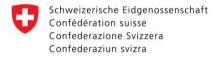
# Effects of livestock asset transfer on the resilience of the landless A case study of NETZ livestock project in Bangladesh

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Md. Korban Ali and Asim Kumar Roy korban@netz-bangadesh.de







Swiss Agency for Development and Cooperation SDC







The Extreme Poverty Research Group (EPRG) develops and disseminates knowledge about the nature of extreme poverty and the effectiveness of measures to address it. It initiates and oversees research, acts as a learning and sharing mechanism, and assists in the translation of learning into advocacy. It is an evolving forum for the shiree family, and others with an interest in the eradication of extreme poverty, to both design and share research findings.

The data used in this publication comes from the Economic Empowerment of the Poorest Programme (<a href="www.shiree.org">www.shiree.org</a>), an initiative established by the Department for International Development (DFID) and the Government of Bangladesh (GoB) to help 1 million people lift themselves out of extreme poverty. The views expressed here are entirely those of the author(s).

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# **Abstract**

This paper presents findings from a study on the beneficiaries of the 'Advancement of the Marginalised Adivasis Deprived of Economic Resources' (AMADER) Project undertaken by NETZ, funded by DFID/Shiree-GoB. The focus of the research was on landless or near landless people who were considered extreme poor. The paper reports on how the project, which was organized around the transfer of livestock assets to extreme poor people, improved their resilience at the end of four years of intervention.

Our findings support the argument that households with more land have a greater propensity to save and accumulate productive assets, making them more resilient than those with less land. The tendency of asset and savings accumulation for households with less than two decimals of homestead land is very slow, making their path to resilience extremely difficult. The study also explores factors other than homestead land that may influence the capacity of extreme poor to benefit from livestock transferred to them. These could include disability, internal stress (such as dowry), health and species of livestock purchased for rearing, market factors, livestock rearing practices and support of the employers, etc.

**Key words:** landlessness, livestock transfer, feeding strategies, community support, unpaid sources of fodder, threats of eviction, deaths of livestock, health issues, control over asset, asset and savings ac, vulnerabilities, distress sale, descent into poverty, resilience, Barind tract.

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#### 1. Introduction

Asset-based approaches to poverty reduction and growth emerged primarily from debate in the 1990s that challenged conventional measurements of poverty based on income, expenditure and consumption aggregates (Sabates-Wheeler and Devereux, 2011). The core idea of the asset transfer approach is to use short-term asset transfers as a vehicle for sustained economic empowerment for economically insecure and marginal households (Sabates-Wheeler and Devereux, 2011). There is growing evidence of success of asset-based poverty reduction programmes such as the two large-scale programmes in Bangladesh—'Challenging the Frontiers of Poverty Reduction: Targeting the Ultra-poor (CFPR/TUP)', introduced by BRAC and 'Chars Livelihood Programmes'—both funded by Department for International Development (DFID) of the UK. Assessments of both these programmes demonstrated success in terms of diversified and stable incomes leading to sustainable livelihoods for the beneficiaries (DFID Bangladesh, 2006 and Marks,2007 cited in Sabates-Wheeler and Devereux, 2011). Many authors recognized the role assets can play in reducing vulnerability and mitigating poverty (McKay 2009) arguing vulnerability is a key dimension of both chronic and transient poverty, (Davis 2011).

Not much literature investigates the impact of livestock transfers on households with little or no homestead land. This creates a scope for this research to generate new knowledge about effects of livestock transfers on the extreme poor with no land or with only a small piece of homestead. The researcher draws upon his experience of working for a livestock-based project of NETZ which suggests that the effectiveness of livestock transfer to the extreme poor is often dependent on their access to other assets and resources, notably land. Insufficient land for rearing livestock often prevent beneficiaries from utilizing and benefitting from assets being transferred to them, as is evidenced in several unsuccessful cases of the project. This limits their capacity to build resilience against stresses, hazards or shocks.

This paper is aimed at understanding the effects (positive and negative) of the NETZ livestock transfer intervention after four years from inception on the resilience of landless and near landless beneficiaries.

The paper is divided into five sections including this introduction. Section 2 reviews existing literature relating to the issue of the research to explore existing knowledge and debates, and to identify gaps of knowledge in existing literature. Section 2 also includes conceptual framework, hypotheses, and research questions and objectives of the study. Section 3 describes the methodological issues. Section 4 presents analyses of data emerging from field and arguments based on data analyses and relevant literature. Section 5 presents conclusions and programmatic recommendations drawn from the main findings.

#### 2. Literature review

## 2.1 Poverty alleviation in Bangladesh

Irrespective of various poverty reduction efforts by both the GoB and NGOs since independence, the proportion of population living below the lower poverty line in Bangladesh still stands at a nationally significant17.6% (HIES 2010, BBS). The incidence of extreme poverty is higher (21%) in rural areas (ibid). The poverty situation is even worse among the indigenous (*Adivasi*) communities in the northern and north-western regions of the country. An empirical study conducted by Ashrai (a Bangladesh NGO) and Caritas, found that 85% of the people from the *adivasi* communities are living below the poverty line (NETZ's AMADER Project Operational Context Study Report 2009).

## 2.2Livestock transfer and poverty reduction

The role of livestock in poverty alleviation has appeared in many preceding studies on asset-based approaches to poverty reduction. However, studies showing the impact of livestock assets on the resilience of the landless are scarce. Sabates-Wheeler et al. (2009), refers to two large scale DFID-funded programmes in Bangladesh – Challenging the Frontiers of Poverty Reduction: Targeting the Ultra Poor (CFPR/TUP) and Chars Livelihood Programme (CLP). Both interventions resulted in diversified and steady flow of incomes as mentioned in the project completion report of DFID (2006, cited in Sabates-Wheeler et al. 2009)

Several studies point out the significance of certain contextual factors (e.g. availability of free range for grazing or enough space for care of livestock) for livestock-based interventions to be beneficial for the rural extreme poor. LID (1999) highlights the cash benefits of livestock and identifies non-cooperation among the livestock-keepers in management of common land as a cause of limited positive impact of livestock on poor households' livelihoods. However, this paper primarily focuses on how social protection and agricultural policies interact and generate either synergies or conflicts in the African context.

Studies conducted in Bangladesh have identified landlessness (or near landlessness) in rural Bangladesh as a constraint to the beneficial effect of livestock on livelihoods and to some extent a cause of poverty (Hossain 1995, Makita 2007). Sobhan (1993, cited in Barkat et al 2001) views that if the goal is to eliminate rural poverty and accelerate all-round economic developments, there is no alternative to a radical agrarian reform which redistributes land widely enough to incorporate the bulk of the landless and land-poor in its admit and which thereby totally eliminates the current as well as any potential new dominant class in the countryside. Contextually, ethnic minorities in the Barind tract of northern Bangladesh, have a history of dispossession of their land since the British rule in India.

Hossain (2004) identifies the scarcity of grazing land and the high cost of imported livestock feed as major limitations for commercial production of livestock by the extreme poor. He, however, does not give specific focus on the issue of effects of livestock resources on the landless poor whereas Makita (2007) found a strong association between landlessness and poverty suggesting that the nonfarm sector can open-up viable livelihood opportunities for the landless. However, she does not explore the limitations of rearing livestock for the landless poor and its effect on resilience. Although there have been a number of publications focusing on the issue of land and livestock, linkages between extreme poor landlessness and livestock-transfer remain unexplored.

#### 2.3 The project case study

As mentioned earlier in this paper, NETZ's project titled 'Advancement of the Marginalised *Adivasis* Deprived of Economic Resources' (AMADER) transfers assets with the objective that the beneficiaries, who are mostly landless or near landless, would graduate out of extreme poverty. Reduced vulnerability and accumulation of productive assets is one of the expected outputs of the project. Evidence from the first phase of this project revealed that BHHs with no homestead land or with a very small parcel of homestead land were in many cases facing multiple challenges to benefit from livestock with a view to finding a sustainable exit from extreme poverty. The study is grounded in NETZ project experiences.

The NETZ project is being implemented in the Barind tract of Bangladesh and as many as 63% of the total beneficiaries of this project come from different Adivasi communities, who are known to be the most politically marginalised and socio-economically disadvantaged peoples in Bangladesh (Barkat 2009). As mentioned earlier, Adivasi communities in the Barind region have a history of settlement in their current location and of being displaced from their land. Land reforms and new land revenue laws introduced by the British colonial administrators in the Indian sub-continent during the British era led to the abolition of the Adivasi's communal land ownership system which, along with some other interventions that included rapid migration of foreign money lenders, merchants and other land-hungry non-tribal settlers, resulted in a very rapid and mostly disruptive process of alienation of tribal land (Bleie, 2005). A large number of Adivasis who found themselves dispossessed, decided to seek their fortune elsewhere in Bengal, leaving the core territories of their ancestors in eastern and central Bengal (currently mostly in Bihar and Orissa) (ibid). Many of those who migrated for a better life, however, found no other way but to labour in tea estates in Darjeeling, Assam and Sylhet and on railway construction works while others found themselves having to clear jungles for agricultural purposes for the East Bengal (now Bangladesh) Zamindars(ibid). Bleie (2005) further notes that many Santal and Oraon settlements in north-western Bangladesh (where Barind tract is located) date back to such forced migration in the nineteenth century, though these Adivasis were no newcomers to these eastern tracts as there had been pockets of continuous Adivasi settlement since prehistoric times.

# 2.4 The Conceptual Framework

The conceptual framework shows how access to land can heavily influence the success of livestock-transfers to the extreme poor. The conceptual framework follows the hypothesis that for an extremely poor household having access to a piece of homestead land that is sufficient to accommodate a livestock shelter along with a living house, the benefits from livestock can contribute to increasing the household's consumption, income and savings, thus creating opportunities for cyclical investments in income generating activities from savings generated from these increased incomes. The cyclical investments are believed to diversify the household's sources of income, resulting in improved well-being, enhanced food security, reduced vulnerability and finally, in enhanced resilience against shocks.

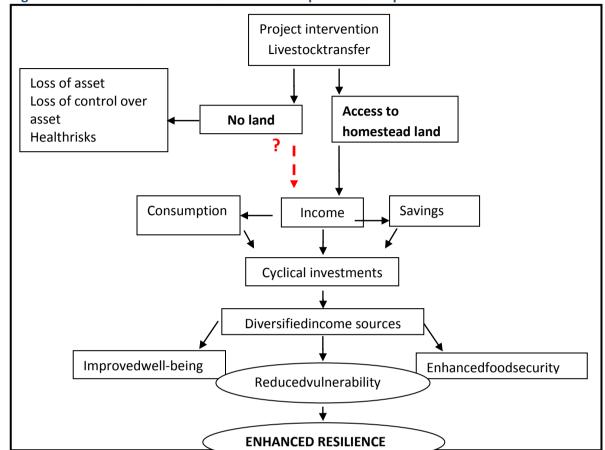


Figure 1: Livestock asset-transfer to the extreme poor- A conceptual framework

Source: The Author

It is assumed that having little or no homestead land limits the opportunity for households to build separate shelter for the livestock assets and in such cases the outcome for the recipient beneficiary household and thus, for the project intervention might not be as positive as expected. Landless beneficiaries also face a multitude of risks including the possibility of losing control over the animals kept on others' premises., likely deaths of livestock caused by diseases arising from being reared in confined spaces as well as falling ill themselves from close contact with animals. All this may result in poor resilience and thereby hamper the overall project's success .Pasteur (2011) defines resilience as the ability of a system, community or society to resist, absorb, cope with and recover from the effects of hazards and to adapt to longer term changes in a timely and efficient manner without undermining food security or wellbeing. Ellis (1998) identifies 'resilience' as the ability of a household to resist a downward movement in welfare caused by a shock. In this research, 'resilience' refers to an individual's or household's ability to recover or adapt their livelihoods and continue improving their lives while striving to step out of poverty in the face of hazards, stresses or shocks.

The study also attempts to identify any difference in experience faced by *adivasi* BHHs with similar land holding status compared to their Bengali counterparts. A*divasi* people are believed to have weaker social relationship with the Bengali majority community compared to the Bengali extreme poor beneficiaries, which may further reduce the possibility of them getting benefits from livestock

assets. This research considers the importance of ethnicity in the process of getting benefits from livestock transfers.

This conceptual framework illustrates two main hypotheses:

- Extremely poor households with comparatively larger piece of homestead land can
  effectively benefit from the project-delivered livestock to build resilience against hazards,
  stresses or shocks
- 2. The transfer of livestock assets proves to be unsuccessful in cases of households with very small piece of homestead land

# 3. Methodology

# 3.1 Research question and objectives

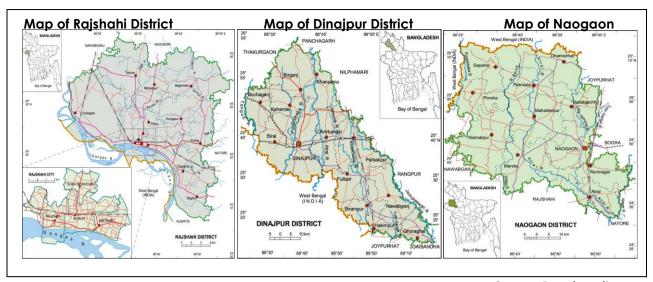
Main question: To what extent can the transfer of livestock assets contribute to the resilience of the landless or near landless extreme poor?

#### Research objectives:

- 1. Understand the livelihood strategies of extreme poor BHHs who have access to relatively large land surface
- 2. Understand the livelihood strategies of extreme poor BHH who only have access to a small parcel of homestead land
- 3. Identify limitations to benefits the near landless can get from livestock asset-transfer as a means to build their resilience
- 4. Draw project recommendations

## 3.2 Study sites selection

The study was conducted among the beneficiary households from the first phase of the AMADER project of NETZ, who were included in the second phase of the project. Supazilas (sub-districts) were selected with one upazila from Naogaon district and two upazilas from each of Rajshahi and Dinajpur districts. Upazilas selected for collection of data were Niamatpur in Naogaon district, Tanore and Godagariin Rajshahi district, and Fulbari and Birampur in Dinajpur district.



Source: Banglapedia

The criteria considered for selection of these districts included an attempt to explore whether beneficiaries from three different districts had different experiences. Other things taken into account for the selection were that BHHs of the AMADER project in these 3 districts were included in the second phase of the project though they were getting only mentoring and technical support. On the other hand, BHHs in the Chapainawabganj district, where the first phase of the project was implemented, shifted to a different NETZ project. Hence, they were not considered for the study.

## 3.3 Participants' selection

The participants were selected according to their access to varying land size, as reflected in the following table.

Table 1: Size of homestead land of households (out of 9,000 total beneficiary HHs)

Size of homestead land (any	Number of households	% of total BHH	
type of land)			
Less than 2 decimals	2,543	28%	
5-10 decimals	305	3%	
10+ decimals up to 15 decimals	6	.06%	
Total	2,854		

Source: NETZ AMADER Project Baseline Survey data 2009

Participants owning varying land sizes were selected for ease of comparison between beneficiaries having access to a relatively large parcel of land with those having access to a smaller piece of land. The reasons for selection of BHHs with less than 2 decimals of homestead land lie with the beneficiary selection criteria of the AMADER project. One of the supplementary project beneficiary selection criteria required that the size of homestead land of a household must be below 2 decimals. Selection of the group of households with more than 5 decimals of homestead land was based on the project knowledge that if a household has access to at least 5 decimals of homestead land, the household can well manage its livestock assets and finally can make use of benefits from livestock to build its resilience against hazards, stresses or shocks.

#### 3.4 Research tools

Tools used for data collection for the study were Focus Group Discussion (FGD), in-depth Interview (IDI) and Key Informant Interview (KII). Alongside, a structured questionnaire was used to conduct a small survey to collect some quantifiable data for the study.

A researcher and a research assistant were involved in the data collection. The researcher was responsible for analysis of data and writing the working paper. Details of the research tools and their objectives, number of respondents and areas of investigation are given in Table 2 of Appendix 1.

# 4. Research Findings

The study found that land certainly influences the benefits the extreme poor can generate from livestock, but also reports evidence that there are other major factors which influence this process (such as ethnicity, size, health conditions or variety of cattle, market factors, feeding and sheltering practices, support of the wealthy). The findings have been divided into two major sections. The first section analyses how beneficiaries manage to benefit from livestock and how it varies according to the size of their homestead land. Firstly it analyzes the role of homestead size, health conditions and variety of cattle and secondly considers productive assets, income diversification and savings accumulation. The second section discusses the strategies that the extreme poor undertake to gain access to land.

# 4.1- Extreme poor's access to and use of land in for rearing livestock

A household with sizeable homestead land finds it convenient to rear livestock and thus benefit from it. The study finds that project beneficiaries, who have comparatively large homesteads of their own are more successful in getting benefits from the livestock assets than those with small homestead land. Findings also show that households with less than two decimals of homestead land face multiple difficulties in maintaining the livestock, which may include possible dependence on others' premises for livestock shelter. This confirms the importance of owning, renting or negotiating access to land for generating valuable benefits that translate into profits, accumulation of productive assets and savings and improve households' well-being.

Quantitative data shows that higher percentage of informant households with more than five decimals of homestead land are able to make profits of more than taka 2000 from sale of each cow, than those with less than two decimals of homestead land. However, qualitative interviews and FGDs with beneficiary households provided little information on whether barriers to generating financial benefits from livestock are related to the size of homestead land surface. The table below shows how differential experiences of two groups of households are being compared in terms of generating profits from project-delivered cattle:

Table 1: Percentage of households making profit of more than 2000Tk from each sale of cattle<sup>1</sup>

1st cow		2nd cow		3rd cow		4th cow		
	% of BHHs							
	<2 dcml	>5 dcml						
>2000tk								
profit	16	22	29	25	40	67	25	50

Table 1 shows that BHHs with access to larger pieces of land generally manage to make more profitable cow sales and that this profit might increase with the BBH's experience. From sale of first cow, 22 percent of households with more than 5 decimals of homestead land made a profit of more than 2000 taka while households living on less than two decimals of homestead land making the same amount of profit from the sale of first cow was16 percent. Though there was an exception in the case of the second sale (when households with less than two decimals of homestead securing a profit of at least 2000 taka was 29 percent and the comparing group of households making the same amount of profit was 25 percent), the overall trend from all four sales shows that greater percent of households with comparatively larger piece of homestead made the benchmark profit than those with smaller pieces of homestead. More importantly, the table shows that an increasingly greater percent of households with at least five decimals of homestead made more than 2000 taka profit over time than those with less than two decimals of homestead. From the sale of the fourth cow, 50 percent of informant households having access to at least five decimals of homestead land made a profit of 2000 taka while the informant households with less than two decimals of homestead land making a profit of more than 2000 taka were only 25 percent. Although, it is to be recognized that the quantitative data does not allow establishing a causal link between having access to more land and getting more benefit from livestock sales, because that would ignore the reasons why some households have more land (better education, social connectedness, skills, knowledge etc). The qualitative data enables to investigate this link further.

Mainstream poverty reduction approaches regard savings as an effective tool for households in extreme poverty to protect themselves against shocks. BRAC's Challenging the Frontiers of Poverty Reduction-Targeting the Ultra-poor (CFPR-TUP) programme, one of the largest asset-based extreme poverty reduction programme in Bangladesh, introduced compulsory savings for its project participants with a view to elevating its participants' capacity to accumulate financial capital for future investment. NETZ's AMADER Project also prioritized promotion of savings behavior among its beneficiaries. When extremely poor households are provided with productive assets, it is also important that the household have enough space in their homestead for proper rearing of the assets if they are expected to enhance their asset base through further accumulation of assets and savings and investment of savings in diversification of income sources. Households with small homestead land surface are, therefore, likely to be less successful in terms of accumulation of productive assets and savings from livestock transfers than those with more land surface in their homestead .One of the causes of low accumulation of productive assets might be keeping of livestock in cramped conditions due to lack of space in homestead causing retarded growth of livestock resulting in less increase of value of livestock. The survey data shows that 44 percent of households with more land

<sup>1</sup>dcml=decimal

hold productive assets worth more than 25,000 taka while only 30 percent of households with less than 5 decimals of land hold productive assets worth 25,000 taka.

Table 2: percentage of BHHs holding productive assets valued more than taka 25000

	% of surveyed HHs Holding productive
	asset worth of > taka 25000
HHs having access to < 2 decimals	30%
of homestead land	
HHs having access to >5 decimals of	44%
homestead land	

Further, when extremely poor households have comparatively large homestead land, they can have the opportunity for homestead-based vegetable production which can contribute to reduce the use of their incomes from livestock for consumption purposes, thus increasing opportunity for saving more. Survey data shows that 44 percent of households with access to more than five decimals of homestead land were holding savings between taka 1500 and 2000 while only 6 percent of households having access to less than two decimals of homestead land were holding a similar amount of savings.

Although findings show that land is important for benefitting from livestock the data collected shows that getting access or retaining access to land is often challenging for the extreme poor. Actually, the extreme poor mostly tend to be landless or, in other word, land-poor. Although land is the primary source of income for majority of the rural population in Bangladesh nearly 53 percent of the extreme poor have no cultivable land (Rahman and Manprasert, 2006). Although laws and policies in Bangladesh make a provision for the extreme poor to have legal access to khas land, an estimated 88.5 percent of total distributable agricultural khas land in the country is under control of the illegal occupants (Barkat 2001). Due to their landlessness, extreme poor often negotiate an exploitative relationship with wealthy landowners to have some form of limited, fragile or conditional access to land for their residence or management of livestock. By creating such access, they experience different challenges that reduce their scope for benefitting from livestock transfers. The situation of the ethnic minorities, in this respect, is more vulnerable than the Bengalis.

#### Using well-off people's land

Access to land is critical for the extreme poor to benefit from livestock. When they do not have land of their own the extreme poor not only risk loss of their assets but also risk becoming engaged in exploitative relationships with better-off households. Both of these can have a negative effect on their resilience. Most informant households with access to less than two decimals of homestead land use the land space of well-off people for keeping and feeding their livestock, mostly cattle, goat or sheep during the day time. In most cases those extreme poor households need to exchange their labour to use this space (often work for the landowner without any wage). This form of unpaid

labour is called 'begar<sup>2</sup>'. *Adivasi* beneficiaries participating in an FGD reported that they had to give 'begar' labour for their landlord.

This common type of strategy adopted by extreme poor households with little and temporary access to land surface has negative effects on their livelihoods. Findings show that 'begar' labouring may cut their working hours, thus reducing their opportunity for wage incomes from labouring. Furthermore, despite their 'begar' labour services, those who claim ownership of the land commonly ask them to leave the land they were residing on and using for livestock management. One of those who reported threats of eviction and their obligation for 'begar' labour said, 'now we often dare to tell our landlord that we will not leave the land; force us to leave it if you have the power to do so'. However, when asked what they would do once they are evicted, they replied that they would actually have nowhere to go for shelter or nothing to do to resist eviction. While sharing their experiences, some of the informant households reported that often their landlords would send men on power-tillers threatening to cause damage, thus reinforcing the threat of eviction.

Extreme poor Adivasi households have more fragile and temporary access to land and weaker bargaining power with landowners compared to the Bengalis. While most of the Bengali extremely poor beneficiaries shared experiencing an easy access to the land of their Bengali neighbours for feeding or taking care of their livestock, experiences of the Adivasi extreme poor in this respect reflect that their access is often based on some form of exploitative relationship with the landowners. This phenomenon tends to increase the vulnerability of Adivasis as they have less scope to raise their livestock compared to their Bengali counterparts. Beena, an adivasi respondent with less than two decimals of homestead reported that a Muslim family claiming ownership of her homestead was trying to evict her. During nighttime, this respondent keeps and feeds her cow inside her house, but during daytime, she tries to keep it outside, which incurs the anger of the Muslim family claiming ownership of her homestead. She received threats in various forms, for example, when she keeps her cow tied to a stake in the space adjacent to her house, the owner of the land pulls out the stake to force her to keep the livestock inside her house, thus aggravating the threat for eviction. Beena fears that if she ever demolishes her dilapidated old hut to erect a new house, the landowner will take the opportunity to evict her once she removes her current mud house for renovation. Referring to the death of her first cow and loss from her second, she said:

'a cow is indeed an extremely important asset of an extremely poor person like me but lack of required amount of space in my homestead put me in a lot of trouble. If I had 5 to 7-8 decimals of land, I could have managed my livestock well and cultivated vegetable in my homestead'.

Experience of Radhika, another adivasi woman, gives us a sense of how lack of space on homestead makes rearing of livestock difficult for an extremely poor household, particularly for an adivasi household. This informant reported that after they started using land surface of a Muslim neighbour,

(Schendel and Westergaard, 1997)

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<sup>&</sup>lt;sup>2</sup>The custom of unpaid labour or 'begar' labour can be traced far back to the British India when the folk-culture allowed the new class called *Zamindars* (landlords), created by the new land revenue system in India, introduced by the British in 1793, to claim subordination from the *rayats* (the peasantry) and, therefore, the peasantry, the depressed class never felt humiliated to give 'begar' labour in the farm of the *Zamindars* 

the landowner dug a shallow ditch there to stop them from using their land though the owner himself did not usually make use of the space.

The story of Aloka Tudu shows how an *adivasi* extreme poor family might often be forced to accept lower wage rate for agricultural labour from their landowners than what they can get from other employers and face abusive treatment only to retain their access to homestead land. She reported that several years ago, when they migrated to their current location, they used to get half-paid by their landlord for their agricultural work. Currently, they are paid better than before but still the rate is lower than the market rate. Alongside, they are forced to cancel order for work from other landlords when their landowner asks them to work for him. She also reported that they often had to serve their landlord with 'begar' labour though they often get fed or get some rice in exchange for the 'begar' labour. Describing what may happen when they are in a situation not to comply with their landlord's request for work because of them being engaged in work for other employers, Aloka said,

'The landlord hurls abuse at us, orders us to leave the homestead and to go wherever we believe we will get our expected wage. The landlord often does not allow us to use his land adjacent to our homestead for keeping and feeding our cow during daytime in case we fail to comply with his request for labouring for him'.

These findings indicate that access of many of the beneficiary households, especially *adivasis*, to land is fragile and often under threat of eviction which has significant negative impact on their livelihoods and makes their opportunities to rear livestock more difficult. The impact of livestock asset transfer on the resilience of near landless extreme poor households is therefore often uncertain.

Further, findings show that the ways the extreme poor *adivasis* have to use to access the homestead land restricts their range of freedom (choice of employers) and economic opportunities that could help them maximise their wage incomes, which in turn might cause their savings to be small. The survey data show that beneficiaries with access to less than two decimals of homestead land had smaller amount of savings than those with more than five decimals of homestead land. Small savings amount means they are less resilient.

#### Using khas land

Distribution of khas (state-owned) land to the extreme poor has been recognised as an important tool for reduction of poverty in Bangladesh. For the extremely poor in northern Bangladesh access to a sizable amount of khas land is equally important because those who live on other people's land or small amount of khas land or owned land, find it difficult to properly manage their livestock assets. The study finds that those who had access to a comparatively large amount of khas land, got more benefits from their livestock than those living on small amount of homestead land. However, none of those living on khas land, who were interviewed, got legal document to ensure security of their access, thus leaving their access uncertain. Once they are in any crisis of access, their livelihoods and certainly, their resilience might be in difficulty.

#### Using land of kin

Some of the respondents explained that due to scarcity of space in their own homestead land, they were keeping their livestock in the homestead land of their mother or father or other relative during nighttime. When extremely poor households have no other alternative but to put their livestock in the cattle shelter of their relatives' during nighttime, the risk for asset loss increases because of their inability to feed their livestock properly or to take emergency care of their livestock in case of

animals showing any symptoms of diseases. Survey data shows that 75 percent of beneficiary households who kept their livestock in the cattle shelter of their kin or others lost their livestock assets due to diseases while a comparatively lower 56 percent of those sheltering their livestock in their own homestead lost their livestock. These losses of assets were caused by diseases. Asset losses impair their effort to build resilience.

#### Using homes to shelter livestock

When the livestock is not kept on other people's land (during night time) beneficiaries use their living house to shelter their livestock, which can have important negative health impact on the household members and on the livestock. Such health problems are believed to claim a portion of their incomes or restrict their opportunity for maximizing incomes, thus holding them back in their effort to find an exit from extreme poverty. Hossain (2013) found a prevalence of diseases like fever, cough, diarrhea, dysentery, skin diseases or stomach pain among the Adivasi participants of NETZ's AMADER project where this study was conducted. Extremely poor Adivasis' access to inadequate land resulting from causes like grabbing of land by powerful groups forces them into cramped living conditions in close proximity to livestock and may cause a number of health problems associated with poverty and marginalisation (Sadeka and Barkat 2009, cited in Hossain 2013). Almost all beneficiaries interviewed identified the bad odour and damp atmosphere caused by livestock sharing their living space as problems though many of them were not aware whether these problems were posing any health risks to them. Some of the respondents felt that they were suffering from stomach diseases and cough caused by continuous inhaling of bad odour of dung and urine of livestock kept in their close proximity. Opinions from the livestock experts working with the AMADER project further indicate that when living in close proximity to livestock for a long time, humans may run the risks of such diseases such as diarrhoea, dysentery, fever, cough, bird flu, worm, rabbis or anthrax. One of the livestock experts observed that such diseases might be transmitted from animals to humans when they live in close proximity. Furthermore, when kept in cramped condition, growth of livestock is delayed and increases the risks of animal diseases. Some respondents believe that bad odour from animal urine and feces causes no health problems as they clean their cattle sheltering space every morning, keep it dry and use *dhoop* (incense) every evening. They believe that *dhoop* reduces bad odour, repels insects and has a germicidal effect that protects them against diseases.

However, since most of the informant households live in close proximity to livestock and many of them reported illnesses, with some of them making an association between their illnesses and the animal sheltering, the researchers recommend a medical research into the issue.

#### Impact of strategies on household's resilience

The data gathered during the fieldwork indicates that extreme poor households with small homestead land are more likely to sell their livestock in distress for multiple reasons, Very few of them have a good amount of savings to help them in times of hardship. As they have very limited or no opportunity for producing vegetables on their homestead to add income or to reduce their expenditure on food, they have to resort to sale of their livestock or loans in times of illness. As a result, such distress sales of livestock push them back into a precarious state with a declining asset base. Data shows that 21 percent of surveyed households living on less than two decimals of homestead land were forced into distress sale of their livestock assets to meet medical expenses. Three of these households spent 100 percent of the money earned from livestock on medical treatment. Furthermore, two of these households spent 50 percent of money earned from livestock sale on medical treatment. This is in line with Das and Misha's finding that (2010) poor health depletes human capital and reduces capital accumulation. Hossain (2013) also finds that depletion of productive assets caused by distress sales during illness reduced earning and shock-absorbing capacity of NETZ beneficiaries in one of the areas where this study was conducted.

When a household lives on small homestead land and shelters the animals within their homestead there is a high risk of health problems for the animal too which can negatively affect the value of it. Extreme poor households in this situation often face losses or only make marginal profit from selling their cattle. Also, the qualitative data collected reports that extreme poor households often have to struggle in order to feed their animal. The time and daily effort invested in sheltering and feeding their cattle can affect their capacity to work. Survey data in the following table shows that more percentage of beneficiaries with less land experienced more losses that those having access to more land:

Table 2: percentage of households facing loss from sales of cattle (dcml=decimal)

	1st cow			2nd cow		3rd cow
	% of BHHs		% of BHHs		% of BHHs	
Land held	<2 dcml	>5 dcml	<2 dcml	>5 dcml	<2 dcml	>5 dcml
Loss	39	22	32	25	30	0

From the first sale of their cow, 39 percent of informant households with less than two decimals of homestead land experienced losses while households experiencing losses from their first cow was 22 percent. From the third sale of cow, 30 percent of households with less than two decimals of homestead land failed to make any profits while no households with access to more than five decimals of homestead land faced any loss.

#### Households with access to less land face higher number of deaths of livestock

Confirming to some extent our initial hypothesis that landlessness of extremely poor households often causes loss of their livestock assets, quantitative data shows how households with less land may have different experiences in terms of livestock mortality rates compared to households with access to more land. Survey data shows that 85 percent of the surveyed households with access to less than two decimals of homestead land faced deaths of their minor livestock (goat, sheep, chicken, duck, etc.) while 78 percent of households with more than five decimals of homestead land reported deaths of their minor livestock. Difference in percentage points of deaths of cattle between the two groups of households was found insufficient. Although the quantitative data indicates significant correlation between landlessness and deaths of livestock, findings from the FGDs and indepth interviews with the beneficiaries do not corroborate the study's hypothesis. There might be several reasons for difference between the qualitative and quantitative data. Respondents might not be aware of the health problems caused to their livestock animals kept in a cramped condition due to shortage of space. There might also be some weakness in the quantitative data as the survey was conducted on a small number of households. Further research can be conducted to get more reliable data on these issues.

#### 4.2 It is not all about land

Alongside the size of homestead land, this study identified many other important factors associated with generation and limit of benefits from livestock asset transfers in the case of extremely poor households. These factors include household composition, physical or health conditions of cattle, market factors, employer's support with fodder, intra-household or extra-household support, feeding practices and relevant knowledge and experience

#### Household composition

Household composition often determines the margin of benefits a household can get from livestock assets. When a household has a physically challenged male head and under-aged children, the female head has to take on responsibilities for earning bread for the family. As a result, it becomes

difficult for the female head to give enough time for collection of fodder for cattle from unpaid sources (demarcation islands between plots of agricultural land, fallow land or road slopes, etc.) and other tasks required for proper rearing of their livestock and eventually, they get less benefits from their cow. The study finds that a beneficiary woman, whose husband had been severely suffering from leprosy, being unable to do any work and there was no other able-bodied member in the household to look after their livestock, experienced losses from sales of her cow three times due to her engagement in wage labouring for earning a living for the family. She shared that her engagement in wage labouring accounted for her losses from cows in two ways. First, being engaged in labouring, she could hardly managed to collect grass from unpaid sources, necessitating purchase of fodder. Second, as she was the only breadwinner for the family, it was difficult for her to invest sufficiently in inputs for the cow. Another beneficiary woman with physically challenged husband reported similar causes for her losses from sales of her cow on two occasions.

#### Internal stress-dowry

Existing gender norms may often be strong barriers for the extreme poor to benefit from livestock assets. When an extremely poor woman has to marry off her daughter at the cost of her cow which is the source of her living, her effort to come out of extreme poverty through building of a strong base is destroyed. The study found an adivasi woman beneficiary who had to sell her cow to meet the demand of dowry for marriage of her daughter and that this event severely depleted her asset base. When asked why she decided to pay the dowry, she said, "it is a social norm so how can I avoid it. If I dare to avoid it, I cannot marry off my daughter. This has been the system for ages".

#### **Ethnicity**

Understanding how Adivasis benefit differently from livestock asset transfer compared to their Bengali counterparts is also a crucial finding of this study. There is a widespread perception amongst project staff that Adivasis takes less care of their livestock compared to the non-Adivasis. This lesser care is attributed to the fact that they are not traditionally used to rearing of cow, sheep or goat. However the data on productive asset accumulation indicates that the pace of asset accumulation is quite similar to their Bengali counterparts. Average value of productive assets accumulated both by the Adivasi and Bengali households were slightly more than taka 23000 and 22000 respectively. During interviews, many of the informants shared that their possession of assets and mentoring support they received from NETZ project and their involvement in group meetings have raised their confidence and self-motivation to make the most of the assets despite investment of a major portion of their time in wage laboring in the agricultural sector. Note that both male and female members of Adivasi households getting involved in agricultural labouring in the crop field is a common tradition in the Adivasi communities in the Barind region. The study finds that before both the male and female members of an Adivasi household go out for wage laboring they ensure fodder for their cow and often their children look after the cow until they return. However, poorer market knowledge and deep-rooted exclusionary attitude of the Bengali majority, who dominate the market system, towards the Adivasi people in general often makes their effort for a competitive price of their cattle more difficult compared to their Bengali counterparts.

#### Size, health conditions or variety of cattle

When choice of cattle at the time of purchase is flawed, the extreme poor beneficiaries might not benefit from such cattle. If cows distributed to the beneficiaries are too small in size or unhealthy or are imported Indian breeds that require excessive feeding for fattening, beneficiaries are unlikely to benefit. According to the livestock experts working with the project, to ensure that beneficiaries get expected benefits from rearing of their cattle, the project should transfer at least two-tooth cattle and cattle of local variety. Some of the respondents reported that they were provided with very small sized cows and they did not fatten as expected, despite, proper feeding and care. As a result, they either got very marginal profit or loss from sale of such cows.

#### **Market factors**

Often negotiation skills in the market determine profit from livestock. In Bangladesh, cattle market are mostly controlled by brokers who impose barriers to getting competitive profits from livestock trade. Those who can efficiently overcome the influence of brokers can get good profits, for example, if beneficiaries can directly negotiate with customers or sellers or sell their cattle directly to customers in their village .Considering ups and downs in prices of livestock, often caused by imports of Indian cattle, and those who can identify the best time for purchase and sale of livestock usually make more profits.

#### Support of the wealthy employers

When the extreme poor are in such a cooperative relationship with their employers allowing them to collect straw for free while doing paddy harvesting work, such support helps reduce investment in fodder. Findings show that some of the beneficiaries who could collect straw from their employers, could make more profits than those buying straw for their cattle.

#### Feeding and sheltering practices

The livestock experts involved in the AMADER project observed that despite limitation of space in the homestead for properly accommodating livestock, more planned management of livestock can help reduce mortality and gain benefits. They opined that if those who have a small homestead can erect amacha(a bamboo-made ceiling) to build a two-tier shelter for livestock to keep cattle and goat or sheep in separate levels, this can help maintain a better environment for the livestock. They further observed that many of the project beneficiaries do not wash grass collected from the field before they feed their cattle. They believe that washing grass before feeding can protect cattle from food poisoning as using chemicals in the crop field is a prevalent practice in Bangladesh. One of the livestock experts stated that before grazing cattle in the field, beneficiaries should feed the cattle with something else to avoid food poisoning from grass while grazing. This livestock expert referred to an example where he found a cow suffering from food poisoning as it was grazed it the field on empty stomach.

#### 5. Conclusion and recommendations

The first main finding emerging from the study is that access to sufficient amount of homestead land for healthy sheltering and management of livestock is crucial for the extreme poor to benefit from livestock transfers and build their livelihood resilience. In that aspect, the sustainability of access to homestead land is often fragile and conditional, particularly in the case of the *Adivasi* extreme poor. This has important implications when extremely poor households have to rear livestock.

When an extremely poor household, who is living on the land of another person, receives a cow for fattening, they often increase their dependency on the landlord to benefit from the asset in a bid to build resilience. However, such dependency usually limits the household's benefits from the livestock, thus undermining their effort for a resilient future. The quantitative data from the small scale survey and from the qualitative interviews indicate that households with access to more than five decimals of homestead land gained more benefits from livestock assets transferred by NETZ project compared to those living on less than two decimals of homestead land in terms of generation of profits, accumulation of productive assets and savings, and diversification of income sources. In contrast, findings also show that households with access to less than two decimals of homestead land are more prone to distress sales of livestock assets and to experience comparatively higher number of deaths of livestock and losses from sales of livestock, thus indicating that

households with less amount of homestead were struggling to build resilience. All these findings together prompt us to conclude that transferring livestock to the extremely poor households in the Barind tract, particularly to the extremely poor *Adivasis* in the region who lack secure access to land, proves not be as successful as it is in other regions of the country.

The second major finding is that although secure access to a sizable amount of homestead land was identified as significant determinant of benefits from livestock transfers, there are other negatively interlocking factors that influence how much the extreme poor can benefit from livestock transfer. These factors may include household internal stresses (i.e. disability and health problems of the household members, dowry, etc.), illegal influence of intermediaries on the cattle market and import of cattle from India. Additional to these are the support of the employers, for instance, by providing residue of agricultural product free of cost, and the species of cattle purchased for fattening.

The study also analysed strategies that households who do not have sufficient access to land adopt in order to rear and protect their livestock. Major strategies included use of own land or land of others' (khas land or land belonging to well-off households) for keeping and feeding their livestock during daytime, and often for nighttime. The benefits and challenges incurred by these strategies are explored in the study (section 4.1.1). Often, as mentioned earlier, extreme poor households' dependence on well-offs for temporary access to land can create a form of exploitative relationship with the landowners. The fragile and conditional access to land may mean that the asset (received from the project) itself may become a liability to the extreme poor. The most common example is of extreme poor households providing unpaid labour to landowners and enduring other forms of abuses in order to maintain a good relationship. When a household serves their landlord with unpaid labour or less paid labour, their opportunity for maximising or diversifying income reduces. Other risks identified included loss of productive assets to incidents such as arson attack by landlords trying to enforce an eviction, thus undermining attempts to achieve resilience through the benefits from project-delivered livestock. This accentuates our hypothesis expressed in the conceptual framework, that lack of homestead might cause loss of livestock. Further, if their access to land is taken away (eviction), this jeopardizes their effort to build resilience. Adivasi women are particularly vulnerable to these risks and suffer comparatively more than their Bengali counterparts from discrimination regarding access to land (khas land and well-off households' land), given that grabbing of land belonging to adivasis has a long history in this region (Barkat et al 2009).

Drawing from the research findings, the author makes six main programmatic recommendations to enhance and sustain the impact of the NETZ's AMADER Project on extreme poor households' resilience:

- 1. Access to sufficient amount of land is crucial for getting and retaining benefits from livestock and around one third of the total number of beneficiary households, who have access to less than two decimals of homestead only, are struggling to benefit from asset transfer. Hence the project should concentrate on advocacy for distribution of khas land among the extreme poor NETZ beneficiaries, most of whom are *Adivasis* experiencing a perennial process of dispossession from their land. NETZ livelihood programme model is designed to involve Social Opinion Makers (SOM) including professions like journalists, lawyers and teachers to speak for rights of the extreme poor. It is recommended that these SOMs are involved in the advocacy for distribution of khas land to the extremely poor beneficiaries of the NETZ project, emphatically to the extremely poor *Adivasis*.
- 2. A census of the project beneficiaries needs to be conducted to identify the exact number of beneficiaries facing threats of eviction. Emphasis also needs to be put on exploring

- availability of khas land and distribution of khas land to these households on a priority basis. Field level staff can be used for collection of data for this purpose.
- 3. Transfer of livestock should be more carefully decided in consideration of physical capacity of household members and availability of minimally sufficient land surface in the homestead for successful rearing of livestock. The project may consider transferring livestock to the upper extreme poor, not to the extremely extreme poor, to ensure that they can benefit from the assets
- 4. There are many khas closed water bodies (pond) in the project area. Barkat (2001) finds that more than three-fifths of the total closed water bodies in Bangladesh are in Rajshahi Division. Pond-based community fishery projects might be one possible alternative intervention for households with physically challenged or elderly members. A group of beneficiaries combining both physically challenged and able-bodied members can be involved in such projects. A study can be done to explore the possibility of such interventions.
- 5. For immediate response, the project needs to ensure that beneficiaries are feeding their animals in the proper manner (washing grass to avoid food poisoning, etc) or building two-tier shelter to maintain a healthy environment for the livestock. To emphasise these practices, project management should incorporate these issues in the monitoring tools of the project.
- 6. Awareness of women's rights among the beneficiary women needs to be strengthened to protect beneficiaries from slipping back into extreme poverty which might be caused by internal stress like dowry.

#### References

AbulBarkat, S Zaman, and S Raihan. 2001. *Political Economy of Khas Land in Bangladesh*. Dhaka: Association for Land Reform and Development. ISBN 984-31-1482-5

Barkat, Abul., Mozammel Haque, Sadeka Halim, and Asmar Osman (2009), Life and Land of Adibashis: Land Dispossession and Alienation of Adibashis in the Plain Districts of Bangladesh. Dhaka: Pathak Shamabesh. ISBN 984-70212-0021-4

BBS, 2010, Household Income and Expenditure Survey Report 2010, http://www.bbs.gov.bd/home.aspx

Bleie, Tone (2005). *Tribal Peoples, Nationalism and the Human Rights Challenge: The Adivasis of Bangladesh*. Dhaka: The University Press Limited. ISBN 984 05 1747 3

Davis, Peter. 2011 "The trappings of poverty: the role of assets and liabilities in socio-economic mobility in rural Bangladesh" Chronic Poverty Research Centre Working Paper Number 195. http://www.chronicpoverty.org

Hossain, Mahabub. 2004 "Poverty Alleviation Through Agriculture and Rural Development in Bangladesh" Centre for Policy Dialogue Paper 39

Hossain, Zakir, SK, 2013. The effects of ill health on the livelihoods of extremely poor Adivais in Bangladesh, shiree working paper 13, March 2013

Krishna, A., Poghosyan, M. and Das, N. How much can asset transfers help the poorest? The five Cs of community-level development and BRAC's Ultra-Poor Programme, BWPI Working Paper 130,

Krishna, A., Poghosyan, M. and Das, N. Addressing Extreme Poverty in a Sustainable Manner: Evidence from CFPR Programme, CFPR working paper 19, June 2010

LID, 1999. Livestock In Development (1999) Livestock In Poverty-Focused Development. Crewkerne: Livestock In Development

Makita, R. 2007. *Livelihood Diversification and Landlessness in Rural Bangladesh*. Dhaka: University Press Limited. ISBN 984 05 1783 X

McKay, Andrew. 2009, "Assets and Chronic Poverty: Background Paper", Chronic Poverty Research Centre Working Paper Number 100. http://www.chronicpoverty.org

Meinzen-Dick, R., N. Johnson, A. Quisumbing, J. Njuki, J. Behrman, D. Rubin, A. Peterman, and E. Waitanji. Gender, Assets, and Agricultural Development Programs: A Conceptual Framework. 2011. CAPRi Working Paper No. 99. International Food Policy Research Institute: Washington, DC. http://dx.doi.org/10.2499/CAPRiWP99."

Prowse, M; Scott, L. 2008, "Assets and Adaptation: An Emerging Debate", IDS Bulletin 39, Blackwell Publishing Ltd, http://dx.doi.org/10.1111/j.1759-5436.2008.tb00475.x

Report on Labour Force Survey 2010, Bangladesh Bureau of Statistics (BBS), 2011, www.bbs.gov.bd

Sabates-Wheeler, R; Devereux, S and Guenther, B. 2009 Building synergies between social protection and smallholder agricultural policies, FAC Working Paper 06, Brighton: Future Agricultures Consortium. <a href="http://www.future-agricultures.org/publications/research-and-analysis/working-papers">http://www.future-agricultures.org/publications/research-and-analysis/working-papers</a>

Sabates-Wheeler, R. and Devereux, S., 2011 "Transforming Livelihoods for Resilient Futures: How to Facilitate Graduation in Social Protection Programmes" CPS Working Paper 023. www.future-agricultures.org www.future-agricultures.org

# Appendix 1

# Table 2: Tools of research objectives

Tools	Participants selection	Objective	Areas of investigation
Questionnaire survey	42 BHHs (33 BHHs with less than 2 decimals of homestead land-11	Collect comparable quantitative data	Benefits gained by both groups of BHHs in terms of building resilience; loss of productive assets due to poor
	BHHs from each of 3	on how	management caused by insufficient space
	study sites and 9 BHHs	landlessness	in homestead or no homestead
	with at least 5 decimals	effects benefits	
	of homestead land-3 BHHs from each of 3	of livestock on the resilience of	
	study sites)	the extreme poor	
FGDs 4	6-8 BHHs with less than	Objective 2	Strategies adopted by different groups of
	2 decimals of	Objective 3	households, successful strategies and
	homestead land (1 in		causes of success in terms of resilience,
	each of the 3 study		common challenges, specific challenges
	sites)		for households with less than 2 decimals
	6-8 BHHs with 5 decimals or more	Objective 1	of homestead land or no land at all
	amount of homestead		
	land (1 in each of the 3		
	study sites was planned		
	but only one was done		
	due to scattered		
	location of BHHs)		
15 IDIs	9 BHHs with less than 2	Objective 2	Impacts of livestock, strategies adopted by
	decimals of homestead	Objective 3	different group of households, causes of
	land (3 BHHs from each		particular effects, challenges linked to
	of the 3 study sites) 6 BHHs with 5 decimals	Objective 1	ethnicity, what could have caused better impacts
	or more amount of land	Objective 1	Impacts
	(2 BHHs from each of		
	the 3 study sites)		
3 KIIs	3 livestock officers (1	Understand	Housing related causes of illness of
	from each of the three	contextual issues	livestock, health risks of BHHs sheltering
	partner NGOs of NETZ	and experiences	livestock in living house, effects of
	in three study sites)	of the BHHs from	livestock on both groups BHHs being
		project staff's	compared, recommendations for better
		perspective	and sustained impacts of project