A study to assess the lifespan and occupancy status of CLP raised plinths

Background

The CLP, now in its second phase, has the objective of improving livelihoods, incomes and food security of one million extremely poor people living on island *chars* in the North-West of Bangladesh. Of these 1 million people, around a quarter are to be from Core Participant households (CPHHs).

As during the first phase of CLP (2004-2010), CPHHs receive an integrated package of support including a significant income generating asset, access to social development modules and savings groups, clean water and a sanitary latrine. Another core element of the package is the provision of raised plinths (provided to all core households and many non core). Plinths provide protection during high floods. During CLP-1, over 90,000 households were raised on plinths at least 60cm above the highest known flood level. In CLP-2, the plan is to raise at least a further 60,000 households.

Plinth-raising uses a significant proportion of the budget: it is estimated that the cost of raising a household on a plinth is £ 140. The budget allocated for plinth-raising during CLP-2 will be approximately £ 9.6 million.

Plinths are raised during two key periods of the year: the dry season (January to June) and the *monga* or 'hungry' season (September to December).

Key Findings

- Across all five CLP-1 districts, 74% of CLP-1 CPHHs are residing on their raised plinth.
- The district with the highest proportion of CPHHs residing on their raised plinth is Jamalpur (87%); the district with the lowest proportion is Bogra (59%)
- The CLP-2 Programme Memorandum assumes the average life span of an island char², and therefore a CLP raised plinth, is 15 years. The actual rate of erosion of CPHH is in line with this assumed rate. The data collected in this study indicate that all CPHHs are likely to be eroded after approximately 30 years.
- Of the 26% CPHHs not residing on their raised plinth, the main reasons are:
 - erosion: 40% of CPHHs across all districts
 - relocation (own choice): 30% of CPHHs across all

² CLP-2 Programme Memorandum, Secondary Annexes, Page 33







districts

- eviction: 12% of CPHHs across all districts

Objectives of the study

The objectives of this study were to assess the life span and occupancy status of homestead plinths raised during CLP-1.

Since island *chars* are prone to erosion and due to the significant costs associated with plinth raising, the CLP is often asked "what is the typical life-span of a raised plinth?"

Furthermore, evidence from other surveys e.g. Customer Satisfaction and IMO Verification³, indicate that some CPHHs no longer reside on their raised plinths due to reasons other than erosion e.g. eviction or sale of the plinth. To date, there has been no systematic collection of such information.



A cluster of homesteads on a raised plinth

Methodology

During CLP-1 55,000 CPHHs received support across 647 island *char* villages⁴ and 5 districts (Bogra, Sirajganj, Jamalpur, Kurigram and Gaibandha). A sample of the island *char* villages was randomly selected by district with the number of villages sampled being proportionate to the number of villages in which CLP worked (Asset Transfer Project [ATP] villages) by district.

In December 2010, fifteen Data Entry & Monitoring Officers (DEMOs) from the Innovation, Monitoring and Learning (IML) Division visited all CPHHs who received a raised

⁴ CPHHs came from 647 island *char* villages. However, plinths may have been raised in some additional villages as well by Union Parishads





¹ This is the predominantly the cost of earthmoving and does not include such items as staff costs, transport and monitoring.

³ An independent company verifies the quality and quantity of a sample of outputs reported by IMOs each month.

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plinth within the randomly selected villages and determined whether they still reside on the plinth and, if not, why (e.g. eviction or erosion).

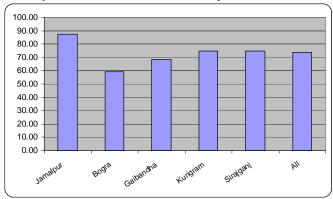
The DEMOs visited all CPHHs (unless they had moved off the plinth) in 277 island char villages (43% of ATP villages). They attempted to trace 16,069 CPHHs (29% of CLP-1 CPHHs).

Results

Occupancy status of raised plinths

Figure one shows the proportion of CLP-1 CPHHs that are currently residing on their raised plinth. The range by district is wide with 87% and 59% of CPHHs currently residing on their raised plinth in Jamalpur and Bogra respectively. Taking all districts together, 74% of CLP-1 CPHHs are currently still residing on their raised plinth.

Figure 1: Proportion of CPHHs still residing on their raised plinth at the time of the survey



Reasons for non-occupancy

Of all the sampled households raised on a plinth, reasons for non occupancy across all districts include:

Erosion: 10.4% across all districts

Relocation (own choice): 7.8% across all districts

Eviction: 3.2% across all districts Did not take possession: 2.7%

Other: 1.9%

Focusing on the 26% no longer residing on their plinth, the main reasons are:

erosion: 40% across all districts

relocation (own choice): 30% across all districts

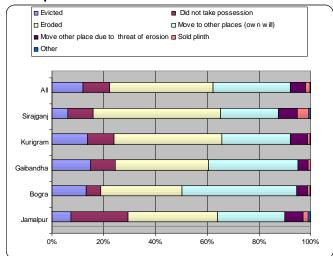
eviction: 12% across all districts

did not take possession: 10%

Other reasons include: sale of plinth (1.7%) and risk of erosion (5.7%) across all districts and other reasons (0.45%).

The majority of those who moved off their plinth by their own choice, moved within the chars (85.2%). A relatively smaller proportion (14.8%) moved to the mainland.

Figure 2: Reasons why CPHHs are not residing on their raised plinth



Base: CPHHs no longer residing on raised plinth

Table 1 shows the cumulative proportion of CPHHs eroded by age of plinth at the time of the survey. The erosion rate is just under 3% of CPHHs per annum.

Table 1: Cumulative % of CPHHs eroded by age of plinth

Age of plinth (years)	Cumulative % of CPHHs eroded
1	2.6
2	6.5
3	9.5
4	10.4

As shown in Figure 2, the proportion of CPHHs not residing on their plinth due to erosion is relatively higher in Siraigani than in Bogra. One reason may be that since Sirajganj is further downstream, it may be more prone to erosion due to higher volumes of water. Table 2 supports this hypothesis. It shows that more land is vulnerable to river erosion in Sirajganj than Bogra.

Table 2: District-wise vulnerability (range of 50% probability) along the Jamuna river

, , , , , , , , , , , , , , , , , , ,	Land (ha)	Settlement (ha)
Bogra	76	13
Gaibandha	122	18
Kurigram	202	43
Sirajganj	261	89
Jamalpur	398	130

Source: CEGIS 5

⁵ CEGIS; April 2010: Prediction of river bank erosion along the Jamuna, the Ganges and the Padma rivers in 2010











The proportion of CPHHs not residing on their plinth due to eviction is relatively higher in Bogra, Gaibandha and Kurigram than in Jamalpur and Sirajganj.

Having spent one month in the field, the enumerators observed that households living on raised plinths in larger clusters feel relatively less threatened by eviction and crime than households occupying plinths alone or in smaller clusters.

The enumerators also noted that due to an increase in the value of the land on which the plinth was raised, some landlords demand payment. If CPHHs are unable or unwilling to pay they are evicted or move⁶.



Homesteads not on raised plinths

Other observations made by the enumerators include:

- Some households believe that if they do not move onto their raised plinth they will not receive other CLP benefits. They therefore move from where they currently reside (and where their social network exists in that part of the village) to a slightly different location, albeit within the same village. After receiving their CLP benefits they may return to where they previously resided;
- Some households inherit or choose to lease land which may be located away from their raised plinth. They therefore relocate to be closer to the land.
- Some CPHHs (albeit a small proportion) were unaware a plinth had been raised in their name.

Erosion rate of CPHHs living on a raised plinth

Figure 3 shows the actual cumulative proportion of CPHHs eroded against predicted erosion. The CLP-2 Programme Memorandum assumes the average life span of an island char, and therefore a CLP-raised plinth, to be 15 years⁷.

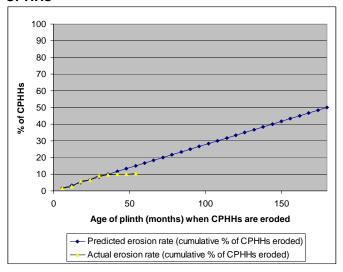
⁷ CLP-2 Programme Memorandum, Secondary Annexes, Page 33





The graph indicates that the actual rate of erosion is in line with this assumed rate. Actual erosion rates (just under 3% per annum) suggest all plinths are likely to be eroded after 33 years.

Figure 3: Actual and predicted rates of erosion of CPHHs



Conclusion

The proportion of CLP-1 CPHHs still residing on their raised plinth is 74%. The main reason that the remainder are not residing on their plinth is erosion, followed by relocation through their own choice, and then eviction. Fewer then 3% of CPHHs are eroded on an annual basis.

Recommendations

- Where feasible, locate CPHHs on raised plinths in large household clusters;
- Ensure CPHHs understand there is no obligation to move onto a raised plinth and that they will not be penalised if they choose not to take up occupancy;
- Try and forge a written agreement (legal) between the landlord/ land claimant and CPHHs;
- Ensure IMO staff have capacity to:
 - locate plinths in an appropriate location (i.e. physically and socially) and that the views of CPHHs are taken into account;
 - broker agreements between landlords and CPHHs;
- Ensure that targets are realistic to allow IMO staff to undertake the more 'social' aspects of plinth raising e.g. location of plinth and liaison with landlord.

Stuart Kenward and Rafiqul Islam; June 2011





⁶ The CLP-1 Sustainability Study will provide more information on this issue of rent payments