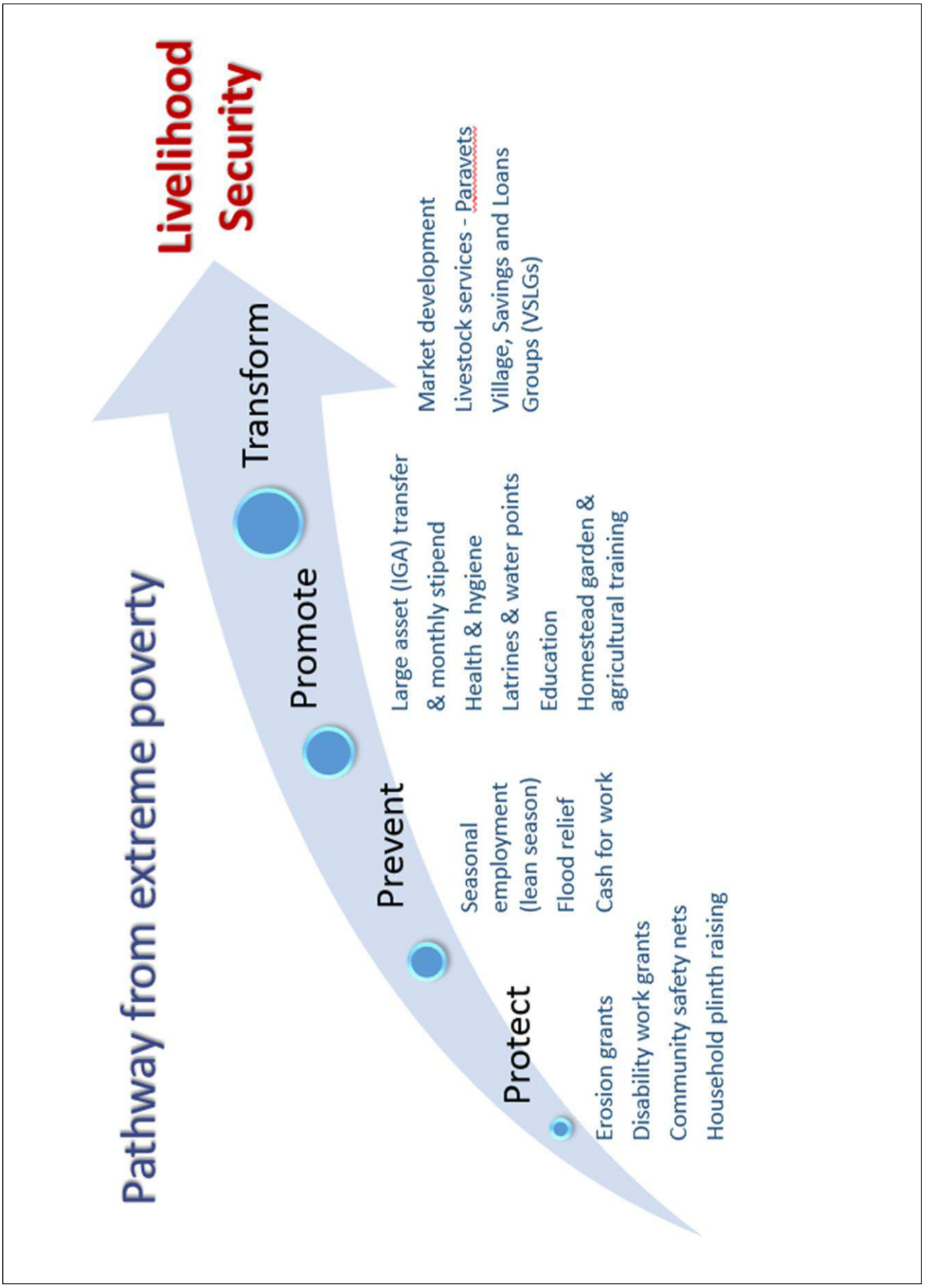
[2]Blackie, R. & Alam, Z. (2012) *Review of the value and composition of assets owned by CLP core participant households.*

[3]McIvor, N. & Hussain, A. (2011). *A study to assess the sustainability and quality of village, savings and loans groups (VSLGs).*

[4]Smith, L. (no date). *Keynote Paper: The use of household expenditure surveys for the assessment of food insecurity*. International Food Policy Research Institute. http://www.fao.org/docrep/005/Y4249E/y4249e08.htm**.** Accessed 05 October 2014.

[5]Barrett, A; Hannan, M; Alam, Z (2014) The Impact and Sustainability of CLP's Food security interventions

Annex 1: CLP Pathways Diagram



Annex 2: Composition of income and expenditure: Cohort 2.1

Figure 18: The composition of types of income source for Cohort 2.1 households

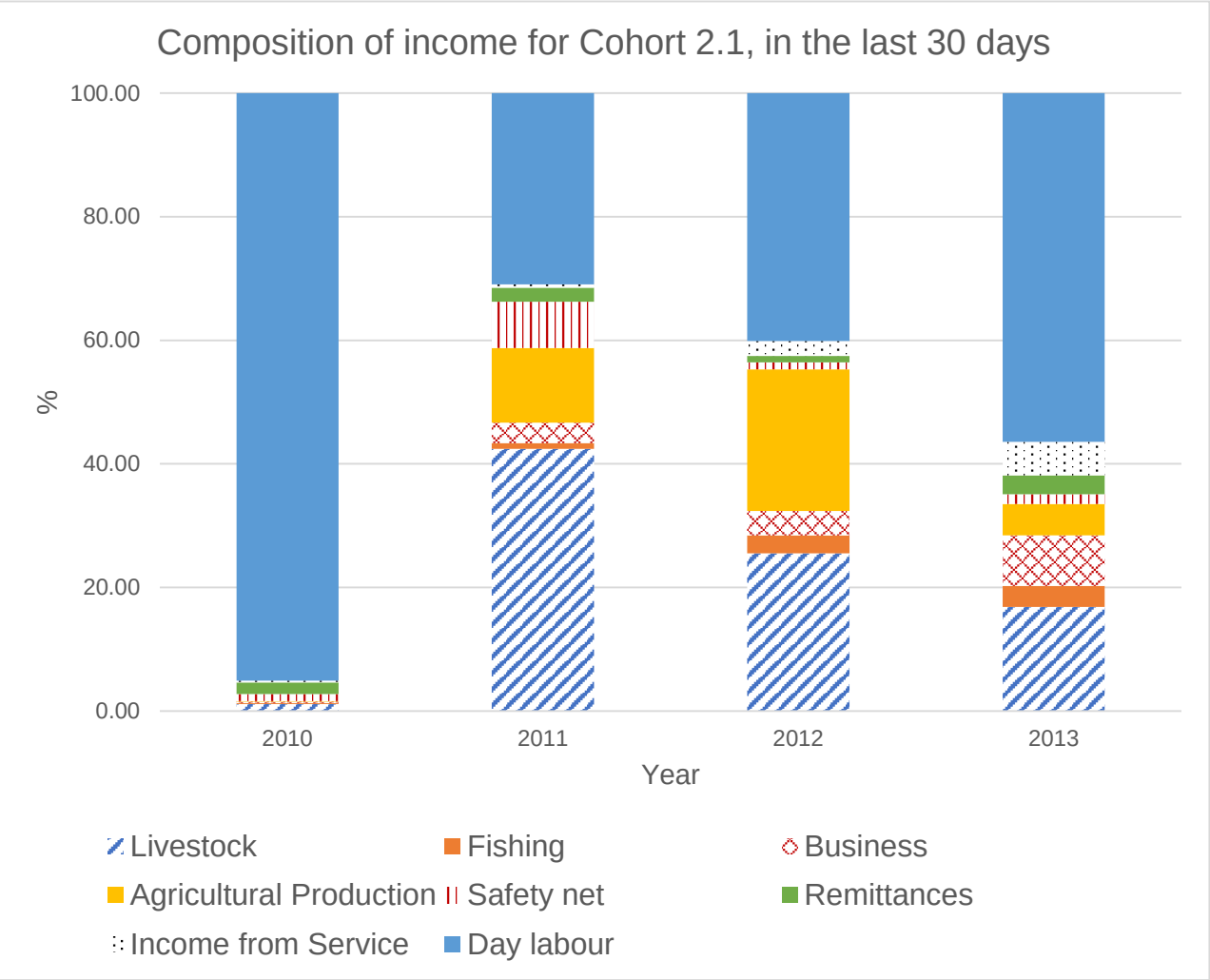
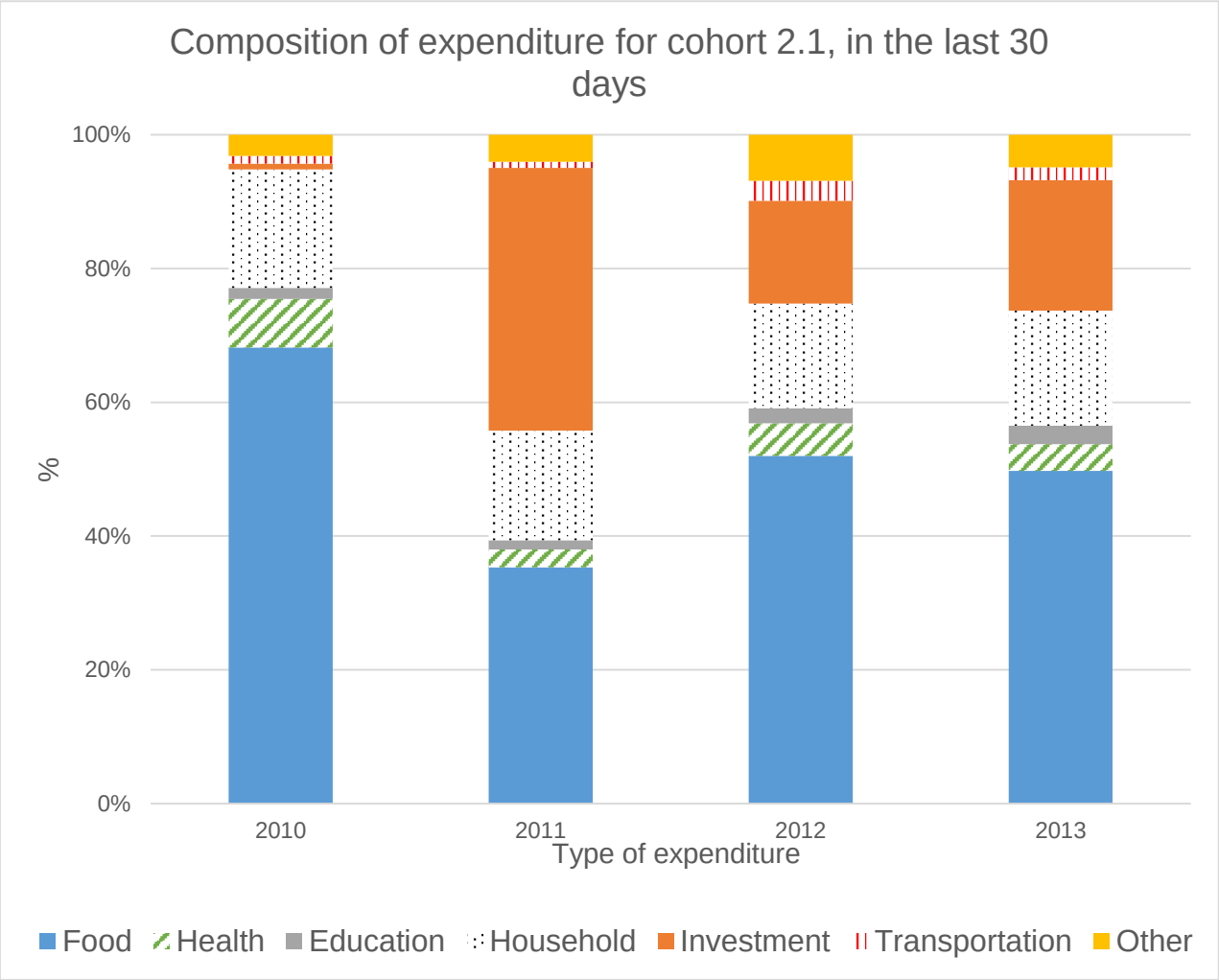


Table 11: Composition of income by cohort

Composition of income by cohort (Last 30 days)						
Cohort	CLP-1	2.1	2.2	2.3	2.4	Control
Livestock	16.3	16.8	16.0	19.8	24.4	3.3
Fishing	2.9	3.4	2.2	2.8	5.1	2.2
Business	7.1	8.2	7.0	6.2	10.4	2.2
Agricultural Production	8.4	5.1	7.8	14.1	5.4	0.7
Safety net	1.2	1.6	2.7	0.8	0.9	0.8
Remittances	6.3	3.1	7.5	5.6	4.7	4.8
Income from Service	4.5	5.4	2.8	3.2	2.0	2.2
Day labour	53.3	56.4	54.1	47.6	47.1	83.7
	100.00	100.00	100.00	100.00	100.00	100.00

Source: CLP Socio economic annual follow up data 2013

Figure 19: Composition of expenditure for Cohort 2.1 households from 2010 to 2013



Annex 3: Mean annual data

Figure 21: Mean annual income (Tk.) pppd by cohort

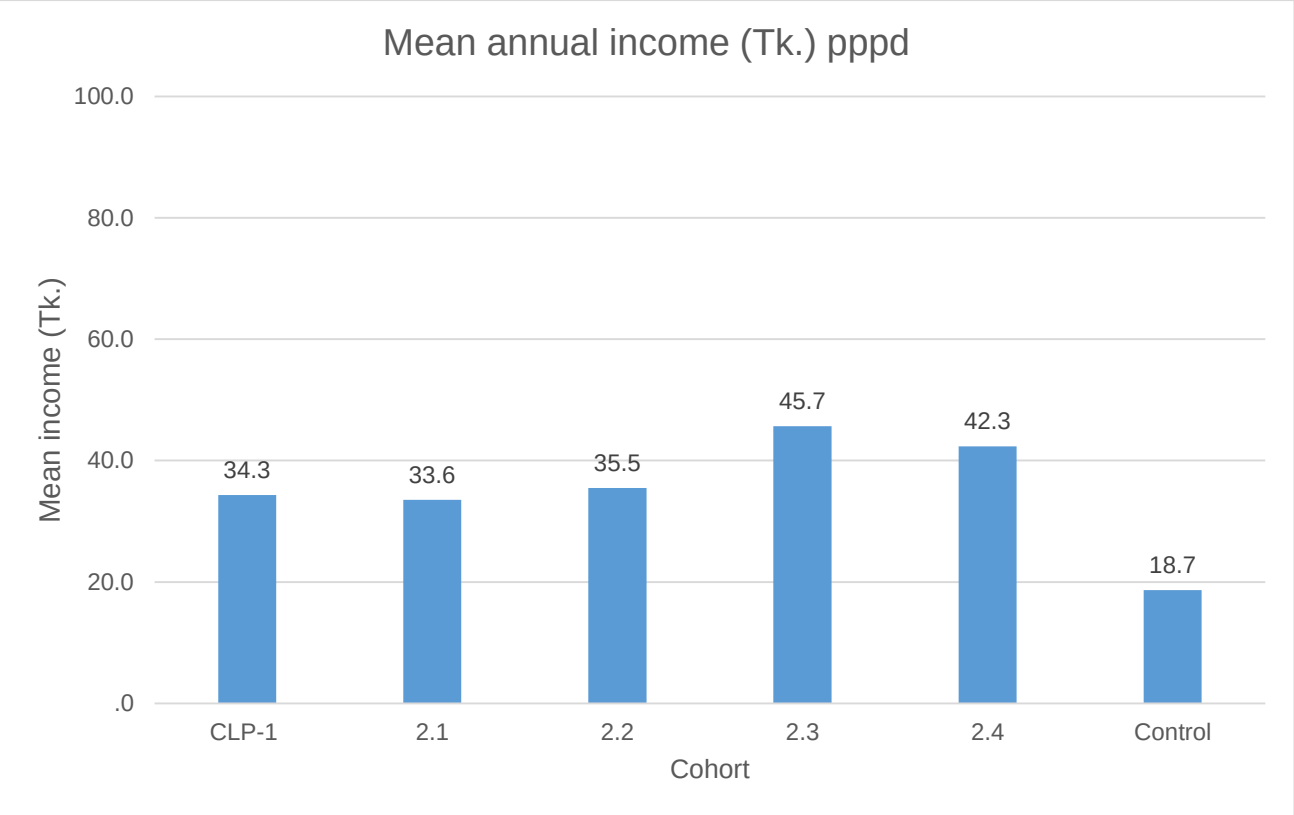


Figure 20: Mean annual income (Tk.) pppd for Cohort 2.1 for 2012 and 2013

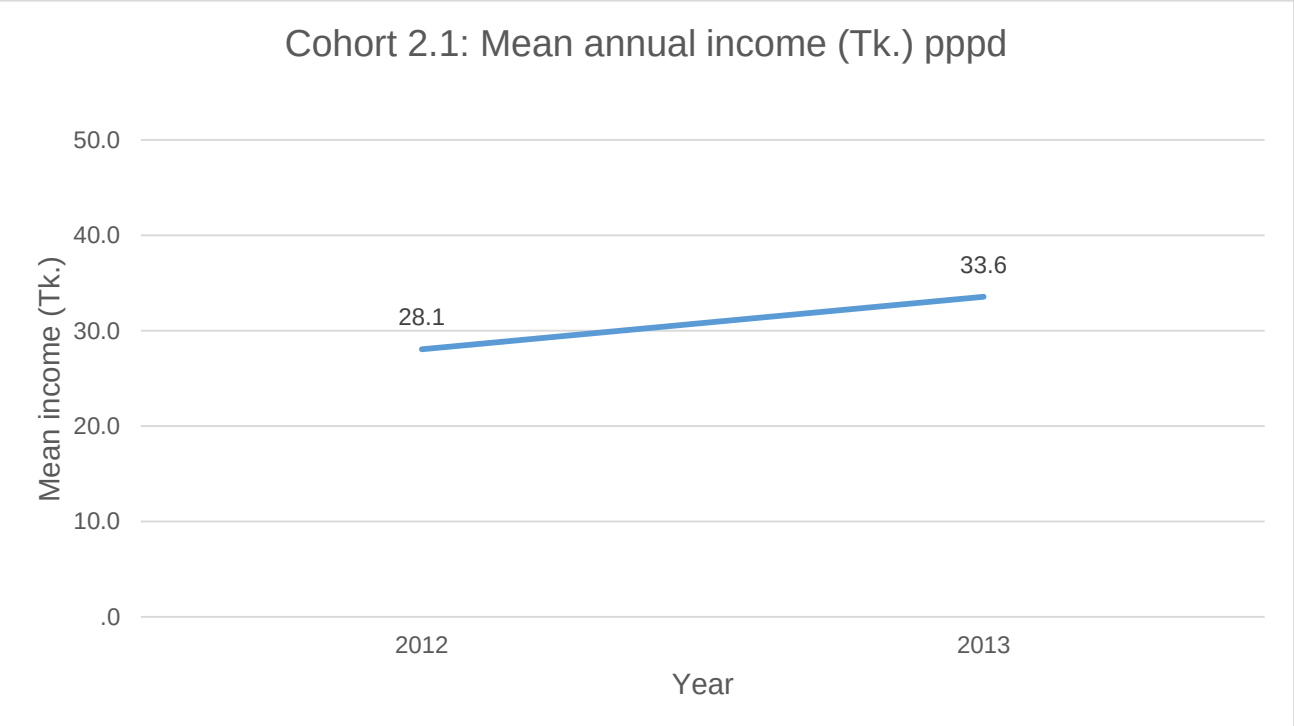
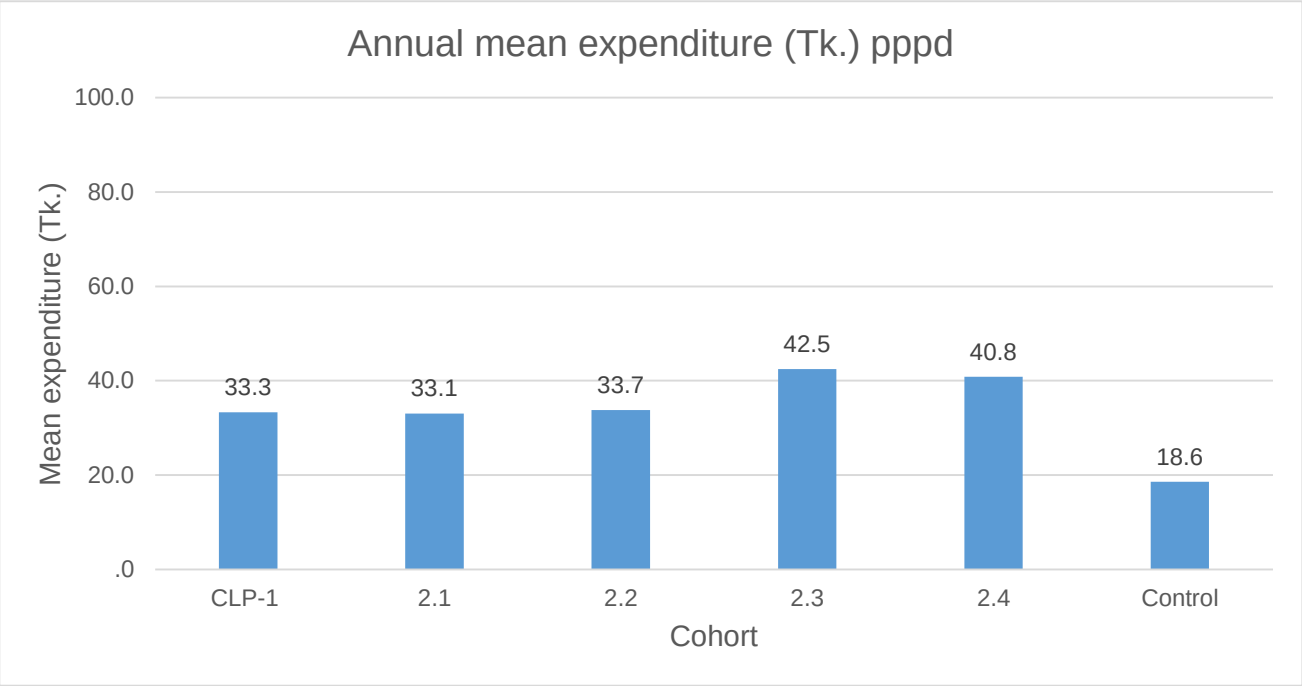


Figure 22: Annual mean expenditure (Tk.) pppd by cohort



Annex 4: Progress towards the logical framework targets

Figure 23: Percentage of Cohort 2.1 and 2.2 households whose income increased by 50%

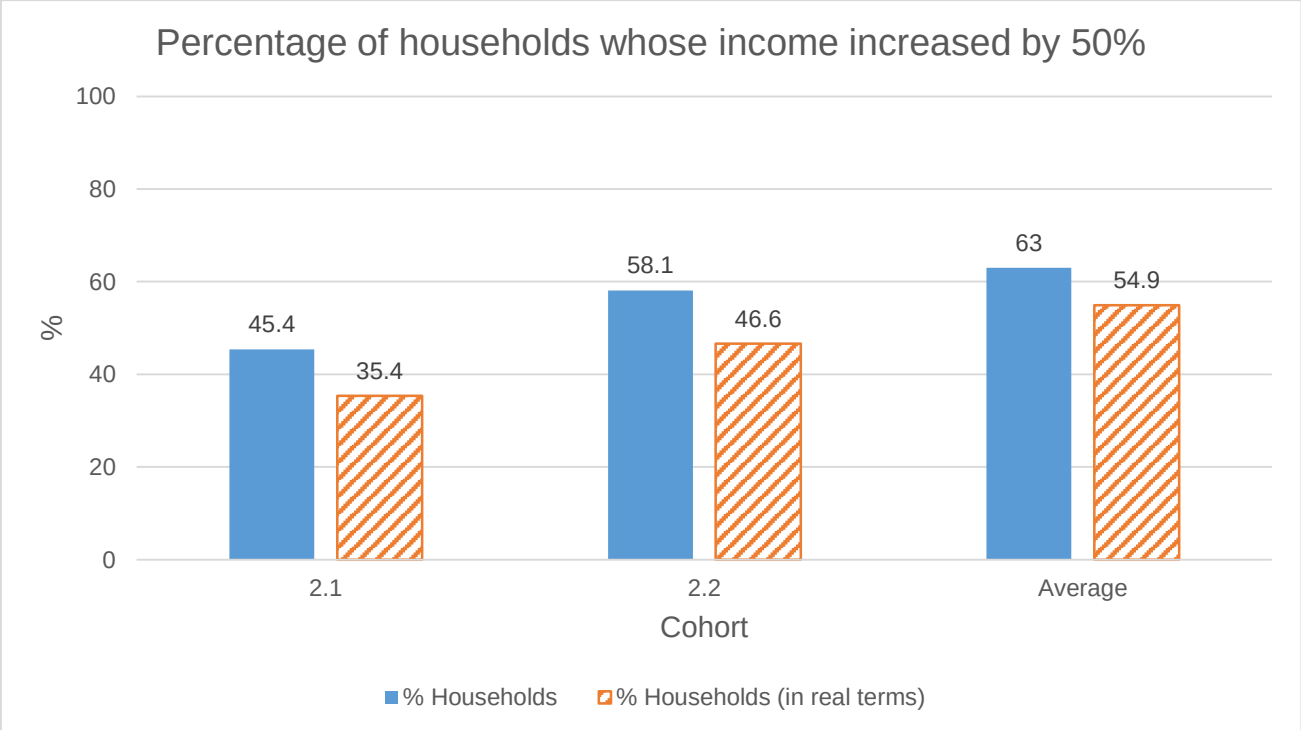


Figure 25: Percentage of Cohort 2.1 and 2.2 households whose expenditure has increased by 50%

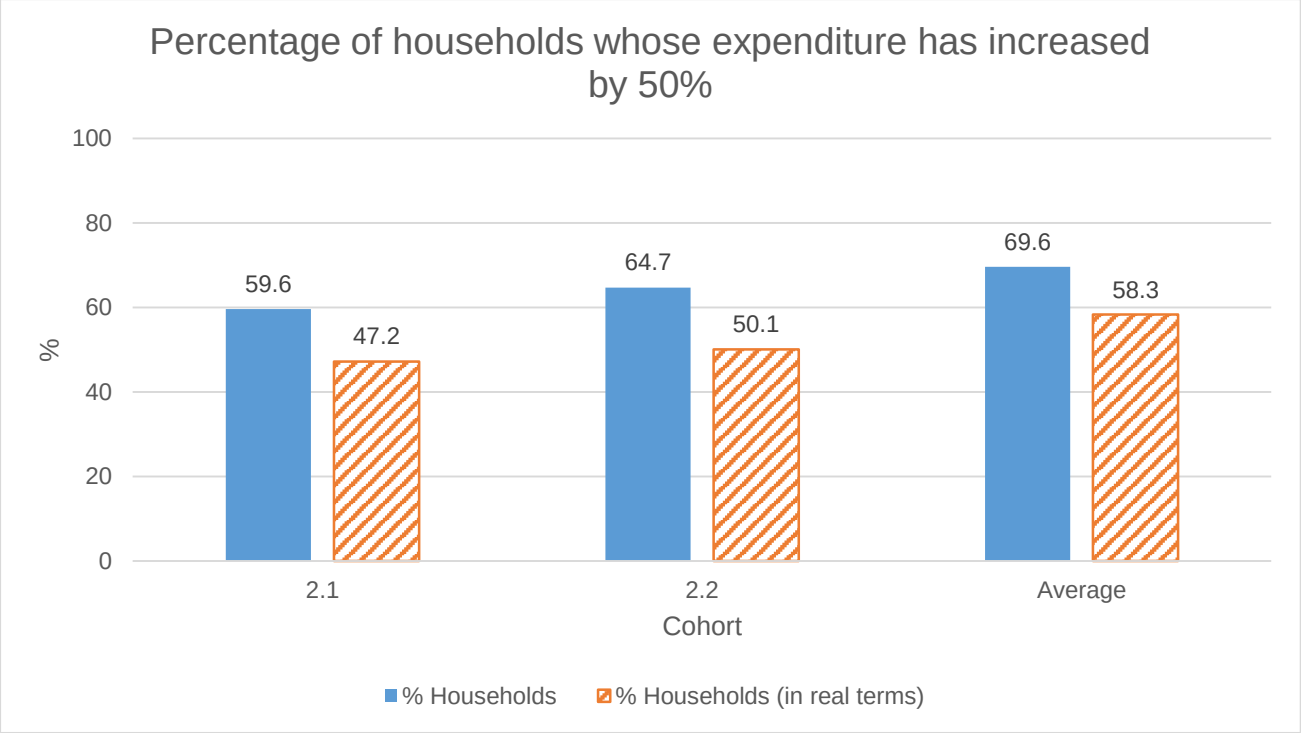


Figure 24: Percentage of Cohort 2.1 and 2.2 households whose cash savings have increased by 50%