

CLP Market Assessment

Market system for livestock health services – Bogra / Sirajgonj chars

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1. Introduction

As part of a review of CLP's market development strategy, Practical Action Consultants were requested to do detailed analyses of market systems around char locations in the CLP working area. Six studies were conducted in November 2010, to identify the main market development opportunities, outline support needs, and identify actors and resources needed to realize more reliable income and employment opportunities in these locations.

This report describes the market system for livestock health services in two upazilas of Bogra and Sirajganj districts on the river Jamuna.

1.1 Rationale for studying the livestock health services market-system

Livestock – in particular dairy cows – are the productive asset of choice for the vast majority of CLP core participant households. In CLP1, over 95% of households selected to purchase cattle, a choice which reflected the traditional role of island chars as grazing areas during the dry season.¹ 68,000 cattle (as well as 40,000 sheep and goats) were provided by CLP1.

Milk production, beef fattening, re-sale of animals and their off-spring, provides a major source of income for CLP participants. The profitability of these activities completely underpins CLP's achievements in terms of raising household incomes and a growing productive asset base. The success and long-term sustainability of these achievements rests to a large degree on the health and well-being of participating households' animals. This in turn depends on the quality and availability of affordable livestock health services: which bolster animal productivity, and protect the herd from disease outbreaks.

CLP fully recognized the importance of animal health in the CLP1 operations. The organisation invested heavily in training a cadre of 'livestock service providers'; provided a range of supporting functions to ensure the quality of their services, and subsidized their services for CLP participants.

This study was specifically conducted in a CLP1 area which the organisation has now exited – in order to observe how the livestock health services market is operating after withdrawal of CLP's support.

1.2 Objective of this study

Examine opportunities for market development in livestock health service systems that are important for CLP participants in Bogra and Sirajganj. Identify the main market development opportunities, outline support needs, and identify actors and resources needed to realize more reliable income and employment opportunities.

Produce an exemplary market-system report that demonstrates market-system mapping and illustrates the kind of results, findings and recommendations that can be expected to emerge from using a market development approach in design of future interventions.

To orientate key staff in the CLP market development unit to the market-system mapping approach – through their active participation in the fieldwork planning, data collection and interpretation of results.

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

1.3 Locations of assessment

As with the milk / dairy products market system, this study was conducted in Sariakandi Upazila, Bogra and Kazipur Upazila, Sirajgonj: two areas where CLP1 provided dairy cattle and promoted milk-marketing, but from which CLP has now withdrawn. A key objective was to observe how the livestock health services market is operating after withdrawal of CLP's support.

Both these Upazillas were part of CLP1 operational areas where livestock service providers (LSPs) were trained and established. These locations were chosen explicitly to understand the sustainability issues related to the viability of livestock service providers as enterprises, and the continuing effectiveness of supporting functions.

1.4 Methodology

The study was conducted by a six member team - comprised of two CLP staff and four field staff from partner implementing organizations (IMOs). It was led by a district coordinator from CLP market development unit.

Prior to the field work, the team – who had no previous experience of this form of market analysis - received a two-day orientation training in market mapping and assessment from the Consultant.

The fieldwork took place between November 6th and 12th. On the first, fourth and final days, the team were supported by visits from the Consultant and CLP market development unit acting-manager.

Data was collected using in-depth interviews, focus group discussions and participatory workshops with multiple stakeholders from the sector.

Actors interviewed or participated in focus group discussion included:

- 20 dairy farmers (female)
- 4 milk collectors (*goala*)
- 4 livestock service providers
- 4 AI service providers
- 8 local milk processors (tea-shops, hotels, sweetmeat producers)
- 5 livestock feed sellers
- 8 veterinary medicine shops
- 4 agro-vet company
- 3 microfinance institutions / banks
- 1 District Officer of Dept Livestock Services (DLS)
- 2 Upazilla Officers of Dept. Livestock Services

3. Market system for livestock health services

The market system for livestock health services is not a simple single value-chain. There are a variety of inputs, as well as related knowledge flows, that contribute to this “cross-sectoral” market. These include supply chains for veterinary drugs, artificial insemination materials and feed-stuffs.

The report that follows is divided for convenience into two sub-sectors: veterinary drugs and artificial insemination services.

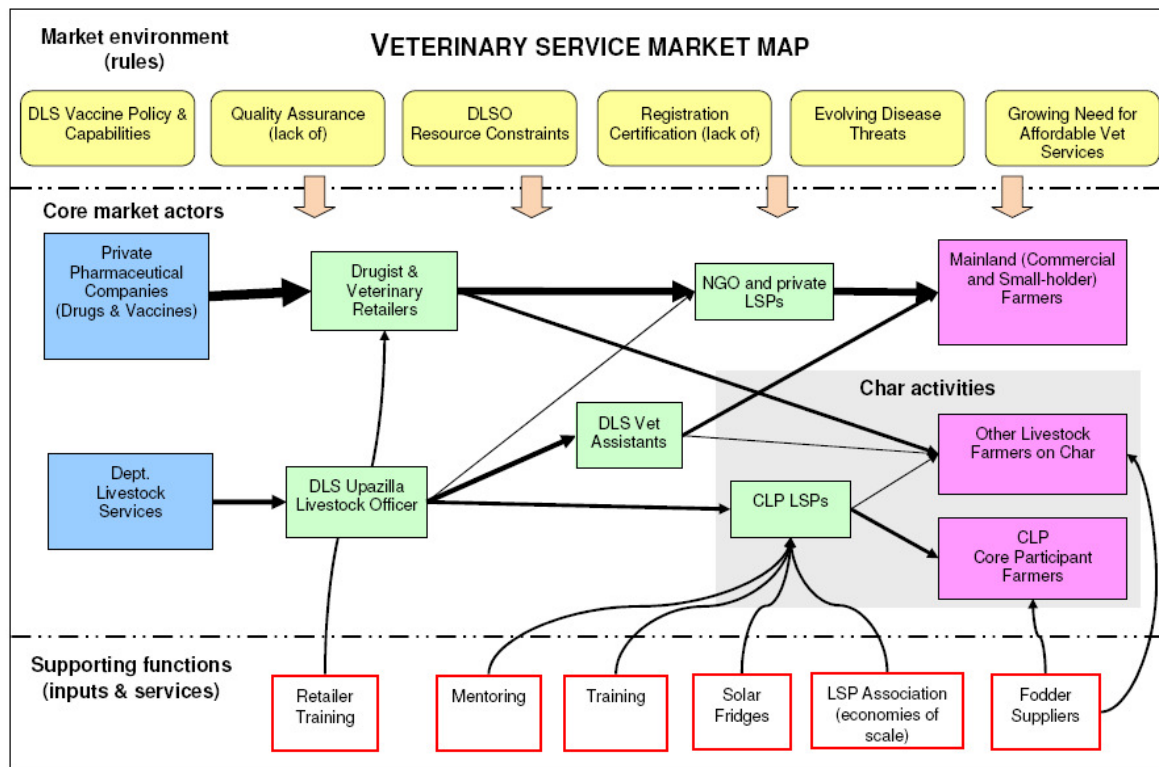
These two market systems are illustrated with the market maps below:

3.1 Core market-chain functions

The core market chain is made up of the market-actors who buy and sell the principle inputs and associated services.

3.1.1 Veterinary services

The core market chain functions of livestock services include treatment of diseased animals, vaccination for avoiding outbreak of diseases, provision of drugs and artificial insemination.



Supply of medicine: There are about 100 local drug store selling medicine for both human and animal. Veterinary medicine manufactured and supplied by ACME, ACI, RENETA and Techno pharmaceutical companies are very popular in the area. Representatives of these companies regularly visit the drug store and supply medicine as required on cash or monthly cash payment basis. Apart from drug store, 15 -20 LSPs in 2 Upazilas are also selling medicine along with treatment.

Vaccination: Vaccination programme includes geographic region, type of cattle operation, frequency of introducing new stock and post vaccination problem. Taking these into consideration, the local livestock office supply vaccines to prevent anthrax, HS, BQ and foot and mouth disease. The Veterinary Field Assistant (VFAs) of livestock office is responsible for implementation of vaccination programme. But LSPs also vaccinate cattle with the assistance of livestock office. They played a vital role during recent outbreak of anthrax in the country. Many char farmers, however, are not aware of vaccine and therefore do not vaccinate their cattle until they experience a loss. They approach to *kabiraj* or LSPs when their cattle are seriously ill.

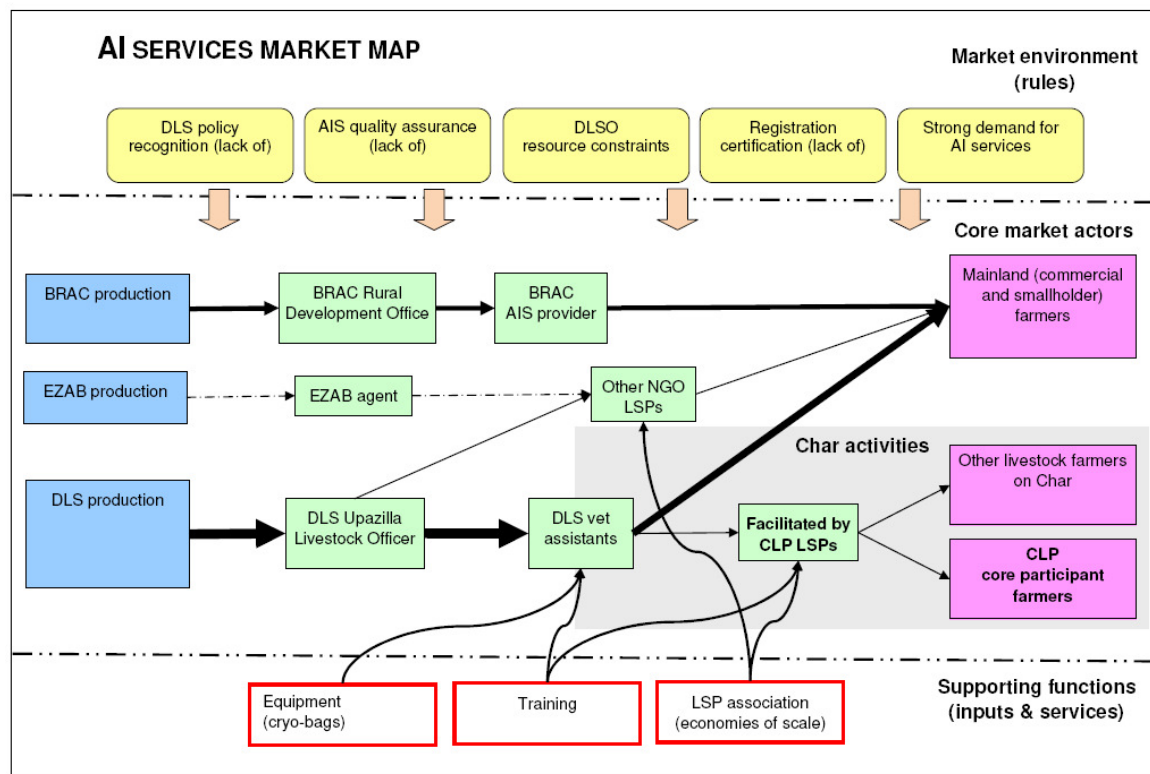
Treatment: In the mainland Upazila level livestock officer and veterinary surgeon treat cattle and other animals at their office premises. Farmers bring their animal for treatment. Most common diseases treated in this centre are malnutrition, anthrax, foot and mouth. Generally char dwellers are not getting this service due to remoteness. They are dependent on local *kabiraj* or traditional healer and livestock service providers trained by CLP and other NGOs. The LSPs charge TK. 50- Tk. 100 per visit/household depending on the condition of diseased animal. They also advise farmers on cattle breeding and feeding.

Costs of different vaccine are as follows:

- Anthrax – Tk.50/100 ml dose, once a year
- HS- Tk. 50/ 50 ml dose, once a year
- BQ – Tk. 30/ 20 ml dose twice in a year
- FMD – Tk. 96/16 ml dose, 2/3 times (45-6 month interval) in a year
- Besides, Tk. ... has to spend for deworming twice a year.

3.1.2 Artificial insemination services

Artificial insemination is popular method used to breed cattle with the semen collected from bull, extended with nitrogen diluents and prepared for storage and use. AI service provider uses instrument to deposit semen into a cow in oestrus.



CLP did not train any LSPs to work as AI service provider considering different factors like quality of AI materials, poor health of local cattle and limited success rate. However, it supported some beneficiaries to inseminate their cattle. Department of Livestock Service (DLS), BRAC and Milk Vita supply AI materials in the area. At the moment, there are only 4 Veterinary Field Assistant (VFS), working in Sariakandi and Kazipur though DLS planned to provide one Veterinary Field Assistant in each union. These VFS attend 10

to 12 AI points along the bank of Jamuna river. Besides, there are 15 local AI service providers in two upazilas. Sometimes AI service providers from Jamalpur come to these areas to inseminate cattle.

According to the Upazila Livestock officer, the success rate of AI is about 50-60 percent. Farmers are very interested in breed improvement. They pay Tk. 50 to 100 to AI providers for liquid semen and Tk. 200-300 for frozen semen. Sometimes farmers inseminate their cows on credit but do not pay the total fees if the insemination is not successful. Overall, access and effectiveness of AI materials are limited because of various reasons including lack of AI facilities and poor management of AI. Inadequate or unaffordable AI service resulted in only 2 to 3 percent cattle of improved breed in the area.

3.2 Rules / Business environment

Growing need for affordable services

The demand for LSP services in the area is growing. Generally active LSPs earn Tk. 5000 to Tk.7000 per month which is a good incentive for them. But as many cash-poor farmers cannot afford cost of vet product and service, the LSPs risk their business by lowering profitability. They operate with limited understanding about market system or economy and have no clear market assessment and strategy.

The AI service providers earn even more than the LSPs despite limited knowledge about proper administration of techniques and its follow-up during pregnancy period and over all reproductive health. Higher demand and income are their main incentives. However, the veterinary service market in both Upazilas is weak because of difficulties the LSPs and AI service providers face in accessing information, quality vaccines, semen and other vet products.

Registration training certification

Government has no provision for registration and certification of veterinarian services provided by the LSPs therefore, they operate without economies scale, official recognition/registration which undermines their efforts to get information services from government officials.

Quality assurance

The LSPs trained by CLP and AI service providers employed by DLS or trained by other NGOs are well received in the area. They have made significant contribution in disease treatment, vaccinations and artificial insemination. However, quality and accountability for the services they render remain a concern. Quality control is virtually non-existent. It is a major risk of LSP's business.

Evolving disease threats

The poor farmers living in study area have a few cattle (2 cows on average) so loss of a single animal has a greater impact on their livelihoods. The threat of disease like foot and mouth disease (FMD), HS and Anthrax is very high. For example, the recent anthrax outbreak caused the poor farmers to cattle trade to great extent. Although it deprived farmer from higher price, it created demand for the service of LSPs. But evolving nature of these diseases makes the local LSPs vulnerable as they cannot upgrade themselves with information needed for preventive measures and treatment.

DLS resource constraints

The LSPs have become a critical element in the overall livestock service system in the area and provide an effective model for extending the outreach of livestock services to poor and marginalized. But the realization of their full potential requires a strong linkage and support system with livestock office for the purpose of capacity building, professional supervision and technical support so that they can be an integral part of the animal health system.

The livestock officers in both Upazilas acknowledge that they don't have time and resource and man power and strategy to travel to char area for monitoring and upgrading the performance of these service providers. They are also not comfortable about giving advice to LSPs living in char areas for complicated diseases over cell phone.

3.3 Supporting functions

Training

CLP in association with local Livestock offices have trained 60 LSPs in Sariakandi and Kazipur with the support of their implementing partner organisations, less than half of them are active. CLP also arranged refresher's training for these LSPs. But currently there is no provision for upgrading skills and information except some advices from Upazila Livestock Officers. As a result, a good number of LSPs are inactive or ineffective in providing services which imbalances the ratio of LSPs and farmers ultimately constraints the growth of service. .

Mentoring

During first phase, CLP livestock officer were mentoring the LSPs through field visit, monthly meeting and advice over cell phone. So, for mentoring support they were dependant on CLP livestock officer. The LSPs also work with some experienced LSPs for the business advices. The farmers are happy about the door step service but LSPs face difficulties in treating complex diseases for which farmers have to go to livestock office in the mainland The livestock officer in Kazipur Upazila mentioned that after phase out of CLP intervention, out of 32 trained LSPs, 10-12 are active in providing livestock services and contact them for advice information and mentoring including support for vaccination. In this regard, some LPs mentioned that they could not maintain regular contact with livestock officer because of distance and remoteness.

Solar Fridge

CLP has provided 8 solar fridges to 8 LSPs in Kazipur and Sariakandi for maintaining the cool chain of vaccines and other medicines used in char. The solar fridges are functioning well but purchase/replacement, repair and maintenance of these fridges are unresolved.

LSP Association

The CLP trained livestock service providers work independently and are not organised in any association for professional interaction and further improvement.

3.4 Value-chain analysis

The active LSPs have some relationship with vet medicine sellers or drugists who have a range of medicine to suit farmers' needs, providing them with essential competitively priced veterinary goods delivered to the farmers.

The LSPs charge fee embedded in the cost of medicine where farmers are not aware or not willing to pay the fee. In other cases, farmers pay both fee and cost of medicine as demanded by the LSPs. Normally, the LSP try to recover cost related to transportation, time spent on treatment. Overall, they sell medicine to farmers at 20 to 100 percent more than the price mentioned in the level.

4. Problems and opportunities

Livestock service providers were dependent on CLP staff for ‘mentoring’ functions, and only a minority have established effective relationship with government livestock service officers to replace this. (For example, according to the upazila LSO in Kazipur only 10 – 12 LSPs out of 30 had maintained such a relationship.)

Demand for artificial insemination services (AIS) is not being met. Questions remain about whether CLP should support access to AIS.

Lack of any official recognition (for example formal registration) for LSPs on the chars sometimes undermines their efforts to get information, services and support from the Dept. Livestock Services

There are no effective opportunities for LSPs to upgrade their skills, receive refresher training or replacement / growth of service. The current ratio of LSPs to livestock farmers seems to be inadequate.

Questions about how the solar-fridges need to maintain the vaccine-cold-chain onto island chars will be maintained and replaced in future, have not been unresolved.

5. Vision of a better market system

5.1 Vision of sustainable outcomes

Closer incentive-driven relationship between LSPs and DLS officers: with provision of veterinary information and advice, in exchange for disease monitoring, access to large numbers of animals, help in meeting government targets.

LSPs are entrepreneurial, innovative – organising their own ‘service centres’ and ‘learning sessions’ for dairy farmers to boost local productivity and their own coverage.

Competition / Service differentiation – LSPs providing service to farmers would be able to differentiate themselves from competitors by giving better service, supplying quality medicine, AI materials, fodder or other services to farmers as necessary. They are entrepreneurial, exploring new opportunities to extend their customer base, or diversify their services. This is critical to the success of their veterinary profession and sustainability of the delivery of the product and service to farmers.

Marketing of LSP services – through innovative promotion activities, LSPs have achieved economies of scale, reduced transaction cost and time and expanded their client base.

Mentoring Relationship between LSP and DLOs – mentoring relationship with DLS in relation to disease treatment, vaccinations, artificial insemination (frozen semen and liquid nitrogen) and advice are critical .

5.2 Plausible intervention strategies

- greater emphasis on ‘entrepreneurial’ qualities during LSP selection, and treating livestock services as independent small businesses
- more involvement of DLS during CLP activities - LSP selection and training, asset procurement

Livestock service providers’ association– service providers organised independently in professional business association. They can attract the attention of veterinary companies who use this platform as a point of entry for selling their products to farmers. The association focus on building the capacity of its members and negotiate with NGOs, DLS and vet companies for continuous training, knowledge information.

LSPs are establishing new Service Points to extend services to new customers - introduce ‘service centre’ and ‘learning session’ models of LSP association entrepreneurship. LSPs would be able to

establish service points at different locations in the communities to provide cost effective service to more farmers enabling them to achieve economies of scale reduce transaction cost and expand client base.

Formalisation of LSP training process – CIP would be able to pilot an exemplary LSP training formalisation process in association with Dept Livestock Services. If successful, it can be replicated in CLP working areas. CLP can study the BRAC/DLS collaboration model for implementation of AI service at union level.

Facilitation of dialogue among LSP association, druggist veterinary retailers and DLS- Through dialogue LSPs and other actors have achieve trust and sustainable relationship for collaboration. This type dialogues are essential for establishing transparent well functioning livestock service market in the area.

6. Conclusion and recommendations

Livestock service is a profitable business in terms return on investment. Access to information, quality vaccines, semen and other vet products can help the LSPs increase client base, income and improve their socio-economic condition. However, greater emphasis on improving their entrepreneurial quality, strengthening their professional association, influencing policy on certification or recognition of their services, mentoring and marketing support are essential for their business growth.

Achieving economies of scale, lowering transactional cost and providing livestock services sustainably will require innovation in LSP business model. By establishing service points, conducting learning session and demonstration LSPs can become more effective in generating demand of their services.