

Chars Livelihoods Programme

A Study to Assess the Sustainability of Livestock Services Providers under CLP-1

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Aid Program



Acronyms and Abbreviations

AI	Artificial Insemination
ANOVA	Analysis of Variance
ATP	Asset Transfer Project
CBO	Community Based Organisation
CLP	Chars Livelihoods Programme
CPHH	Core Participant Household
DANIDA	Danish International Development Agency
DFID	Department for International Development
DLS	District Livestock Services
DLSO	District Livestock Services Officer
GoB	Government of Bangladesh
GUK	Gram Unnayan Kendra
IGA	Income Generating Asset
LSP	Livestock Services Provider
PLDP	Participatory Livestock Development Project
OPs	Operations Division
ULO	Upazila Livestock Officer

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Executive Summary

The first phase of the Chars Livelihoods Programme (CLP-1) worked to eliminate extreme poverty on the island *chars* of North West Bangladesh and successfully lifted 250,000 people out of extreme poverty. CLP-1 ended in March 2010 and the withdrawal of support under CLP-1 provides the opportunity to monitor the progress of CLP-1 and explore issues which could influence programme design of CLP-2.

Central to the CLP is the integrated package of support that includes the transfer of an income-generating asset (IGA) to each core participant household (CPHH), the majority of which (95%) select livestock – dairy cows in particular. To ensure the sustainability of this growing population of livestock on the *chars*, CLP trained a number of Livestock Services Providers (LSPs) to maintain the health of the core and non-core participants' cattle and strengthen livestock productivity¹. The LSP initiative aimed to encourage micro-entrepreneurship to support sustainable livelihoods of the LSPs and develop small business skills to facilitate the movement out of poverty. CLP's Innovation, Monitoring and Learning (IML) division examined the sustainability of LSPs' performance and the market for their services, where CLP has withdrawn its support.

This study briefly explores the market environment for livestock health services on the *chars* and reports on the findings from two surveys which examined the sustainability of the CLP-1 trained LSPs following withdrawal of CLP support². The main survey targeted LSPs who were still 'active' at the end of CLP-1 and a small secondary survey interviewed a sample of 'non-active' LSPs who dropped out prior to the completion of CLP-1³. Key findings include:

- All of the LSPs who were active at the end of CLP-1, are still working as LSPs and 96.1% of these LSPs are earning over Tk 3000 profit per month. However 93.2% of LSPs supplement this income with another source of income, mainly sharecropping their own land;
- There is a large and growing demand for LSPs' services on the *chars*, most of the LSPs visit between 101-300 households per month and 75% of LSPs' clients are from non CPHHs, therefore LSPs are not dependent upon clients who have received cattle from CLP's ATP;
- LSPs who earned the largest profit were those who practice AI (6.8%), maintained contact with CLP's District Livestock Services Officers (DLSOs), had previous experience as a LSP, host a fridge and maintained financial bookkeeping (15.5%);
- 72.8% of LSPs contacted CLP's DLSOs in the last 6 months, mostly to seek their advice on treatment and complex cases;
- The most profitable services reported were primary treatment, followed by the sale of de-worming tablets, de-worming of cows and vaccination of cows. The most requested were also primary treatment, de-worming and livestock vaccinations;

¹ Maxwell Stamp (2010) Chars Livelihoods Programme – Bangladesh, Final Report for DFID.

² CLP support includes: technical and business skills training, mentoring, assistance in establishing and strengthening links with suppliers and DLS, subsidies for equipment such as cool boxes and solar fridges and provision of a voucher system for CPHHs to pay for vaccines, de-worming and livestock feed to facilitate and subsidise market entry.

³ Unless stated as 'non-active' LSPs the sample of LSPs referred to throughout this is that selected for the main survey which targeted LSPs who were still 'active' at the end of CLP-1.

- Only 72.8% of LSPs have access to a fridge, which is vital to maintain the vaccine-cool-chain;
- The main challenges faced by LSPs are communication with other LSPs and experienced physicians, diagnosis of diseases previously unknown to the LSP, providing the correct treatment and timely acquisition of vaccines and medication.

1. Background

1.1 CLP

The first phase of the CLP aimed to alleviate extreme poverty for the poorest households living on island *chars* in the riverine of the Jamuna River⁴. Cornerstone to the poverty alleviation programme is the CLP's Asset Transfer Programme (ATP), which selects assetless, landless core participant households (CPHHs) who receive an income-generating asset (IGA). The most popular IGA is cattle, specifically dairy cattle. Completion of CLP-1 in March 2010 and the withdrawal of support under CLP-1 provided the opportunity to monitor the progress of CLP-1 and explore issues which could influence programme design of CLP-2. CLP's Innovation Monitoring and Learning division (IML) examined the sustainability of Livestock Services Providers' (LSPs) performance and the market for their services, where CLP has withdrawn its support.

1.2 Livestock services provision on the chars

Livestock are an important component of Bangladesh's integrated farming system and their mobility in the face of floods makes livestock a key asset to *char* dwellers. Cattle are used for milk production, beef fattening and re-sale of animals and their off-spring. However, as reported by the Danish International Development Agency (DANIDA 2003), provision of services for maintaining livestock is "*inadequate, ineffective and infrequent*", particularly in remote areas such as the *chars*; the report recommended the need for extension services and training of farmers to improve livestock management and productivity⁵. Those services that do exist focus mostly on high potential areas, offering breeding and health services that the poor cannot afford. Prior to CLP intervention, livestock service provision on the *chars* was minimal, with inadequate support from government livestock services and rates of livestock mortality and morbidity were high (ibid.). To maintain the health of the core and non-core participants' cattle and strengthen animal productivity, CLP trained a number of LSPs to complement the ATP initiative; this helped to lower the cattle mortality rate among CLP provided cattle to 0.49% by the end of May 2009, with reduced morbidity due to vaccination and anthelmintic treatment⁶.

The agro-climatic and geographical features of the *chars* presents further challenges to livestock rearing and maintenance of the health and well-being of cattle. Without paved roads and motorised vehicles on the mostly sandy terrain, it is difficult for LSPs to travel around the *chars* efficiently to meet their clients' needs. Annual flooding on the flood-prone *chars* further restricts movement around and between the *chars*. Therefore a large

⁴ The working districts of CLP-1 were: Kurigram, Gaibandha, Bogra, Jamalpur and Sirajganj.

⁵ DANIDA (2003 p18) Livestock Services and the Poor in Bangladesh; a Case Study.

⁶ CLP, Maxwell Stamp (2010) Chars Livelihoods Programme – Bangladesh, Final Report for DFID.

number of LSPs must be located strategically across the *chars*; CLP trained 387 under CLP-1.

Weak communication also hinders service provision on the *chars*, as the lack of electricity on remote *chars* makes it difficult to charge mobile telephones and LSPs are often unable to reach clients quickly to provide emergency support or coordinate effectively with other agricultural and livestock service providers. Furthermore without electrical power, vaccines and medication cannot easily be stored in cold fridges and the vaccine-cool-chain cannot be sustained. To enable maintenance of a vaccine-cool-chain on the *chars*, a mixture of 35 AC and solar-fridges were distributed to selected 'host' LSPs. CLP subsidised the fridges and the host LSPs were encouraged to form associations to share the fridge with other LSPs in the locality.

The main role of LSPs is to:

- Vaccinate livestock and poultry;
- De-worm livestock and poultry;
- Provide primary treatment and medicine;
- Procure and supply vaccines and feed;
- Raise awareness of effective livestock management and productivity and improve animal husbandry skills on the *chars*;
- Facilitate training for CPHH poultry rearers to improve their yields for egg and meat sale;
- Offer advice on livestock rearing and fodder production.

1.3 Objectives of the study

This study assesses the sustainability of CLP trained LSPs on the *chars* and will enable CLP's operations division (OPs) to gain further insight into the extent to which CLP-1 LSPs have been successful, identify the practices of successful LSPs and consider whether the LSPs are likely to continue this livelihood without CLP support. The study also assesses the extent of LSPs' entrepreneurial activities and attempts to gauge the attitudes of the *char* dwellers towards livestock services. With a growing number of livestock on the *chars* as a result of CLP's ATP, LSPs are central to other CLP market development initiatives, as they also provide a link between fodder production to feed the cattle and milk marketing from the milk produced. Additionally, the wide network of LSPs, due to the large number of households that they work amongst, makes LSPs key 'connectors'.

The aim of the study was to gain an overall picture of whether livestock services provision is a sustainable livelihood on the *chars* through and assessment of:

- the proportion of LSPs trained under CLP-1 who are still active as LSPs;
- the physical assets, income and social capital of LSPs following CLP LSP training;
- LSPs' practices which may contribute to the sustainability of their livelihood;
- the impact of CLP trained LSPs on the market for livestock services and goods on the *chars*;
- the awareness levels amongst core and non-core participants of the importance of livestock rearing.

The study examines LSPs' performance to gain a better understanding of their market environment, gauge the level of existing competition and identify the constraints that LSPs face, as well as their future aspirations. A secondary component of the study identified the main reasons why 73 of the total number of LSPs trained under CLP-1 stopped practicing before the end of CLP-1⁷. Together, the findings will inform and assist the CLP Market Development Unit to plan LSP activities under CLP-2, which aims to move away from a supply driven service, to more entrepreneurial business development on the *chars* for sustainable livelihoods.

2. Methodology

2.1 Data Collection

The sample of 108 LSPs (as outlined in the sampling methodology) was surveyed during the last two weeks of December 2010 and the first three weeks of January 2011 (over a period of 24 days). Three trained enumerators collected the data, reaching an average of 2 LSPs per day⁸. Training comprised one day in the classroom and two days in the field with IML staff from the 13th to the 15th of December 2010. During this time questions were also field tested and revised by IML accordingly to produce the final questionnaire (Appendix 1). Upon completion of data collection, the enumerators returned to CLP and provided qualitative feedback on the data collection process and the key findings. A number of questions guided the discussion and written feedback (Appendix 2). Of the 35 solar and AC fridges provided by CLP, 12 were visited by the data collectors to assess whether the fridges are still operating effectively and continuing to be used for their intended purpose⁹.

The raw data was analysed alongside the enumerators' feedback to formulate this report. From the data collected, three interesting case studies were selected to present more qualitative information on the sustainability of LSPs on the *chars*. The case studies selected focused on:

- one association that had been formed by a group of LSPs in Bogra;
- one LSP who was utilising a CLP solar-powered fridge in Sirajganj;
- one LSP who had invested in land and a motorbike in Sirajganj.

The LSPs selected for the case studies were revisited by IML staff during March 2011 and interviewed using open ended questions¹⁰. Supplementing the survey data with these case studies also served as a useful method of verifying the reliability of the data collected by the enumerators.

⁷ The methodology and findings from the survey of 'non-active' LSPs are set out in Appendix 3.

⁸ All three enumerators received appropriate training and were familiar with CLP.

⁹ The locations of all of the fridges provided in CLP-1 are shown in Appendix 4.

¹⁰ Findings from the case studies are presented in Appendices 5, 6 and 7.

2.2 Sampling Methodology

A total of 387 LSPs were trained under CLP-1; however 62 of these were still receiving support from CLP in December 2010, therefore were not included in this sustainability study¹¹. Of the remaining 252 LSPs, a representative sample of 108 LSPs was randomly selected as a statistically representative sample size to report on sustainability¹². The target of 108 is based on three enumerators aiming to reach two LSPs each day over a period of 18 working days. However enumerators were unable to meet the target of 2 LSPs per day and due to large distances between LSPs, the data collection extended to 24 days. The enumerators did not collect data for 5 LSPs because the LSPs were unreachable during the survey period; the total sample was 103 LSPs.

Among the total population of LSPs no longer receiving support, the 35 LSPs who were selected to house a CLP solar or AC fridge as part of the LSP project were identified from the 252 LSPs. From these 35 LSPs, 12 were sampled and this was divided proportionately between solar and AC fridges, as 8 and 4 respectively, based on the actual number of the fridge type. The 8 solar fridges and 4 AC fridges were selected randomly from the total. The sample of LSPs hosting solar and AC fridges was also divided proportionately between the five districts to ensure a representative sample as shown in table 1. A large majority of the remaining LSPs who do not host a CLP fridge have access to, and may have shared ownership of the fridge. These will be captured in the sample of 96 LSPs, which is representative of the total number of LSPs who do not house a CLP fridge. The breakdown of the sample is shown in table 1.

The random sample for this survey was obtained prior to piloting the questionnaire during the enumerators' field training. From the remaining LSPs that were not included in the main survey sample, the nine LSPs selected to participate in the field test in Bogra were chosen according to accessibility

¹¹ Only 314 of the 387 were still active upon completion of CLP-1. Explanations for the drop out rate of almost 20% are detailed in appendix 3, alongside the methodology and objectives...

¹² 19 LSPs in the random sample were located on the mainland, as opposed to remote island *chars*. These mainland LSPs have better access to markets and services, therefore may be in a more advantageous position than those on the remote island *chars*.

Table 1. Sampling distribution of LSPs with and without CLP provided solar and AC fridges across the five districts

District	Total Number of LSPs*			Number of LSPs in Sample		
	With Solar/AC Fridge		Without Solar/AC Fridge	With Solar/AC Fridge		Without Solar/AC Fridge
	Solar Fridge	AC Fridge		Solar Fridge	AC Fridge	
Bogra	4	1	26	1	1	11
Gaibandha	1	0	26	1	0	11
Jamalpur	5	4	39	2	1	18
Kurigram	6	4	66	2	1	30
Sirajganj	8	2	60	2	1	26
Total	24	11	217	8	4	96
Total	252			108		

*The LSPs referred to in this study are the 252 LSPs who stopped receiving support under CLP-1 during, or before June 2010 and no longer receive assistance from CLP.

3. Results

The study found that all of the LSPs trained by CLP who were still active as LSPs at the end of CLP-1 are still practicing and the majority (96.1%) earned over the target level of Tk 3000 profit per month. LSPs demonstrated that they have taken ownership of their business and engaged in self-sustaining activities by working through associations, maintaining relations with local government institutions, undertaking further training, raising awareness to increase their demand, ensuring a regular supply of vaccines and medication and investing in assets to enhance their delivery. The analysis below discusses how many LSPs are still practicing and whether their work as a LSP is sufficient as their sole income. The analysis reveals which services LSPs report to be delivering, whether they are serving CLP core households or non core households and how much they are earning. To assess the extent to which livestock services provision is a sustainable livelihood on the *chars* several indicators of sustainable practice were selected, these include:

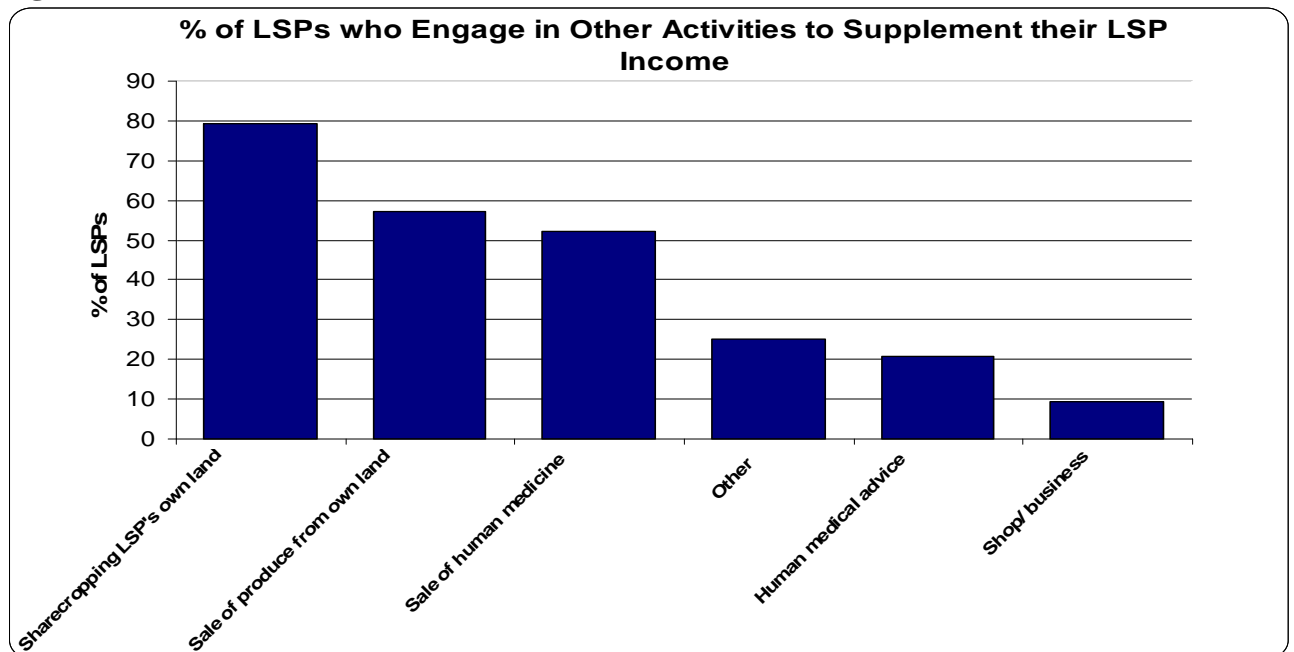
1. shop ownership;
2. bookkeeping;
3. membership of an association of LSPs;
4. raising awareness of services;
5. increased asset basis;
6. access to a fridge.

The analysis leads to further discussion of the constraints faced by LSPs, their aspirations and the existing market environment.

3.1 Who are the practicing LSPs?

Encouragingly, all of the LSPs trained by CLP that were active at the end of CLP-1 are still active as LSPs. However, most of these LSPs (93.2%) supplement their income with other work; sharecropping their own land is the most common supplementary livelihood (79.2%), followed by the sale of produce from the LSPs' own land (57.3%) and third is the sale of human medicine (52.1%). Figure 1 shows the variety of activities that LSPs engage in to supplement their income. Other includes cattle business, tutoring and milk sale.

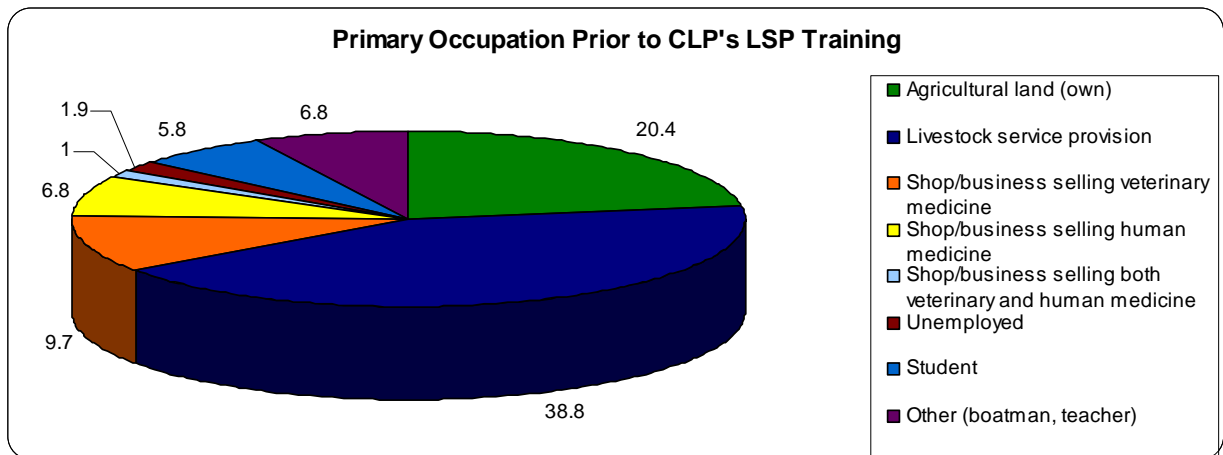
Figure 1



This indicates that whilst supply and demand for agricultural services remains high enough for LSPs to continue to operate, in most cases the profit is insufficient for the LSP to rely solely upon the income from livestock services provision. Seasonal factors also play a role in income, for example LSPs reported that the demand for livestock treatment is higher during the rainy season when diseases are more widespread. Therefore LSP income would complement their agricultural activities, which require more labour during the drier seasons.

Prior to receiving LSP training from CLP, 38.8% and 9.7% of the LSPs practiced livestock services provision as their primary occupation and secondary occupation respectively. Therefore approximately half of the LSPs trained under CLP did not previously generate their main income from livestock services. Figure 2 shows the primary occupations of LSPs prior to receipt of the CLP LSP training, 'other' includes boatmen and teachers. The most common primary occupation after livestock services provision (38.8%) was agricultural labour on LSPs' own land (20.4%) and sale of veterinary medicine (9.7%). 8.2% also undertook agricultural work on their own land as a secondary occupation and 10.7% had a shop/ business selling veterinary medicine as a secondary livelihood prior to receiving CLP training.

Figure 2



3.2 What services are the LSPs providing?

LSPs serve a mean of 309.7 households per month (core and non-core households). Approximately 25.7% of households served are CPHHs, whilst the remaining 74.3% are non-core, as shown in figure 3. This indicates that even without CLP ATP, there exists a high number of livestock, with potential demand for service provision¹³.

Figure 3

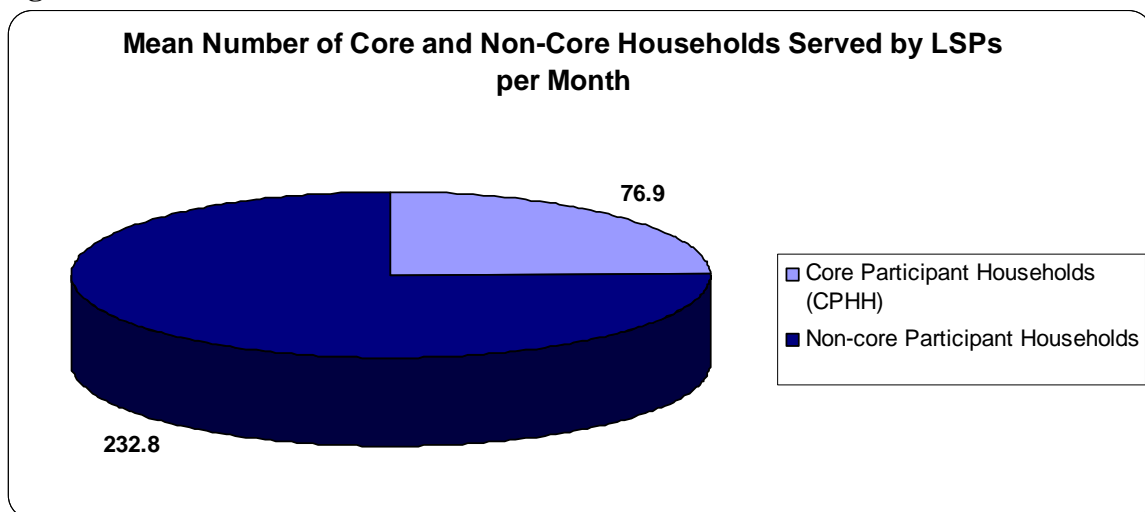
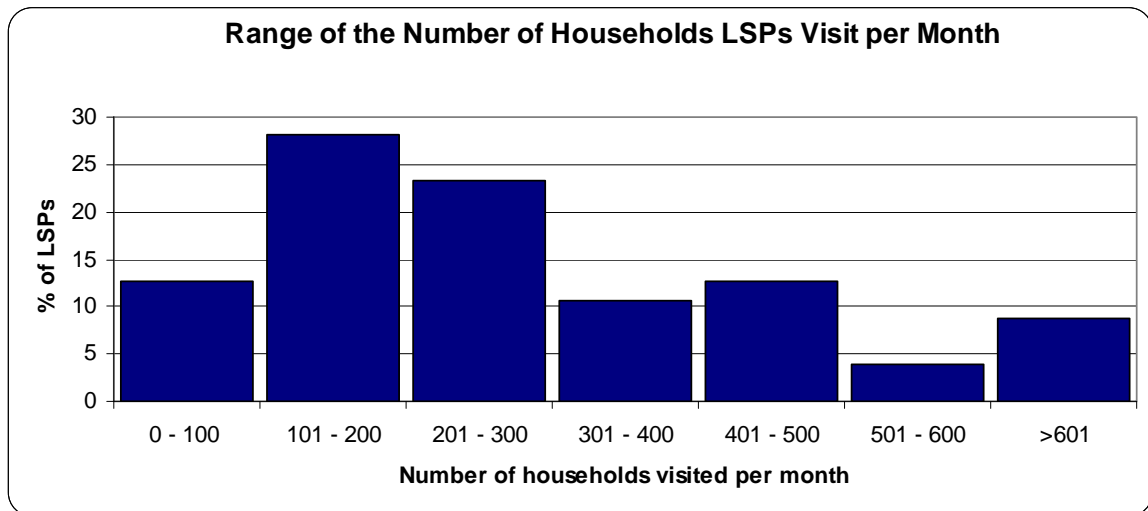


Figure 4 shows the range of the number of households that LSPs visit per month and it can be seen clearly that a large proportion of LSPs visit between 100 and 300 households and surprisingly 8.7% of LSPs reported that they visited over 600 households per month.

¹³ These data do not provide information on the proportion of the CPHHs who are seeking the services of the CLP LSPs, further interviews with CPHHs could be conducted to obtain this information.

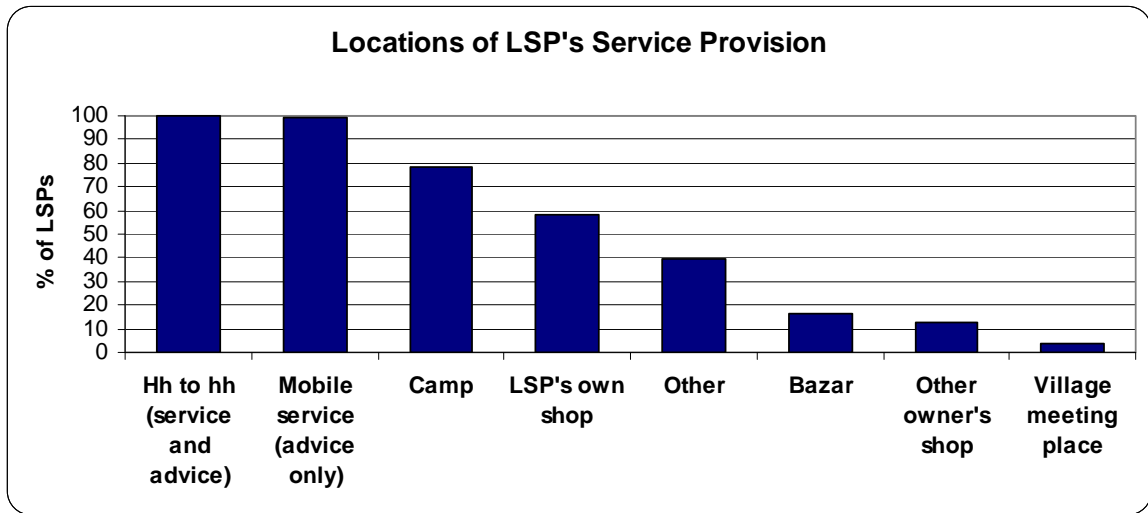
Figure 4



The main services delivered include vaccination, de-worming, primary treatment, supply of vaccine, medicine and feed. The most requested service is primary treatment (81.6% first most requested), followed by de-worming and livestock vaccinations. The least requested are fodder sale, commercial livestock feed sale, poultry vaccinations, cattle-fattening and Artificial Insemination (AI) (6.8%). This information, combined with the results of the most profitable services helps to provide some indication of where the largest proportion of LSPs' income is derived.

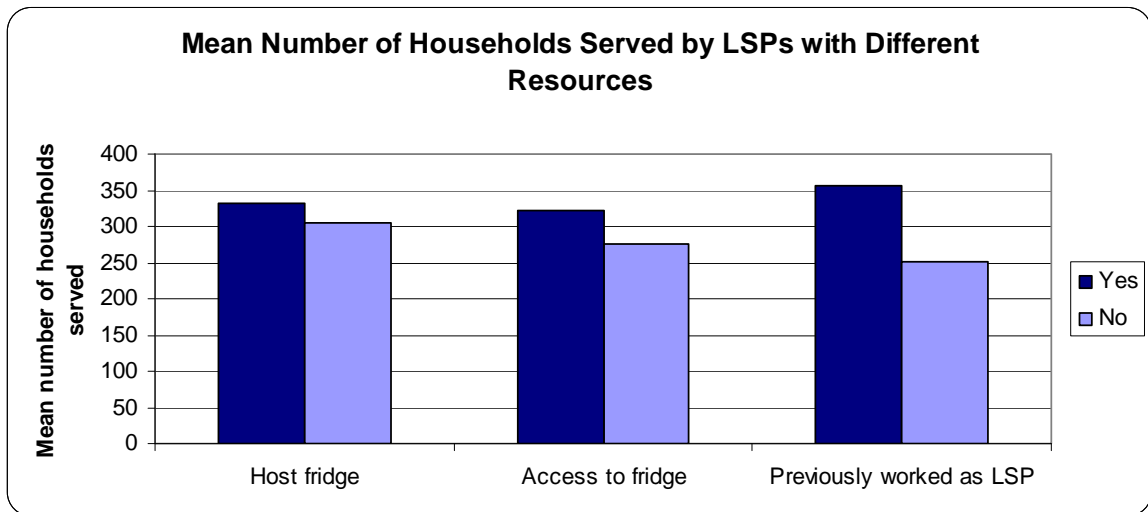
As shown in figure 5, all LSPs reported that they provide a household to household service and 99% also provide a mobile service which delivers advice without treatment. A high proportion of the LSPs also reported having a permanent location from which they practice from; 58.3% of LSPs have their own shop and 12.6% practice from other owners' shops. Other locations include LSP's home and community based organisations (CBOs). The percentage of LSPs reporting that they provided services in camps is surprisingly high and suggests these rates for camps, as shown in figure 5 could be higher than the actual practice. These camps run from an accessible and visible location in the community and are aimed at raising awareness of the importance of rearing cattle effectively, services such as vaccinating and de-worming are offered and information is distributed.

Figure 5



The LSPs who worked as LSPs prior to receiving training from CLP serve significantly more households than those who were not previously engaged in this work, as shown in figure 6¹⁴. LSPs who host a fridge, or have access to a fridge, visit more households than those who do not, however the differences are not statistically significant.

Figure 6



3.3 What are the LSPs earning?

The mean profit of LSPs per month is Tk 8,806. 96.1% of LSPs earn above Tk 3,000 profit per month. As shown in table 2, the mean gross income per month is Tk 15,075 and the mean expenditure is Tk 6,269¹⁵.

¹⁴ The level of significance selected is 0.05 ($p < 0.05$), therefore results from the analysis of variance (ANOVA) test that give results where $p < 0.05$ are statistically significant.

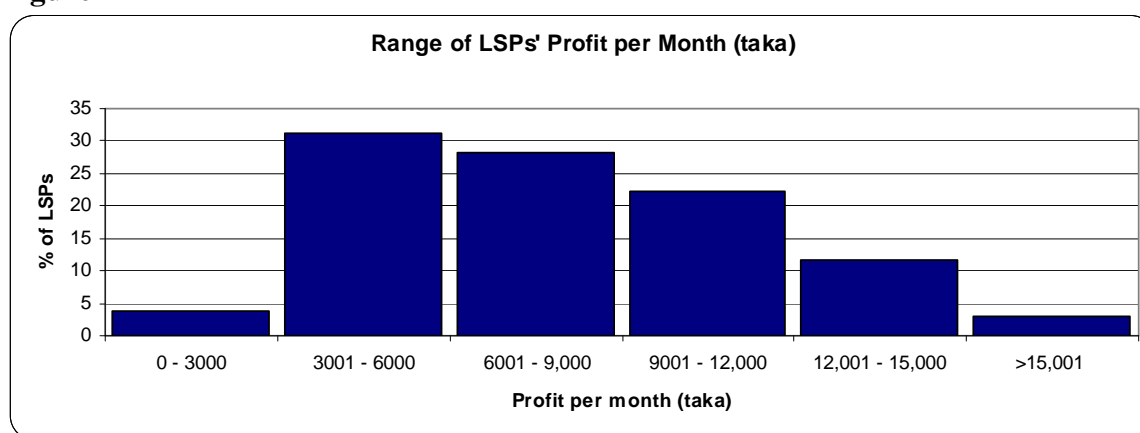
¹⁵ Figures refer to income, expenditure and profit from LSP activities alone, not supplementary sources of income.

Table 2: Mean income, expenditure and profit

Mean gross income (per month)	15,075 taka
Mean expenditure (per month)	6,269 taka
Mean profit (per month)	8,806 taka

The range of monthly profit earned by LSPs is shown in figure 7, it is clear that a large proportion of LSPs (59.3%) earn between Tk 3001 and Tk 9000 per month. However the reliability of these data may be questioned as most of the LSPs report that they do not maintain records of their financial transactions and approximate figures are recalled from memory. Future surveys could breakdown the income sources more to gain a more detailed understanding of which are the most profitable sources of income.

Figure 7

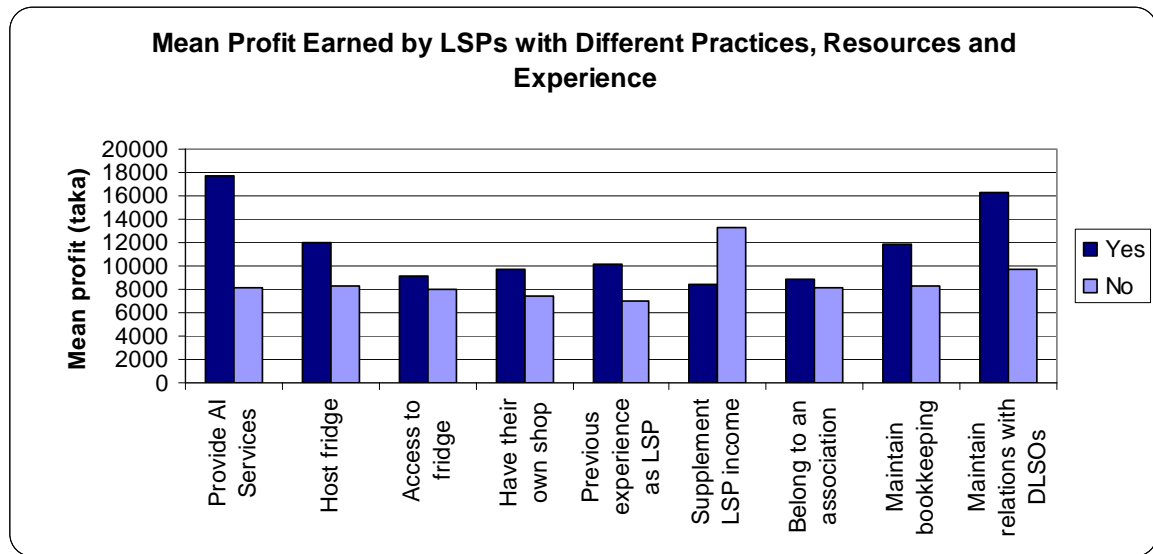


The most profitable services are primary treatment, followed by sale of de-worming tablets, de-worming of cows and vaccination of cows. The least profitable services provided are vaccine sale, vaccination of animals other than cows and goats and sale of commercial livestock feed.

The LSPs who earned the largest profit were the 6.8% who reportedly provide AI services, these LSPs earned a mean profit of Tk 17,714, those who continue to contact District Livestock Services Officers (DLSOs)¹⁶ made high profits and those who do not supplement their income with income from other activities also made the largest profit. There is a statistically significant difference in LSPs' profit regarding whether they had previous experience as an LSP, whether they host a fridge, have their own shop, practice bookkeeping, offer AI services and whether they have maintained relations with CLP's DSLOs, as shown in figure 8.

¹⁶ Under CLP-1, 41 DLSOs were recruited by the IMOs, with each DLSO supporting approximately 8 LSPs. DLSOs completed their work in all areas except for Kurigram and Gaibandha, as there are now 7 DLSOs recruited directly by CLP working in CLP-2 working areas. However CLP-1 LSPs have continued to contact DLSOs for support, often informally by mobile phone.

Figure 8



3.4 LSP's practices

To assess the likelihood of the LSPs continuing to practice, the following were considered to be good indicators of self-sustaining strategies to maintain livestock services provision:

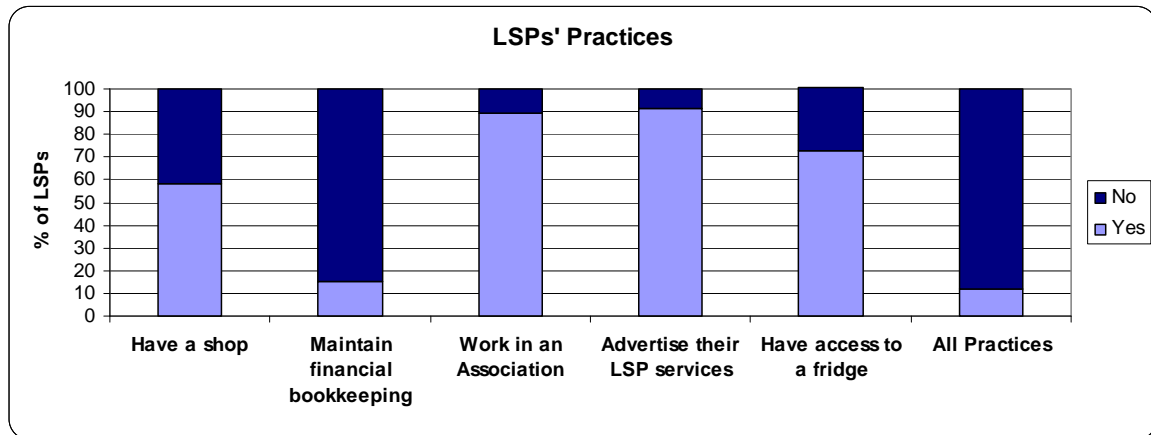
Table 3: Reasons for the choice of practices to indicate sustainability of LSPs

Practice	Indicator of sustainability
Veterinary shop ownership	Regular and reliable supply of vaccines and medicine, suggests a degree of permanence.
Bookkeeping ¹⁷	Effective planning and business management.
Membership of a livestock/ agricultural association	Collective capacity for coordination, information sharing and purchasing in bulk to increase economies of scale.
Raising awareness through advertising services	Building and maintaining demand for LSPs' services.
Having access to a fridge	Maintaining the vaccine-cool-chain to enable storage of vaccines and help increase the range and quality of services LSPs are able to offer.

The percentage of LSPs who reportedly engage in these activities is shown in figure 9. 11.7% engage in all five practices and 54.4% of LSPs engage in four of these listed practices.

¹⁷ CLP did not provide bookkeeping training, however set a format for bookkeeping practice and encouraged the LSPs to keep records.

Figure 9



3.4.1 Shop ownership¹⁸

Having a well-stocked shop facilitates a regular and reliable supply of vaccines and medication to provide to livestock owners on the remote *chars* and 58.3% of LSPs reported that they practice from their own shop. LSPs who work from a shop also demonstrate long term investment and a degree of permanence. LSPs with their own shop earn more profit on average than those who do not.

3.4.2 Bookkeeping

Maintaining financial records of incomes, expenditure and profits can help LSPs to plan their work and manage their funds effectively. Bookkeeping also demonstrates a business-minded approach and potential for expanding entrepreneurial activities. However, only 15.5% of LSPs reported that they practice bookkeeping and this was supported by the observed evidence of their records. This raises questions over the reliability of the data gathered on income.

3.4.3 Associations

Strong local collective capacity can increase LSPs' representation and potentially stimulate partnerships with the private sector, which are necessary for sustainability. Coordination, information sharing and bulk purchasing through associations of LSPs and other local agricultural services providers can potentially enhance market information, facilitate economies of scale and improve efficiency. 89.3% of LSPs reported working in an association, most of which were formed during the period of CLP support. An example of one association in Bogra can be seen in Annex 4.

97.8% of the LSPs who reported working in association said that the association meetings are held on a 'needs basis', some held meetings weekly (17.4%), monthly (13.0%), fortnightly (2.2%) and others quarterly (1%). As shown in table 3, all LSPs who participate in an association reported that the nature of their association is to share experiences from practice, 50% said it was to purchase in bulk from suppliers, 48.9% reported that it was to purchase medicine from other LSPs and only 1.1% reported that they coordinated the service provision areas to target.

¹⁸ Ownership usually refers to renting and/ or leasing the land where the shop is located.

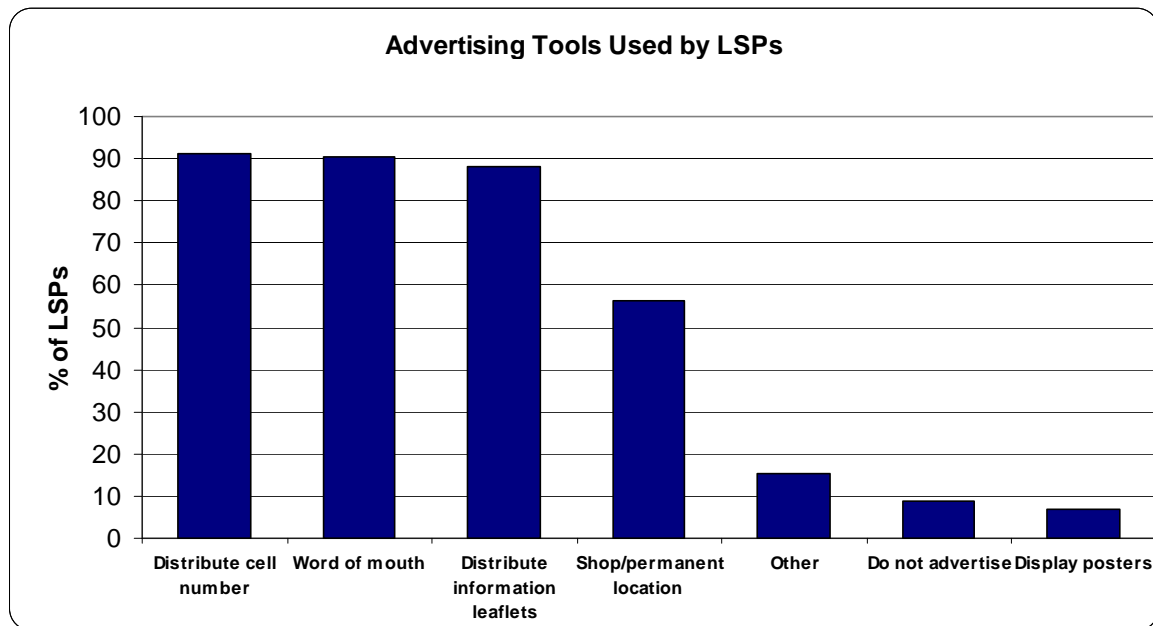
Table 4: Type of associations LSPs participate in

Type of association	%
Sharing experiences from practice	100.0
Purchasing in bulk	50.0
Purchasing medicine from another LSP	48.9
Other 1 (information collection and sharing, discussing problematic cases etc)	5.4
Coordinating service provision areas to target	1.1

3.4.4 Publicity

Raising awareness of the importance of rearing healthy livestock and the livestock services available, such as vaccinating against diseases is key to building and maintaining the demand for LSPs' products and services. The most popular form of awareness raising regarding LSP services was through distribution of the LSPs' mobile phone number (91.3%). 90.3% of LSPs reported that their services were advertised by word of mouth, only 6.8% used posters to advertise and 8.7% reported that they did not advertise their livestock service. Figure 10 shows the variety of advertising tools used by LSPs; 'other' includes using business cards.

Figure 10



The enumerators commented that the LSPs reported *char* dwellers to be more aware of the necessity to take care of their livestock compared with the period before the CLP LSPs began to work on the *chars*. However this is not the case in all areas, as other qualitative sources claimed that a more scientific understanding of livestock rearing and healthcare has not yet been accepted and one LSP reported that his clients were not convinced of the benefits of vaccinating their cattle (see appendix 6). Publicising LSP activities is likely to help to overcome these social barriers to vaccinations, increase the demand for services and contribute to sustainability.

3.4.5 Maintaining the vaccine-cool-chain

A vital component of the LSPs' work is to vaccinate livestock, however this requires the ability to store and transport the vaccines in a cold environment. 72.8% of LSPs reported that they have access to a fridge, of these only 52.0% had access to a fridge which was provided by the CLP. Other fridges were owned by neighbours, relatives and local shop owners who purchased the fridge themselves. Where there was no fridge available, 35.7% reported that they did not offer a vaccination service and 64.3% reported that they used the CLP provided cool box to store and transport vaccines.

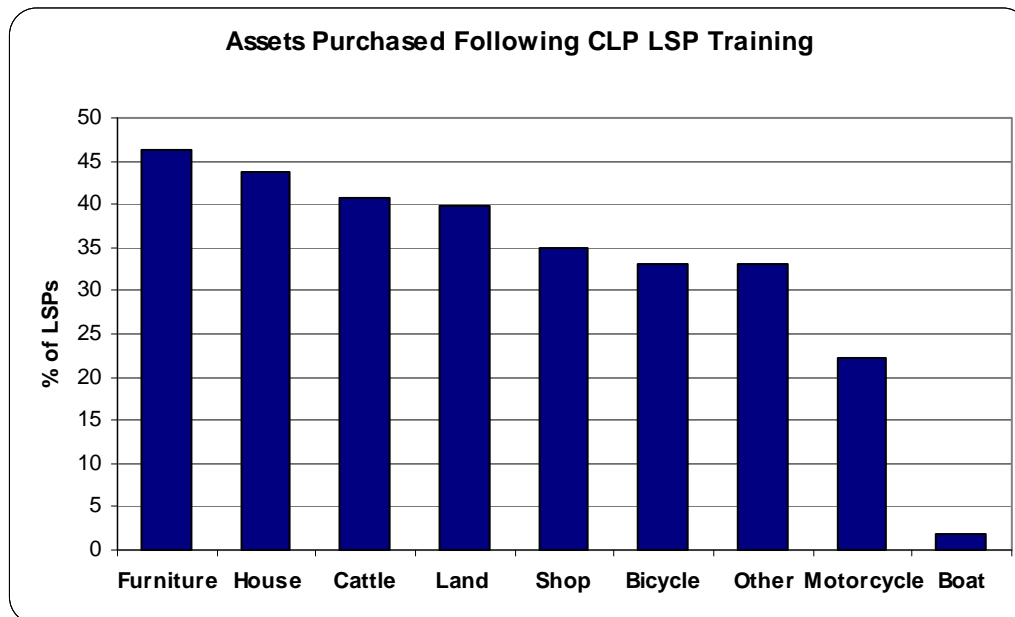
3.5 Assets

A useful indication of the success of LSPs is their increased asset basis, which can be both physical and social.

Physical

Investment in productive assets such as cattle, land, a shop, bicycle, motorcycle and a boat may further increase income and may contribute to the self-sustaining approach. Figure 11 shows that 35% of LSPs purchased a shop after they began working as CLP LSPs, 33% purchased bicycles and 22.3% purchased motorcycles, which are likely to increase the efficiency with which LSPs can travel around the *chars* to visit their clients. 'Other' includes TVs, solar panels and mobile phones.

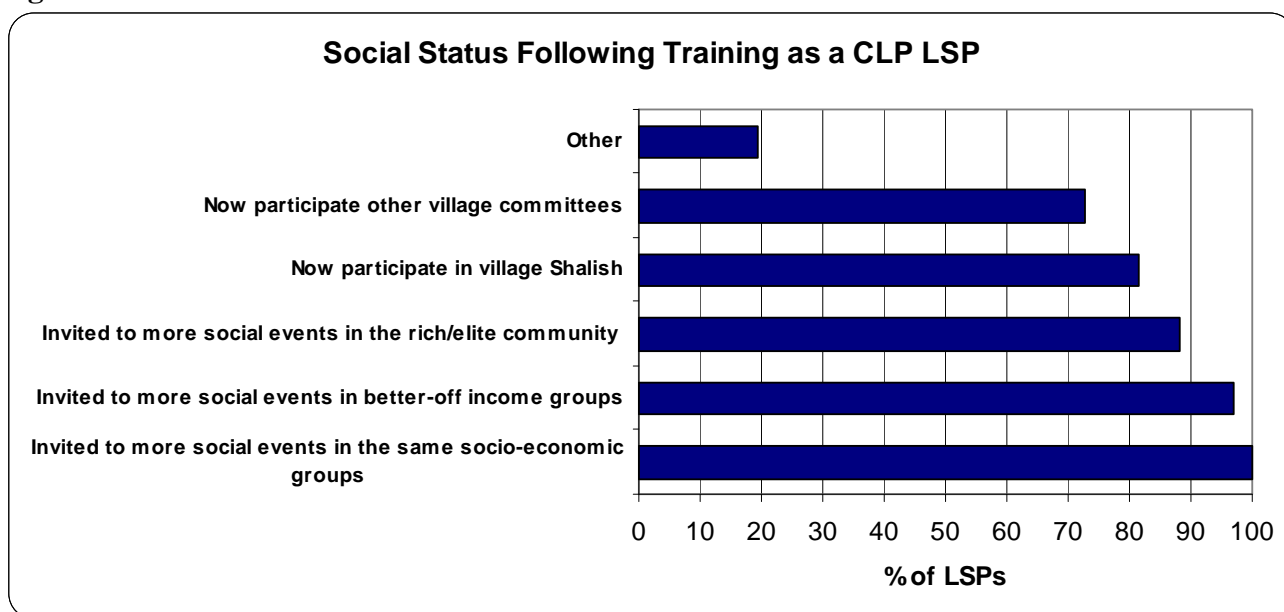
Figure 11



Social Status

LSPs reported to have a high social status within the community and are relatively influential, engaging in local decision making. With more respect, LSPs are more likely to maintain their livelihood security and clients.

Figure 12



3.6 Maintenance of relations with DLSOs

As part of the support from CLP, LSPs engaged in quarterly meetings with DLSOs, however after withdrawal of CLP support 72.8% of LSPs report that they have contacted DLSOs in the last 6 months, mainly seeking advice on treatment and 27.2% of LSPs reportedly have no relation with DLSOs now. Facilitating linkages with government livestock services such as Upazila Livestock Officers (ULOs) could provide a long term support system instead of CLP DLSOs to enhance the sustainability of LSPs.

Table 5: The purpose of LSPs’ contact with DLSOs

Purpose of contact with DLSO	% of LSPs
Advice on treatment	62.7
Livestock treatment (Badla, Anthrax, Golafula, Khura)	29.3
Acquiring vaccine	8.0
Identifying livestock diseases	4.0
Learning about livestock medicine	2.7
Training	1.3
Monthly meeting	1.3
Personal	1.3
Other (planning for a camp)	1.3

3.7 Market Competition

85.7% of the non-CLP LSPs were reportedly working in the area before CLP began training LSPs, this indicates that there was a market existing before CLP’s intervention, however most other LSPs were not attached to an organisation¹⁹. LSPs indicated that

¹⁹ Non-CLP LSPs found to be operating in are attached to BRAC, SSS (Society for Social Services), Solidarity, Upazila Livestock hospital, Upazila Livestock Office, GUK (Bogra), DIDP, CARE, GUK (Gaibandha) and Samakal.

CLP's training was of a high level compared with other organisations²⁰. Just over one third of CLP LSPs (34.5%) work in partnership with non-CLP LSPs. More qualitative discussions suggest that there has been a gradual change in the market environment for livestock over the past 4-5 years, which has brought a growing demand for livestock services. The demand has been met with a supply and subsequently created competition between LSPs in some areas and only 18.4% of LSPs reported that no other LSPs operate in the same area as them.

24.3% of LSPs reported that they had received assistance or training from an organisation other than CLP. Of these 4% of these received assistance from a private company (ACI - Godrej Agrovvet) and 16% reported that they received support from NGOs (Ashania mission, BRAC, CARE, Proshika). 80% received assistance or training from the GoB for treatment related assistance from a GoB veterinary surgeon or ULO and one LSP received financial support from Upazila Livestock Office. GoB training included training on AI, avian flu and training through the second phase of the GoB Participatory Livestock Development Project (PLDP II). Linkages with these livestock services could perhaps be explored and pursued by CLP-2.

4. The future of livestock services on the *chars*

The LSP project will continue under CLP-2 in a slightly modified form. An additional 307 LSPs will be trained and poultry vaccinators will be introduced to the programme's new working areas. In contrast to CLP-1, which selected all male LSPs, CLP-2 will include female LSPs. By putting women in a position of responsibility, which has a high social capital attached encourages more equal gender relations and could contribute to making a sustainable impact on the extreme poor.

Qualitative questions in the interviews with LSPs revealed that the LSP's have further hopes that CLP will:

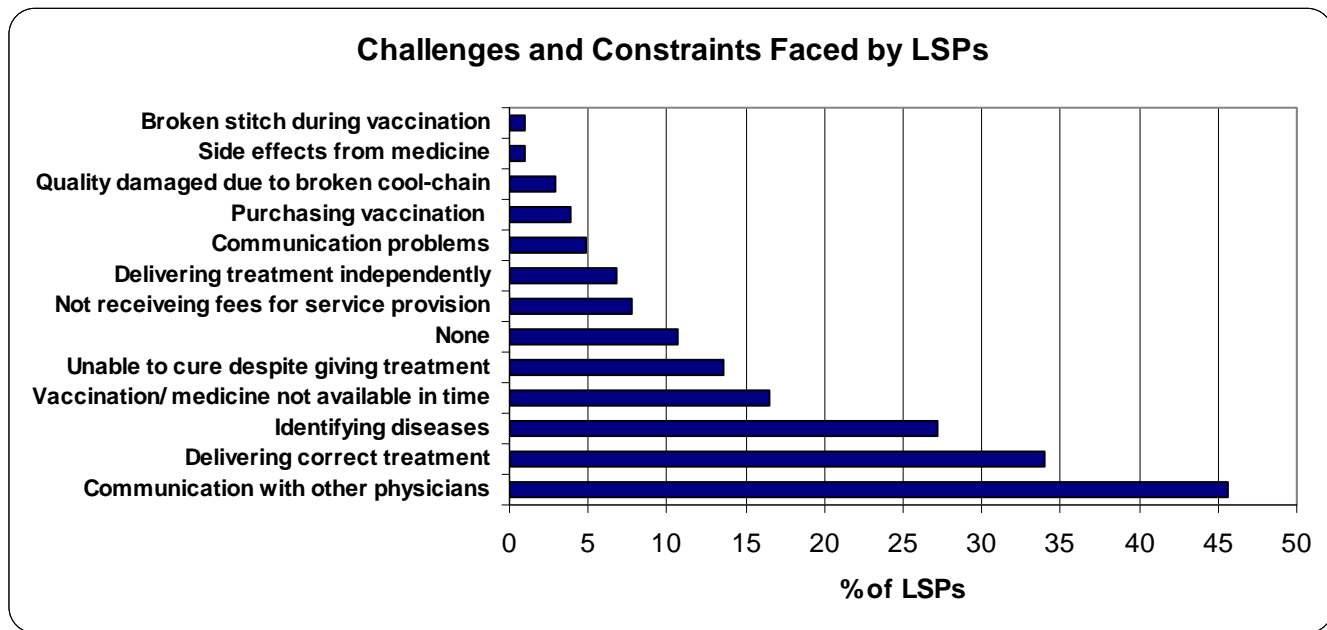
- Arrange AI training for the LSPs;
- Arrange refresher trainings for the LSPs;
- Provide some improved surgical instruments and training on minor surgery;
- Facilitate better linkages with ULOs;
- Provide more fridges in the *char* area.

4.1 Constraints and challenges

This study reveals that the main challenges faced by LSPs are communication with other livestock physicians, the ability to provide the appropriate treatment and the correct identification of diseases and health problems. Others expressed concern over their inability to respond to complex cases where advanced surgical tools and knowledge of procedures were required. This indicates that LSPs require further technical training and assistance to increase their knowledge and skill in livestock services provision. Constraints like this could be overcome by implementation of refresher training and training for conducting minor surgical operations.

²⁰ Some LSPs received other training from BRAC, CARE, Proshika, Ahsania mission and ACI (Godrej Agrovvet, private medical company).

Figure 13



Qualitative feedback from the enumerators highlighted that purchasing vaccines is problematic for many LSPs and some even face harassment with government officers at government outlets such as union livestock offices, where vaccines are sold. Some LSPs have stopped buying vaccines because they refuse to pay the demanded price for vaccines, which are above the official sale price. Transportation is also a major problem for LSPs on the *chars* due to the sandy terrain and annual flooding.

5. Conclusion

This study assessed the sustainability of livestock services provision as a livelihood on the *chars* for the LSPs trained under CLP-1, who no longer receive support from CLP. The findings provide OPs with insight into the income levels of LSPs, the demand for LSPs' services, the market for livestock services on the *chars* and inform OPs of the key challenges faced by LSPs.

Overall the results show that the LSPs have been successful and are running sustainable businesses on the *chars*; all of the LSPs active at the end of CLP-1 are still practicing and 96.1% are earning over Tk 3000 in profit per month. Less optimistic was the finding that 73 LSPs dropped out of the initiative prematurely and were no longer active as LSPs at the end of CLP-1. Findings from the secondary survey to follow-up the drop-outs highlighted common explanations for the number of drop-outs and pointed to some approaches that could be adopted in selection to avoid high drop-out rates in CLP-2. Nonetheless both quantitative and qualitative data reveal that there is a large and growing demand for livestock services, as more *char* dwellers are aware of the importance of livestock rearing and the cattle population is increasing with NGOs' investment in cattle and lower mortality. The demand is being met by the supply of LSPs and in some areas there is healthy competition between LSPs.

Encouragingly approximately 75% of LSPs' clients are from non CPHHs, therefore LSPs are not dependent upon clients who have received cattle from CLP's ATP. However, most LSPs (93.2%) still supplement their LSP income with another income source. LSPs who earned the largest profit were those who maintained contact with DLSOs, had previous experience as a LSP, hosted a fridge and maintained financial bookkeeping.

The level of the quality, the range of services offered by LSPs and the extent of LSPs' entrepreneurial practices are all varied, for example areas on, and closer to the mainland are more developed, therefore the LSPs the opportunity to earn more money. The main challenges faced by LSPs are communication with other LSPs and experienced physicians, diagnosis of diseases previously unknown to the LSP, provision of the correct treatment and timely acquisition of vaccines and medication. Key lessons can be drawn from these findings and applied to CLP-2 to improve the LSP project under CLP-2.

6. Recommendations

Several recommendations can be made based on the findings of this study, these could be applied to the LSPs trained and supported by CLP under CLP-2:

- The LSPs' dissatisfaction with the extent of training could be overcome by **refresher training**, which would further develop the **technical skills** of the LSPs. Training could include AI, minor surgical operations, knowledge of how to respond to complex cases and the training sessions would simultaneously provide a forum for LSPs to share experiences with each other and seek advice on problems that have arisen. Alternatively further training could be delivered by those organisations which are already delivering training, CLP could facilitate training of CLP LSPs under government training schemes.
- **Business centred refresher training**, which reiterates and encourages activities such as bookkeeping and offers further assistance in developing business skills and enhancing communication could improve LSP's entrepreneurial activities to promote growth and sustainability, balanced with ethical considerations. Furthermore emphasis should also be placed on the importance of establishing and maintaining relations with government livestock services offices such as ULOs.
- There is potential to **deepen the LSPs' coordination** and improve efficiency in supply chains, for example through relations with suppliers such as pharmaceutical companies and utilisation of partnerships and associations.
- CLP-2 could increase the number of **women in LSP positions**, as putting women in a position of responsibility with high social capital attached encourages more equal gender relations and could contribute to making a sustainable impact on the extreme poor.
- CLP could provide **more subsidised solar and AC fridges** to ensure all LSPs have access to a fridge.
- **Regular (annual) monitoring** of LSPs' shop ownership, association membership, access to fridges, asset purchase and bookkeeping could usefully show sustainability of livestock services provision on the *chars* and identify areas that are inhibiting sustainability.

- **Further research** on non-core and CPHHs' **willingness to pay** for LSP services, as well as their **satisfaction** with the services and general feedback could shed more light on the sustainability of LSPs to supplement the findings of this study.
- A **study to assess the proportion of CPHHs that use CLP trained LSPs' services** might provide further information on the demand for LSPs' and the sustainability of their livelihood.
- Finally, greater attention should be taken in **selecting LSPs** to ensure that the LSPs are not over-qualified, live on a *char* and have a future plan to remain in the area and continue LSP work.

Appendix 1: Final Questionnaire for LSPs

Chars Livelihoods Programme Innovation, Monitoring and Learning Division

LSP Study

Date: ___/___/___ (Day/Month/Year)

Name		Code		
District:		District:		
Upazila:		Upazila:		
Union:		Union:		
Village:		Village:		
IMO:		IMO:		

1.	Category of sample LSP: (1=LSP with Solar fridge, 2=LSP with AC fridge, 3=LSP without fridge)	
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2.	Name of LSP	
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3.	When did you receive your first and last (refresher) LSP training from CLP? (Please give month and year). Certificate for first training can be checked by enumerator if available.
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Date of first training (a)	Date of last refresher training (b)

4.	How many years have you been working as a CLP LSP?	
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5.	How many of the following areas do you currently operate in?	
a. Unions		
b. Villages		

6.	Did you have experience in livestock services provision before CLP LSP training? (1=Yes, 2=No)	
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7.	If Q6=yes, where did you receive training? (please provide other details of LSP practice before becoming a CLP LSP under 'comments')	
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SL	Training	Code	Comments
a.	Government		

b.	BRAC		
c.	Other NGO		
d.	Private service provider		
e.	Other (please specify).....		

CODE: 1=Yes, 2=No

8.	What were your main sources of income/livelihood before becoming a CLP LSP?
-----------	--

SL	Livelihood	Code		Comments
		Primary	Secondary	
a.	Agricultural land (own)			
b.	Provision of medical advice			
c.	Day labourer (agricultural)			
d.	Day labourer (non-agricultural)			
e.	Rickshaw puller			
f.	Livestock service provision			
g.	Shop/business selling veterinary medicine			
h.	Shop/business selling human medicine			
i.	Shop/business selling both veterinary and human medicine			
j.	Other shop/business			
k.	Fishery			
l.	Unemployed			
m.	Student			
n.	Other (please specify)			

CODE: 1=Yes, 2=No

9.	Are you still providing services to CLP core (ATP) and non core households? (1=Yes, 2=No)	
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10.	If Q9=yes, how many households do you provide with services in total per month?	
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11.	If Q9=yes, how many of these are CORE (ATP) participant households (per month)?	
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12.	How many cases have you attended in the past two weeks?	
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13.	What services are you currently providing? (can be multiple)	
------------	---	--

SL	Service Provided	Code
a.	Primary Treatment	
b.	Vaccinating (livestock)	
c.	Vaccinating (poultry)	
d.	De-worming	
e.	Commercial livestock feed sale	
f.	Cattle fattening	
g.	Fodder sale	
h.	Artificial Insemination (AI)	
i.	Sale of livestock medicine	
j.	Other (please specify).....	

CODE: 1=Yes, 2=No

14.	Which is the most requested service? Please rank the most requested 3, with 1 as most requested, 2 = second most requested and 3 = third most requested service.	
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SL	Service Provided	Code
a.	Primary Treatment	
b.	Vaccinating (livestock)	
c.	Vaccinating (poultry)	
d.	De-worming	
e.	Commercial livestock feed sale	
f.	Cattle fattening	
g.	Fodder sale	
h.	Artificial Insemination (AI)	
i.	Sale of livestock medicine	
j.	Other 1 (please specify).....	
k.	Other 2 (please specify).....	

15. If you source supplies, where are they from and what is their quality?
(can be multiple)

SL	Source	Vaccines (Source & Quality)	Medicines (Source & Quality)	Feed (Source & Quality)	Comments
a.	Government (DLS)				
b.	Private company				
c.	NGO				
d.	Other LSPs				
e.	Medicine shop in local bazaar				
f.	Other shop in local bazaar				
g.	Medicine shop in district bazaar				
h.	Other shop in district bazaar				
i.	Other 1 (please specify).....				
j.	Other 2 (please specify).....				

CODE: 1=Very low, 2=Low, 3=Medium, 4=High, 5=Very high, 6=Don't know, 7=Not sourcing

16. Where do you provide your livestock service provision from at present?
(can be multiple).

SL	Location	Code	Comments
a.	Household to household (providing service)		
b.	Mobile service (providing advice only)		
c.	LSP's own shop		
d.	Other owner's shop		
e.	LSP's own house		
f.	Village meeting place		
g.	Bazaar		
h.	Camp		
i.	Other 1 (please specify).....		
j.	Other 2 (please specify).....		

CODE: 1=Yes, 2=No

17. If LSP has own shop please observe and give details of how well it is stocked and other important observations.

18. Currently, how do you advertise your livestock services? (Can be multiple).

SL	Advertising Tool	Code	Comments
a.	Do not advertise		
b.	Word of mouth		
c.	Distribute cell number		
d.	Have a shop/permanent location where people know where to access services		
e.	Distribute information flyers		
f.	Posters		
g.	Other (please specify).....		

CODE: 1=Yes, 2=No

19. What mode of transport do you usually use to deliver your services and collect inputs and resources during the dry season?

SL	Transport	Code		Comments
		Deliver services	Collect inputs	
a.	Foot			
b.	Bicycle			
c.	LSPs own motorbike			
d.	Borrowed motorbike			
e.	Boat			
f.	Rickshaw			
g.	Bus			
h.	CNG			
i.	Horse and cart			
j.	Other 1 (please specify).....			
k.	Other 2 (please specify).....			

CODE: 1=Yes, 2=No

20. For livestock service provision ONLY, please estimate the value (in Taka) of the following per month at present:

SL	Value in Taka	Comments
----	---------------	----------

a.	Gross income per month (Taka)		
b.	Expenses per month (Taka) (include transport, purchase of resources, rent for shop etc.)		
c.	Profit (per month)		

21.	Do you have a register to record details about clients and services? Observation required if possible. (1=Yes, 2=No)		b. Observation:	

22.	Do you have a bookkeeping system to record money transactions? Observation required if possible. (1=Yes, 2=No)		b. Observation:	

23.	What are the 5 most profitable services/sources of income as a LSP? Please rank the first 5 most profitable in order of the most profitable first – 1 to least profitable last – 5.
------------	--

SL	Service	Rank	Comments
a.	Primary treatment		
b.	Vaccinating cows		
c.	Vaccinating goats and sheep		
d.	Vaccinating other animals		
e.	De-worming cows		
f.	De-worming goats and sheep		
g.	De-worming other animals		
h.	Commercial livestock feed sale		
i.	Vaccine sale		
j.	De-worming tablet sale		
k.	Human medicine sale		
l.	Other 1 (please specify).....		
m.	Other 2 (please specify).....		
n.	Other 3 (please specify).....		

24.	What is the average price that you charge for the following services?
------------	--

SL	Service	Price (Taka)	Does this include service charge?	Comments
a.	Vaccinating a bull			

b.	De-worming a bull			
c.	House call without any medicine or vaccines			

CODE: 1=Yes, 2=No

25.	To your knowledge, are there any other (non-CLP trained) people or organizations currently offering similar livestock provision services operating in this area? (1=Yes, 2=No). If no please skip to Q27.	
------------	--	--

26.	If Q25=yes, please give details:
------------	---

SL	Service	Code	Comments
a.	Did they begin operating in this area before CLP LSP training?		
b.	Are they attached to an organization? If yes please give details.		
c.	Do you work in partnership with them?		
d.	Other details		

CODE: 1=Yes, 2=No

27.	Are you supplementing your LSP income with any other source of income? (1=Yes, 2=No)	
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28.	If Q27=yes, how are you supplementing LSP work?
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SL	Other occupation	Code	Profit from this occupation per month (Taka)	Comments
a.	Agricultural labour on own land			
b.	Agricultural labour on other owner's land			
c.	Day labouring (non-agricultural)			
d.	Provision of human medical advice			
e.	Sale of human medicine			
f.	Fishery			
g.	Shop/business			
h.	Land leasing			
i.	Sale of produce from own land			
j.	Other (please specify)			

CODE: 1=Yes, 2=No

29.	If Q27=no, is LSP work sufficient to meet the needs of your family? (1=Yes, 2=No)	
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30.	If Q29=no, If No please give details.
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31.	What assets (if any) have you purchased from the income of this service, since becoming a CLP LSP?
------------	---

SL	Asset	Code	Comments
a.	Land		
b.	Shop (please specify type)		
c.	Motorcycle		
d.	Bicycle		
e.	Furniture		
f.	House		
g.	Boat		
h.	Cattle		
i.	Other animals		
j.	Other (please specify).....		

32.	Do you feel that your social status has changed as a result of becoming a LSP? Please give an example (can be multiple)
------------	--

SL	Indication of social status before becoming an LSP	Code	Comments
a.	Now participate in village <i>Shalish</i>		
b.	Now participate other village committees		
c.	Invited to more social events in the same socio-economic groups		
d.	Invited to more social events in slightly better-off income groups		
e.	Invited to more social events in the rich/elite community before		

f.	Other 1 (please specify).....		
g.	Other 2 (please specify).....		
h.	Other 3 (please specify).....		

CODE: 1=Yes, 2=No

33.	Have you had any contact with DLSOs over the past 6 months? (1=Yes, 2=No)	
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34.	If Q33=yes, please give details and the purpose of contact.
------------	--

35.	Are you currently working collectively in any associations with other LSPs or other service providers, for example purchasing in bulk etc? (1=Yes, 2=No). If no please skip to Q38	
------------	---	--

36.	If Q35=yes, are they also working as a LSP? (1=Yes, 2=No).	
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37.	If Q36=no, please give details.
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38.	If Q35=yes, how many LSPs work together?	
------------	---	--

39.	If Q35=yes, how often do LSPs in the association meet? (Can be multiple).
------------	--

SL	Frequency of meetings	Code
a.	Weekly	
b.	Every 2 weeks	
c.	Monthly	
d.	Quarterly	
e.	Ad hoc	
f.	Annually	
g.	Other-1 (please specify).....	

CODE: 1=Yes, 2=No

40. If Q35=yes, please give details of the cooperation involved: (can be multiple)

SL	Cooperation	Code	Comments
a.	Purchasing in bulk		
b.	Sharing experiences from practice		
c.	Coordinating service provision areas to target		
d.	Purchasing medicine from another LSP		
e.	Other 1 (please specify).....		
f.	Other 2 (please specify).....		

CODE: 1=Yes, 2=No

41. Are you receiving assistance or training for livestock service provision from any other NGOs, government services, other organizations or private companies? (1=Yes, 2=No)

42. If Q41=yes, which?

SL	Provider	Code	Comment
a.	NGO		
b.	Government (DLS)		
c.	Private company		
d.	Other 1 (please specify).....		
e.	Other 2 (please specify).....		

CODE: 1=Yes, 2=No

43. Are you still using the CLP cool box? (Observation required) (1=Yes, 2=No)

b. Observation

44. If Q43=no, why?

45. Do you have access to a solar-fridge or AC fridge? (1=yes, 2=No) If no, skip to Q50.

46. If Q45=yes, was the fridge provided by CLP? (1=yes, 2=No)

47.	If Q46=no, who was the fridge provided by?	
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48.	If Q46=no, who owns the fridge?	
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49.	If Q45=yes, what is being stored in it currently? <i>Observation required.</i>
------------	---

SL	Item	Code	Comments
a.	Veterinary vaccines with labels		
b.	Veterinary vaccines without labels		
c.	Human medicine or vaccines		
d.	Other 1 (please specify).....		
e.	Other 2 (please specify).....		

CODE: 1=Yes, 2=No

50.	If Q45=yes, how far away is it? (<i>estimate in terms of time taken to travel and specify usual transport mode</i>)
------------	--

SL	Item	
a.	Time taken	
b.	Usual mode of transport taken	

51.	If Q45=yes, who maintains the AC/solar-fridge (for example replaces the battery) and repairs it if it breaks?
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52.	If Q45=yes, is there a maintenance/repair fund for the AC/solar-fridge? (1=yes, 2=No).		
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53.	If Q52=no, please give details.
------------	--

54.	If Q45=no, do you have anywhere to store vaccines? Please give details. (1=yes, 2=No)
------------	--

55.	What constraints are you facing in livestock service provision, if any?
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56.	What are your plans or aspirations for the future as a LSP?
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_____ Data collected by:

_____ Checked by:

Appendix 2: Questions to obtain qualitative feedback from the enumerators

The questions directed to the enumerators included:

1. What are the reasons for LSPs' success?
2. What are the reasons for LSPs' lack of success?
3. What problems are LSPs facing during their service delivery?
4. How could these problems be solved?
5. What are LSPs' expectations of CLP?
6. What recommendations or other comments do you have?

Appendix 3: LSP Follow-up Survey with ‘non-active’ LSPs

Objective:

The 73 ‘non-active’ LSPs were excluded from the main survey, largely because their premature exit from the CLP’s LSP project set them apart from the majority of LSPs who continued to work as LSPs through until the end of CLP-1. Two separate surveys enabled a greater understanding of the specific situations faced by LSPs and the variety of motivations among the LSPs. A rapid assessment was conducted to identify the key reasons why 73 of the LSPs that were trained by CLP were no longer active as LSPs at the end of CLP-1. The findings supplement the results of the main survey which examined the sustainability of the remaining 252 ‘active’ LSPs.

Methodology:

5 of IML’s data entry and monitoring officers (DEMOs) conducted a rapid survey across 4 of the working districts of CLP-1 to identify the reasons why 73 of the LSPs originally selected to undertake LSP training dropped out before the end of CLP-1. 18 ‘non-active’ LSPs were visited in 2 days and a further 13 ‘non-active’ LSPs were contacted by telephone to acquire the relevant information. As the DEMOs aimed to reach as many ‘non-active’ LSPs in a short period of time, the 18 LSPs visited were selected based on the accessibility of their location. DEMOs used a short questionnaire consisting of structured and semi-structured questions to assess:

- the reasons why LSPs stopped working as LSPs;
- ‘non-active’ LSPs’ previous average monthly profit from LSP work compared with their average monthly profit in their new occupations;
- ‘non-active’ LSPs future plans (if any), especially regarding their occupation.

Findings:

The most common reasons why ‘non-active’ LSPs stopped working as LSPs were: movement to higher paid jobs, often on the mainland such as national GoB positions, NGOs, teaching or private organisations including Grameen Bank and Grameen Shakti. Other less common reasons include chronic illness, migration due to river erosion, migration to a foreign country for work and one reported political problems regarding solar fridge allocation.

Among the groups visited by the DEMOs, the average monthly profit reported as a LSP was approximately Tk 2753, which is below the target set by CLP. This compares with an average of Tk 7100 monthly profit from other occupations after they dropped out of CLP’s LSP project. Most LSPs dropped out during the training period, or extended period of support, none of the ‘non-active’ LSPs visited dropped out after CLP withdrew support.

Of the 18 ‘non-active’ LSPs visited, 7 are still doing LSP work, either during their free time to supplement their earnings from their main occupation, practicing in a different area to the one assigned to them under the CLP project, or plan to take up LSP work again in the near future. Some even had plans to open small medicine shops (human and animal) and encourage their children to work in livestock service provision.

Conclusion and Recommendations:

Understanding the reasons behind the relatively high drop out rate of CLP-1 LSPs early on in the project can offer useful application to CLP-2. The key factor is that greater attention should be paid to the selection of LSPs, as those who are over qualified may be likely to seek higher paid employment following receipt of training from CLP. Additionally LSPs should not be selected from the mainland, as it is likely that they discontinue working on the *chars* and instead opt for more profitable employment on the mainland. However those who exited the CLP initiative to seek higher paid employment did so with additional skills, therefore CLP training in this sense is not being wasted.

Appendix 5: Case study of a LSP Association in Bogra

Case Study – LSP Association in Bogra

**Name: Aminur Kabir
(Secretary of the LSP association)**

**Chithulia village*,
Gosaibari Union,
Dhunot Upazila**



Aminur trained in livestock service provision initially under a government youth employment program in Bogra, then through Thengamara Mohila Sabuj Sangha (TMSS) about four years before receiving his training from CLP. As an experienced LSP, Aminur and a fellow LSP – Arif, established an association of 30 LSPs, which covers 5 unions and 50 villages. From their shops in Gosaibari, Aminur and Arif supply medicine to the other 28 LSPs in the association and these LSPs are under an agreement that they will not purchase from any other supplier.

The association, which was set up in mid 2009 enables the LSPs to meet together every 2-3 months to share and discuss the problems and unusual situations that arise during their livestock work. The LSPs share information about how to deal with these difficult circumstances and disseminate any information from new companies and suppliers to the group. Only LSPs who are members of this association are permitted to work in these villages, this helps to maintain a good balance of supply and demand**. The association is comprised of 8 CLP trained LSPs, as well as LSPs trained by BRAC and GUK.

Aminur reported that over the last 4-5 years there has been an increase in *char* dwellers' understanding of the use of cattle for commercial purposes such as milking heifers and fattening cows for sale. This has brought a new awareness of the health of the cattle and gradually LSPs have encouraged a more scientific approach to cattle rearing, which the majority of clients are willing and able to pay for.

None of the association members own a fridge to store vaccines, however use those of friends, relatives and local shopkeepers. The main problems faced by Aminur and the other association members are complicated cases which demand a response to diseases and problems not encountered before. Sharing in the association has proved a useful tool for overcoming this, as has contact with upazila livestock officers. Secondly transport is problematic and most LSPs in the association would like to purchase a motorbike to enhance their mobility in their service delivery.

Aminur earns approximately Tk 10,000 profit per month from his LSP work, plus Tk 7,500 per month from the government avian flu programme (October 2010 – April 2011) and profits from his own dairy farm of 2 heifers, and 8 cows.

*It should be noted that this village is not on an island *char*, therefore is easily accessible from the mainland. This means that communication and supply chains are likely to be more efficient, however the case can still offer useful lessons for more remote villages.

**NGOs' supply of livestock provide a good boost to the demand for LSPs and in February 2011 GUK provided 3000 cattle to 3000 households, which significantly increased the number of vaccines required.

Appendix 6: Case study of a LSP with a solar fridge in Sirajganj

Case Study – LSP with a solar fridge in Sirajganj



**Name: Mohammed Moniruzzaman
Reisuribar village
Natar Para Union
Kazipur Upazila**

As an experienced LSP, Monir had already been working in livestock service provision for 10 years prior to his training from CLP in 2006. However he did not have access to a fridge, therefore did not offer livestock vaccinations. In 2008 Monir invested in a solar fridge subsidised by CLP, which is located in his medicine shop and enables him to store vaccines and medicine for his own LSP business, as well as for other LSPs and medical practitioners nearby.

16 other LSPs (all trained by CLP), from 4 different unions also use the vaccines stored in Monir's fridge and purchase medicines from his 2 shops. Whilst Monir receives a small percentage of the profits from the medicines stored in his fridge, he lacks any form of 'maintenance fund' and is therefore responsible for paying the full maintenance and repair costs of the fridge if it breaks. The main use of the fridge is to store vaccines, which are purchased from the Upazila Livestock Office (ULO) approximately every two months. Monir purchases the livestock medicines from private companies who visit the village to sell their products or collects medicines from mainland suppliers.

In addition to the new skills that CLP training has given him, Monir reported that it is the CPHH's communication with non-core households that has increased the demand for livestock services, as the *char* dwellers (both core and non-core) are more aware of the positive effect of maintaining healthy livestock. Since his CLP training, Monir purchased a motorbike and has invested in another shop, giving him two medicine shops, with medicine to the value of 8 lakh taka, where as previously the value was about 3 lakh taka. Currently Monir is waiting for government approval to enable him to practice AI in his union and would like further training on minor surgical procedures to enable him to expand the range of services that he can offer.

Monir earns approximately Tk 30,000 profit per month from his LSP work, including profits from the percentage he receives from allowing other service providers to store vaccines in his fridge and the medicine sales from his 2 shops.

Appendix 6: Case study of a LSP in Sirajganj and his investments

Case Study – Investments of a successful LSP in Sirajganj



Name: Sohel Rana Mohon

**Decredorota village,
Nischantapur Union,
Kazipur Upazila**

Mohon was unemployed before he undertook LSP training from CLP in July 2006. Since then he has purchased a motorbike, which has improved the efficiency of his service and invested in a small medicine shop selling livestock medicines. In addition to this, the profit from his LSP work has enabled him to purchase and install solar panels for his home and repair his home, improving his family's wellbeing. Mohon has also invested in 4 decimals of land (costing 2 lakh taka) in Gazipur, where he plans to move to in the future when he has to leave the *char*.

AI training from BRAC in 2008 has also increased Mohon's income and he has approximately 100 AI clients per month*. Mohon's shop is located in an area which could easily support a solar fridge, therefore would enable him to store vaccines; alternatively he could use the solar fridge belonging to another CLP LSP's (Monir – see annex 5) solar fridge. Despite awareness campaigns conducted during the period in which Mohon was receiving support through CLP-1, he does not offer vaccination services on the basis that he believes that most of the *char* dwellers in his area are not aware of the need to vaccinate their animals. This poses a major constraint for Mohon. He also stressed the desire for enhanced relations with the Upazila Livestock Office to access government provided livestock semen as opposed to private companies, which are more expensive sources.

In the future Mohon intends to continue his LSP work and AI services and plans to move to his land in Gazipur. If he has children, his ambition is to send them to school and provide them the greater opportunities than he had.

Mohon earns approximately Tk 15,000 profit per month from his LSP work. In addition to this, he gains from sharecropping the 120 decimals of land which he inherited from his father.

*BRAC also provided a cryocan to store and transport the semen in nitrous oxide for AI.