

The Impact and Sustainability of CLP's Food security interventions

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Innovation, Monitoring Learning and Communications Division



Barrett, A; Hannan, M; Alam, Z



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Acronyms

CLP	Chars Livelihoods Programme
CLP 1	Phase 1 of the Chars Livelihoods Programme
CLP 2	Phase 2 of the Chars Livelihoods Programme
CLP 2.1	Phase 2 of the Chars Livelihoods Programme, first cohort
CLP 2.2	Phase 2 of the Chars Livelihoods Programme, second cohort
CLP 2.3	Phase 2 of the Chars Livelihoods Programme, third cohort
CLP 2.4	Phase 2 of the Chars Livelihoods Programme, fourth cohort
CLP 2.5	Phase 2 of the Chars Livelihoods Programme, fifth cohort
CPHH	Core Participant Households
DFID	Department For International Development
FCS	Food Consumption Score
FGD	Focus Group Discussion
GoB	Government of Bangladesh
IMLC	Innovation, Monitoring, Learning and Communication
IEP	Infrastructure and Employment Project
IMO	Implementing Organisations
KII	Key Informant Interviews
NGO	Non-Governmental Organisation
SN	Safety Net
UNSCN	United Nations Standing Committee on Nutrition
WASH	Water, Sanitation and Hygiene
WFP	World Food Programme

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Executive Summary

The purpose of this study was to understand the impact of the Chars Livelihoods Programme (CLP) on the food security of core participant households and whether the impact is sustainable. Improving food security on the *chars* is a key objective for the CLP. In this study, food security is broken down into three pillars: Access, Availability, and Utilisation. The study also explores how seasonality affects some indicators (stability).

The study found that households have significantly better food security after receiving CLP support and this impact sustains beyond the programme.

Methodology

A mixed methods approach was used to collect the data. Most of the quantitative data is taken from the two annual surveys carried out in October 2012 and October 2013. CLP's annual surveys use rolling baselines with cohorts that have not yet received the CLP support package acting as controls. In 2012, cohort 2.4 was the control and in 2013, cohort 2.5 was the control. To understand the stability of food security within a year, monthly and bimonthly data collected while cohorts received CLP support was used. After the quantitative data had been analysed, qualitative data was also collected using Focus Group Discussions (FGDs); Key Informant Interviews (KIIs); and a workshop with CLP district staff who discussed their experiences of food stability on the chars.

Food access

Households' food access increases after cohorts receive the CLP support package. The percentage of households with an acceptable Food Consumption Score (FCS) increases substantially after CLP's interventions, compared to households in the control groups. The percentage of households with an acceptable FCS sustains beyond CLP support. During the calendar year there is a drop in the number of households with acceptable FCS in September. This is caused by low agricultural labour opportunities and high prices of rice, created by the lack of harvesting in this period. This drop is temporary and FCS increases in November/December after the aman (a variety of rice) rice harvest.

In both the October 2012 and October 2013 survey, more households have three meals a day after receiving the CLP support package, however less households in 2012 had three meals a day compared to 2013. This is because there was a significant number of disasters including floods and droughts which impacted households in 2012 compared to 2013.

The number of households spending more than 70% of their income on food decreases after receiving CLP support. Of all the food groups, households spend the most on rice with more than four times the amount of money spent on rice than any other food. The study found that households' expenditure on rice increases in August and September. This is because households are preparing for the lean period that occurs in September/October, by stocking up on rice while it is still available and relatively affordable.

Food availability

Food availability increases for households on the *chars* after receiving CLP support. After receiving the CLP package of support, almost all households initially have access to cattle increasing their access to meat and dairy products as well as an income to buy food. After this, households invest into other assets, particularly land, creating other sources of food. The more types of food sources households have, the greater their food stability. This diversification increases their resilience to shocks and stresses in the future.

Food utilisation

Food utilisation is the third pillar of food security and focuses on households' Water, Sanitation and Hygiene (WASH) practices. WASH impacts on how households can use food to maximise their nutritional value. The study found that women hand wash more with soap/ash at critical times after receiving CLP support compared to the controls. Households' access to sanitary latrines and tube wells (up to CLP standards) increases after receiving CLP support. There has also been a marked improvement from 2012 to 2013. This is important as CLP changed their WASH policies in 2012. Although this policy change has had a positive impact, there is still scope for improvement.

Key Findings

This study shows that CLP is having a positive impact on the food security of CLP participant households, across all three pillars of access, availability and utilisation. Households' food security is relatively stable across years but disasters can cause certain years and months to be more difficult. Food stability does vary within the year particularly during the lean season when there is low agricultural labour opportunities and food prices are high created by the lack of rice availability. Available food sources do increase as households diversify their assets from solely cattle into other sources including land. Most but not all households are hand washing more often and have better access to sanitary latrines and tube wells after receiving CLP support.

Recommendations

- Continue with the provision of the CLP's package of interventions, as these have led to a direct improvement to food access, availability and utilisation.
- Continue providing IEPs and SNs to households during the lean season as this will reduce seasonal impact.
- Lobby Government of Bangladesh (GoB) and other organisations to increase/initiate cash for work schemes on the *chars* during the lean season to assist households once CLP ends in 2016.

1. Background

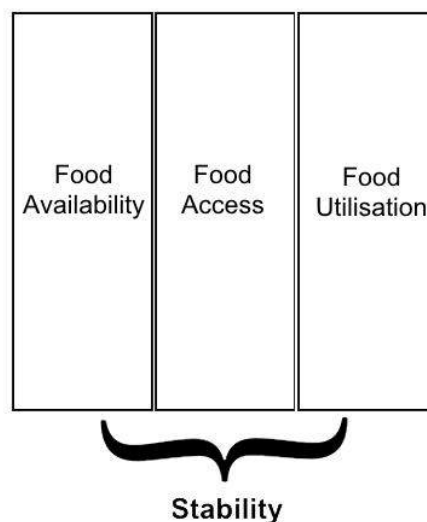
The Chars Livelihoods Programme (CLP) works with extreme-poor households living on riverine islands (in Bengali called “*chars*”) in North West Bangladesh. The Programme aims to improve the livelihoods, incomes and food security of at least one million poor and vulnerable women, children and men living on the *chars*. The CLP provides a comprehensive package of support to its core participant households (CPHHs) as well as a number of interventions also benefitting the wider community. The main objectives of CLP are to improve social and economic assets, reduce environmental and economic risk and increase access to markets and services.

The 1996 World Food Summit defined food security as existing when “all people, at all times, have sufficient, safe and nutritious food to maintain a healthy and active life”. Previous CLP studies broke down food security into three pillars (Cordier et al, 2013):

1. Food availability: food must be available in sufficient quantities on a consistent basis.
2. Food access: households must be able to regularly acquire adequate amounts of food.
3. Food utilisation: consumed food must have positive nutritional impact on people.

The World Food Summit definition includes the phrase “at all times”. This study relates to this part as it analyses the impact of shocks and stresses on food security at different times of the year. Each pillar of food security pillars has an aspect of stability. Shocks that affect the stability of food security include volatile food prices; hazards; and political instability. Periods of poor food security, however short, have long-lasting impacts on households, particularly the vulnerable such as children and the disabled.

Figure 1. The three pillars of Food security each have an aspect of stability (Adapted from Bajaqai,



The CLP aims to improve household food security through a combination of direct and indirect interventions including:

- providing an income-generating asset, which can become the basis of a sustainable livelihood;
- promoting homestead gardening as a way to increase nutritional status as well as an additional source of income;
- increasing the number of persons with access to an improved water source and new/improved sanitation facilities;
- building awareness on nutrition, water, sanitation and hygiene issues;
- improving the nutrition status of core participant households particularly vulnerable groups such as pregnant women, breastfeeding women, children under two years of age, and adolescent girls. Specific activities include one-on-one counselling on Infant and Young Child Feeding and hygiene promotion, the provision of iron and folic acid tablets to pregnant and lactating mothers and adolescent girls and the provision of deworming tablets for all family members except pregnant women during their first trimester. Micro Nutrient Powder (MNP) is also provided to children from 6 months to 2 years old; and
- providing cash for work and safety nets for households during seasonal periods of hunger in the lean season.

From April to June 2012, the Innovation, Monitoring, Learning and Communications Division (IMLC) reviewed its approach to monitoring food security. Prior to this CLP measured the food security of households by only focusing on a few indicators:

- mean number of meals consumed per day;
- mean number of food groups consumed in the last seven days;
- mean number of food shortage coping strategies used in the last 30 days.

Although sufficient to gain an understanding of household access to food on the *chars*, these indicators did not provide information about availability or utilisation i.e. the other two pillars of food security. Following the review, IMLC decided to introduce a more comprehensive approach to monitoring food security which combined other indicators and methodologies such as the Food Consumption Score (FCS), used by United Nation agencies.

CLP carried out a survey in 2012 (Cordier et al., 2012), which adopted this new approach. This data was analysed and it was found that CLP had a positive impact on both the access and availability of food but a mixed impact on improving utilisation of food. Whilst households showed marked improvements in hand-washing behaviours, participants had low rates of access to clean water and sanitary latrines up to CLP standards. One of the recommendations of the Cordier et al. study was to “Monitor food security over time to understand the issue of seasonality” (Cordier et al., 2012). This current study addresses this recommendation.

This study draws on two annual surveys (October 2012 and October 2013) that collected food security data from a sample of CLP households (see methodology). The study aims to assess:

- the impact of the Programme on food security (availability, access and utilisation);
- changes in food security between years;
- the seasonal effects of food security.

2. Methodology

A mixed methods approach was used to collect the data. Most of the quantitative data is taken from the two annual surveys carried out in October 2012 and October 2013. CLP's annual surveys use rolling baselines with cohorts that have not yet received CLP support acting as controls. In 2012, cohort 2.4 was the control and in 2013, cohort 2.5 was the control. To understand the stability of food security within a year, monthly and bimonthly data collected while cohorts received CLP support was used. After the quantitative data had been analysed, qualitative data was also collected using Focus Group Discussions (FGDs); Key Informant Interviews (KIIs); and workshops with CLP district staff who discussed their experiences of food stability on the chars.

Table 1: Status of cohorts during 2012 and 2013 annual surveys

Cohort	Status during the October 2012 annual survey	Status during the October 2013 annual survey
Cohort 1 (CLP 1)	Received CLP support package 2-7 years previously	Received CLP support package 3-8 years previously
CLP 2 cohort 3 (CLP 2.3)	Received majority of CLP support package, completed in June 2013	Received CLP support 3 months previously
CLP 2 cohort 4 (CLP 2.4)	Had not yet received CLP support (baseline)	Received majority of CLP support, completed in June 2014
CLP 2 cohort 5 (CLP 2.5)	-	Not received CLP support package (baseline)

The second phase of the CLP (CLP 2) will support 78,000 Core Participant Households (CPHH) through six annual cohorts. CLP's IMLC division monitors the outcomes of the programme using a rolling baseline approach.

During the October 2012 survey, data was collected from a sample of CPHHs from cohorts CLP 2.1 to CLP 2.3, as well as CLP-1. At the same time, baseline data was collected from cohort 2.4 which acts as the control group for the other cohorts.

Similarly, during the October 2013 survey, data was collected from a sample of CPHHs from cohorts CLP 2.1 to CLP 2.4, as well as CLP-1. At the same time, baseline data was collected from cohort 2.5 which acts as the control group for the other cohorts.

Table 2. Sample size for each cohort in each Annual Survey

Cohort	Sample size in 2012 annual survey	Sample size in 2013 annual survey
Cohort 1 (CLP 1)	575	549
CLP 2 cohort 3 (CLP 2.3)	402	374
CLP 2 cohort 4 (CLP 2.4)	452	402
CLP 2 cohort 5 (CLP 2.5)	Not surveyed – cohort was not selected at this stage.	441

IMLC collects data from a panel sample of households during the annual surveys. Numbers reduce slightly each year due to migration (see Table 2 for exact numbers). The data was then analysed to understand each of the food security pillars of access, availability, and utilisation. See Annex 1 to view data used from 2012 and 2013 annual surveys. Both the 2012 and 2013 annual surveys were carried out in October and therefore seasonality should not impact the data.

A sample of CPHHs from each cohort is monitored every two months against key indicators including income, expenditure, asset value and food security whilst CPHHs receive support i.e. over 18 months. Cohort 2.4 bimonthly data was analysed for this study as it received CLP support most recently. Cohort 2.1 data was also analysed as households were monitored monthly in this cohort whereas later cohorts were only monitored bimonthly. The monthly data allows for more data points during the year and greater understanding of the stability of food security.

Focus Group Discussions (FGDs) were undertaken in May 2014 with four groups of men and two groups of women with each group comprising six to eight people. Two male and one female FGDs were taken from the villages with the highest and lowest frequency of households with acceptable food consumption scores. These two extreme villages helped to give a better understanding of what internal and external forces cause food insecurity at the village level. Only members of core participant households (CPHHs) were involved in the FGDs.

Key Informant Interviews (KIIs) were also conducted with three CLP Secretariat staff (Dr. Mahbub Alam, Livelihoods Coordinator; Nazrul Islam, Horticulture Coordination; Abdul Kalam Azad, Infrastructure Coordinator); two *char* farmers who grow rice and other staple food; and two shopkeepers who sell staple food on the *chars*.

A workshop was held on 18 May during the data collection of the qualitative data with 15 Implementing Organisation (IMO) staff (5 Livelihood Development Officers, 5 Agriculture Officers; and 5 Community Development officers). During the workshop, members discussed the following topics:

- Possible causes of food instability;
- What problems are caused by periods of food instability for households;
- Whether CLP's current interventions are sufficient in reducing the impact of food instability;
- Possible solutions to food instability.

3. Results and Analysis

The results of this study are presented according to the three pillars of food security: Access, Availability, and Utilisation. Food stability and the sustainability of food security outcomes are discussed within each of the pillars. It is important to highlight again that:

- Sampled HHs from CLP 1 stopped receiving CLP support in 2010 (at the latest);
- Sampled HHs from CLP 2.3 stopped receiving CLP support in June 2013
- Sampled HHs from CLP 2.4 stopped receiving CLP support in June 2014
- Sampled HHs from CLP 2.5 started receiving CLP support in October 2013

Using CLP's rolling baseline approach, CLP 2.4 acted as the control group in the October 2012 annual survey and CLP 2.5 acted as the control group in the October 2013 annual survey.

3.1 Food Access

For HHs to be seen as having 'access to food' they must be able to acquire regularly, adequate amounts of food. CLP measures household access to food by analysing household:

- dietary diversity;
- frequency of consumption of different food groups;
- expenditure on food;
- frequency of use of coping strategies.

The Food Consumption Score (FCS) is an important indicator which incorporates the first two of these measurements, dietary diversity and frequency of consumption of different food groups; as well as the nutritional importance of food groups consumed¹. The score is calculated by multiplying the frequency of foods consumed in the last seven days with a weight applied to each food group. The weighting of food groups have been determined by the World Food Programme (WFP) according to their nutritional density². Scores are then compared to pre-established thresholds:

- 1) Poor food consumption (<28);
- 2) Borderline food consumption (28-42);

¹ World Food Programme (February 2008), Calculation and Use of the Food Consumption Score in Food Security Analysis, VAM Unit, Rome. Accessed from: http://documents.wfp.org/stellent/groups/public/documents/manual_guide_proced/wfp197216.pdf

² World Food Programme (January 2009); Food Consumption Score (FCS) in Bangladesh Context, Technical Guideline, January 2009. http://foodsecuritycluster.net/sites/default/files/WFP_BAN_FCS%20technical%20guideline_Bangladesh%20context_Jan09.pdf

3) Acceptable food consumption (>42).

Figure 2. Proportion of households with acceptable Food Consumption Scores

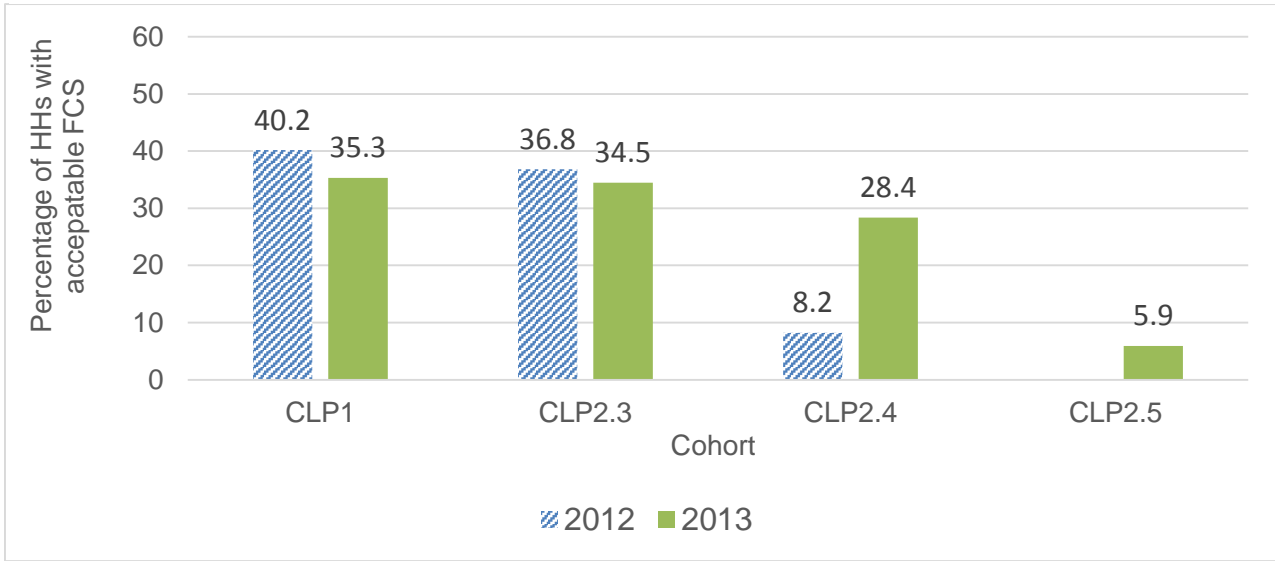


Figure 2 shows the proportion of households with acceptable FCSs for different cohorts, in the October 2012 and October 2013 surveys. The controls for each of the surveys (CLP 2.4 in 2012 and CLP 2.5 in 2013) had not received CLP support which explains why both report less than 10% households with acceptable FCSs, considerably less than cohorts who had received the CLP support package.

In the October 2013 annual survey, CLP 2.4 had not received all of the CLP support hence slightly less, 28.4% households achieved an acceptable FCS compared to CLP 1 and CLP 2.3 cohorts which achieved, 35.3% and 34.5% respectively. The graph shows that the proportion of households with acceptable food consumption scores increases after cohorts receive the CLP support package. Similar percentages of households from CLP 1 were found to have acceptable FCSs showing the impact is sustainable.

Figure 3. Proportion of households with different FCS for Cohort 2.1 before and after receiving the CLP support package

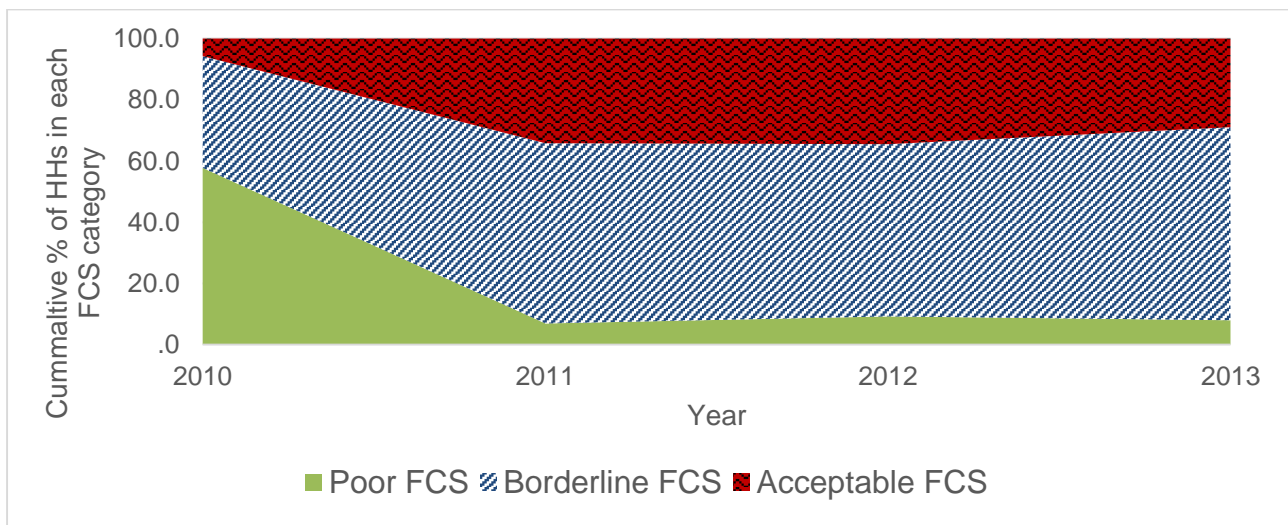


Figure 3 shows how the proportion of CLP 2.1 households in different FCS categories changes between 2010 and 2013. In 2010, CLP 2.1 had not yet received the CLP support package. Almost 60% of sampled households had a poor food consumption score. After receiving CLP support, this proportion drops to less than 10% in one year.

The proportion of households with an acceptable food consumption score increases from 5% in 2010, before CLP support, to over 30% in 2011. This may appear low, however a person's FCS fluctuates with food seasonality (Headey and Ecker, 2012) and the period that the surveys were carried out, October, is a known lean period on the chars. There is a lack of agricultural labour opportunities and prices of food are high, created by the lack of harvesting in this period. This will cause the proportion of HHs with acceptable FCS in this month to be less than an average month. When looking at the proportions of households with poor FCSs, they remain low for two years after CLP support ending. This supports the hypothesis that CLP has a significant impact on the FCS of households and that this impact is sustainable.

Figure 4. Cohort 2.3 HHs achieving an acceptable food consumption score

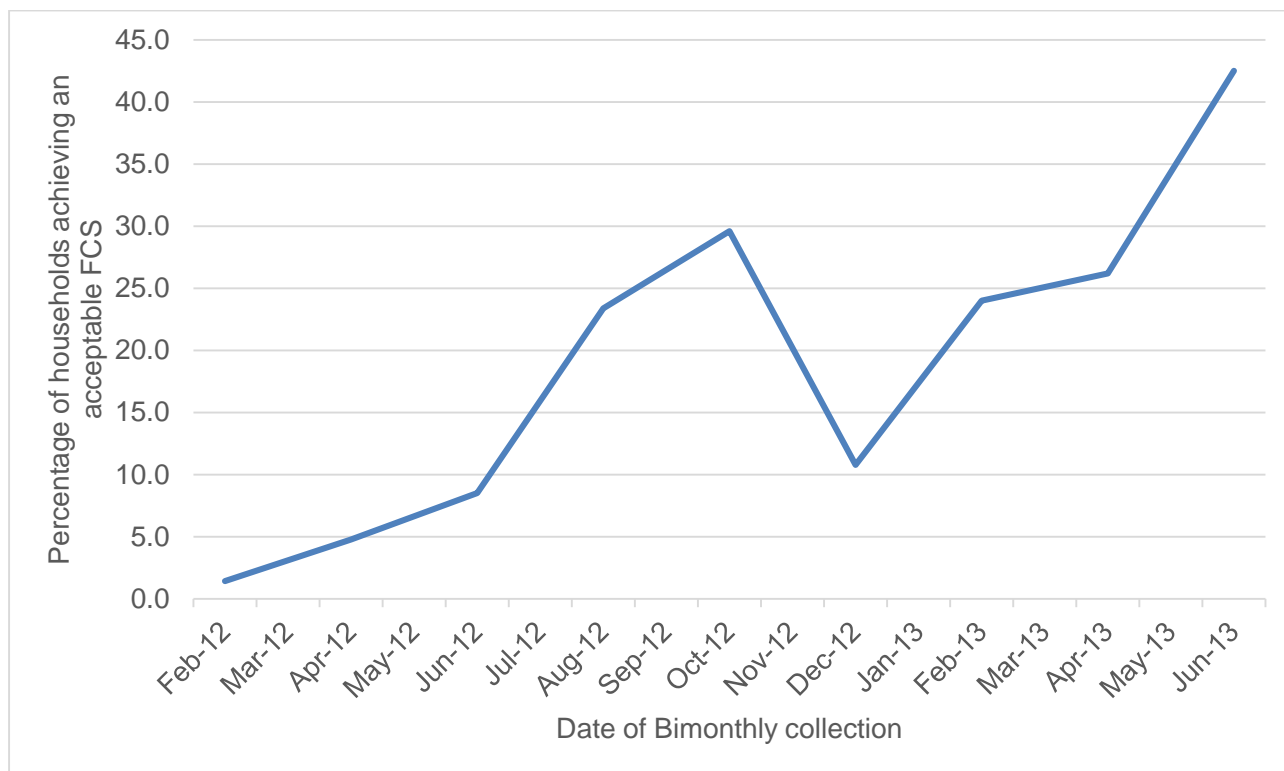


Figure 4 shows the proportion of Cohort 2.3 HHs achieving an acceptable FCS during the 18 month period when they receive CLP support (February 2012 to June 2013).

The figure shows that less than 2% of HHs had an acceptable FCS when they joined the Programme in February 2012. This increased to over 42% by the time CLP support was coming to an end. Throughout the period the percentage of HHs with acceptable FCSs rapidly increases except in the period of September 2012 to December 2012 where there is a sharp drop from 29% to 11%. This short period of decline occurs in a regular seasonal period of hunger, called the lean season, when there is a lack of agricultural labour opportunities and prices of food are high, created by the lack of harvesting in this period.

Figure 5. Proportion of households having three or more meals per day

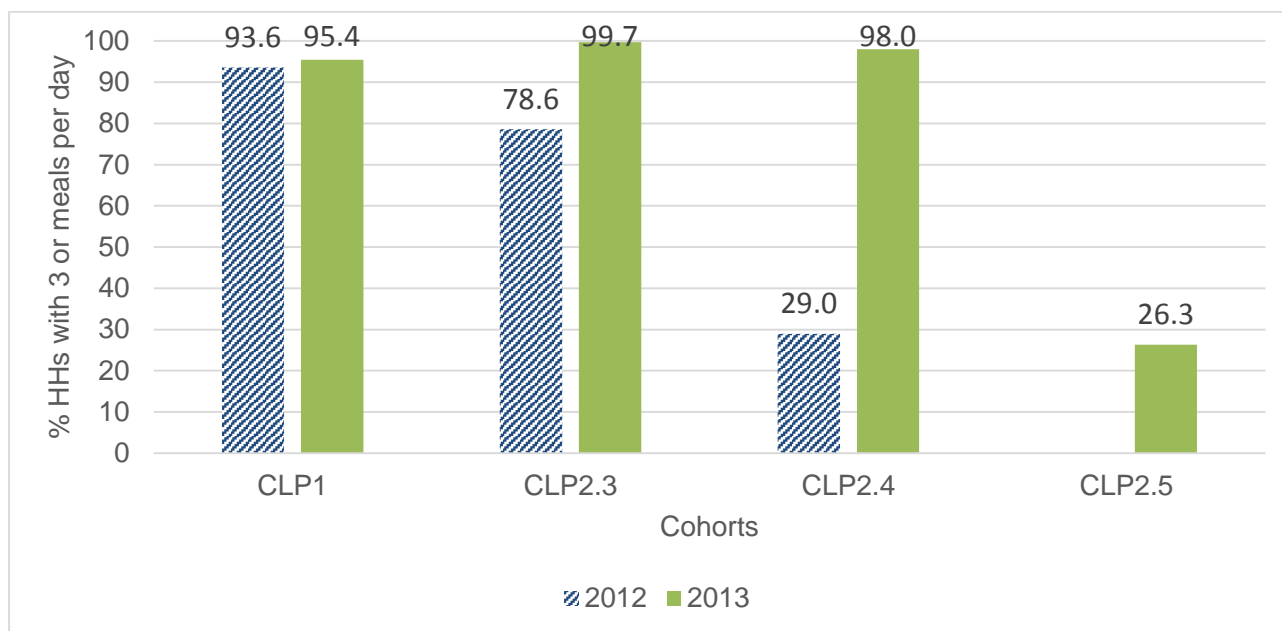
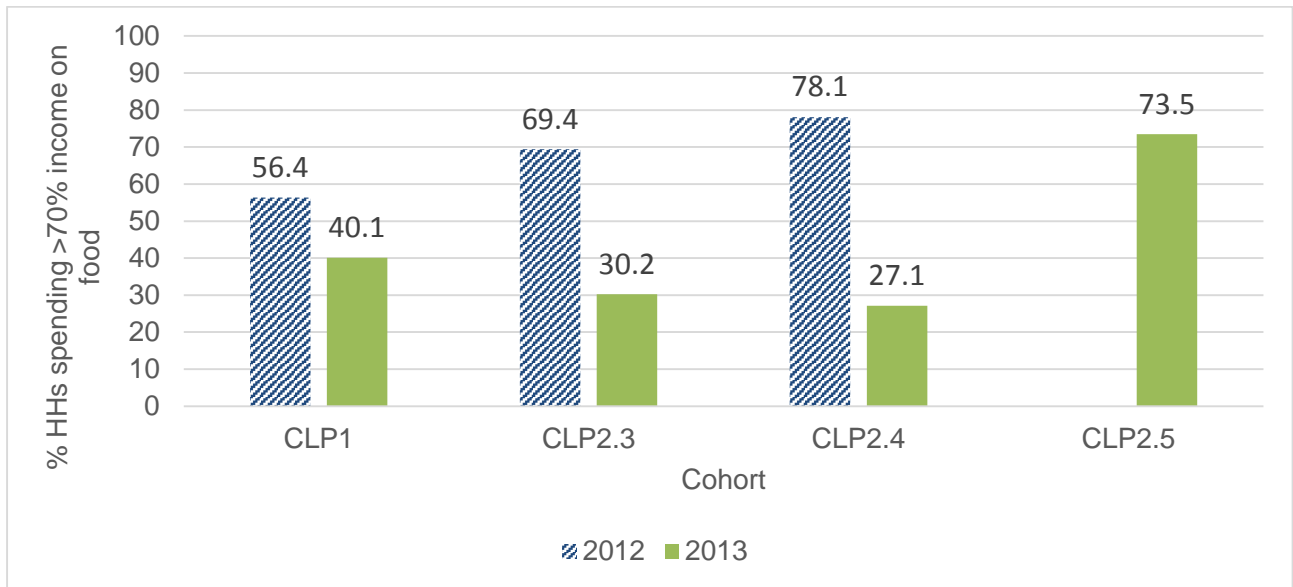


Figure 5 shows the proportion of households eating three or more meals per day (3MPD) for different cohorts in the October 2012 and October 2013 annual surveys. The percentage of households achieving 3MPD is an important indicator; however, it does not indicate the quality of the meals. In Figure 5, CLP 2.4 is the control for 2012 and CLP 2.5 is the control for 2013. Both controls show less than 30% of HH taking 3 or more meals per day. All three cohorts that received CLP support have significantly higher percentages of HH eating 3MPD. This difference between the controls and the cohorts who received CLP support shows the CLP has a significant impact on the number of meals households consumed per day. This outcome is sustainable as the percentage of HHs in CLP 1 eating three or more meals per day continues to be high. CLP 2.3's proportion of households is less than the other cohorts which received CLP support. This may be because CLP 2.3 in 2012 had not received the full CLP package of support when the survey was carried out. There were also more hazards, including floods and droughts in 2012 and CLP 2.3 had not built up as much disaster resilience as CLP 1.

Figure 6 (overleaf) shows the proportion of households spending over 70% of their income on food. This is a standard indicator used by the World Food Programme (WFP) and the Food and Agricultural Organisation (FAO) to measure how accessible food is for HHs. During the October 2013 survey, the control group, CLP 2.5, has 73.5% of HHs spending over 70% of their income on food.

A significantly smaller proportion of HHs spent 70% of their income on food in CLP 2.4 who, at the time of the October 2013 survey, was in the middle of receiving CLP's support. CLP 2.3, who had recently completed receiving the full CLP package of support in June 2013, had 30.2% who spent more than 70% of their income on food. The proportion of households in CLP 1, who stopped receiving CLP support at the latest in 2010, had 40.1% of HHs spending 70 % of their income on food. CLP support initially has an impact on the proportion of households spending more than 70% of their income on food however this impact does not appear to be sustainable as the proportion of households in CLP 1 has a higher proportion of households spending more than 70%.

Figure 6. Proportion of households spending at least 70% income on food



In the October 2012 data, the control, 2.4, also has high percentages of HHs spending more than 70% of their income on food. CLP 2.3 and CLP 1 has significantly more HHs spending more than 70% of their income on food compared to the 2013 data. 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.

Figure 7. Mean monthly expenditure of cohort 2.1 on rice

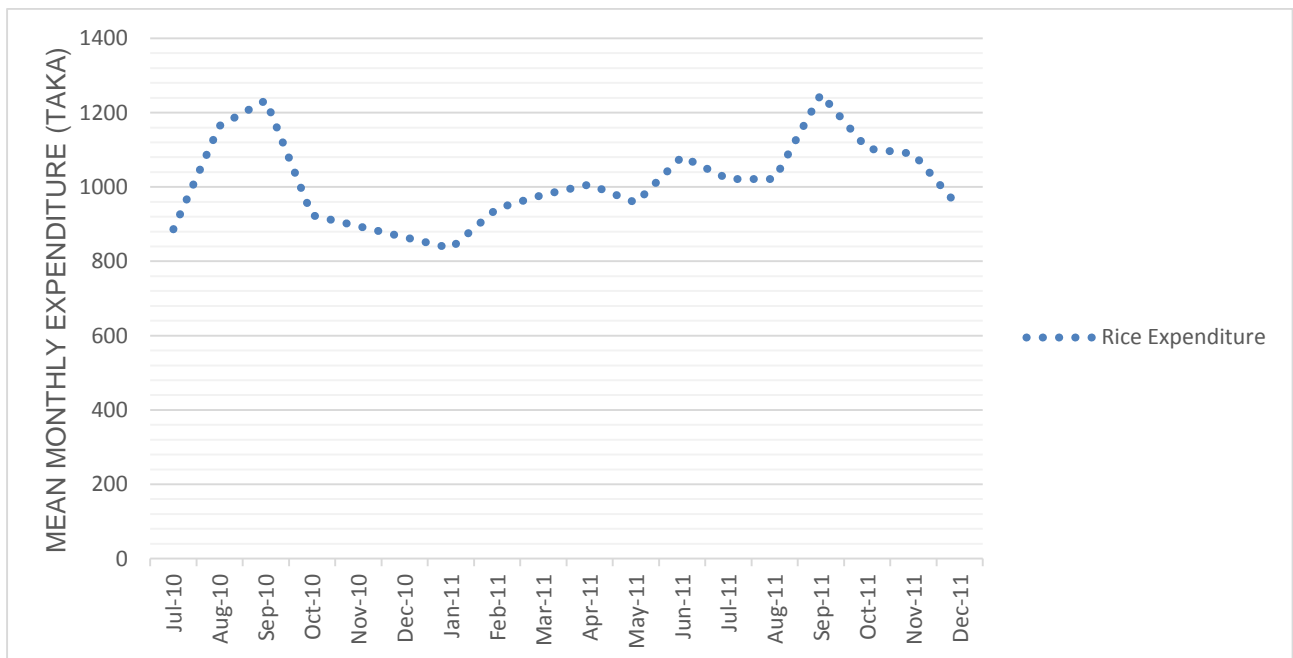


Figure 8. Mean monthly expenditure of cohort 2.1 on main food groups

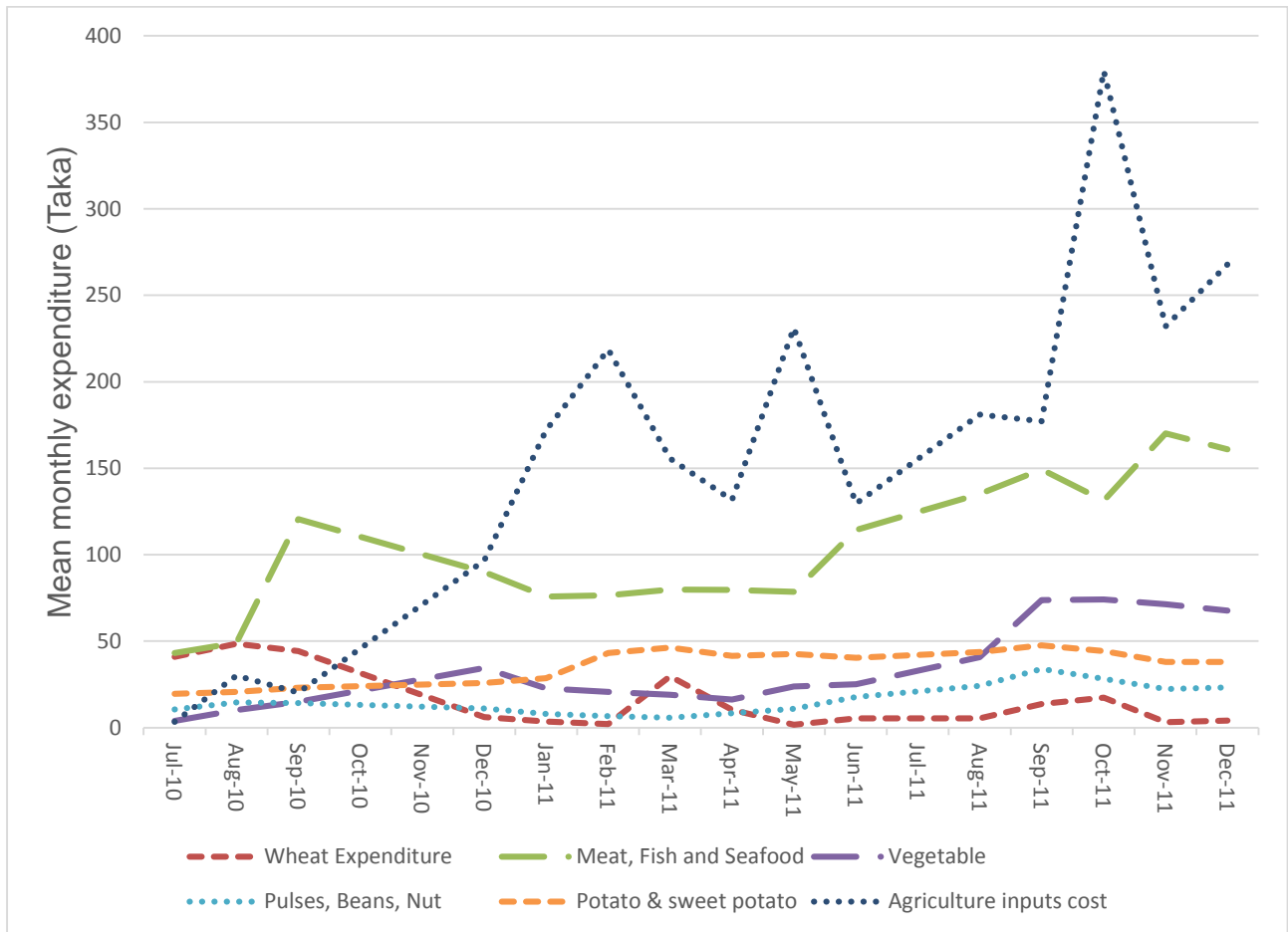
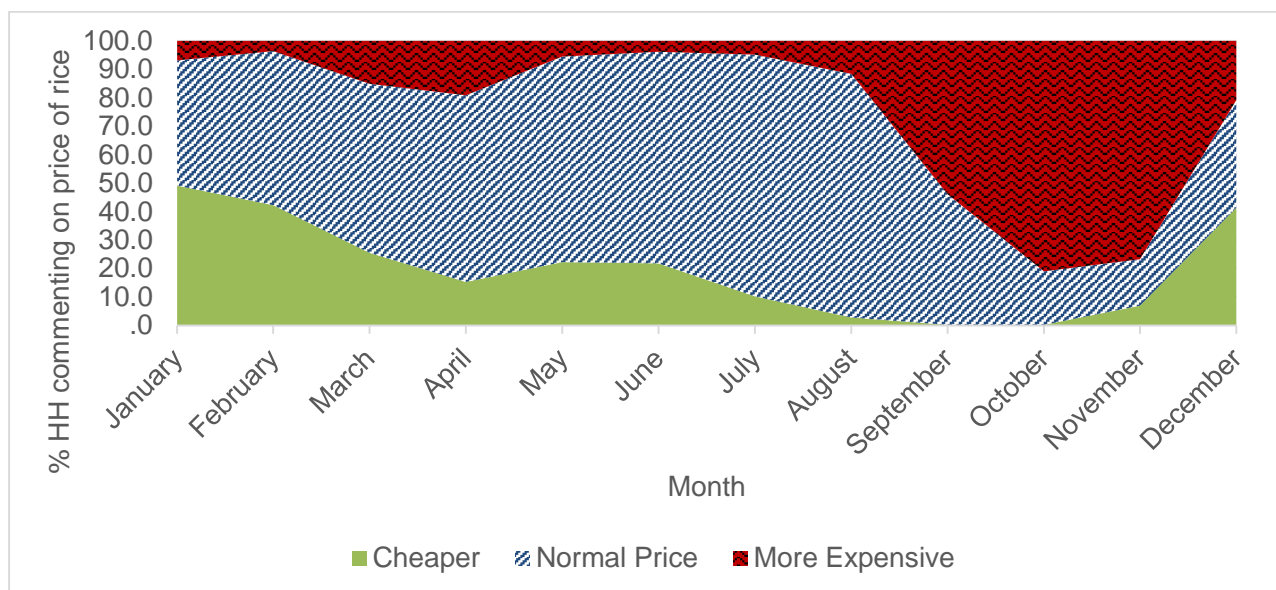


Figure 7 and 8 shows the mean HH expenditure on the main food groups for CLP 2.1 households whilst they received CLP support. The main food items comprise rice; wheat; meat, fish and seafood; vegetables; pulses, beans and nuts; and potato and sweet potato. CLP 2.1 was analysed as households were monitored at monthly intervals. Latter cohorts were monitored on a bimonthly basis. Monthly data provides more data points and a better understanding of how seasonality impacts on HH expenditure on different food groups.

Figure 7 shows that mean expenditure on rice is four times greater than any other food group shown in Figure 8 throughout the year. It also shows that mean expenditure of rice increases during September each year. This is because households prepare for the lean season in September/October by stocking up on rice while it is still available, increasing the demand for rice and therefore the price.

Figure 9. Price of rice for cohort 2.4 (data from 2013 annual survey)



In 2013 HHs were asked their opinion on the price of rice for each month of the year answering either cheaper, normal or more expensive. Figure 9 shows the results of this question with the majority of households reporting that rice was more expensive in October. This supports qualitative data where HH members during FGDs reported that, during this period, rice price goes up due to rice’s limited availability caused by the lack of rice harvest. As the majority of male household members are agricultural labourers, this period is incredibly difficult as, on top of rice being expensive, there is limited work available. Households understand that this increase in price is going to occur and buy more rice in September before it becomes excessively expensive.

More HHs reported that rice was cheaper in December/January. In November/December there is a harvest for the rice type aman. Not only does this increase the amount of rice available in these months but also creates more employment opportunities for agricultural labour, allowing households to purchase more rice. Figure 7 supports this conclusion as mean monthly expenditure on rice is lowest in December.

3.2 Food Availability

Figure 11. Proportion of households with cattle

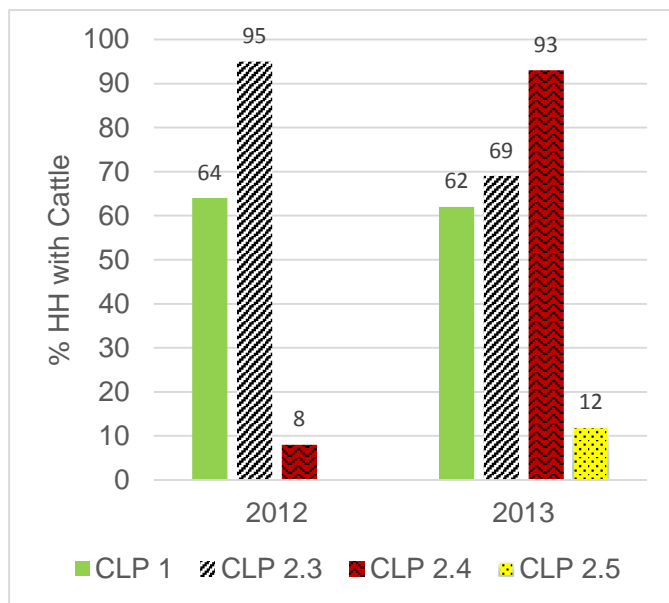
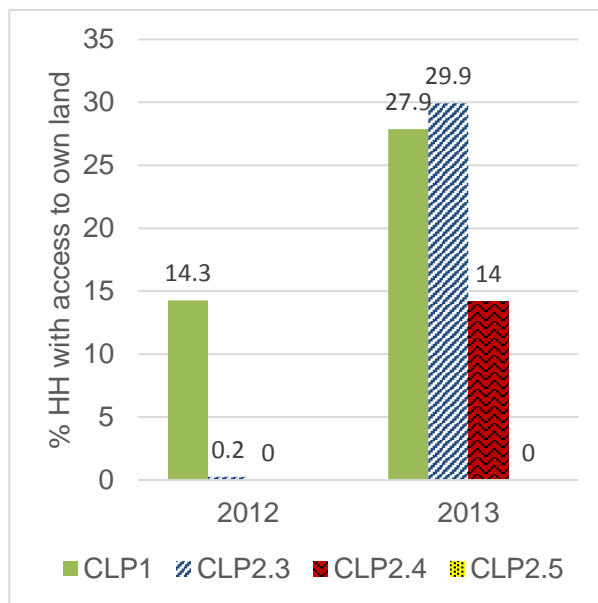


Figure 10. Proportion of households with access to own land



For food to be available for households, it needs to be in sufficient quantities on a consistent basis. The indicators used to measure food availability of CPHHs focus on the possible sources HH use to access food – particularly livestock and land.

Over 98% of core participant households choose cattle (beef or dairy) as their income generating asset, part of the CLP support package. Having access to cattle potentially improves food availability:

- Bulls can be fattened and eventually sold, providing an important source of income to purchase food and re-invest in other income generating assets;
- Dairy cattle can provide milk for consumption and/ or sale by the household.

Figure 10 shows the proportion of HHs with cattle, both owned and shared. CLP 2.4 is the control during the October 2012 survey and CLP 2.5 is the control during the October 2013 survey. During both the 2012 and 2013 surveys the proportion of control group households with cattle is relatively smaller than households who have received CLP support. The highest proportion of households in both years are the cohorts which most recently received CLP support. This proportion decreases the longer households have stopped receiving the CLP support package. This is expected: as CLP HHs grow in wealth, they diversify into other assets such as land.

Figure 11 shows the proportion of HHs with access to their own land. This is self-reported own land and so does not necessarily mean that they have land titles. Again, the controls are CLP 2.4 in 2012 and CLP 2.5 in 2013. In both 2012 and 2013, the control groups have no households that have access to their own land. In 2012, CLP 2.3 (which at the time was receiving the CLP support package) had less than 1% of households with access to land whereas in 2013, 30% of HHs have access to own land. When this is compared to the drop in access to cattle for CLP 2.3 from 2012 to 2013, it is logical as some households sell their cattle and diversify into land. When comparing CLP 1's proportion of HHs with access to land in 2012 and 2013, there are almost double the amount of CLP2 HHs that have access to land.

3.3 Food Utilisation

Food utilisation is the third pillar of food security and specifically refers to appropriate food preparation as well as an individual's ability to metabolise nutrients. It largely focuses on household's Water, Sanitation and Hygiene (WASH) practices. With good WASH practices, households reduce their risk of disease, such as diarrhoea, increasing the absorption of nutrients during food digestion, maximising their food's nutritional value. In this study Food Utilisation indicators are:

- proportion of households with access to an improved water source up to CLP standards;
- proportion of households with access to a sanitary latrine up to CLP standards;
- proportion of women reporting hand washing at critical times.

Text box 1. CLP's criteria for improved drinking water and sanitary latrines

Water from tube well that:

- is on a raised plinth above the highest known flood level;
- is at least 40 feet deep;
- is at least 10 metres from any latrine;
- has an intact concrete platform; and
- is less than a 10 minute roundtrip away from the household.

A sanitary latrine is one that:

- is a pit covered with a concrete slab and fitted with a pan & an unbroken water seal;
- has a pit that is supported internally; and
- is raised on a plinth above the flood line.

Figure 12. Proportion of households with access to a sanitary latrine to CLP standards

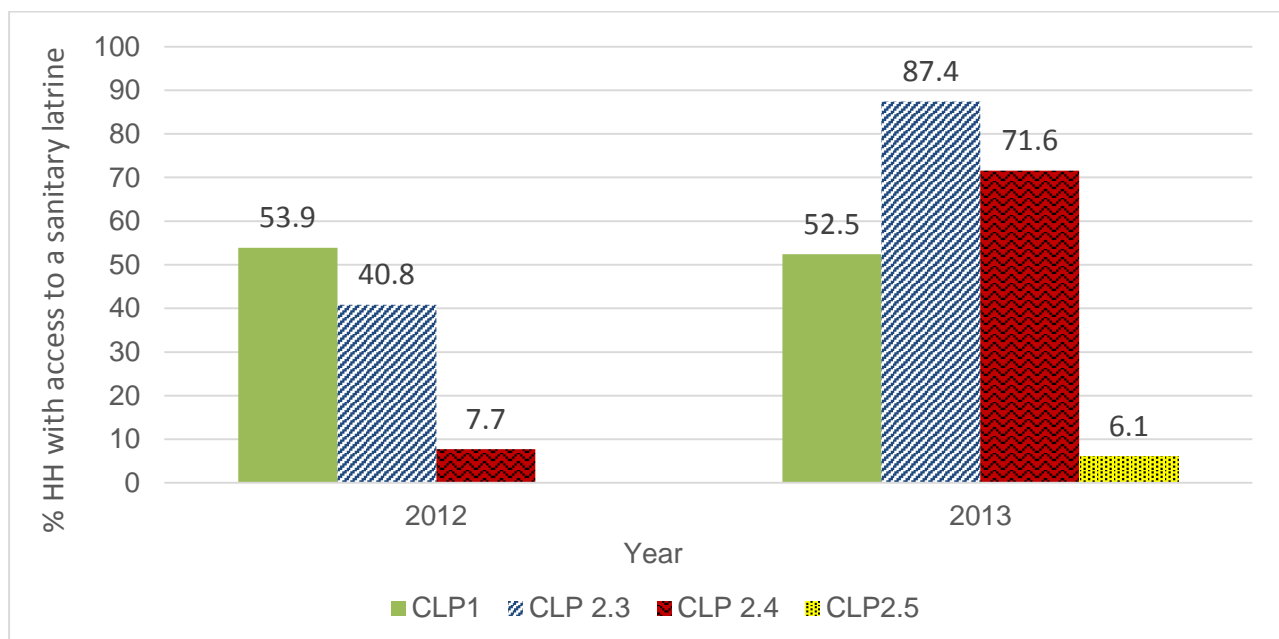


Figure 12 shows the proportion of HHs with access to a sanitary latrine up to CLP standards (text box 1). The control group in the October 2012 survey was cohort 2.4 and in the October 2013 survey

it was cohort 2.5. As can be seen from the graph, both control groups have relatively small proportions of HHs with access to a sanitary latrine compared to cohorts that have received CLP support. In 2012, CLP 2.3 has just over 40% of HHs with access to a sanitary latrine but this figure jumps to almost 90% in 2013. In July 2012, CLP changed its policy for who received a sanitary latrine so now all HHs, including non-core HHs³, receive a CLP sanitary latrine instead of just CPHHs. This increased the number of total latrines on the *chars* which may be the reason that more of CLP 2.3 households use sanitary latrines. Government and NGOs are also doing work on providing latrines which may have contributed the increased proportion of households using sanitary latrines. CLP 1's proportion of households with access to a sanitary latrine does not change significantly from 2012 to 2013. This is expected as CLP has not made any intervention with CLP 1 HHs. The criteria causing most households' latrines not meeting CLP standards was the water seal of the latrine being broken.

In summary, HHs' access to sanitary latrines (up to CLP standards) increases after receiving the CLP support package. The percentage of households with access to a sanitary latrine up to CLP standards has also improved since the change in policy in 2012.

Figure 13. Proportion of households with access to an improved water source

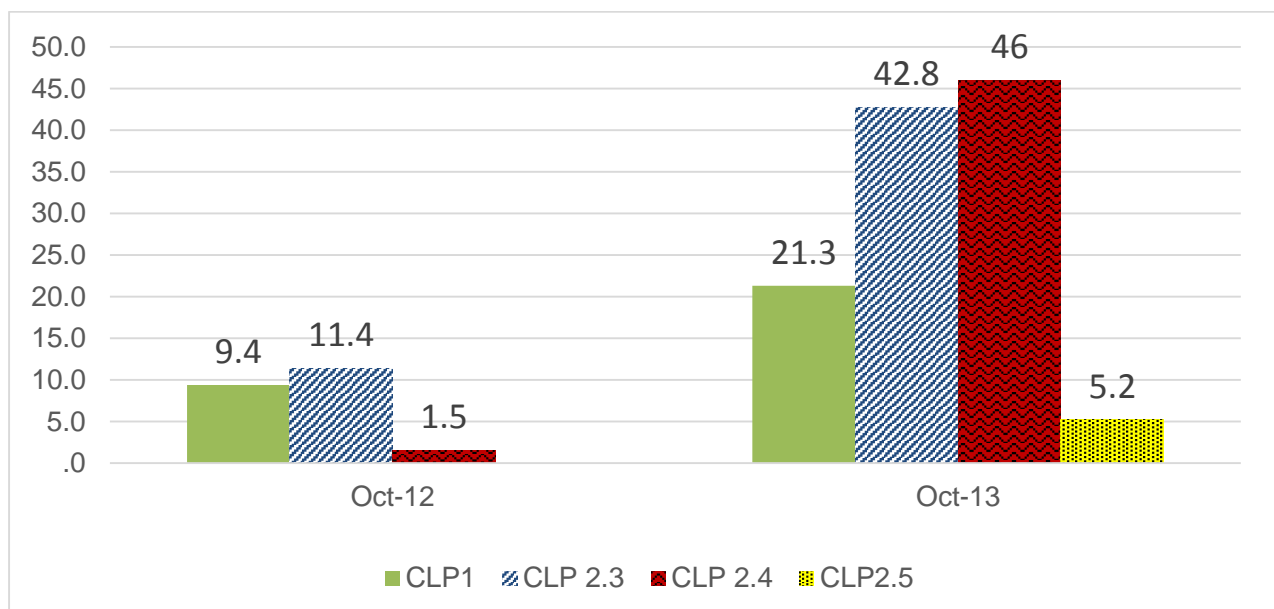


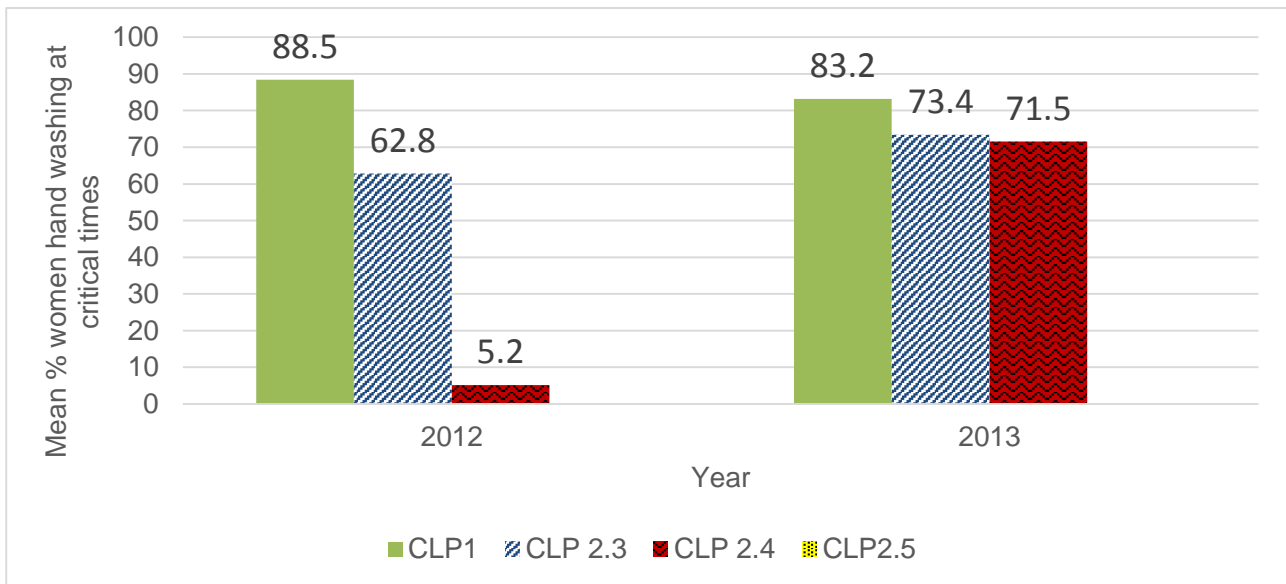
Figure 13 shows the proportion of households with access to an improved water source. Using a tubewell up to CLP standards will reduce the likelihood of participants drinking and cleaning their food with contaminated water.

The control in 2012 was CLP 2.4 and in 2013 it was CLP 2.5. As can be seen, both controls have relatively small proportions of HHs with access to an improved water source compared to cohorts that have received the CLP support package. All households in the 2013 survey scored significantly better than in 2012. This is potentially from a change in water policy in July 2012 which ensures all core participants receive access to an improved water source. Prior to this, tube wells were only installed where 8 or more HHs (irrespective of whether they were core or not) could access the tubewell and in areas where there was no water source.

³ A 'non-core household' is one that is not receiving the core package of CLP support. They may, however, benefit from other CLP activities such as VSLGs, being raised on plinths, market-based support and so on.

The percentage of CLP 1 HHs with access to an improved water source has also increased from 2012 to 2013. This may be a result of some CLP 1 HHs living in villages which are receiving support during CLP 2. It is worth noting the scale of this graph, only going up to 50%. This means that even though there is a marked improvement in 2013 compared to 2012, there are still over half of CLP HHs, even in the best-performing cohorts, that do not have access to an improved water source up to CLP standards.

Figure 14. Mean percentage of women hand washing at critical times



Hand washing at critical times is important in food security because it reduces the risk of household members passing on germs. The six critical times that household members should wash their hands are:

- before preparing food;
- before eating;
- before feeding a child;
- before serving food;
- after cleaning a child’s anus;
- and after defecating.

Figure 14 shows the average percentage of women (the respondents in this case) washing at critical times. Women were interviewed because they are generally responsible for these activities. The controls, CLP 2.4 in 2012 and CLP 2.5 in 2013, both have very low mean percentages, 5% in 2012 and 0% in 2013. In 2012, CLP 2.3, which was receiving CLP support, has over 60% of women washing at critical times and CLP 1 in 2012 has over 80%. This may reflect that it takes time for behaviours to change. In 2013 similar results were found with the new cohort, CLP 2.4 which had percentages over 70% and CLP 1 again had over 80% women hand washing at critical times. This shows that CLP support package has an instant impact on the mean percentage of women washing at critical times and that this impact not only sustains but increases with time as women’s behaviours change.

4. Conclusions and Recommendations

This study shows that CLP is having a positive impact on the food security of CLP participant households, across all three pillars of access, availability and utilisation. Households' food security is relatively stable across years but disasters can cause certain years and months to be more difficult. Food stability does vary during the year, particularly during the lean season (September to November) when labour opportunities are scarce and rice prices are relatively high caused by the lack of rice availability. Available food sources do increase as households diversify their assets from cattle into other sources including land. Most, but not all, households are hand-washing more often and have better access to sanitary latrines and tube wells after receiving the CLP support package. This is still not to the levels that CLP expect, particularly in relation to household access to an improved water source.

Based on the findings, a number of recommendations can be made to improve CLP's outcomes on food security:

- Continue with the provision of the CLP's package of interventions, as these have led to a direct improvement to food access, availability and utilisation.
- Continue providing cash for work and safety nets to households during the lean season as this will reduce the effect of seasonality on FCS as households will be able to purchase more food during this period.
- Lobby GoB and other organisations to increase/initiate cash for work schemes on the *chars* during the lean season to assist households once CLP ends in 2016.
- CLP to ensure rigorous implementation of the revised water policy in which all CPHHs will have access to an improved water supply.

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Annex 1

Food Access

Percentage of households spending over 70% of income on food

Cohort	2012	2013
CLP1	56.4	40.07286
CLP2.3	69.4	30.2
CLP2.4	78.1	27.11443
CLP2.5		73.46939

Percentage of households with Acceptable Food Consumption Score

Cohort	2012	2013
CLP1	40.2	35.3
CLP2.3	36.8	34.5
CLP2.4	8.2	28.4
CLP2.5		5.9

Percentage of households having 3 or more meals per day

Cohort	2012	2013
CLP1	93.6	95.4
CLP2.3	78.6	99.7
CLP2.4	29.0	98.0
CLP2.5		26.3

Food Availability

Cohort	CLP 1		CLP 2.3		CLP 2.4		CLP 2.5
	2012	2013	2012	2013	2012	2013	2013
Proportion of households with access to a Bed crop	6.8	18.0	34.8	25	2.0	48	0
Proportion of households with access to a Pit crop	45.6	80.0	56.7	83	17.0	86	48
Proportion of households with access to Own land	14.26	28	0	30	0	14	0
Proportion of households with access to Mortgage land	21.74	26	9	31	0	16	0
Proportion of households with access to Shared land	31.13	38	27	28	3	31	15
Proportion of households with access to Lease Land	0.52	0	0	3	0	3	0
Proportion of households with access to Khas land	0.87	0	2	2	0	1	1
Proportion of households with access to Cattle	64.35	62	95	69	8	93	12
Proportion of households with access to Goats and Sheep	39.48	43	36	40	10	42	22
Access to Chickens and Ducks	67.83	71	83	81	36	81	61

Food Utilisation

Cohort	CLP1		CLP 2.3		CLP 2.4		CLP 2.5
	2012	2013	2012	2013	2012	2013	2013
Percentage of households with access to a sanitary latrine up to CLP standards	53.9	52.5	40.8	87.4	7.7	71.6	6.1
Percentage of households consuming improved water	9.4	21.3	11.4	42.8	1.5	46	5.2
Percentage of Intact concrete platform of tubewells	19.8	25.1	31.1	46.8	11.9	51.7	9.5
Percentage of latrines with broken water seal	78.4	39.2	67.7	8.6	22.6	23.6	94.8
Percentage of women hand washing before preparing food	90.1	73.4	56.5	62.3	.7	63.4	0.9
Percentage of women hand washing before eating	88.5	90.7	67.4	80.5	2.4	74.1	1.1
Percentage of women hand washing before feeding a child	83.3	78.3	58.5	65.8	0	62.4	0.2
Percentage of women hand washing before serving food	89.2	74.9	52.5	61.8	.7	63.4	0.5
Percentage of women hand washing after cleaning a child's anus	87.3	90.3	67.2	82.6	0	81.6	16.8
Percentage of women hand washing after defecating	92.3	91.4	74.9	87.4	27.2	84.3	3.4
Mean percentage of women hand washing at critical times	88.5	83.2	62.8	73.4	5.2	71.5	3.8