Mis-targeting and Mis-using Microcredit in Livestock Development Projects in Bangladesh

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This note argues that tied targeted microcredit for raising livestock is not likely to be a successful tool for livestock development if borrowers do not have comparative advantage in livestock rearing and lenders have little incentive to monitor the proper use of credit by the "right" households for the "right" kind of activities. It also examines issues of mis-targeting, mis-use and weak monitoring on the basis of the findings from the impact study of the second phase of Participatory Livestock Development Project (PLDP-II) carried out by the BIDS.

I.INTRODUCTION

This note argues that tied targeted microcredit for raising livestock cannot be a successful tool for livestock development if borrowers do not have comparative advantage in livestock and lenders (e.g., MFIs, PKSF, donors) have little incentive to monitor whether the right person has used the credit for the right purpose.

Linking microcredit to livestock development has been the key feature of all past large project interventions in livestock development in Bangladesh (Alam 1997, Nielson 1997, 2003, Seeberg 2003, DARUDEC 2003). Borrowers, often poor women or female-headed households, are provided a tied credit for investment in the livestock sector. The borrower is also given training in raising livestock. Livestock services are also built-in in the project: a sick cow is a liability to a poor household, not an asset. Now that a borrower improves her skill in livestock raising through training and can minimise risk of asset erosion by taking advantages of livestock services provided by the project, will she necessarily invest in livestock when credit is made available to her? The answer is not so simple and there are several issues involved here. For example, the

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borrower can take the trouble of taking the training and invest the borrowed money in an activity not related to livestock but brings higher return if the lender does not mind her doing so as long she pays back the money. Who will then invest in livestock? What are the implications of excluding those who are likely to invest in livestock and including those who are unlikely to invest in livestock? Broadly speaking, is the tied targeted microcredit the most efficient way to develop livestock in Bangladesh? This note raises these issues on the basis of the findings from a recent final impact study of PLDP-II or the second phase of Participatory Livestock Development Project carried out by the BIDS. Findings from the past livestock development projects implemented in Bangladesh is also used to support our arguments. It is hoped that this discussion can inform future livestock projects of some issues that have to effectively taken into consideration for the success of the project. The lessons learnt from this project can also be relevant for similar projects aiming at promoting particular income-generating activities.

II. THE PLDP-II PROJECT

The Second Participatory Livestock Development Project (PLDP-II) of Palli Karma Sahayak Foundation (PKSF) is a six-year project (July 2004-June 2010) which was implemented in 20 districts of North-West and North-Central regions of Bangladesh. It was financed by the Asian Development Bank, Government of Bangladesh, PKSF, amongst others. The Project aimed at reducing rural poverty by increasing income-generating activities and employment in livestock-related enterprises for the rural poor, particularly landless households and households headed by women. The project specifically targeted the ultra-poor and supported them in asset development and social mobilisation. The list of districts included in the project is presented in Table I.

TABLE I **DISTRICTS/UPAZILAS UNDER PLDP-II**

Twenty Treated Districts (Upazilas)	Three Control Districts (Upazila)
Dinajpur (Khansama), Thakurgaon (Pirgonj), Panchagar (Tetulia), Nilphamari (Jaldhaka), Lalmonirhat (Kaligonj), Kurigram (Fulbari), Rangpur (Kaunia), Gaibandha (Sundarganj), Rajshahi (Poba), Chapai Nawabganj (Chapai Nawabganj Sadar), Joypurhat (Pachbibi), Naogaon (Raninagar), Pabna (Pabna Sadar), Bogra (Sherpur), Natore (Gurudaspur), Sirajganj (Belkuchi), Mymensingh (Haluaghat), Jamalpur (Madariganj), Sherpur (Nalitabari) and Netrokona (Mohanganj).	Rajbari (Goalanda), Meherpur (Mujibnagar) and Chuadanga (Chuadanga Sadar).

III. METHODOLOGY AND DATA

The central tool of the Final Impact Study has been administration of a questionnaire on PLDP-II beneficiaries. The questionnaire was designed in the light of the questionnaire administered by the MTR (Mid Term Review) to facilitate before and after comparisons. The survey was conducted in 23 preselected districts in which Baseline and Mid-term Review of the PLDP-II were conducted. Out of these 23 districts, 20 are treated and 3 are control (Table I). Sample households of MTR were revisited. Those households that were not available for the survey were replaced by new households. A sample of 4,000 households from treatment (i.e. PLDP-II) upazilas and 600 households from control upazilas (200 households from each upazila) were interviewed. Unit record data was available for the baseline survey but not for the MTR. Information from both the BL and the MTR was used whenever available and required.

Though the study is mainly quantitative in nature, a number of focus group discussions (FGDs) were organised. Besides, several rounds of discussions were held with the managers of the project representing both the PKSF and the Partner Organisations (POs). The Field Officers made site specific notes and provided insights to the project.

IV. A BRIEF DESCRIPTION OF LIVESTOCK DEVELOPMENT PROJECTS IN BANGLADESH

Livestock development projects continue to intervene on the basis of smallholder production relations and have a long history of implementation in Bangladesh. It developed from an NGO initiated project to a food aid project in the 1970s (Dolberg 2003, Dolberg *et al.* 2002, Dada and Matin 2003). The initial players were the NGO BRAC and the Department of Livestock Services or DLS. BRAC started a cock exchange programme to help chick rearing in 1978. High mortality and low productivity were considered as major problems in the poultry sector. What is known as the poultry model was then tested by BRAC and DLS

¹ Schleiss (undated) defines the poultry model as "based on semi-scavenging poultry flocks and is defined as a system with poultry flocks under partly controlled management and where the scavenged food accounts for a significant part of the total food consumption. It is an integrated system which provides supplies, services and production components in order to establish and maintain a semi-scavenging poultry sector." "The Poultry Model developed in Bangladesh is the most structured and the most carefully designed smallholder poultry program in any developing country." (p141-2)

in Manikganj during 1983-85. In subsequent couple of years it was scaled up in 32 upazilas.

The model is essentially a technical model where inputs are related to outputs through various supply links and services. Uncertainty in livestock production is addressed by provision of livestock services. Earlier projects introduced the services of female vaccinators and PLDP-II introduced CEWs or the Community Extension Workers. For this model to function, one needs a flow of credit among the participants. The model has a very strong poverty reduction objective and preference is given to women and female-headed households. This credit, poverty reduction, and gender aspects paved the way for further involvement of the NGOs and donors in livestock development in rural Bangladesh. This has been the basis of all livestock based projects in Bangladesh. PLDP-II is the latest version of credit-driven livestock development project in Bangladesh.

TABLE II
MAJOR LIVESTOCK PROJECTS IN BANGLADESH (1992-2010).

Period	Project	Major source of funding	Upazilas covered	Target beneficiaries
1992- 1998	SLDP I: Smallholder Livestock Development Project	Danida, IFAD, GOB, 3 NGOs	80	400,000
1998- 2002	PLDP: Participatory Livestock Development Project	Danida, ADB	89	364,000
1999- 2003	SLDP II: Smallholder Livestock Development Project	Danida	26	109,000
2004- 2010	PLDP II: Participatory Livestock Development Project	ADB	157	6,60,000

V. THE ISSUES

PKSF has been implementing this project through its Partner Organizations (i.e., the contracted local MFIs or Micro Finance Institutions) which deliver credit to the targeted households to develop livestock "enterprises." Since this is a conditional targeted credit, the success of the project largely lies, among other factors, on whether the right person gets the credit and whether the credit is used by the right person for the right purpose, i. e., livestock. We first deal with the issue of targeting. The issue of the use of loan is discussed later.

5.1 Targeting

Basically, targeting means limiting the number of project beneficiaries in terms of some observed criteria. This could be poverty status of the household, amount of land owned by a household, or the gender of the household head and so on.

We will focus on the landownership criterion. PKSF set the landownership criterion to a maximum of 50 decimal for the beneficiaries of PLDP-II. Table III shows that about 24.5 per cent of the beneficiaries own land greater than 50 decimal in the programme area, 12.73 per cent of the beneficiaries are landless and the biggest mass of the beneficiaries, about 59 per cent, have land less than 10 decimal, including the landless.

TABLE III
DISTRIBUTION OF LAND AND ITS COMPARISON WITH BASELINE

Land classification	Final (2010)		Baseline (2007)	
	No.	%	No.	%
landless	509	12.73	2,677	14.45
1-10	1,858	46.45	13,465	72.66
11-20	304	7.6	955	5.15
21-30	134	3.35	446	2.41
31-40	122	3.05	431	2.33
41-50	93	2.33	431	2.33
50+	980	24.5	127	0.69
Total	4,000	100.00	18,532	100.00

Source: BIDS (2010).

In terms of land about a quarter of the sample is off targeted. This has happened in a context where households meeting the land criterion were available—some eligible households were excluded and some ineligible households included. For example, while 2,677 landless households were available as borrowers, only 509 of them (19%) were in fact included in the project during the time of the survey. Similarly, while 13,465 households having between 1 and 10 decimal of land were available, only 1,858 (14%) of them were observed participating in the project. Only 127 households were present in the Baseline survey that had more than 50 decimal land, but around 8 times more households from this category of landowners were selected.

However, one could argue that when PLDP-II started, eventually beneficiaries of the programme area took off because of the project (or any other intervention which is outside the purview of the impact study) and this is reflected in higher land holdings by the beneficiaries in the treatment area. To

probe this further, we compare our results with the Baseline Survey conducted in 2006 and also the Midterm Review conducted in 2007-08.

Midterm Review only reports mean, with no information on the distribution of land. Therefore, we can only compare means. The mean land holding in treatment areas increased from 7 decimal in Baseline to 50 decimal in Midterm and then to 58 decimal in Final Review. Thus there has been a gradual incorporation of more land-rich households in the project.

We have already seen that the household base in the Baseline Survey from which PLDP-II could draw targeted households was excellent. But did PLDP-II ended up selecting the richer segment of the baseline population? Or can this be the case that the newer participants in PLDP-II were more likely to be mistargeted? We would like to see whether mis-targeting was subsequent or whether it was there from the early stage of the project cycle.

One way to do that is to study the land holdings of the recent participants. Table IV shows the distribution of land of the beneficiaries who took their first loan in 2009.

TABLE IV
DISTRIBUTION OF LAND HOLDING OF THE BENEFICIARIES
WHO TOOK FIRST LOAN AFTER 2008

Land classification	Fina	1 (2010)	Baseline (2007)		
	No.	%	No.	%	
landless	107	12.08	509	12.73	
1-10	402	45.37	1,858	46.45	
11-20	62	7.00	304	7.60	
21-30	23	2.60	134	3.35	
31-40	28	3.16	122	3.05	
41-50	19	2.14	93	2.33	
50+	245	27.65	980	24.50	
Total	886	100.00	4,000	100.00	

Source: BIDS (2010).

Though the share of households having more than 50 decimal of land is slightly higher than the new entrants, the difference is not statistically significant. Therefore, the new entrants have similar land holdings as the older ones. So, land based targeting does not confirm our hypothesis that towards the end of the project richer households have been targeted more than it was before. Rather it points out that the targeting was off to begin with when the PLDP-II started.

However, land ownership can also be a misleading criterion. For example, there are some programme areas in urban and semi-urban areas such as Chapai Nawabganj Sadar and Pabna Sadar where a large number of households were engaged in trade and service sectors. For these households, income rather than land is a better indicator for targeting. We have carried out the same analysis as

we did with land criterion and derived identical results. A large proportion of households have been served by the project that comes from the highest income slab. Also, this is built-in in the project and has not resulted from project intervention. In the final impact study, more than 75 per cent of the households in treatment area earned more than 50,000 Taka per year, which is 45 per cent in control areas and the corresponding figure from the Baseline survey was only 2 per cent.

The problem of targeting has been observed in other studies on the impact of livestock projects (Islam and Jabbar 2005, Seeberg 2002, DARUDEC 2003). For example, Seeberg (2002) finds that, "74% of the beneficiaries had less than 0.50 acre of land and 12% had 0.51-1.00 acre and 4.3% had 1.01-1.50 acres." This relates to PLDP-I and we have derived almost the same figure for the beneficiaries of PLDP-II.

5.2 Use of Credit

In section 5.1 we have shown the extent to which PLDP-II credit was mistargeted based either on land or on income criterion. In this section we examine the extent of diversion of credit. To what extent the beneficiaries have used credit for investment in livestock enterprises? This is important because a livestock development project should not only look at reduction of poverty but also at the path, that is poverty reduction through livestock development.

In the project area about 34 per cent borrowers of PLDP-II used credit in livestock and a meagre 1 per cent used credit in poultry (Table V). Among the other productive categories, business enterprise, agricultural enterprise and fisheries account for about 24.5 per cent of total cases. House repairing, home consumption and medical treatment are the dominant sectors of loan use.

TABLE V
USE OF MFI CREDIT (IN NUMBER)

Sectors of use of Loan	Ba	seline	Final	
	No.	%	No.	%
Business enterprise	963	0.16	1,039	23.19
Agricultural enterprise	292	0.05	48	1.07
For medical treatment	366	0.06	104	2.32
To meet household consumption needs	1,410	0.24	153	3.41
Rent / purchase / improve housing	1,086	0.18	313	6.99
Educational expenses	31	0.01	33	0.74
Marriage expenditure	138	0.02	51	1.14
Dowry	89	0.02	55	1.23
Funeral	11	0.00	1	0.02
Γo lend out at higher interest	105	0.02	44	0.98
Livestock	648	0.11	1,515	33.81
Poultry	36	0.01	59	1.32
Fisheries	21	0.00	9	0.20
IGA	363	0.06	202	4.51
Other	318	0.05	855	19.08
Γotal	5.877	100.00	4.481	100.00

Source: BIDS (2010).

Patterns of Use of Credit

At least a couple of patterns in the use of credit in livestock can be observed. The first pattern is the use of credit in livestock initially by a household and then in something else. The second pattern is the use of credit in something else and then in livestock.

Ticket to Ride

For several cases it is found that the borrowers use their first credit on livestock but most of the subsequent credits go elsewhere. They generally use the subsequent credits on building and repairing houses, leasing-in cultivable land, investing in respective businesses, purchasing van and rickshaw, spending in daughter's wedding, etc. Table VI indicates such patterns. It shows that the share of credit that goes to livestock and poultry goes down with subsequent credit.

TABLE VI CREDIT HISTORY AND USE

Use of credit	First loan		Second loan		3 rd loan	
	No.	%	No.	%	No.	%
Livestock and poultry	515	39.86	168	23.56	17	14.66
Others	777	60.14	545	76.44	99	85.34
Total	1,292	100.00	713	100.00	116	100.00

Is there any explanation of this pattern? One can put forward a host of competing arguments that may explain such scenario. Firstly, it can be argued that at the initial stage of the project PLDP-II the POs were very strict about the use of the loan. Once they have achieved certain targets of "enterprise development," they were more focused on revolving the fund and maintaining high repayment rate. Secondly, this can be looked as an indication of graduation—households start with birds, then move to goats or cattle and finally move to something altogether different (typically, purchase of land or leasing in land). This is the livestock ladder argument (Todd 1998). Thirdly, livestock credit is a ticket to get further credit that can be used for purposes other than livestock. In fact, PLDP-I had made it explicit, "A poultry activity was compulsory for the first loan, but after repayment of the first loan the beneficiary was entitled to a new loan for an activity of her own choice" (Islam and Jabbar 2005, p. 5). In fact, the third objective of PLDP-II states that: "Providing Microfinance for income generating activities including livestock enterprises." This allows borrowing for purposes other than livestock. Triangulating this argument, one project document states that "protteker hashmurgi ba gobadiposhu palon korte hobey amon

badhobadokota nei" or "it is not necessary that everybody has to raise cattle or poultry" (PKSF, undated).

Ride to Earn Ticket

FGDs also found a number of cases where borrowers first bought a van or invested in off farm activities with credit. We have observed that relatively poor borrowers are inclined to take this strategy. This is the inverse of the "ticket to ride" strategy. When they were capable of generating weekly savings at least as large as the weekly instalment of some small sized credit, they took loan for livestock investment. This indicates that a major criterion for selecting household is that it must have a constant and stable source of income, large enough to generate savings at least as large as the size of weekly instalment. Livelihoods diversification forms the basis for the working of the microcredit financed livestock development project for poor households. While it takes a while for a cow to produce milk, repayment is due in a week or two. Nonetheless, this type of household defaults when there is a disruption of the source of income due to idiosyncratic shocks (e.g., illness) and also covariate shocks (e.g., flood). One FGD found a number of cases in Kaunia Upazila, Rangpur where the borrowers dropped out from this project due to their husbands' illness.

The bottomline of the above argument is that not all credit is necessarily used in livestock even by those who invest in livestock. That is why training in livestock projects should not be limited to the sphere of livestock alone. Training in other income earning activities can also be included in the project.

VI. MIS-TARGET AND MIS-USE OF CREDIT: WHAT IS ACTUALLY MISSED?

The link between mis-targeting and mis-use of credit is poorly understood or inadvertently ignored in the existing literature. It is sometimes not seriously taken by the managers of the project. The issues are, however, discussed in the literature. Citing Chipeta (2003) and MoFL (2003)² in the context of the experience of PLDP-I, Riise (undated) states that, "Obviously the official selection criteria was not related to debt capacity of beneficiaries, but as implementing NGOs gained their main income from expanding their micro-credit portfolio and were monitored primarily on their credit performance, they had every incentive to select beneficiaries with assets and diverse income streams in order to improve the quality of their loan portfolio. Poor monitoring of implementing NGOs allowed such an outcome to materialise. On the other hand,

² Reference not found in the document.

those who did participate in the projects had higher labour opportunity costs, reflecting their comparatively diverse and profitable investment opportunities, which translated into no voluntary investments in low profitability poultry. This illustrates the highly inappropriate incentive structures and effects created by bundling micro-credit and technical advice."

Islam and Jabbar (2005, p. 6), who reviewed all the impact studies of all the livestock projects listed in Table II except PLDP-II, make the following observation: "the poverty criteria used in SLDPI seem not to have been used in the later projects, thus allowing field staff of most of the new implementing NGOs to select relatively well-off households as participants." This trend, as we have presented in this note, is continued in PLDP-II, the latest version of microcredit-driven livestock development project. It is true that mis-targeting compromises on poverty reduction but it also compromises on livestock development. This is so because it is the land-poor households who not only invest more in livestock but also use most of the loan on livestock enterprise development. We will elaborate on this issue of actually missing growth in livestock in livestock development projects in Bangladesh by excluding the poor from project beneficiaries. We will then emphasise the role of opportunity costs in micro-finance led livestock development project as mentioned above by Riise (undated) and provide another aspect of the link between targeting and use of credit. If a household has higher opportunity costs of investment in livestock, it is less likely to invest in livestock but it may be a favoured client of the POs. This will drain out resources available for development of the livestock sector.

6.1 Mis-target and Mis-use of Credit: The Exclusion Dimension of the Problem

Why is targeting important? Riise *et al.* (undated) emphasises: "as poultry should be perceived as a first step out of poverty, and not a goal in itself, it is important to get the targeting right from the beginning." All livestock projects in Bangladesh aimed at reducing poverty and of course, through increasing livestock production.

We have seen that a quarter of the beneficiaries do not follow the landownership criterion for selection in PLDP-II and about two third of credit was not used in livestock enterprises. This has obvious implications for the success of PLDP-II. The percentage of credit used in livestock has increased from 11 per cent to 34 per cent between the Baseline and Final Reviews. On the other hand, during the same span of time the use of credit in livestock in the control areas also increased from 11 per cent to 21 per cent. Thus we can argue that about an additional 10 per cent point increase in the use of credit in

investment in livestock has been brought about by PLDP-II in the project area. We consider this as a marginal increase given the length of 5 years of the project and the heavy investments made in the project. These investments were made in improving the capacity of DLS (Department of Livestock Services), in improving livestock services in the project areas and in providing training to the beneficiaries. However, given this rather unsatisfactory performance of the project, it also indicates that raising cattle and poultry may have become profitable to some households. There existed a group of households who borrowed for investment in livestock and did so actually. Who are they?

The impact of PLDP-II on income may work in four major routes:

- 1. Target group $(T) \rightarrow$ invest in livestock $(L) \rightarrow$ income generation (Y)
- 2. Target group $(T) \rightarrow$ investment in something else $(X) \rightarrow$ income generation (Y)
- 3. Non-Target group (NT) → invest in livestock (L)→ income generation (Y)
- 4. Non-Target group (NT) \rightarrow investment in something else (X) \rightarrow income generation (Y)³

Route 1 is what PLDP-II is designed for. Route 4 represents any other typical microcredit programme with no strings attached. Among the two intermediate routes, route 3 augments livestock while the route 2 targets the right group but not necessarily the right purpose.

Now the question is: who uses credit more in livestock and poultry—the relatively richer households or the poorer? We have found that it is the two extreme groups—the poorest and the richest—who use credit more in livestock than other groups. There is apparently a missing middle. In our sample there are 1,858 households in 1-10 decimal land category and 700 of them use credit in livestock (38 per cent), while there are 980 households in 50+ decimal category and 402 of them use credit in livestock (41 per cent). Total number of poor households is more than double than the total number of richer households. Between the two land groups, only a few use credit in livestock. We also checked the intensity of use—that is a household could use only say 10 per cent of credit in livestock and poultry, while others use most of it. So we have to distinguish between these two types of use of credit. We have found that the households who reported to have used credit on livestock and poultry have actually used most of

³ There could be other routes which involve some linear combinations of L and X but we will not complicate this simple classification.

it on them. This has a strong implication for future livestock project. If a household is rightly targeted, it will use most of the credit in livestock development. Right targeting implies use of more credit for the right purpose, livestock development. Thus, in terms of our framework with good targeting livestock development will take the first route, that is by the poor households investing in livestock and triggering livestock growth. It will address the twin goal of livestock growth and equity.

Using the methodology developed by Coleman (1999), Hossain *et al.* (2010) have shown that microcredit on livestock is more effective for landless or very poor households.

6.2 Mis-target and Mis-use of Credit: The Opportunity Cost Dimension of the Problem

The Partner Organizations (POs) have incentives to give credit to the safer borrowers whose financial conditions are better than the targeted group. It is likely that POs may lend to persons who have already demonstrated success in livestock or any other activity that brings money or makes the person "bankable." If the monitoring by PKSF is weak, or the pressure to meet the target number of borrowers is high, mis-targeting is the most likely outcome. The Principal (i.e. the PKSF) may not also have incentives to monitor the POs for reaching the right people if they are only concerned about high repayment rate.

Before targeting any group based on some criteria, it is imperative to understand the "mapping" which translates borrowers' income generating and risk bearing capacity (e.g., income, asset, social network, etc.) to their capabilities to run a specific "enterprise" successfully. It could be the case that the targeted beneficiaries, chosen based on certain criteria, may not be the right group to undertake enterprises. In this case, it may result in no participation in the credit programme or re-routing of credit to unintended sectors. The bottom line is that the targeting criteria must be set carefully so that they are in line with project's goal, that is, poverty reduction through development of livestock and poultry.

Even if capabilities of a person map into an enterprise, he or she may choose not to do it because the rate of return of doing something else with the credit may be higher. Then the POs would target those households whose opportunity costs are low or who do not have much alternative livelihoods such as distressed women, single mother households, very poor households and so on. But here lies a dilemma—the income generating and risk bearing capacity of these households may not map into a large range of enterprises. So, the households with higher opportunity cost of doing livestock may not undertake any livestock enterprise

(but may be more creditworthy) and the households with lower or zero opportunity cost of doing livestock are too poor to undertake some livestock enterprises (but may be less creditworthy). The second category of households is more likely to be the group of ultra poor or extreme poor households who are not able to make livestock investments beyond having some backyard poultry. This group of households may also include some marginal households having small piece of land.

An FGD of a Samity of Belkuchi Union of Sirajganj District is worth noting here. Historically, this region has been known for the handloom industry. All of the members of this Samity are involved in this thriving handloom industry. While some of them have their own machines, others work for wages. They have used PLDP-II credit for buying new mechanised handloom machines or invested in this business in some other forms. UDPS (Uttara Development Program Society) is the Partner Organization of PKSF for this region. In fact, it is implausible to expect a weaver, who has comparative advantage in weaving, will spend time and money on a different trade like livestock. Note that women are heavily involved in this industry too. So, the opportunity cost of raising cattle or poultry is very high for these women and the return is also lower.

Needless to say that credit under PLDP-II has helped them upgrade the technology and contributed to their economic wellbeing. Though this project may have significant contribution in Belkuchi union in augmenting income for the weavers who normally do not raise livestock, this is not what this project is meant for. This is the fourth route in our framework presented above.

We have met several women, in a village called Chaibaria in Naogaon District, who are primarily involved in making mats in their homes. Their husbands are small traders or drivers of rickshaw vans. Two women are required to make these mats and they can produce 3-4 mats a day and sell each for between Tk. 60 and Tk. 70. The cost of production is half the price of each mat and they go to the market once a week to sell their produce. They have indeed taken training from PLDP-II and borrowed money as well but used that money in repairing their houses, leasing land or spent them on other social occasions. None of them we met invested in livestock. Weekly repayments were made from their incomes or from the incomes of their husbands.

Midterm Review does not provide detail break down of the use of credit the way it is presented in Table V. However, it reports the diversion of credit to non-stated purposes, though not in a meaningful way. When asked why credit was not used in livestock enterprises, "65.95% of them mentioned the scope for investment of money for other income generating activities by insufficiency of

money for PLDP-II enterprise." And this makes perfect sense. Households know better where their comparative advantage lies and encouraging them to do something else would result in "diversion" under weak monitoring of POs.

Hossain *et al.* (2010) have shown that the increase in income brought about by the PLDP-II has been triggered by investment in off-farm activities rather than in livestock enterprises.

Monitoring by PKSF

The project headquarter in Rangpur has an M&E section. It employs five officers for project monitoring. They are called Field Monitoring Officers. Each of the officers is responsible for monitoring the activities of 3 POs. They make regular field trips and prepare a field report. These field reports are then pulled together and compiled by another Monitoring Officer. The six monitoring officers are guided by an M&E Specialist. We could collect two field reports prepared by the monitoring and evaluation department of PLDP-II. We have found these reports very detailed and informative. They not only looked into the accounts and progress of respective POs, the monitoring officers also met the borrowers and collected information on the use of PLDP-II credit.

Table VII summarises some important aspects of PLDP-II based on field investigation reports of ESDO (Eco Social Development Organisation) and Heed, Bangladesh. The extent of re-direction of credit (use of credit in sectors other than the livestock) was 70 per cent in the case of Heed, Bangladesh and 21 per cent for ESDO.

The Heed report contains case by case information on how credit was used by the borrowers. A quick look at these cases showed that:

- (1) Most of the borrowers had livestock already.
- (2) Credit not used in livestock was invested in:

Business: 3 (11%) Land purchase: 9 (32%) Cultivation: 16 (57%)

⁴ This argument also points to the relative small size of PLDP-II credit. Our fieldwork experience suggests that many borrowers find the size of credit small for investment in livestock. This prompted them to use the credit for some other purpose.

	Heed Bangladesh	ESDO
Period of review	13-15 May, 2008	15-18 Nov., 2009
Area	Gobindganj	Thakurgaon
PKSF Recovery rate*	100%	100%
PO Recovery rate	98.5	99.2
Drop out rate	20%	45%
Credit redirection	70% of 40 borrowers	21% of 30 borrowers

TABLE VII
SUMMARY OF FIELD INVESTIGATION REPORT OF HEED AND ESDO

Source: BIDS (2010).

In respective reports ESDO was reported to be financially performing poorly and Heed was warned of high credit re-redirection rate. The managers of PLDP-II therefore knew about the issues raised in this report but did act accordingly?

The interesting aspect of this information is PKSF recovery rate and the PO recovery rate. While the former relates to the transaction between PKSF and the PO, that is the money borrowed and returned to PKSF, the latter related to actual recovery of PLDP-II credit at the actual borrower level. Both these figures are either 100% or very close to 100%. This indicates that PKSF was rather satisfied with impressive recovery rates.

Although two randomly collected field reports do not allow us to make a conclusive statement, existence of other evidence suggests that these are not isolated reports or outlier cases. The extent of mis-directed credit is quite endemic in livestock projects in Bangladesh.

VII. MICRO-CREDIT AND LIVESTOCK DEVELOPMENT IN BANGLADESH

Livestock development in Bangladesh takes place under several constraints. Highly developed large farms raising livestock and selling livestock products as observed in the developed countries were considered unfeasible and the alternative small holder based poultry model was proposed. The smallholder nature of the production organisation was seen both as a constraint and an opportunity for livestock development. These smallholders face problems other than credit. Lack of space, poor quality of the stock, lack of technical and managerial knowledge, poor livestock services provided by the state and the private sector, and shrinking grazing grounds can be mentioned amongst others. While the earlier projects retained the name of smallholder, the later projects dropped it altogether as the scaling up of the project continued. This note

^{*} Transaction between PKSF and the PO (money borrowed from and returned to PKSF).

analyses some of the pitfalls involved in this process of "microcreditisation" of livestock development in Bangladesh.

In this note we have identified two important aspects of microcredit-driven projects implemented for developing the livestock sector in Bangladesh. These are mis-targeting or credit given to non-poor households and mis-direction or credit used by the recipients in purposes other than livestock. While these issues are important on their own and have been recognised and discussed in the existing literature, the implications are not well understood and the dynamics of this relationship is often overlooked. We have shown that leaving out a large number of poor households not only affect the extent of poverty reduction but also affects the livestock growth. This is so because this is the group of people who use credit most in livestock enterprises. Since they are large in number in Bangladesh, the success of livestock project through credit in Bangladesh hinges heavily on effective targeting. We have shown that targeting is affected by opportunity costs of the borrowers and monitoring. Those who can make the most of credit from investing in non-livestock enterprises and return the money to the credit provider are less likely to invest in livestock. Although there exist some richer households who also invest in livestock like the poor households, there also exists a large number of households who do not at all invest in livestock. The success of livestock project depends heavily on the extent of success of taking on board those class of borrowers who invest in livestock. The relatively richer (or "graduated") households may often be not interested in small credit and weekly repayments. They are either going for large scale production or planning an increase in their stock. Perhaps micro-enterprise type of loan is more suitable to cater their needs. The success of livestock development projects depends heavily on the extent to which the project reduces that cost of raising livestock. In particular, quality of training provided to the borrowers and the livestock services made available to the borrowers are very important in this respect. In our evaluation, the poor performance of PLDP-II is not only due to poor monitoring from both PKSF and local MFIs, which resulted in a larger leakage of credit to non-livestock sector, but also due to leaving out a large number of households who could have invested in the livestock sector.

The microcredit-driven livestock projects implemented in Bangladesh have a tendency to become a microcredit project first and then a livestock project. The focus is on recovery of credit, not development of livestock through training and livestock services. The order of this focus has to be changed for any future microcredit based livestock development project in Bangladesh.

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