The Tier 2 Pilot: Reviewing the Decision not to Scale Up and Exploring the Relationship Between Sharecropping & Income

Key Findings:

- There are no differences in income between T1 and T2 using a 12 month recall or a 30 day recall period.
- Incomes of T1 and T2 households track each other throughout the year (even though T2 HHs share crop and own more assets).
- Sharecropping and ownership of assets do not have a large influence on per person per day (pppd) incomes, which explains the similarity in incomes. The incomes of sharecroppers are typically the same as non-sharecroppers (with the exception of WBG 1[†]).
- For both groups, wage labour is the main driver of HH income (rather than share cropping or assets).
- The decision not to scale up the T2 pilot was justified. These households are relatively better off than T1 hhs (from a vulnerability perspective). Asset transfer may reduce their vulnerability to shocks but will not drive incomes up.
- Sharecroppers are present in all WBGs and 20% of extreme poor (EP) households sharecrop. However, most sharecroppers are not EP, suggesting that sharecropping is not accessible to many of the EP.
- Modifying land access criteria is unlikely to be an effective way of including EP households that practice sharecropping, as inclusion error would rise.

[†]Well-being analysis group: groups used during participatory well-being analysis, with WBG 1 being the poorest and WBG 4 the least poor.

Background

The Chars Livelihoods Programme (CLP) works to eliminate extreme poverty on the island *chars* of northwestern Bangladesh. Although aiming to improve the livelihoods of more than 1 million people on the *chars*, the CLP focuses on 67,000 extreme poor (EP)[1] households. These households, known as core participant households (CPHH), receive a focused package of assets and support aimed at improving their socio-economic status.

In 2010, facing a shortfall in target household numbers, the CLP ran a pilot of 1,000 households with incomes marginally above the poverty line, but which did not meet the CLP inclusion criteria of being landless and assetless. These households (known as Tier 2) received a lower-value package of support. It was felt that their higher initial levels of land and productive assets meant that they would require lower levels of asset transfer from the CLP to move away from extreme poverty. The 2011 Annual Review argued that Tier 2 was not justified based on data available at the time, and criticised the CLP's use of 30 day recall to determine income. The review also recommended further research into the relationship between productive assets, land and income.

The study outlined in this brief was conducted in response to the Annual Review's recommendations. The objectives of the study were:

- To explore if there are differences in incomes between Tier 1 (households that meet the standard CLP criteria), and Tier 2 based on a 12 month income recall, where consumption value[2] is included as income.
- To determine if Tier 2 is justified and should be scaled up.
- To explore the asset-income relationship by assessing whether sharecropping of land is a profitable practice (as Tier 2 selection criteria allows sharecropping)
- To understand why households become involved in sharecropping, and the barriers to involvement.

Methodology

In order to investigate incomes, 50 Tier 1 (T1) and 50 Tier 2 (T2) households were selected at random. Monthly monitoring is used by the CLP to track changes in a sample of households (HHs) over time, and is based primarily on a structured questionnaire. For this study, additional questions were included during monitoring in June 2011, asking HHs to recall detailed information on income and income sources over the last 30 days, as well as slightly less detailed income information regarding the previous 12 months. These HHs had been receiving CLP support for up to four months at the time of the survey.

To investigate sharecropping, data regarding incomes of sharecroppers were drawn from a participatory study conducted across the CLP's working area, in 21 villages where the CLP had not yet worked. The study included use of wellbeing analysis and was conducted between June and August 2011. This was supported by additional data which was gathered through a series of case studies of sharecroppers, highlighting the reasons for

[1] per person per day income of <=Tk 19 in 2009/'10 prices, rural Rajshahi extreme poverty line as per *Jackson, A. (2009)* DfID Bangladesh Information Note: Poverty Thresholds and Reporting

[2] The original income calculations did not include the value of food that was produced and consumed within the household (such as farmers consuming part of their own harvest). The Annual Review argued that excluding this "consumption value " resulted in underestimation of incomes.

sharecropping, barriers to entry, level of profitability and arrangements of sharecropping tenancies. A number of focus group discussions were also held with landowners, sharecroppers and aspiring sharecroppers to explore in more depth the reasons why people do and do not become involved in sharecropping.

The methodology has the following limitations:

- As T1 and T2 households interviewed were receiving CLP support, it was not possible to separate incomes from assets provided by either the CLP. For example, it was not possible to separate the income from CLP-provided livestock from livestock which was not provided by the CLP. This therefore may have overestimated incomes. Direct CLP income support (stipends) was excluded.
- Direct data on profitability of sharecropping was not scientifically sampled (came from case studies) and the sample was very small.
- 12 month recall of crop value, sale amounts and yearly expenditure on inputs could suffer from inaccuracy.

Tier 2 in Brief

Tier 2 was a pilot of 1,000 households in Kurigram and Lalmonhirat districts. These households were found to have incomes only slightly above the extreme poverty line, despite having different assets levels to Tier 1. At baseline, per person per day (pppd) incomes of T1 & T2 were found to be Tk 22 and Tk 23 respectively, yet T1 was found to own on average productive assets of only Tk 633, while T2 owned productive assets worth Tk 5,574[3] (Table 1; these figures include land). In order to bring T2 HHs into the programme, an adjusted set of criteria were defined (Table 2) which allowed households with some productive assets, including share land, to be selected.

Table 1: Asset Ownership/Access by T1 & T2 at Baseline

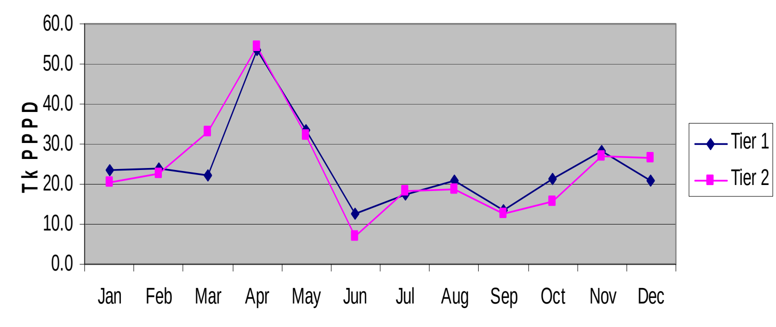
	T1	T2
Mean value of cash savings (Tk)	76.8	107.9
% of hhs owning land	0	1.3
% of hhs share cropping	0.9	49.1
Mean value of productive assets (Tk)	633	5,574
Mean value of total assets (Tk)	1,984	7,636
% of households who have shared cattle	7.1	21.1

Table 2: Selection Criteria for Tier 1 and Tier 2

Criteria for Selection	**Tier1**	**Tier2**
Residency	6 months on island *char*	6 months on island *char*
Land ownership	No land ownership	Up to 5 decimals of homestead and 33 decimals share cropping
Productive assets	Up to Tk 5,000	Up to Tk 15,000
Credit	No loan from a micro-finance institute	No loan from a micro-finance institute
Assets and income	Not receiving cash/ asset grants from another programme	Not receiving cash/ asset grants from another programme

[3]CLP (2011) *Baseline Findings: Comparing First and Second Tier CPHHs of Cohort 2.2.*

Figure 1: Monthly PPPD Income of T1 & T2 Based on 12-Month Recall



In order to adjust for the fact that T2 owned a higher level of productive assets, which could potentially generate income, T2 households were allocated a lower package of assets and support (Table 3).

Table 3: CLP Support to Tier1 and Tier 2

Components of package	**Tier1**	**Tier2**
SD group training	Full modules	Full modules
Asset value (Taka)	15,500	9,000
Monthly asset maintenance stipends	250	250
Family income support stipend	350	0
AI vouchers	300	0
Vaccination and de-worming support	400	200
Vegetable seed	900	60
HG training	425	170
Livestock training	595	595
Raised plinth	Yes	Yes, but not guaranteed
Latrine grant	5,500	1,500
Health vouchers	1,500	1,000

Findings from the Annual Review

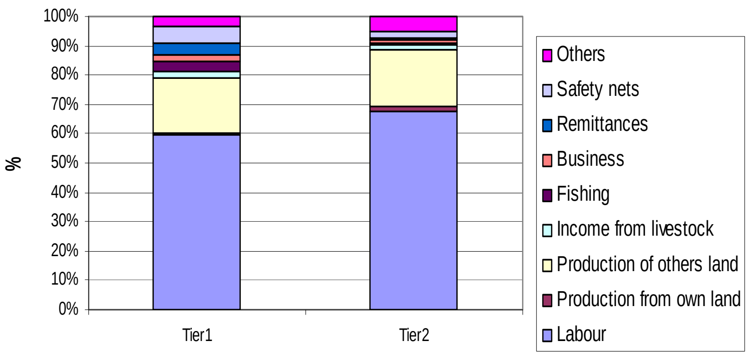
The Annual Review concluded that there was no justification for the lower package of assets and support given to T2 on the evidence available at the time. This evidence (baseline data), indicated that T1 & T2 incomes were the same, suggesting that different levels of productive assets and land were not affecting incomes. However, the review suggested that in fact it was more likely that incomes of T1 and T2 were not the same, but that use of 30-day recall was underestimating T2 incomes by excluding large, seasonal incomes such as the value

of livestock and crop sales and migration/remittance incomes. The review also pointed out that consumption value (value of crops produced by a household that are consumed within that household, rather than sold) was not included as income, possibly resulting in underestimates of income. The authors recommended more detailed investigation into the income-asset relationship, including re-assessment of T1 and T2 incomes based on 12-month recall and including consumption value as part of income.

Is the use of 30-day Recall Valid?

The study found T1 and T2 had identical incomes when a 12-month recall (including consumption value) was used (Tk 23 pppd for both groups), and these are the same as found by the 30-day recall in the original baseline study. The incomes of both groups track each other over the year, reflecting periods of high and low labour demand (Figure 1). Analysis of the source of incomes shows that wage labour is the single most important source of income and that T2 derive a higher proportion of their income from labour, not from asset and crop sales or migration as was suggested in the Annual Review (Figure 2).The data do not support the argument put forward in the Annual Review that income similarities between T1 and T2 were a result of methodology. It remains unclear whether a 12-month recall is more accurate than a 30-day recall. However, monthly incomes of the *char* dwellers are known to fluctuate with seasons, as a result of high dependence on labour for income[4]. This means that the timing of a 30-day recall will have a large influence on the result, and this needs to be taken into account during surveys.

Figure 2: Proportion of Income from Different sources (12 month recall)

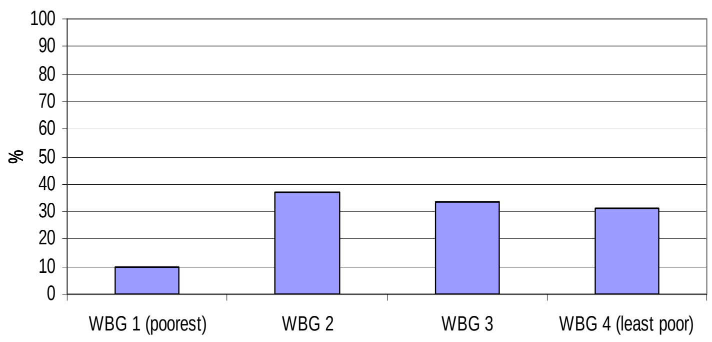


Who is sharecropping and why?

While sharecroppers are present in all WBGs (wellbeing analysis groups), the majority of sharecroppers (53%) are found within WBG 2, while just 10% of WBG 1 (the poorest group) are sharecroppers (Figure 3). This indicates that sharecropping is either not attractive to, or not accessible by, the majority of the poorest HHs (as identified by the community). However, it is possible to be both extreme poor (based on Tk 19 poverty line) and a sharecropper. Yet with the exception of WBG 1, where sharecroppers are wealthier than non-sharecroppers, incomes of sharecropping HHs are not significantly higher than those of non-sharecropping HHs within the same WBG group. Furthermore, there is no difference in income from land between T1 and T2 HHs (who are often sharecroppers).

Thus sharecropping does not appear to be more profitable than alternative activities – a finding that is supported by data from focus groups and case studies. This then raises the question as to why HHs are choosing to sharecrop, if there is little or no immediate economic benefit from doing so.

Figure 3: Proportion of HHs Sharecropping by WBG



Focus groups and case studies suggest a number of key reasons, mostly indicating that the benefits from sharecropping are non-economic or do not translate directly into household income:

- Sharecropping is seen as a stepping stone from landlessness to owning land, as sharecropping can be a savings method that delivers a lump sum return from regular small investments over a long period of time.
- Sharecropping is a method of building social capital, for example by creating a relationship with a landowner. This is one way in which poorer members of society can have some influence in the community. It is also a livelihood strategy, as sharecroppers may be able to call on landowners for support during crises (having built up social capital).
- Risk management: assets from sharecropped land (such as stored crops) can be sold off during crises.
- Sharecropping is also a way of managing uncertainty in the labour markets on which the poor rely on for most of their income, and putting less productive HH members (such as the elderly or very young) to work.
- The practice would be more profitable if sharecroppers could cultivate higher value crops such as chillies, but many indicate that they cannot afford the initial capital investment required for these crops.

[4] CLP (2011) *Seasonal demand for labour on island chars and its effect on migration and remittances*

However, while sharecropping may be an aspiration for many of the extreme poor, there are also a number of barriers which can prevent extreme poor households from becoming sharecroppers. These include:

- Lack of financial capital required for investment in inputs such as seed, irrigation and fertiliser.
- Lack of sufficient human capital – for example, disabled, female headed, elderly or small households.
- Lack of 'work ethic' reputation – which may be linked to previous.
- Lack of initial social capital such as a connection to the landowner.

Conclusions

Based on the findings of the study, the following conclusions can be drawn

- Based on 12-month recall, incomes of T1 & T2 are the same and match those from the baseline study.
- There is no evidence to suggest that a 12-month recall is more accurate than a 30-day recall, and the Annual Review was not correct in its assumption that the use of a 30-day recall was the reason behind the similarities in incomes of T1 and T2.
- In most cases, sharecropping is not influencing income significantly – labour is the key driver of income. The Annual Review was mistaken in its view that livestock assets were more important to the incomes of T2 than those of T1.
- Although 20% of EP HHs (HHs with incomes pppd of less than Tk 19) are sharecropping, the majority of sharecroppers are not EP.
- Sharecropping has benefits that do not translate directly into income, which make it attractive to HHs trying to move up the socio-economic scale.
- Rationale for reduced asset package for T2 was not justified, as assets are not driving income.
- Discontinuing T2 as it existed was probably the best decision, given that productive assets and land do not appear to be affecting incomes.

Recommendations

In light of the findings from the study, the following recommendations are made:

- Not recommended that the CLP change landholding criteria to include the 20% of EP HHs that are sharecropping. This is because work on selection criteria has shown that increasing land thresholds results in unacceptable inclusion error.
- Recommended that T2 is not expanded.
- Recommended that the CLPs' operations team consider increasing arable agricultural advice and training provision to CPHHs, to match that currently available for livestock farmers through the ATP project. This could be done through the proposed Agricultural Services Providers project, for example.
- Recommended that the CLP's operations team considers options to increase CPHH access to agricultural inputs, such as input vouchers. This would allow HHs that do choose to invest in land to move into production of higher-value crops.

Prepared by Blackie, Kenward & Islam (IML), September 2011