

Plinth Performance Review

Summary:

This brief presents the key findings from a survey carried out in January 2015 to assess how effective plinths are in addressing the flood risks over a longer period of time.

The results of the study show that households from early cohorts (CLP 1 – 2.3) still have significantly greater disaster resilience than they had before joining the Programme; fewer incidents of flooding, erosion, disease, loss of assets and reduction of income.

CLP has raised over 153,000 households on plinths between 2004 and 2014.

Of those surveyed, 80% are still living on the plinth provided by CLP.

Less than 4% of CPHHs experienced flooding after having received CLP support, compared to over 97% before CLP.

After CLP, much fewer CPHHs report having to deal with the typical problems associated with the seasonal floods, such as; moving house (69% less), needing to rebuild/repair their house (88% less) and facing problems with cooking (96% less) and finding safe drinking water (82% less).

86% of CPHHs report being ‘very satisfied’ with their CLP-raised plinth.

Background

This brief presents the key findings from a survey carried out in January 2015 which aimed to assess how effective plinths are in addressing the flood risks over a longer period of time.¹

The principal audiences include CLP’s Programme Management and the Annual Review team. The latter are expected to visit the Programme during February 2015.



A core element of the package of support offered by CLP is the provision of raised plinths (provided to most core households and many non-core). Plinths provide protection to households during high floods; allowing continued access to potable water, sanitary latrines, as well as keeping the household’s assets safe during floods.

During CLP 1, 90,377 households were raised on plinths at least 60cm above the highest known flood level. In CLP 2, (as of December 2014) the Programme has raised a further 62,670 households.

¹ Terms of Reference: Annual Review 2015
The Chars Livelihoods Programme-Phase 2



This means that over the course of CLP 1 and CLP 2, **153,047 households** have been raised on plinths (91,227 for CPHHs and 61,820 for non-CPHHs) have been raised. **595,353 people** (all household members) have benefited from a CLP-raised plinth; 60% from CPHHs and 40% from non-core². By the end of the Programme, it is projected that 65% of CLP 2 CPHHs will be provided with a raised plinth.

Plinth-raising uses a significant proportion of the budget: on average 60% of the infrastructure Unit's budget. For the 2013-2014 fiscal year, CLP spent 278,898,255 BDT (£2,368,904)³ on its plinth-raising activities. It is estimated that the cost of raising a household on a plinth currently stands at 20,974 BDT (£178).

Methodology

In January 2015, eight Data Entry & Monitoring Officers (DEMOs) from the Innovation, Monitoring, Learning and Communications (IMLC) Division visited a randomly-selected sample of CPHHs who received a raised plinth to determine whether they were still residing on the plinth.

² Percentage of CPHHs and non-CPHHs, as on provision of plinth

³ Currency conversions were done at the exchange rate 1 GBP = 117.732 BDT, as of 29/01/15.

The DEMOs visited CPHHs from cohorts CLP 1, 2.1, 2.2 and 2.3 across nine districts. They attempted to trace 662 CPHHs, of which 646⁴ were available for interviewed and whose responses are reflected in this brief.

The following table illustrates the schedule of support to each of the cohorts interviewed.

Cohort	Assistance Start Date	Assistance End Date	Participants Interviewed
CLP 1	2004	2010	187
2.1	May 2010	Dec 2011	152
2.2	Sep 2010	Jun 2012	126
2.3	Sep 2011	June 2013	197

Occupancy status



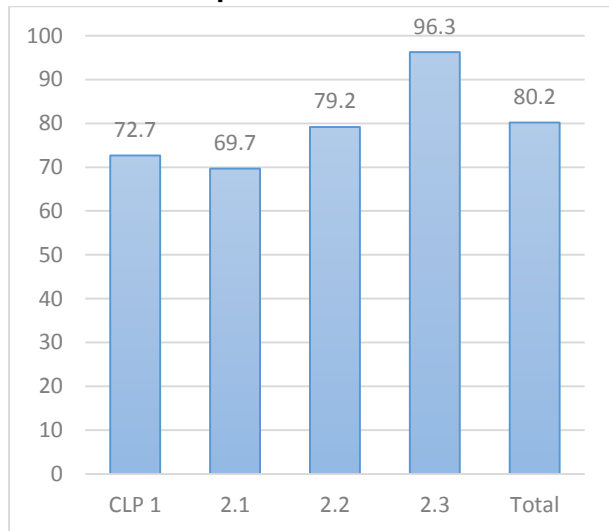
As seen in Figure 1, 80% of respondents are still living on the plinth provided by CLP. Of those still living on the plinth, the average amount of time spent on the plinth is 6 years.

The results show that a high proportion (73%) of CLP's earliest cohorts are still living on the plinth provided by the Programme.

⁴ The remaining 16 CPHHs were unavailable for interview due to work commitments or migration.

A 2010⁵ survey among CLP 1 CPHHs, found the plinth occupancy rate to be 74%.

Figure 1: % of surveyed CPHHs still living on CLP-raised plinth



Of those who no longer live on the plinth, the average time spent living on the plinth provided by CLP was 2.5 years.

The reasons for non-occupancy were:

- Loss of plinth due to river erosion: 75%
- Eviction by land owner: 15%
- Migration⁶/Other: 10%

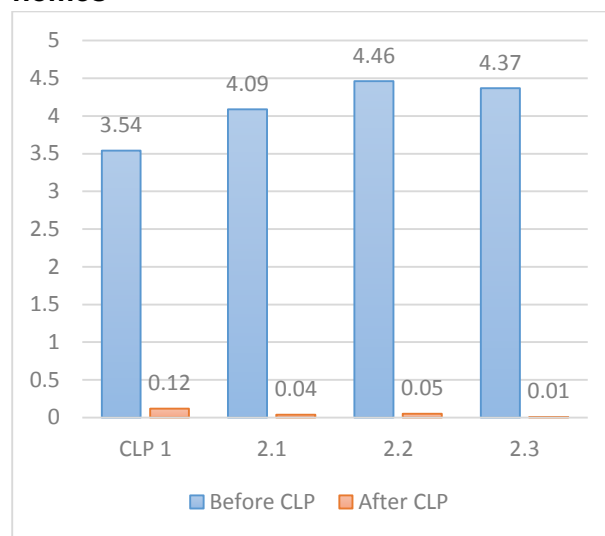
Figure 2 shows the number of times the interviewed CPHHs experienced flooding of their homesteads before and after CLP support. Over 97% of CPHHs experienced flooding before CLP, with flooding having occurred an average of 4 times over the past ten years.

Less than 4% of CPHHs experienced flooding after having received CLP support, with the average number of times flooding occurred being 0.06 times.

⁵ Kenward, S., and Islam, R. (2011) 'Brief: A study to assess the lifespan and occupancy status of CLP raised plinths'

⁶ DEMOs were able to interview some of those who had migrated as they had moved to nearby chars

Figure 2: Number of times surveyed CPHHs experienced flooding of their homes



Erosion Rate of CPHHs living on a raised plinth

Figure 3 shows the proportion of plinth erosions by cohort. The average percentage of erosions amongst all cohorts surveyed is 15%.

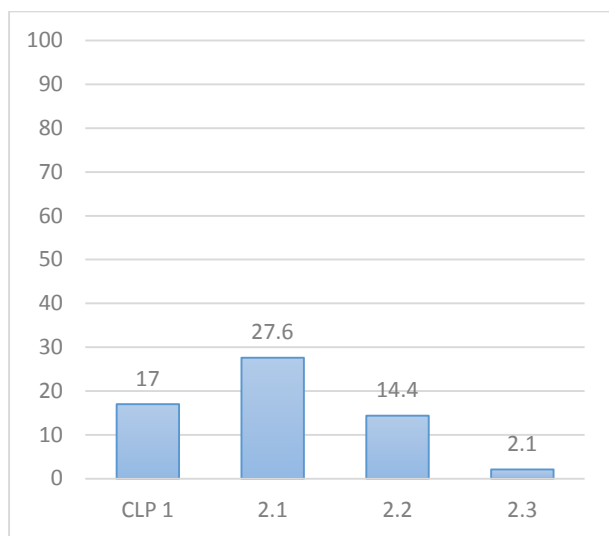
Results show that just 17% of CLP 1 CPHHs (i.e. those who received their plinth between 4 and 10 years ago) have experienced erosion of their CLP plinth.

Another survey⁷ carried out in 2010 found fewer than 3% of CPHHs from CLP 1 were eroded on an annual basis .

This shows that the vast majority of CLP plinths remain intact over time and continue to protect households years after being constructed.

⁷ Kenward, S., and Islam, R. (2011) 'Brief: A study to assess the lifespan and occupancy status of CLP raised plinths'

Figure 3: % of surveyed CPHHs whose plinth has been eroded



Frequency of problems associated with flooding

The annual floods on the chars can erode whole chars, forcing people to leave their homes and relocate. Other families may remain in their houses, either living in the water or moving onto the roofs of their houses. Without access to an improved water source and adequate sanitation, these families are at greater risk of disease. Loss of assets and livestock and the inability to work also characterise the problems experienced during times of flooding.

Figure 4 illustrates how CLP participants bear the effects of some common problems associated with flooding before and after support.

After moving to a CLP-raised plinth, much fewer CPHHs report having to move house, needing to rebuild/repair their house, losing livestock or encountering problems with cooking and finding safe drinking water.

Figure 4: Effects of flooding before and after CLP support for all CPHHs surveyed

	% experiencing problem before CLP Support	% experiencing problem after CLP Support
Had livestock stolen/lost	29	3
Had to sleep on the roof/raised	76	1
Faced problems cooking	97	1
Faced lack of potable water	95	13
Had to rebuild/repair the house	92	4
Had to stay in someone else's home	71	2
Had a reduction in income	95	65

Participant Satisfaction

All CPHHs (including those who experienced erosion) were asked about their level of satisfaction with their CLP-raised plinth. The vast majority (86%) of CPHHs described themselves as being 'very satisfied' with their plinth, 10% as 'satisfied', 3% as 'satisfied a little' with just 1% reporting dissatisfaction.

Even some of those experiencing erosion/flooding gave positive feedback, as they felt the plinth had been beneficial for some time.

This brief was prepared in January 2015.