



CLP Graduation Rates: How Sustainable Are They?

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Innovation, Monitoring, Learning and Communications Division



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Acronyms

CLP 1 Chars Livelihoods Programme, Phase 1
CLP 2 Chars Livelihoods Programme, Phase 2
CPHH Core Participant Household
IMLC Innovation, Monitoring, Learning and Communications Division
Tk Taka

Executive Summary

During the first half of 2014, CLP and the donors finally agreed a set of criteria and methodology to define "graduation". A household must meet (any) six out of ten criteria within three months of CLP support ending to graduate. The graduation rates for Cohorts 2.1-2.4 were established in November 2014. Overall graduation for Cohorts 2.1-2.4 was 85%, in line with CLP's logframe target.

It is important to assess whether this measure of success is sustainable after the 18 months cycle of support ends. Each year the Programme's Innovation, Monitoring, Learning and Communications Division conducts a survey (normally September/ October) which collects information from a sample of CPHHs from each cohort, including CLP 1 households.

This report provides information on the extent to which graduation rates are sustainable over time. Analysis of the data shows that graduation rates for Cohorts 2.1 to 2.4 have not changed in the (weighted average) 16.7 months since the end of CLP support. Graduation rates were found to be 85% for Cohorts 2.1 to 2.4 in the most recent annual survey (September 2014). The proportion of CLP 1 households meeting 6 of the criteria in the most recent annual survey was 66% (between 4.5 and 7 years after CLP support ended.) This is a relatively good achievement considering CLP 1 households are being judged against CLP 2 criteria.

It is primarily the access to water and economic criteria (cash savings and more than one income source) which are met by relatively fewer households across several points in time. The access to water criteria is being addressed (with the water re-sweep policy) and will likely lead to a continuing increase in the proportion of households meeting this criteria in future. The criteria related to empowerment, hygiene and food security are the criteria that relatively higher proportions of households meet across all points in time.

In 2012 CLP monitoring data showed that not all households were succeeding, based on the value of their productive assets. This report again shows that just under 20% of CLP 1 households do not succeed (based on value of productive assets falling below Tk 10,000). That said, there is a sizeable proportion of households (28% of CLP 1 households) that have productive assets in excess of Tk 70,000.

1. Background

The "percentage of households graduating" is a headline indicator for the Chars Livelihoods Programme, Phase 2 (CLP 2). The Programme's logical framework target is to graduate 85% of core participant households (CPHH); the households that receive the full package of support. If a household has graduated then the assumption is that it is on the right pathway out of extreme poverty.

During the first half of 2014, CLP and the donors finally agreed a set of criteria and methodology to define what graduation means for a CLP-supported CPHH. To graduate a CPHH must meet (any) six of the criteria shown in Table 1 within three months of CLP support ending.

Criteria domain	Criteria		
Income/	1. Household has had more than one source of income during the last 30 days		
expenditure/ consumption	2. Household eats three meals a day AND consumes five or more food groups in the past week		
	3. Household has access to improved water		
Nutrition	4. Household has access to a sanitary latrine with an unbroken water seal		
	5. Presence of ash/ soap near to water point or latrine		
Asset base	6. Productive assets worth more than Tk 30,000		
Status of females	7. Participant is able to influence household decisions regarding sale/ purchase of large investments e.g. cattle		
	8. Homestead is above known flood level		
Vulnerability	9. Household has cash savings of more than Tk 3,000		
Access to services	10. Household has membership of social group		

Table 1: CLP Graduation Criteria

Having established the criteria and methodology the Innovation, Monitoring, Learning and Communications Division (IMLC) assessed the graduation rates for CPHHs from Cohorts 2.1 to 2.4. CLP published a brief documenting the results in November 2014¹. Table 2 summarises the graduation rates. Graduation rates for CPHHs in Cohorts 2.5 and 2.6 have not yet been assessed as these households continue to receive CLP support.

¹ Kenward S and Hannan M; November 2014; Graduation: Results for Cohorts 2.1-2.4

Cohort Number	# of CPHHs	Month/ Year CLP Support Ended	% of CPHHs Graduating
2.1	5,004	December 2011	66.7
2.2	12,109	June 2012	81.3
2.3	17,435	June 2013	86.7
2.4	16,309	June 2014	91.1
All Cohorts (2.1- 2.4)	50,857		85%

Table 2: Graduation Rates (within 3 months of CLP support ending) for Cohorts 2.1-2.4

CLP firmly believes in assessing whether household achievements have been sustainable. For this reason IMLC monitors progress of a sample of CPHHs from each cohort, on an annual basis, after CLP support ends. This annual survey normally takes place in September/ October each year and tracks a household's status against a range of indicators, including graduation indicators. The most recent annual survey was in September/ October 2014 (referred to in this report as "the 2014 annual survey").

The purpose of this report is to assess the extent to which graduation rates are sustainable over time. The report aims to answer the following questions:

- 1. Are there any changes in the rates of graduation over time, and since the end of CLP support?
- 2. What percentage of households, by cohort, meet the graduation criteria post CLP support?
- 3. Which criteria are being met/ are not being met, by cohort (and why)?
- 4. Which indicators are increasing, decreasing or remaining stable over time?
- 5. To what extent does modifying the thresholds of some key indicators impact graduation rates post CLP support?

2. Methodology

CLP's IMLC Division is responsible for monitoring outputs, outcomes and impacts. To assess graduation rates at the end of the 18 month period of support data was collected from a panel sample of households for each of the four cohorts, 2.1 to 2.4. Sample sizes were as follows: Cohort 2.1: 300 households, Cohort 2.2: 337 households, Cohort 2.3: 360 households, Cohort 2.4: 384 households.

For Cohorts 2.2 to 2.4 data was collected during the 18th month of support. For Cohort 2.1 data was collected and analysed from two surveys (six months before the end of support and 10 months after the end of support – depending on indicator). This is because when Cohort 2.1 support concluded, the current graduation criteria had not been agreed and the M&E system had therefore not been developed to efficiently capture the information.

IMLC conducts annual surveys, normally during the last quarter of the calendar year, during which data is collected from a panel sample of all previous cohorts, including CLP 1, and the incoming cohort. The following table provides relevant details for the 2012, 2013, and 2014 annual surveys:

	Annual survey			
	2012 2013		2014	
Months when data collected	October '12	October '13 (It was continue till 1 st week of January due to country situation)	October '14	
Cohorts from which data were collected	CLP 1, 2.1, 2.2, 2.3 & 2.4.	CLP 1, 2.1, 2.2, 2.3, 2.4 & 2.5.	CLP 1, 2.1, 2.2, 2.3, 2.4, 2.5 & 2.6	
Sample size	2540	2950	3360	
Data collection and entry outsourced to (name of company)	Grameen Bikash Foundation	Grameen Bikash Foundation	Grameen Bikash Foundation	

IMLC conducts its own analysis and reporting.

3. Results

3.1. Graduation Rates Post CLP Support

Research question 1:	Are there any changes in the rates of graduation over time, and since the end of CLP support?		
Research question 2:	What percentage of households, by cohort, meet the graduation criteria post CLP support?		

Table 3 shows the number of months between the end of CLP support and the 2014 annual survey, for Cohorts 2.1 - 2.4.

Table 3: By Cohort, Time Elapsed between the End of Support and the 2014 AnnualSurvey

Cohort	Number of CPHHs	Month/ Year CLP Support Ended	Number of months between CLP support ending and 2014 annual survey
2.1	5,004	December 2011	34
2.2	12,109	June 2012	28
2.3	17,435	June 2013	16
2.4	16,309	June 2014	4
Weighted average for all Cohorts (2.1- 2.4)			16.7

To graduate, a CPHH must meet any six of the graduation criteria in Table 1 within three months of CLP support ending. Figure 1 shows the graduation rates for Cohorts 2.1 to 2.4 within three months of CLP support ending. It also shows the percentage of households meeting six or more of the graduation criteria in the 2014 annual survey, a weighted average of 16.7 months later. Overall, for all Cohorts, graduation rates remain stable between these two points in time. For the earlier Cohorts (2.1 and 2.2) there is more variation between these points in time than the latter Cohorts.





Figure 1 shows graduation rates at two points in time: within 3 months of CLP support ending and at September/ October 2014. Table 4 shows graduation rates, by Cohort, for more points in time since the end of CLP support.

Years after CLP support end	0 Years*	1 Year	2 Years	3 Years	4 Years	5 Years (2014 annual survey)
CLP 1				69.6	49.2	66.2
2.1	66.7	66.6	54.0	75.0		
2.2	81.3	65.1	74.5			
2.3	86.7	90.4				
2.4	91.1					

Table 4: By cohort, the % of households meeting at least 6 graduation criteria over time

*Within 3 months of support ending

A high proportion of CLP 1 CPHHs (66.2%) are still achieving six or more graduation criteria between 4.5 and 7 years after support ending (Table 4). It should be emphasised that CLP 1 CPHHs are being judged against CLP 2 graduation criteria. This is perhaps slightly unjust considering 1) not all CLP 1 CPHHs were targeted to receive access to an improved water source 2) the experimental nature of early CLP 1 cohorts.

Table 4 also shows that the percentage of households meeting six or more of the criteria does vary from time to time. Variation over time in the percentage of households meeting six or more of the criteria is perhaps not all that surprising. CPHHs still rely heavily on wage labour which has a significant bearing on three of the graduation criteria:

- Household has had more than one source of income during the last 30 days
- Household has cash savings of more than Tk 3,000
- Productive assets worth more than Tk 30,000

The supply and demand for labour fluctuates throughout the year and from year to year. Adult members of the household can become sick and unable to work, impacting household income. As we are currently seeing, political disruptions can affect the adult male's ability to temporarily migrate in search of work. To emphasise, much of the data included in Table 4 is collected during the lean season (October – December) when the availability of labour on the chars is relatively limited.

3.2. Analysis of Separate Graduation Criteria

Research question 3:	Which criteria are being met/ are not being met, by cohort (and
Research question 4:	why)? Which indicators are increasing, decreasing or remaining stable over time?

Figure 2 shows for Cohorts 2.1-2.4 the percentage of households meeting each of the ten criteria at two points in time: 1) within 3 months of CLP support ending, and 2) the 2014 annual survey (weighted average of 16.7 months later).



Figure 2: Percentage of Cohort 2.1 to 2.4 households meeting individual criteria (cohorts 2.1 -2.4)

*indicators in the Y axis have been paraphrased

Table 5 offers a summary of Figure 2. It shows the three indicators not met by high proportions of households from Cohorts 2.1-2.4 at the two points in time: at the end of CLP support and the 2014 annual survey. The table also shows the 3 indicators met by high proportions of households at these two points in time. Annex 1 provides more detailed information i.e. disaggregated by cohort and at three points of time.

	Within three months of support ending	2014 annual survey
3 criteria met by relatively low % of households	 Cash Savings Access to an improved water source Productive assets greater than Taka 30,000 	 Cash savings Income sources Access to an improved water source
3 criteria met by relatively high % of households	 Household eats three meals a day AND consumes five or more food groups in the past week Household has membership of social group Presence of ash/ soap near to water point or latrine 	 Participant is able to influence household decisions regarding sale/ purchase of large investments Presence of ash/ soap near to water point or latrine Household eats three meals a day AND consumes five or more food groups in the past week

Table 5: The three indicators met by relatively low and relatively high proportions of CPHHs (Cohorts 2.1 to 2.4)

3.2.1 The Criteria Met by Relatively High Proportions of CPHHs

We are seeing more or less the same criteria that are being met by relatively high proportions of CPHHs over time and on a cohort by cohort basis (Figure 2, Table 5 and Annex 1). These are:

- Presence of ash/ soap near to water point or latrine
- Participant is able to influence household decisions regarding sale/ purchase of large investments
- Household eats three meals a day AND consumes five or more food groups in the past week

3.2.2 The Criteria Met by Relatively Low Proportions of CPHHs

We are seeing more or less the same criteria that are being met by relatively low proportions of CPHHs over time and on a cohort by cohort basis (Figure 2, Table 5 and Annex 1). These are:

- Access to an improved water source
- Household has had more than one source of income during the last 30 days

• Household has cash savings of more than Tk 3,000

What follows is an attempt to understand why these indicators are being met by relatively low proportions of CPHHs. The indicator related to "productive assets" is also included because of its importance.

Access to an improved water source

During the first two years of CLP 2 CPHHs were not specifically targeted to receive access to an improved water source. This policy changed in July 2013, with the realisation that an improved water source can contribute to achieving food security, health and nutritional outcomes. Since July 2013 CPHHs have been specifically targeted and CLP's Infrastructure Unit has been conducting a re-sweep of the early cohorts. In hindsight, and because CPHHs were not specifically targeted to receive improved water, this criteria should perhaps not have been included as a graduation criteria.

Figure 2 does show that the percentage of CPHHs from Cohorts 2.1 - 2.4 does actually increase between the end of CLP support and the 2014 annual survey (40.4% to 55.7%), likely as a result of the re-sweep. Expectations are that the proportion of CPHHs meeting this criteria will continue further due to the ongoing re-sweep.

Household has had more than one source of income during the last 30 days

Figure 2 shows that the proportion of CPHHs from Cohorts 2.1 - 2.4 meeting this criteria decreases between the end of CLP support and the 2014 annual survey (61.6% to 51.1%). A possible explanation for this is that the 2014 annual survey was conducted in the middle of the lean season when employment opportunities are relatively scarce. Conversely, data collected "at the end of CLP support" for each of the Cohorts 2.2 - 2.4 was collected outside of the lean season.

A further explanation is that the "window" for earning more than one income is only 30 days. Households rearing cattle for meat for example would not be counted if they sold more than 30+ days before the survey. Similarly, households that had diversified into land and are cultivating crops would not be counted if they sold their harvest outside the 30 day recall period.

Household has cash savings of more than Tk 3,000

Whilst a relatively high proportion of CPHHs for Cohorts 2.1-2.4 are consistently not meeting thus criteria over time (Figure 2, Table 5 and Annex 1), the percentage meeting the criteria does actually increase between the end of CLP support and the October 2014 survey (17.3% to 41.4%).

Figure 3 shows the variation in the value of cash savings held by CPHHs, by cohort as at September/ October 2014. It shows a bi-modal distribution; a cluster of CPHHs with cash savings greater than Tk 3,500 and a cluster with cash savings less than Tk 500. 27% of CLP 1 have no cash savings, but an almost equal proportion (25%) have cash savings of more than Tk 3,500.

Admittedly, the dynamics related to cash savings are not fully understood. Possible reasons why relatively high proportions of CPHHs from Cohorts 2.1 - 2.4 are not meeting this criteria could be:

- The threshold is simply too high
- Households might not wish to keep cash savings, preferring instead to convert cash into productive assets such as poultry/ small ruminants etc.

Figure 3: By Cohort, the value of cash savings held by CPHHs during the 2014 annual survey



Productive assets worth more than Tk 30,000

Whilst this is not one of the three criteria that relatively high proportions of CPHH consistently do not achieve, this is an important indicator of success and therefore warrants further analysis.

Relatively high proportions (49%) of CPHHs from Cohort 2.1-2.4 do not meet this criteria at the end of CLP support (Figure 2). The threshold of Taka 30,000 is perhaps too ambitious to achieve at the end of CLP support. Many CPHHs do not receive their asset until months 5 or 6 of the 18 month cycle leaving them relatively little time to grow their productive asset base. Figure 4 does show however that for Cohorts 2.1-2.4 the proportion of CPHHs meeting the criteria does actually increase between the end of CLP support and the 2014 annual survey (48.7% to 64.9%). Time is therefore a factor – households need time to grow their productive asset base.

35% of CPHHs from Cohorts 2.1-2.4 were not however able to meet this criteria by the 2014 annual survey. The reasons for this:

- Cohort 2.4 CPHHs are bringing down the averages (only three to four months had passed between the end of support and the 2014 annual survey).
- As with any micro-business one cannot expect all households to succeed (judging success based on value of productive assets held)

CLP published a report in 20122 that found almost a quarter (23%) of CLP 1 households had productive assets of less than Tk 10,000 in October 2012. At the other end of the spectrum, 18% of CLP 1 CPHHs had productive assets valued at over Tk 70,000 with the rest of the sampled CPHHs falling in between these two extremes. This resulted in additional CLP research³ to understand why some households perform better than others (in terms of the value of their productive assets). The main reasons for failure were:

- Poor reinvestment
- Payment of dowry
- Land investment combined with river erosion

The main reasons for success were:

- Good cattle management
- Investing in land
- Investing in a small business

The 2014 annual survey shows similar results to those reported by Blackie et al (Figure 4). Figure 4 shows that just under 20% of CLP 1 CPHHs had productive assets of less than Tk 10,000. For Cohorts 2.1-2.3 between 13% and 17% have assets of less than Tk 10,000. Figure 4 does however also show that 28% of CLP 1 CPHHs have productive assets greater than Tk 70,000.



Figure 4: By cohort, value of productive assets held by CPHHs during the 2014 annual survey

² Blackie R and Alam Z; December 2012; Review of the Value and Composition of Assets Owned by CLP CPHHs

³ Barrett et al.; November 2014; Chars Livelihoods Programme; Asset Values: Why are Some Households Doing Better Than Others?

3.3. Sensitivity Analyses

Research question 5: To what extent does modifying the thresholds of some key indicators impact graduation rates post CLP support?

3.3.1 Modifying the Number of Criteria Required to Graduate

To graduate, a CPHH must meet at least six of the graduation criteria. Figure 5 illustrates what happens when the required number of criteria is increased or decreased. For example, if only five criteria are required then the graduation rate increases to 95.3% (from the current rate of 85%) for Cohorts 2.1-2.4 at the end of CLP support. Conversely, if seven criteria are required then graduation rates drop to 64.7%.

Selecting six criteria as the cut-off was slightly arbitrary. However, it should be highlighted that the cut-off of six criteria was set prior to any analysis of results.



Figure 5: Graduation Rates (at the end of CLP support) by Varying the Number of Criteria Met

3.3.2 Modifying Individual Criteria

Figure 5 shows that modifying the number of criteria required to graduate can have a large impact on graduation rates. This section illustrates the effect of modifying individual (key) criteria on graduation rates. Two graduation criteria that have thresholds and therefore lend themselves to a sensitivity analysis are:

- Household has cash savings of more than Tk 3,000
- Productive assets worth more than Tk 30,000

Annex 2 provides detailed analysis.

Modifying the threshold for cash savings from the current Tk 3,000 to Tk 1,500 has a relatively small effect on graduation rates (85% to Tk 87.2% based on the 2014 annual survey [Annex 2]). Similarly, modifying the threshold for productive assets from Tk 30,000 to Tk 20,000 has a relatively small effect on graduation rates (85% to Tk 87% based on the 2014 annual survey [Annex 2]).

Combining these two criteria and then modifying the thresholds has a slightly larger impact on graduation rates. Modifying the threshold for cash savings and productive assets from Tk 30,000 and Tk 3,000 to Tk 15,000 and Tk 1,500 respectively results in graduation rates changing from 85% to 89% based on the 2014 annual survey.

4. Conclusions

Graduation rates are sustaining beyond the end of CLP. The same proportion of CPHHs are meeting six or more of the criteria at the end of the 18 month cycle as in the 2014 annual survey (a weighted average of 16.7 months later). Furthermore, two-thirds of CLP 1 households met six or more of the criteria during the 2014 annual survey (4.5 to 7 years post CLP support).

It is primarily the access to water and economic criteria (cash savings, more than one income source) which are met by relatively fewer households consistently across all the annual surveys. The criteria related to empowerment, hygiene and food security are the indicators that relatively higher proportions of households meet consistently across all the annual surveys.

Using the value of productive assets as the defining criteria, not all households succeed. 9% - 19% (Cohort 2.4 and CLP 1 respectively) of CPHHs in the 2014 annual survey have productive assets of less than Tk 10,000. That said 22% - 28% (Cohort 2.4 and CLP 1 respectively have productive assets of greater than Tk 70,000.

Changing the number of criteria required to graduate, say from six to seven or from six to five has a significant impact on graduation rates. Modifying the thresholds of key criteria such as assets and cash savings, both individually and simultaneously, has a relatively smaller impact on graduation rates.

Annex 1: Analysis of Individual Graduation Criteria

By Cohort and Annual Survey, the three Graduation Criteria that are met by the \underline{fewest} % of HHs

Cohort	September/ October	September/ October	September/ October
	2012	2013	2014
2.1	Water	Savings	Savings
	Income sources	Water	Income sources
	Savings	Committee	Water
2.2	Water	Savings	Savings
	Income sources	Water	Income sources
	Assets	Income sources	Water
2.3	Savings	Savings	Savings
	Income sources	Income sources	Income sources
	Assets	Water	Assets
2.4	NA (baseline)	Savings Income sources Assets	Income sources Savings Assets

*indicators have been paraphrased

- Income sources appears 10 times
- Savings appears 9 times
- Water appears 7 times
- Assets appears 4 times
- Committee appears 1 time

By Cohort and Annual Survey, the three Graduation Criteria that are met by the $\underline{highest}$ % of HHs

Cohort	September/ October	September/ October	September/ October
	2012	2013	2014
2.1	Group membership	Ash/ soap	Ash/ soap
	Ash/ soap	3 meals/ day	Influencing decisions
	3 meals/ day	Influencing decisions	3 meals/ day
2.2	Group membership	Ash/ soap	Influencing decisions
	Ash/ soap	3 meals/ day	Ash/ soap
	Protected on a plinth	Influencing decisions	3 meals/ day
2.3	Group membership	Ash/ soap	Influencing decisions
	Ash/ soap	Influencing decisions	Ash/ soap
	Protected on a plinth	3 meals/ day	Protected on a plinth
2.4	Group membership	Ash/ soap	Influencing decisions
	Protected on a plinth	Protected on a plinth	Ash/ soap
	Ash/ soap	Influence decisions	Group membership

*indicators have been paraphrased

- Ash/ soap appears 12 times
- Influencing decisions appears 8 times
- 3 meals/ day appears 6 times
- Group membership appears 5 times
- Protected on a plinth appears 5 times

Annex 2: Productive Asset and Cash Savings Values and Their Effect on Graduation Rates



The Effect of Modifying the Number of Criteria Required to Graduate (Cohorts 2.1 – 2.4)



The Effect of Modifying the Cash Savings Threshold on Graduation Rates (Cohorts 2.1-2.4)

The Effect of Modifying the Productive Assets Threshold on Graduation Rates (Cohorts 2.1-2.4)





The Effect of Modifying both the Cash Savings and Productive Asset Thresholds on Graduation Rates (Cohorts 2.1-2.4)