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# ENSURING ESCAPES FROM POVERTY ARE SUSTAINED IN RURAL BANGLADESH

**LEO**

Leveraging Economic  
Opportunities

**LEO REPORT #32**



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## **DISCLAIMER**

The author's views expressed in this publication do not necessarily reflect the views of the United States Agency for International Development or the United States Government.

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# ACRONYMS

BBS	Bangladesh Bureau of Statistics
BDT	Bangladeshi Taka
CBN	Cost of Basic Needs
CFPR-TUP	Challenging the Frontiers of Poverty Reduction - Targeting the Ultra-Poor
CLP	Chars Livelihoods Programme
CPAN	Chronic Poverty Advisory Network
DFID	Department for International Development (United Kingdom)
FFE	Food for Education
FGD	Focus Group Discussion
FTF	Feed the Future
HIES	Household Income and Expenditure Survey
IFPRI	International Food Policy Research Institute
LEO	Leveraging Economic Opportunities
MG	Micronutrients – Gender
NGO	Non-governmental Organization
ODI	Overseas Development Institute
ZOI	Zone of Influence

# EXECUTIVE SUMMARY

Bangladesh has experienced substantial reductions in both extreme poverty and poverty. The proportion of the population living below the national extreme poverty line has reduced from 50 percent in 1991 to 18 percent in 2010 while the poverty headcount ratio, using the national poverty line, has reduced from 60 percent to 32 percent over the same period. Economic growth, increased non-farm employment (particularly in the ready-made garment industry), international migration, and investments to improve human development outcomes have all contributed strongly to this success. However, some households escape poverty only to live at a level just above the poverty line: 19 percent of the population lives out of poverty, but has a level of consumption less than 1.25 times the national poverty line. They therefore remain vulnerable to slipping into poverty in the event of a shock or stressor, such as an episode of ill-health or a flood.

The specific focus of this report is on “transitory poverty escapes”: a term referring to households that successfully escape from poverty only to return to living in it once again i.e. they become re-impooverished. Analysis of the Chronic Poverty and Long-Term Impact Study for this case study reveals that transitory poverty escapes are a significant phenomenon in rural Bangladesh. In particular, between 1997/2000 and 2010, 10 percent of all households experienced a transitory poverty escape. Of those households that escaped poverty between 1997/2000 and 2006, around 20 percent were again living in poverty by 2010.

This report combines analysis from three rounds of the Chronic Poverty and Long-Term Impact Study with qualitative research approaches; in particular: key informant interviews, life histories, and participatory wealth ranking to further investigate the drivers of transitory poverty escapes or of re-impooverishment. Specifically, it examines why some households are able to escape poverty and remain out of it—that is, they experience sustained escapes from poverty—while others escape poverty only to return to living in it again. The report investigates the resources (land, livestock, and value of assets), attributes (household composition and education level), and activities (including jobs and engagement in non-farm activities) of households that enable them to escape poverty sustainably and minimize the likelihood of returning to living in poverty again.

What matters? Specific findings include the following:

- Households with greater asset value are more likely to experience a sustained escape from poverty.
- Owning more cultivable land reduces the risk of experiencing a transitory poverty escape relative to a sustained poverty escape. Cultivating land is an important source of income and food while ownership of land itself can act as collateral to secure loans; owning land is a measure of social status and can be mortgaged out during hard times.
- An increase in the number of livestock is associated with a reduced risk of experiencing a transitory poverty escape relative to a sustained poverty escape. Buying and selling cattle can be an important source of income as are sales of milk; there is evidence of “livestock ladders” with households moving from rearing poultry and small ruminants to share-rearing and owning cattle. Selling small ruminants, particularly goats, as well as poultry, is an important means to manage risks.
- An increase in the share of dependents is associated with a higher risk of a transitory poverty escape. Life histories also highlight dowry payments for girls as being an important driver of re-impooverishment.
- A more educated head of household is tied to a reduced risk of transitory poverty escapes and impooverishment. The level of education is also important. Households where the head has completed secondary education are less likely to experience a transitory poverty escape than

those where the head has completed primary education. Those with primary education, in turn, are less likely to experience a transitory poverty escape than those where the head has no education.

- Female-headed households are less likely to experience a transitory poverty escape or become impoverished than to experience a sustained poverty escape. This finding should be contextualized for Bangladesh where there are two primary groups of female-headed households: those where the male head of household has migrated (including internationally); and those where the woman has been abandoned, divorced, or widowed. While the latter are among the poorest households in rural Bangladesh and can have limited prospects for sustained poverty escapes given limited income-generating activities that are accessible to women, the former are among some of the better-off households in rural areas due to their receipt of remittances.
- Female-headed households that receive remittances are more likely to experience a sustained escape than a transitory escape.
- When the head of household is involved in non-agricultural activities, the household is more likely to experience a sustained escape. In practice, based on the life histories of households that experienced sustained escapes, heads of these households were engaged in both agricultural and non-agricultural work throughout the year.
- Experiencing a series of shocks in short succession is associated with transitory poverty escapes. Health shocks emerge as a particularly important driver of re-impoverishment.
- Households where the man and woman work together are more likely to experience sustained poverty escapes.
- Households that experience sustained poverty escapes cultivate more than once a year, switch crops regularly depending on market prices, and store crops to sell them when the price is high.

What can be done? Recommendations include the following:

- Both primary and secondary education are important for sustained poverty escape. However, education needs to be relevant for the labor market, and because of this, *technical training and skills development* are crucial, as is *raising awareness* on the types of job available for educated individuals.
- *Avoid neglecting jobs*, given the predominant focus of development interventions in rural areas on self-employment and entrepreneurship. Migration is important here, and interventions should aim to reduce the risks associated with migration, both internal and international.
- *Work toward changing values and behaviors*. Female empowerment and tackling unequal gender relations as a root cause of poverty remain central in efforts aimed at ensuring that escapes from poverty are sustained.
- *Promote mentoring*. Household- and individual-level mentoring and follow-up is useful in providing continuous support to enable them to successfully to follow new livelihood activities and to maintain interest in these activities.
- *Innovate around health care* so that households are protected in the event of health shocks; health insurance is one potential avenue here. In addition, there are households that experience transitory poverty escapes because family members are chronically sick or elderly. A priority here is to link these households with government safety nets so that they have access to long-term support.

# I. INTRODUCTION

Analysis of two-wave panel data to examine poverty dynamics reveals a disturbing trend in terms of the numbers of households descending into poverty. Across 14 countries,<sup>1</sup> while some households successfully escape poverty, other households are falling into poverty over the same period. For instance, in Nepal between 2003/04 and 2010/11, 13 percent of households escaped poverty while 9 percent of households fell into poverty (Mascie-Taylor 2013). Meanwhile, in South Africa between 2008 and 2012, 20 percent of households escaped from poverty while 10 percent fell into poverty (Finn and Leibbrandt 2013). In some other contexts and over particular periods of time, more households actually fell into poverty than escaped from it. This includes Tanzania where between 2008/09 and 2010/11, 12 percent of households fell into poverty while 7 percent escaped from poverty (Tanzania National Bureau of Statistics 2011).

Analysis of three-wave panel data by the Chronic Poverty Advisory Network (CPAN) reveals further the incidence of “transitory poverty escapes,” or households that escape poverty subsequently returning to living in it. For instance, in Vietnam, while 14 percent of households escaped poverty between 2002 and 2004, 20 percent of those households had once again returned to living in poverty by 2006. In rural Kenya, 12 percent of households escaped poverty between 2004 and 2007; by 2010, just over 40 percent of these families had returned to living in poverty again (Scott et al. 2014).

Qualitative life histories conducted by the CPAN and hosted at the Overseas Development Institute (ODI) complement the panel data analysis referred to above. The life histories point to the inability of poor and insecure, non-poor households to mitigate, adapt to, and recover from shocks and stresses as key drivers of transitory poverty escapes and impoverishment. To investigate further, and to articulate the role of risk and the importance of risk management in relation to Feed the Future’s (FTF) top-line poverty reduction goals and USAID’s ending extreme poverty agenda, the Bureau for Food Security contracted ODI through the Leveraging Economic Opportunities (LEO) activity to examine the observed variance (at the household and national levels) in transitory poverty escapes in three FTF focus countries: Bangladesh, Ethiopia, and Uganda. Box 1, below, clarifies how the terms “transitory poverty escapes” and “impoverishment” are used in this work, and how they relate to USAID’s resilience agenda.

## **BOX 1: TRANSITORY POVERTY ESCAPES AND IMPOVERISHMENT**

**Impoverishment** refers to the process whereby a poor person or household becomes poorer, or where somebody who is non-poor slips into poverty. **Transitory poverty escapes** refer to individuals or households that used to live in poverty, succeeded in escaping poverty, and then subsequently fell back into poverty i.e. they became re-impoverished. For the purposes of this work, we view **resilience** as a set of capacities enabling households to remain out of poverty over the long term, even in the face of shocks and stresses. (Source: In other words, the capacity to be resilient means an individual or household is ultimately able to avoid becoming impoverished or to experience a transitory poverty escape.

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<sup>1</sup> Panel data sets from the following 14 countries were analyzed in the third Chronic Poverty Report (2014): Burkina Faso, Ethiopia, India, Indonesia, Mexico, Nepal, Pakistan, Philippines, Kenya, Senegal, South Africa, Tanzania, Uganda, and Vietnam. More detail about the data sets analyzed is presented in Annex A.

# II. THE CASE STUDY OF RURAL BANGLADESH

The objectives of this case study of rural Bangladesh are (i) to highlight the importance of a poverty dynamics perspective for an agenda to end extreme poverty, ensuring that escapes from poverty are sustained, i.e., that “re-improvement” is prevented; (ii) to investigate the drivers of transitory poverty escapes, or the reasons why some households are able to escape poverty and remain out of it while others escape poverty only to fall back into it; and (iii) to draw out implications for USAID’s ending extreme poverty agenda and programmatic approaches in Bangladesh.

This study brings together:

- New analysis of the panel data collected as part of the Chronic Poverty and Long-Term Impact Study in Bangladesh (Quisumbing and Baulch 2010). This impact study was conducted by the International Food Policy Research Institute (IFPRI) in conjunction with the Chronic Poverty Research Centre and Bangladesh’s Data Analysis and Technical Data Ltd.; it covers individual-, household-, and community-level information. It was created to assess the impact of certain antipoverty interventions on poverty trajectories in the country<sup>2</sup>. Specifically, the Micronutrients-Gender (MG)/agricultural technology data set explored the introduction of new agricultural technologies; the Food for Education/Cash for Education (FFE) data set explored the impact of educational transfers; and the microfinance data set evaluated the short-term effects of the introduction of microfinance within the survey site.

While together the impact study is not nationally representative, the areas chosen do “broadly characterize the variability of livelihoods found in rural Bangladesh” (Quisumbing 2007). Moreover, as poverty in Bangladesh remains a predominantly rural phenomenon, employing this data set enables a closer look at the most prevalent drivers associated with poverty trajectories in the country (Sen 2003).

The analysis in this paper relies on the 1,193 households with available data across the three survey waves of the MG/agricultural technology and FFE data sets<sup>3</sup>. Three waves were constructed, first in 1997/2000 and then in 2006 and 2010 when both sites were resurveyed.<sup>4</sup> Poverty status was identified through comparison of household per capita expenditures to lower and upper poverty lines provided by the Bangladesh Bureau of Statistics’ Household Income and Expenditure Surveys. Annex B presents some summary statistics from this data set.

- Insights from key informant interviews with development stakeholders in Dhaka and Jessore districts in the southwest of the country, which is a FTF zone of influence (ZOI). Jessore is not particularly disaster prone. We conducted 16 key informant interviews in Dhaka and two in Jessore. Jessore was purposefully selected for life histories as it is (i) located in the FTF ZOI; and

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<sup>2</sup> The panel survey was undertaken in 102 villages across 14 of Bangladesh’s 64 districts. These districts are: Manikganj, Kishoreganj, Mymensingh, Jessore, Barisal, Chandpur, Cox’s Bazaar, Naogaon, Narail, Nilphamari, Sherpur, Tangail, Habiganj and Kurigram.

<sup>3</sup> Analysis was conducted on a subsample of surveyed households. In particular, on households which became impoverished over the survey period (n=48); those which experienced a transitory poverty escape (n=121) and those which experienced a sustained escape (n=484).

<sup>4</sup> The first survey wave corresponds to 1997 for the MG data set and 2000 for the FFE data set. This difference in years exists because the original studies examined interventions separately across survey sites; the MG panel began in 1996 and comprised four rounds of data collection until the end of 1997, while the FFE panel began in 2000 and involved another round in 2003. In our analysis, we employ data from the last round (late 1997) in the first wave of the MG data set and the first round (2000) of the FFE data set to reduce this difference and maintain a degree of cross comparability.



(ii) analysis of the Chronic Poverty and Long-Term Impact Study revealed a relatively high proportion of households in each of the different poverty trajectories. Annex B gives a list of key informants interviewed for this work.

- Information from focus group discussions (FGD) that can be used for participatory wealth ranking in three villages in Jessore district. Two of these villages were the same villages previously visited by the Chronic Poverty and Long-Term Impact Study and by USAID’s Feed the Future initiative, which has been operating in all three of these villages since 2013. The groups assembled to conduct the participatory wealth ranking comprised both heads of household from households engaged in USAID interventions and those from households not involved with USAID’s activities. In each village, we undertook the exercise twice: once with a group of men and once with a group of women.

Specifically, we conducted a historical participatory wealth ranking for three points in time (2006, 2011, and 2016) using predetermined wealth classifications. We then asked the group to discuss and explain reasons behind the assignment of households to certain categories and the drivers of different poverty trajectories. The participatory wealth ranking exercises were recorded, and the key insights from these were subsequently documented. Annex C gives more details of this approach.

- Life history interviews with individuals who took part in the participatory wealth ranking and who were identified during this exercise as being on different poverty trajectories. These life histories enabled in-depth investigation of the reasons why individuals, and subsequently their households, were able to escape poverty at different points in time; why they became impoverished; or alternatively why they were able to remain out of poverty or were trapped in poverty. The guiding template for the life histories is in Annex D. In each of the three villages, we undertook eight life histories: four with women and four with men. The life histories, along with key informant interviews, were analyzed using MAXQDA with codes to identify those factors associated with sustained poverty escapes, impoverishment, and transitory poverty escapes.
- Existing policy and program assessments and evaluations (see references)
- Wider literature on the extent and nature of impoverishment and re-impoverishment, and the success of anti-poverty efforts in Bangladesh (see references)

## **A. WHAT IS THE EXTENT OF TRANSITORY POVERTY ESCAPES IN BANGLADESH, AND WHY IS THIS IMPORTANT?**

Bangladesh has experienced impressive reductions in the incidence of both poverty and extreme poverty, as illustrated in Figure 1. Overall, the poverty headcount ratio<sup>5</sup> has reduced from 60 percent in 1991-92 to 31.5 percent in 2010 while the proportion of the population living below the extreme poverty line<sup>6</sup> has reduced from 50 percent to 17.6 percent over the same period (Bangladesh Bureau of Statistics (BBS) 2010). Significant poverty reduction has taken place in the context of rapid GDP growth, which averaged 4.7 percent during the 1990s and just under 6 percent in the period since. Bangladesh has also seen

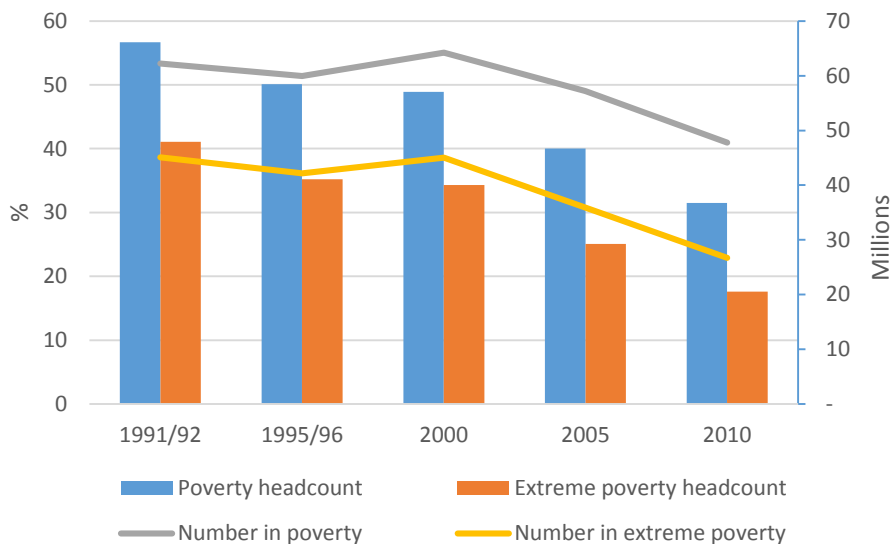
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<sup>5</sup> Using the national poverty lines, which are calculated by the Bangladesh Bureau of Statistics using the Cost of Basic Needs (CBN) method, and given as the “upper poverty line” and “lower poverty line.” In this paper, as commonly used in Bangladesh, “poverty” refers to those households living below the “upper poverty line,” while those living below the “lower poverty line” are referred to as the extreme poor.

<sup>6</sup> Note footnote 5 and how, throughout this paper, the term “extreme poverty” refers to households living below Bangladesh’s national lower poverty line. In other words, the term extreme poverty is not used to refer to those people living on/below \$1.90 ppp, as is used in international discussions.

marked improvements in measures of human development, which exceed those of other countries with a similar level of per capita income. In 2011, the U.N. Human Development Report placed Bangladesh third out of 178 countries in terms of improvements in education, health, and inequality over the last 20 years (Asadullah et al. 2014).

**Figure 1: The Poverty Head Count Ratio and Number of People Living in Poverty**



*Source: BBS (2010) and World Bank Health, Nutrition, and Population statistics.*

Analysis of the Bangladesh Household Income and Expenditure Survey (HIES) reveals that though there are some commonalities in the drivers of poverty reduction in the 1980s, 1990s, and the period from 2000, there are also some important differences (Zaman 2012). This section investigates the drivers of poverty reduction at both the macro- and micro-levels across these two periods.

### 1. MACRO-LEVEL DRIVERS OF POVERTY REDUCTION BEFORE THE 2000'S

Agricultural development in Bangladesh has to be viewed in the context of a devastating famine in 1974 and the subsequent, almost overriding ambition to become self-sufficient in rice production. This ambition was based on the desire to avoid future famines and suffering and, in doing this, to ensure political support for the ruling party, law, and order. Since independence, production has increased threefold (National Agricultural Extension Policy 2012), and there is a sense of pride at the country's achievements in this regard.

Accompanying the progress on achieving rice self-sufficiency, Bangladesh also witnessed progress in reducing both poverty and extreme poverty before the 2000s, with an annual rate of extreme poverty reduction of 1.8 percent in the 1990s (Sen and Ali 2015). During this time, progress in non-income dimensions of poverty came faster than for income dimensions. The human poverty index, which stood at 61 percent in the early 1980s, declined to 35 percent in the late 1990s (Sen 2003). Accelerated income poverty reduction during the 1990s was due in no small part to the increased speed of economic growth, with GDP growing at a rate of 3–6 percent throughout the decade (Sen 2003). The following factors also contributed to reducing poverty prior to 2000 (Kabeer 2004):

- A decline in fertility rates: with the birth rate reducing from around 7.0 children per woman in 1970 to 2.3 children per woman in 2010 (Chowdhury et al. 2013)
- The Green Revolution in agriculture

- Changes in the policy environment, specifically structural adjustment measures for economic liberalization
- Growth in the rural non-farm sector
- Investment in infrastructure development. In particular, analysis of household panel data from the late 1990s reveals that rural road investments significantly reduced poverty through increased agricultural production, higher wages, lower input and transportation costs, and higher output prices. Rural roads also lead to higher school participation rates among school-aged boys and girls (Khandker et al. 2009).
- Policies leading to improvements in human capital, mainly through public sector promotion of social services including health care, drinking water provision, and education. For instance, since the 1990s the Bangladesh government has given systematic attention to increasing primary school enrollment rates, with these steadily increasing and reaching 100 percent by the end of the decade (Lewis 2011). A combination of public social policy and organized NGO interventions also saw striking improvements in the delivery of health services and health outcomes. Particularly noteworthy is that the immunization rate increased from 1 percent in the early 1980s to over 70 percent within 10 years (Chowdhury, Bhuiya, and Aziz 1999 in Asadullah et al. 2014), and maternal mortality has decreased by 75 percent since 1980 (Sen and Ali 2015). A key innovation, which enabled effective delivery of health services and improved health outcomes, is the use of household visits by community health workers (Adams et al. 2013).
- Though NGOs have played a contested role in poverty reduction, NGOs involved in service provision, including microfinance services, have largely been seen as an enabler for women's empowerment (Kabeer 2004).

## 2. MORE RECENT MACRO-LEVEL DRIVERS OF POVERTY REDUCTION

In the 2000s, both poverty and extreme poverty remained largely rural phenomena. In 2010, the poverty head count was 43.8 percent in rural areas and 21.3 percent in urban areas. In terms of extreme poverty, 21.1 percent of people in rural areas and 7.7 percent of people in urban areas were extremely poor in 2010 (BBS 2010). Agriculture, including crops, fisheries, and livestock, meanwhile remains the major source of livelihoods and the largest employer in the country: 47.5 percent of the population is directly employed in this sector, while around 70 percent depends on agriculture in one form or another for their livelihoods. The agricultural sector therefore remains crucial in poverty reduction (Miah et al. 2015).

The 2000s have seen impressive reductions not just in poverty but also in extreme poverty, with the proportion of the population living in extreme poverty falling from 34.3 percent in 2000 to 17.6 percent in 2010 (BBS 2010). However, 27 million people are still living in extreme poverty, which remains qualitatively different to conventional poverty and is characterized by functional landlessness and landlessness (Goto et al. 2011; Sen and Ali 2015). This has implications for the extent and mechanisms through which they can benefit from programs for (crop) agriculture. The need for specific interventions to meet the specific needs of extremely poor households was stressed by key informants (see also Ali and Mujeri 2016). Human capital improvements for the poorest segments of the population have continued into the 2000s, with notable achievements including a decline in the under-five mortality rate for the lowest asset quintile from 121 deaths per thousand in 2004 to 64 deaths per thousand in 2011. In addition, the share of illiterate people among the extreme poor has declined from 64 percent to 46 percent over the previous seven years (Sen and Ali 2015).

The nature of poverty reduction has also varied over the decade since 2000. In the mid-2000s, Bangladesh was argued to be entering “a phase of inequality” (Sen and Hulme 2006, 46), where the poorest were getting “left behind” in national progress. In particular, between 2000 and 2005, the rate of poverty

reduction was greater in the wealthier eastern part of the country, as compared to the much poorer west; this exacerbated the east-west divide (Government of Bangladesh 2005).

Since 2005 though, growth is argued to be more pro-poor (World Bank 2013). Poverty reduction has also been much more regionally balanced: in particular, the Jamuna bridge, which opened in 1998, has contributed to increased prosperity in the northwest of the country (World Bank 2013). In addition, both own-account farmers, including smallholders, and agricultural daily wage laborers have seen improvements in their situation (World Bank 2013). In particular, reductions in extreme poverty and poverty between 2005 and 2010 have predominantly been driven by **increased returns to existing endowments (particularly labor and land)**, rather than a shift in the endowments that poor people own or have access to (World Bank 2013). However, returns to existing endowments have been greater for some than for others. For instance, since the 2000s, the rate of poverty reduction has been greater among households with larger landholdings, which is defined as households with more than 1.5 acres of land (World Bank 2013).

Specifically, net food producers have benefitted from increases in the price of food, especially during 2007–2008 (World Bank 2013), while agricultural wage laborers have seen their **real wage rates increase**, with these increases accelerating during the second half of the decade (Wiggins and Keats 2014). This is in sharp contrast to declining returns for agricultural occupations during the 1980s (Wodon in Zaman et al. 2012). Rural real wages have particularly accelerated since 2005, with an annual growth rate of approximately 10 percent for both male and female workers during agricultural peak and lean seasons (Zhang et al. 2013). This has led some to argue that, since 2005, it has been increases in labor income connected to growing economic activity that has played the largest role in reducing extreme poverty (Azevedo et al. 2013).

A key driver of growth in rural real wages is **more ample job opportunities in the non-farm sector**, especially jobs for women in the manufacturing sector (Zhang et al. 2013). While the ready-made garment sector employed 1.3 million people in 1995, this increased to 3.6 million in 2010 with a particularly rapid increase since 2004 (Zhang et al. 2013); the sector has been a key driver of economic growth during the 2000s as well (World Bank 2010). **Migration, both domestic and international**, has also contributed to the rise in agricultural and rural wages for the remaining workers in rural areas (Sen and Ali 2014). Indeed, despite the high up-front costs of international migration, the share of the two lowest land-owning groups in rural areas (owning up to 0.40 ha) among rural households reporting international migrants increased considerably from 38 percent in 2000 to 54 percent in 2008 (Hossain et al. 2013 in Sen and Ali 2014).

### 3. A MICRO PERSPECTIVE: EVIDENCE ON THE DRIVERS OF HOUSEHOLD DESCENTS AND ESCAPES

The previous section has focused on the macro-level drivers of poverty reduction. This section presents existing findings from micro-level data including household surveys, both cross-sectional and panel, as well as from household-level qualitative research about what drives escapes from poverty and causes falls into or further into poverty. This section investigates findings in terms of the following categories:

1. The initial household **resource base** including land, livestock, value of assets, electricity, and piped water
2. Household **attributes and capacities** including age, household size and structure, gender, education, and skills
3. The types of **activities** that household members engage in including employment, non-farm enterprise, crop agriculture, and remittances
4. Household **shocks**, including the number and types of shocks

**a. Poverty ascents.** In terms of household resource base, the *accumulation of both land and non-land fixed assets* has been found to drive poverty ascents across the literature (see, for example, Hossain and Nargis 2010; Davis 2011a; Ahmed et al. 2016). Davis (2011a) finds that individuals who *own or have access to productive tangible assets such as land and livestock* are more likely to fare better.

Meanwhile, those households with a *stronger human capital base* tend to be faster at accumulating assets and displaying positive economic mobility. Related to this are intangible assets like head of household education, social status, and female economic empowerment that are also important in propelling households upward (Davis 2011a; Kabeer 2004; Ahmed et al. 2016). However, while a shift to higher levels of education among heads of household is associated with improving welfare, the overall returns to education at each grade level, as compared to the 1980s and 1990s, has declined in the 2000s. While the returns to education still increase with the level of education attained by heads of household, the authors suggest that higher numbers of children going to school is likely to have resulted in an overall reduction in the “wage premium” for educated individuals in the labor market (Zaman et al. 2012).

Having a *lower dependency ratio*, and particularly fewer children, is also important for poverty reduction. Analysis of HIES data reveals that changes in household size and the education of household members contributed the most to consumption growth between 2000 and 2005. In particular, there was a sizeable reduction in household size over the five-year period: the average size of households fell from 5.2 to 4.9 members as a result of fewer children in the household (Zaman et al. 2012). If household size had not reduced between 2000 and 2005, poverty reduction would have been almost half of what it actually was (World Bank 2008 in Zaman et al. 2012).

Besides a household resource base and capacities, *household activities* are also indispensable in deciding poverty trajectories. Determinants of upward trajectories responsible for poverty reduction have included *crop intensification, diversification of agriculture, irrigation, and the growth of non-farm activity* (Sen 2003). Kabeer (2004) also notes business and trade to be drivers of poverty ascents, especially where these comprise non-agricultural activities. In addition, Hossain and Nargis (2010) find that it is not necessarily occupational shifts but rather the engagement in non-farm activities itself that contributes to upward economic mobility. International migration and remittances also drive poverty ascents (Kabeer 2004; Hossain and Nargis 2010; Davis 2011a).

Meanwhile, poverty escapes can also partly be a case of *avoiding shocks*. Quisumbing (2011) finds that households that experience upward mobility are significantly less likely to have health expenses as well as expenditures on dowry and wedding costs.

**b. Poverty descents.** While poverty reduction in Bangladesh has made large strides over the last decades, there have been large flows not only of poverty ascents but also of descents. Such flows are not observed through changes in the poverty head count alone. Examining the *drivers of poverty trajectories* is important in order to formulate more effective poverty-reduction strategies (Sen 2003; Sen and Ali 2015). It also provides a means of tackling chronic poverty as well as preventing re-improvement and impoverishment.

While the extreme poor are very susceptible to shocks and to sliding further down into poverty as a result, households living above the poverty line are also vulnerable to shocks, though not to the same extent. “The slippages of the non-poor and moderate poor into extreme poverty makes the project of ending extreme poverty solely through a climbing-up strategy a very difficult task” (Sen and Ali 2015). In particular, in Bangladesh, 18.6 percent of the population lives out of poverty, yet consumes less than 1.25 times the (upper) national poverty line. This means that a sizeable proportion of the population is vulnerable to slipping into poverty in the aftermath of shocks, whether a natural disaster, health shocks, crop failure, or theft (NSSS 2015). Recent analysis by IFPRI indicates that descents by the non-poor into poverty are not insubstantial, with 12 percent of rural households falling into poverty between 2011/12

and 2015 (Ahmed et al. 2016).<sup>7</sup> This section examines some of the reasons for impoverishment and downward mobility in Bangladesh in recent decades.

In terms of the household resource base, land is not only a key asset for upward mobility, but **land ownership is also associated with a reduced likelihood of downward mobility**. Excess income tends to be invested in land, it can be sold in times of crises, and it endows household members with social status that contributes to their social capital (Davis 2011a). Sen (2003) also finds escapes from poverty and downward movements to both be affected by initial asset position as proxied by the amount of land owned. Besides land, other structural factors such as debt, in addition to **intangible factors like social stigma, violence, and physical insecurity, contribute to “social disadvantage” and poverty descents** in the country (Sen 2003; Davis 2011a).

In terms of household attributes and capacities, **high dependency ratios** have been found to drive poverty descents (Ahmed et al. 2016). Building on the **gender** dimension, Asadullah (2012) finds that downward mobility in wealth exists particularly in cases where sons split off from the father’s household. These household divisions as well as other family disputes that may stem from land or dowry-related issues also exert a downward pressure on households across income quintiles (Baulch and Davis 2008).

Investigating poverty dynamics in the late 1990s, Kabeer (2004) finds that female headship and the relative absence of adult male members as well as adult members without an education are all associated with descents into poverty. She relates this to the limited choice of activities for these individuals, confined mainly to agricultural wage labor, which, in that period, provided low wages and was associated with poverty traps.

Shocks such as illness or natural disasters that destroy assets or crops have played a key role in initiating poverty descents in Bangladesh (Hossain and Nargis 2010). Episodes of illness tend to be especially severe for poor households, wherein families face a double disadvantage due to the loss of productivity of an earning member as well as health-related expenses (Kabeer 2004). Besides illness and dowry, difficulties in repaying loans also contributes to household-level crises and a decline in well-being (Kabeer 2004; Davis 2011a; Quisumbing 2011). Ahmed et al. (2016) found that crop losses from floods, droughts, pests, and diseases can play an equally significant role in driving descents into poverty. Meanwhile, Quisumbing (2011) does not find that flooding is a major driver of poverty, something which she suggests may be due to flood response efforts. Certainly, with the growth of non-farm employment opportunities it is likely that natural disasters currently play a less important role in poverty descents than they did in previous decades.<sup>8</sup>

An important programmatic response to prevent impoverishment is **social protection**. Households that receive social safety net income that comprises more than 15 percent of their total household income are less likely to fall into poverty (Akhter et al. 2016).

Table 1 presents recent findings from FGDs in Jessore district.

**Drivers of poverty escape and upward mobility** include a range of factors associated with increased agricultural production, market access, and prices as well as factors related to improvements in the position of women, which have occurred particularly over the previous five years.

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<sup>7</sup> Analysis of the Feed the Future sample of IFPRI-PRSSP’s Bangladesh Integrated Household Survey. This comprises a sample of roughly 2,000 households in southwest Bangladesh.

<sup>8</sup> Interview with Binayak Sen.

**Table 1: Drivers of Upward Mobility in Particular Communities over Previous Five and Ten Years**

Between 2006 and 2016 (Over the previous 10 years)	Between 2011 and 2016 (Just over the previous five years)
Farmers could not produce crops if they did not have money. Now, however, they can obtain loans from any NGO for agriculture when they need one.	Increased price of milk and meat. This is linked to increased border controls with India and the ban on exporting cattle from India. Increased price of jute and rice.
Training by NGOs on livestock rearing and modern crop agricultural practices. This means farmers can now cultivate more than one crop on one piece of land per year.	Improved relationships with agricultural input and output dealers due to higher levels of production. Dealers come to the village and distribute fertilizer, pesticides, and seeds, and farmers no longer have to buy these from markets. Fertilizer is also now of an improved variety ( <i>guti urea</i> ).
Increased awareness of the value of education and, in particular, of educating children.  “Now we try to convince our children but in previous parents were not that serious about educating their children. They were not bothered about whether children went to school or not. But now we try to make our children educated so that they can get sufficient light and air to live.” [Fasiatala Female, FGD]	Increase in the wage offered for agricultural day labor. “Five years ago, wage of day labor was Tk 100–150 per day where it is now Tk 250/300 <sup>9</sup> per day.” [FGDs in Ishwaripur]
	Migration abroad and to other cities in Bangladesh. In Ishwaripur village, 35 people are currently working abroad.
	Increased information and communications, including through TV and mobile phones. Through mobile phones, rural people can now communicate with local livestock doctors. When needed, they can consult with doctors about livestock treatment over the phone. They can also learn about different topics through various TV programs. [Banstalli Female, FGD]
	Improved road infrastructure, enabling easier transport of agricultural produce to markets.
	Husbands and wives are working outside the home together. Generally, women work outside the home in rural areas, but recently, more women across Bangladesh are working outside the home. Increasingly throughout the country, men and women are working outside the home in equal numbers.  Besides household chores, women now tend homestead gardens and rear livestock on their homesteads. [Ishwaripur Male, FGD]  “Many women in our area help their husband[s] grow crops on agricultural land. They also work as day laborer[s]. Now many women work in Dhaka or in Jessore.” [Banstalli Female, FGD]
	Homestead gardening to meet nutritional needs and to supplement household incomes.

<sup>9</sup> At the time of writing, Tk 78 is approximately \$1.

Between 2006 and 2016 (Over the previous 10 years)	Between 2011 and 2016 (Just over the previous five years)
	Through USAID's agriculture extension program, women plant more vegetables on their homesteads. [Banstalli Female, FGD; Fasiatala Female, FGD]
	Improved relations between mothers-in-law and daughters-in-law. When daughters-in-law increase family income by engaging in income-generating activities, then the mother-in-law and other older people support them and permit them to attend the NGO meetings and trainings.

Table 2, meanwhile, presents the *drivers of downward mobility and impoverishment* as reported during the FGDs. Interestingly, all drivers were common across the previous 10 years, with none being specific to the previous five years. These drivers include different types of shocks such as natural disasters, dowry, death, and illness as well as stressors that can drive downward mobility over the longer term. These stressors include having limited land assets and being unable to earn enough to maintain your situation; this can lead to being trapped in loan repayment cycles.

**Table 2: Drivers of Downward Mobility in Particular Communities over Previous Ten Years (2006–2016)**

Natural disasters, including continuous heavy rain, flooding, storms, and flash floods. Destroy both houses and crops.
Death of an income earner. When the one and only bread winner of the family dies, the whole family is driven into poverty. A female respondent from an FGD in Banstalli village explained that her husband recently died. For his treatment, she had to spend about Tk 4 lakh. <sup>10</sup> Her son was studying in higher secondary school, but after the death of her husband, he had to drop out and work as an agricultural day laborer to repay the debt.
Illness or accident
Death of livestock
Dowry. Across the FGDs, dowry is given as one of the causes of a deteriorating economic situation among families. To provide a dowry, many families have to sell land, mortgage out their land, or take out loans and then are trapped in a cycle of destitution by taking loans to repay loans.
Failed international migration. If a family member goes abroad, the family has to take out a huge loan or sell key assets. If that family member comes back to the country without having earned much money because he was cheated by a broker, then the family is likely to experience trouble. As one FGD participant explained, "in 2011, my son went abroad by spending four lakhs money. But we have lost all the money as the broker stole it." [Fasiatala Female, FGD]
Lack of land ownership. Most working men work as agricultural day laborers. Even people who farm their own land also work on other's land. For people who do not own their own land, however, it is hard to escape poverty through agricultural wage labor alone. In addition, through sharecropping, farmers must give half the crops to the land owner. With agricultural wages, a person will not be able to make enough money to secure a land-lease. If farmers do not have their own land, they cannot improve their condition through leasing land or sharecropping. [Banstalli Male, FGD]
Lack of savings to manage shocks. "Many people among us don't save money for emergency situation[s], they spend all of their earnings to live. So, when those people fall in any trouble, then they have to borrow money with interest." [Ishwaripur Male, FGD]
Trapped in loan repayment cycles. "Many people take a loan from NGOs when they are in trouble. They have to repay the loan with interest through installments made within several weeks. So for repaying one loan, they have to take a further loan from another NGO. In this way they can't overcome their poor condition." [Banstalli Male, FGD]

<sup>10</sup> One lakh is 100,000 taka.

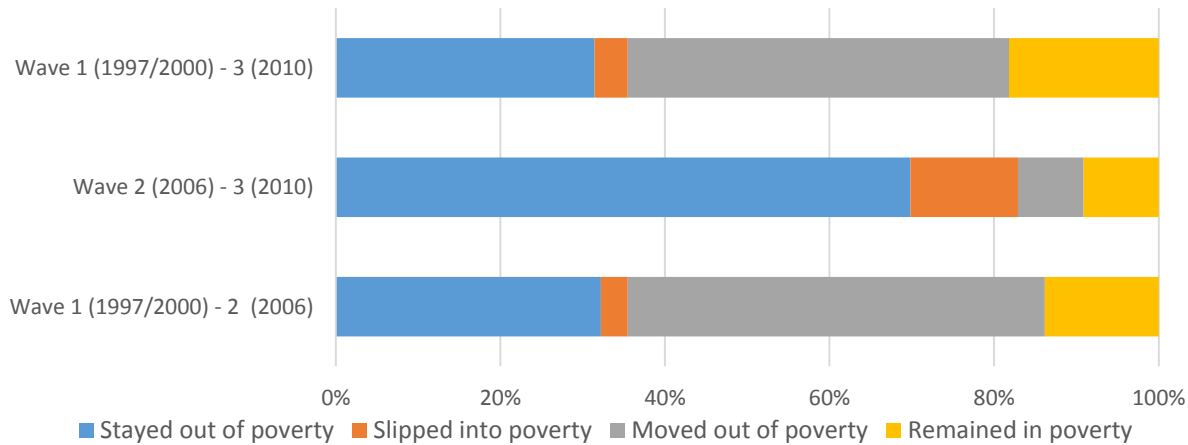


“Taking a loan is a popular trend in this area. Many people take a loan without really needing it. Again many people can’t utilize the loan money properly and fall into a poorer condition trying to repay it.” [Ishwaripur Male, FGD]
Increased dependents or children. If there are a lot of children in the family and only one person earns for the family, then the family cannot escape from poverty easily, since increased numbers of children means more expenditures. As such, families with fewer children can improve their condition more easily than families that have more children. [Banstalli Male, FGG; Ishwaripur Male, FGD]
Drug addiction, gambling
Limited education and aspirations. People are failing to plan for the future or have a goal for what they want to achieve.
Household and family division. For instance, when sons start their own households, usually both the new and the old households suffer. When a family unit divides, property is also divided amongst the inheritors. In this way, family division reduces the amount of land owned that the original household can cultivate and reduces the number of wage earners. [Ishwaripur Female FGD]

#### 4. THE EXTENT OF DIFFERENT POVERTY TRAJECTORIES AND TRANSITORY POVERTY ESCAPES

This section introduces analysis of the Chronic Poverty and Long-Term Impact Study, and in particular, analysis of survey rounds from 1997–2010 to investigate poverty dynamics. Figure 2 indicates that just over half of the households escaped poverty between waves 1 and 2 (between 1997/2000 and 2006), while only 3 percent fell into poverty during the same period. Between 2006 and 2010, only 8 percent of households moved out of poverty. Examining the dramatic reduction in poverty between waves 1 and 2 reveals a *large share of households that have escaped poverty during this period but that remain clustered just above the poverty line* (Davis and Baulch 2009). Interestingly, 13 percent of households slipped into poverty between the latter two years of the survey. Of this, over three quarters (78 percent) were transitory escapers, meaning they had once been poor, escaped poverty, and become poor once again.

**Figure 2: Poverty Dynamics in Rural Bangladesh, 1997–2010**



Source: Analysis of Chronic Poverty and Long-Term Impact Study. N=1,193.

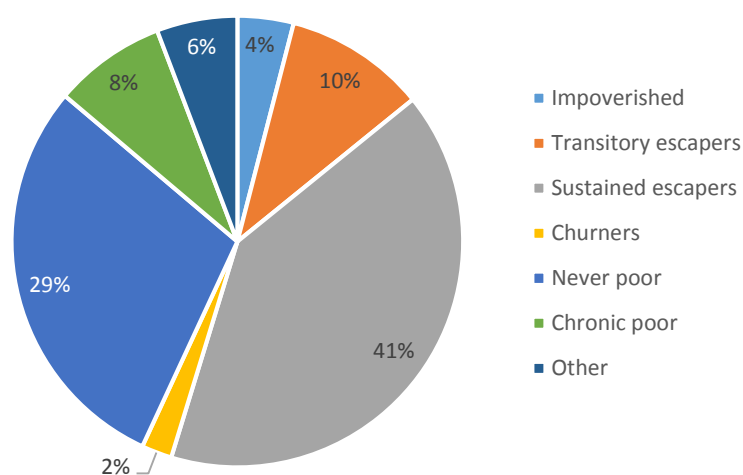
Examining poverty trajectories that households have experienced *over the entire survey period, we see that 10 percent are transitory escapers and another 4 percent become impoverished* (Figure 3).<sup>11</sup> Optimistically, two in five households are sustained escapers, meaning that they were in poverty in the first wave of the survey but thereafter escaped poverty and remained above the poverty line in the

<sup>11</sup> The specific trajectories of these different groups are; Impoverished: Non-poor (N) in wave 1, Poor (P) or N in wave 2, P in wave 3. Transitory poverty escapers: PNP. Sustained escapers: PNN. Churners: NPN. Never Poor: NNN. Chronic Poor: PPP.

subsequent two waves. The large number of sustained escapers is testament to Bangladesh’s poverty reduction successes.

However, in spite of this hopeful trend, we still see that almost a quarter of the sample comprises households that either experience a transitory poverty escape, churned around the poverty line, became impoverished, or were chronically poor. Transitory escapers are the largest of these four groups. As such, it is worth investigating the factors associated with transitory poverty escapes in Bangladesh and whether the gains accrued to sustained poverty escapers can be replicated by those households which experience transitory poverty escapes.

**Figure 3: Poverty Trajectories in Rural Bangladesh, 1997–2010**



Source: *Analysis of Chronic Poverty and Long-Term Impact Study*. N=1,193.

## **B. WHY DO SOME HOUSEHOLDS ESCAPE POVERTY ONLY TO FALL BACK INTO IT, WHILE OTHERS ESCAPE POVERTY AND REMAIN OUT OF POVERTY OVER TIME?**

This section investigates how different factors help or hinder sustained poverty escapes. These factors include (i) household resource base; (ii) household attributes and capacities; (iii) engagement in certain activities; (iv) shocks; and (v) household strategies. Findings from mixed-methods research are presented to examine further why some households are able to experience sustained escapes while others experience transitory poverty escapes or become impoverished. In particular, the research draws on the following sources:

1. Analysis of three waves of the Chronic Poverty and Long-Term Impact Study (see Box 2 for a summary of the analysis approach; the full regression results and further justification of the analysis approach are presented in Annex E)
2. Life histories with 24 rural households in Jessore district on different poverty trajectories

The findings presented in this section therefore draw either on the quantitative analysis, the qualitative research, or from both research methods. Several of the findings from the quantitative analysis are not statistically significant at conventional levels<sup>12</sup>; this is in part a function of the small sample size: 121 transitory poverty escapers and 484 sustained escapers. Where not statistically significant findings are also included, this is clearly stated and these findings are included as they are supported by insights from the life history research.

## BOX 2: APPROACH TO EMPIRICAL ANALYSIS

Pooled multinomial logistic regressions form the basis of our empirical investigation into the determinants of transitory poverty escapes and impoverishment. In our equations, the base outcome is whether a household has experienced a sustained poverty escape. We control for a host of characteristics of the household head, as well as demographics and regional variables. Our equation is similar to that employed in Scott et al. (2016), where:

$$Pr(\text{Poverty Trajectory}_{i,t} = 1 \mid \beta, v_{i,t}) = F(\beta_0 + \beta_1 \text{Head}_{i,t} + \beta_2 \text{Upazila}_{i,t} + \beta_3 H_{i,t})$$

for  $v_i = (1, \text{Head}_i, \text{Region}_i, H_i)$

where  $\text{Poverty Trajectory}_i$  is probability of the household  $i$  experiencing a transitory poverty escape, becoming impoverished, or sustaining a poverty escape,

$\text{Head}$  is a vector of variables defining the characteristics of the household head,

$\text{Upazila}$  is a set of dummy variables stating in which upazila the household resides and whether it is located in an urban or rural area, and

$H$  is a vector of household specific controls.

In interpreting the results, a variable coefficient that is greater than one indicates that a household has a higher risk ratio of the outcome (transitory poverty escape or impoverishment) relative to the base reference group of sustained escapers.

## I. INITIAL HOUSEHOLD RESOURCE BASE

Analysis of the panel data reveals that an increase in the log of per capita expenditures is associated with a reduced risk of experiencing a transitory poverty escape relative to sustaining a poverty escape, with the result being statistically significant.

**Key finding: Household assets are associated with reductions in the relative risk of experiencing a transitory poverty escape.**

Panel data analysis reveals that an increase in household asset value as well as the presence of a sanitary toilet and electricity are all associated with a reduced likelihood of transitory poverty escape relative to experiencing a sustained poverty escape, with all except the electricity variable being statistically significant at conventional levels.

With the arrival of electricity to villages, qualitative research reveals that some people have invested in irrigation pumps powered by electricity (rather than diesel). During the life history interview, Amran Ali from Banstalli village points to the profitability of this investment, which he made through selling two cattle.

<sup>12</sup> Results are presented in the text as statistically significant if  $p < 0.01$ ,  $p < 0.05$  or  $p < 0.1$ . The actual level of significance of each finding is given in Annex E.

He uses the irrigation pump to water his own crops (in particular *irri* rice), and he rents out his pumps to earn money seasonally. He estimates that he earns about Tk 2,000 for every bigha<sup>13</sup> of land irrigated in a season. In 10 years, after the costs of repairing the machine, he believes that he has earned Tk 10 lakh.

The quantitative findings displayed a slight discrepancy: improved drinking water sources, defined as supply water or water from tube wells, is significantly associated with an increase in experiencing a transitory poverty escape. This is possibly on account of continued problems with these water sources. In the decade since 2000, between 35 and 77 million people in Bangladesh were exposed to arsenic in drinking water. The situation is especially severe in rural areas, where as much as 97 percent of the population relies on tube wells as their primary water source.<sup>14</sup>

**Key finding: Ownership of more cultivable land reduces the likelihood of experiencing a transitory poverty escape.**

As expected, panel data analysis reveals that an increase in the amount of cultivable land owned is associated with a statistically significant reduced risk of a transitory poverty escape, though the size of the coefficient is very small. The qualitative research reveals how land ownership is not just a marker of economic wealth but also of social status. Given the widespread importance of land, Rohima explains that they think of their “lands as a bank.” Pathways out of poverty frequently involve the accumulation of land assets. For example, while Selim used to work as a day laborer on others’ lands during his childhood and youth, he now cultivates his own land, growing paddy and vegetables on 2.5 bighas, which is a marker of his upward mobility and a driver of his sustained escape from poverty. Selim became a landowner both through purchasing land and inheriting it. Having land, and the associated future income streams that may arise from it, can also be an important form of collateral in accessing an NGO loan. Selim was able to access an NGO loan after receiving 1 bigha of land from his father. He used this loan of Tk 10,000 to lease-in more land for cultivation.

Life histories reveal that the elevation of the land is also important. Ashraf notes that when he inherits land from his father, he and his brothers will get approximately 2 bighas each. He would like to inherit a certain block of land that is higher than the rest of father’s lands where he would be able to grow high-value crops and vegetables. He believes that, as he has contributed much to their extended family, his mother, brothers, and sisters will comply with his demand. If a household owns sufficient land, then leasing out a portion can be an important way of managing shocks. When asked how his family would manage if there was a natural disaster, Imran Ali explains that “if we need money then we... [lease] out some land. If we [lease] out 1 bigha of land, then we can manage Tk 70,000.” This intergenerational commitment to land ownership was described as an “addiction until death” by Zulfiqar, who himself stated that he, too, had plans to purchase land after accumulating enough money. For his part, Ishwar purchases land almost every year from his business profits. He now owns 264 *decimals*<sup>15</sup> of crop land and 40 decimals of homestead land. He explains that “buying land has become a passion for me and so I go and buy land every year.” In all instances, this engagement with cultivable land has been a source of sustained poverty escape for their households.

**Key finding: An increase in the number of livestock is associated with a reduced relative risk of a transitory poverty escape and impoverishment.**

The panel data analysis reveals that households owning livestock numbering higher than the median are less likely to experience a transitory poverty escape and become impoverished, though the results lack statistical significance. The importance of livestock for sustained poverty escapes is reinforced in the life

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<sup>13</sup> A bigha is a unit of land area. One bigha is approximately one-third of an acre.

<sup>14</sup> <http://www.who.int/bulletin/volumes/90/11/11-101253/en/> and source therein.

<sup>15</sup> A decimal is equal to 1/100 of an acre.

histories, where livestock is frequently mentioned as a resource from which households derive at least part of their income or production needs. Many households that were faring well tended to rear cattle and raise poultry in conjunction with other forms of income-generating activities. For example, Bakul Begum's husband cultivates the land he inherited while she rears poultry. Both husband and wife work together to look after their three cows. Amran Ali, meanwhile, actively buys and sells cattle as a small business in addition to engaging in crop agriculture. Each year he buys and sells more than one cow. On average, he buys a cow with the proceeds from his crop income for Tk 8,000–10,000 and sells it one to two years later for Tk 30,000–40,000. Biplop purchases cattle and rears them for several months before selling them for a high price at Eid. He started this business when he was 15 years old, and by the time he got married at age 22, he had earned enough from this to buy an irrigation pump for Tk 25,000. Rabeya Khatun's story (Box 3) illustrates how accumulation of livestock can be an important component in upward trajectories. Livestock can also be an important income-generating activity for women as it can be predominantly reared on and around the homestead.

### **BOX 3: INVESTING IN LIVESTOCK**

The station of Rabeya Khatun's family started to improve when her husband's income from vegetable trading improved and they were able to buy two cows. These two cows then gave birth to two calves; the income from the milk and the increased asset value helped to put her and her family on an upward trajectory. After her husband secured employment in 2003 as a second-class government employee in the Jessore Dairy Firm, they bought another cow, which gave birth, gaining them additional income from selling milk. In 2005, her husband's job became permanent, and their income again increased. Rabeya also worked hard rearing the livestock and doing small agricultural work. With their surplus income, they bought a cross-bred cow that gave birth and produced 18 liters of milk a day, which they sold for Tk 30 per liter. Savings from their multiple sources of income meant that they were then able to invest in buying 2 bigha of land. Currently, they own four cross-bred cattle.

For others, livestock is a tool to mitigate or stall downward trajectories. For example, though Shofiquil inherited several plots of land from his father, he has currently given them out to lease. He suffered two strokes, the latest in 2014. As a result, he is no longer able to cultivate his own land and had to lease out his last remaining piece of land to fund his daughter's marriage. At the moment, he relies on two cows, one that he owns and another that he share-rears,<sup>16</sup> as his main activity; these have at least temporarily helped prevent further economic descents.

## **2. HOUSEHOLD ATTRIBUTES AND CAPACITIES**

**Key finding: An increase in the share of dependents is associated with a higher risk of a transitory poverty escape.**

The panel data analysis reveals that an increase in the share of dependents is associated with an increased risk of experiencing a transitory poverty escape relative to experiencing a sustained escape, though the finding is not statistically significant at conventional levels. The importance of the number of earning members, relative to dependents, also emerges from the life histories. Amran Ali highlights how he and his brother, during their youth, were able to work on their father's land doing day labor and rearing cattle. This tipped their father's household from being an extreme poor household to being a poor household.

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<sup>16</sup> Share-rearing livestock (cattle, small ruminants, and poultry) is an arrangement analogous to sharecropping where members of poor households rear livestock on behalf of wealthier ones. The specifics of the arrangement vary, but it normally entitles poor households to either keep every alternate offspring or half the profits from the sale of the animal(s).

It is worth mentioning that it is not just the presence of children that affects household trajectories. In the long term, poverty trajectories are also likely to be influenced by the gender of young dependents, and this emerges strongly from the life history research. While sons are likely to provide a family with a higher capacity to earn and contribute to household income through receipt of dowry upon their marriage, daughters can prolong impoverishment as households seek to pay their dowries (Kabeer 2004).

From the life histories, for many families, early marriages emerge from a need to ensure their daughter's union while she remains socially desirable. The perception also remains that marrying off daughters when they are young safeguards their integrity. For example, Amran Ali's daughter got married when she was just 13 years old in order to prevent interactions with other boys who would "disturb his daughter beside his house." Dowries are often reframed as "gifts" as opposed to a required payment upon marriage; in principle, these marriage-related expenses caused significant hardships for many families. In the FGDs, dowry emerged as one of the causes of re-impoverishment for many families. To pay for dowries, these families often had to sell or mortgage their lands or otherwise take out a loan. The story of the marriage of Shofiqul's daughter illustrates the impacts of wedding costs and dowry for the girl's family only too starkly (Box 4).

#### **BOX 4: THE POTENTIALLY CRIPPLING COSTS OF MARRYING YOUR DAUGHTER**

In 2012, Shofiqul arranged the marriage of his only daughter, Shapna, when she was 13 years old. He bore the costs of the wedding ceremony, which were just over Tk 50,000, though he says that his son-in-law's family did not demand a dowry. He obtained this money by selling a cow for Tk 18,000, taking a gift from a range of relatives totaling Tk 5,000, taking a loan from BRAC worth Tk 20,000, and borrowing from neighbors. He also took Tk 12,000 from a moneylender, which he repaid with 12 *maund*<sup>2</sup> of paddy.

However, the marriage did not last. Shapna's husband and his mother tortured her, with Shapna's mother-in-law encouraging her son to torture her. Shapna's husband also had affairs. In 2013, Shapna was sick with diarrhea, and Shofiqul paid Tk 12,000 to cure the illness, costs which neither Shapna's father-in-law nor husband contributed to. Shofiqul took a loan from ASA to fund this. Shapna stuck with the marriage for two years, but then she was unable to endure it any longer and so she divorced her husband. Because of this, she was not able to receive any of the money outlined in the marriage contract. Shapna returned to her father's house.

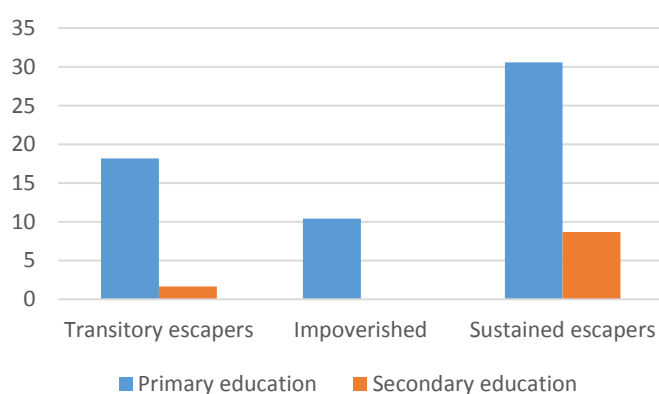
A year ago, Shofiqul arranged Shapna's second marriage; she is now 16 years old. Again, he spent Tk 50,000 on the marriage and also bought two goats; he took out a loan from an NGO to finance these purchases. He says that in the previous three to four years his family has faced so many different problems, and they have taken out loans from different NGOs each time. He now needs to take out a loan to repay his outstanding loan payments.

In addition, the boy's relatives demanded that Shofiqul buy a motorbike for the boy's family. This was because it was Shapna's second marriage while it was only the boy's first. Shofiqul agreed but could not afford to buy one straight away. This meant that Shapna had to stay living in her parent's house for another nine months until the motorbike was bought. To afford the motorbike, Shofiqul had to lease out his last remaining land for Tk 116,000 and sold a cow for Tk 26,000. Shofiqul, who is now 60 years old, says that his family has now fallen to its lowest level. They have just one cow and one share-reared cow. They are unable to cultivate land as they have leased everything out. He does not see a ladder for them to climb back up, and they are surviving in extremely bad conditions economically, physically, and mentally.

**Key finding: Education reduces the risk of transitory poverty escapes and impoverishment, with the level of education also playing a role in the magnitude of this reduction.**

In the data set, 28 percent of household heads have completed primary education, while another 11 percent have completed secondary education. When results are disaggregated by poverty trajectory, we see that heads of households who have experienced sustained escapes have higher primary and secondary education completion rates (Figure 4). Regression results confirm that household heads with primary and secondary education are less likely to experience a transitory escape, highlighting the gains to be had through education. That the size of the coefficient is much smaller for the secondary education variable reinforces the importance of higher education as a means of successful, sustained poverty escapes. All education variables are statistically significant at conventional levels.

**Figure 4: School Completion Rates by Household Heads**



*Source: Analysis of the Chronic Poverty and Long-Term Impact Study*

While life history respondents largely acknowledged their desire to be educated and the route out of poverty that education could provide, it is difficult for poor households to prioritize this investment. Selim, while wanting to educate his children, failed to study when he was younger due to his household's poverty during his childhood. Rabeya gave up studying when she was 11 years old also on account of her father's difficulties in bearing all of the children's educational expenses. Meanwhile, her sisters had to leave school and get a job in the garment factories when they were young as their father was sick with pneumonia and tuberculosis for nine months. Similarly, Arman Ali left school when he was only six years old. When asked why, he responded, "we couldn't eat three times a day; how could we continue [to] study?" Moreover, there remains an acceptance of maintaining the *status quo* of activities and life trajectories. Arman mentioned that when he was young, he knew he had to help his father in the field. As such, continuing education was viewed as largely unnecessary in this occupational trajectory.

Life histories also revealed that girls are more likely to drop out of school than boys due to marriage (see previous section). By the time they go to secondary school, girls are often seen as a "burden" for their families and so are removed from school to be married.<sup>17</sup> Rafiqul married his daughter three years ago, when she was 15 years old. Rafiqul's wife believed that if they did not marry her at a young age then they would be unable to get her married. They are happy that their daughter is married as she is now living in a better situation, and they no longer need to worry about how they will afford to marry her to a suitable man.

**Key finding: Female-headed households are less likely to become impoverished or re-impoverished, relative to sustained poverty escapes.**

Across specifications, the panel data analysis reveals that female-headed households are less likely to experience a transitory poverty escape or become impoverished than to experience a sustained escape

<sup>17</sup> Interview Mahmuda, USAID.

from poverty. This is particularly the case in relation to impoverishment, where the coefficient is much smaller than it is for transitory escapes. The lower risk of impoverishment for female-headed households relative to a sustained poverty escape is statistically significant, though not where the outcome is transitory escapes.

Contextualizing this result in terms of migration patterns in Bangladesh provides a rationale. In particular, as a result of international migration, there are two types of female-headed household. Some households are headed by a woman after her husband migrates abroad; these households tend to be relatively wealthy given that they receive international remittances, which can both smooth and increase household income. Other female-headed households are those in which a woman has been abandoned, widowed, or divorced; these tend to be amongst the poorest households in the country.<sup>18</sup> As such, the presence of a female-headed household is not necessarily associated with widowhood or the death of a primary male income earner. Rather, many households are female-headed on account of migrating male members.

Certainly, without appropriate safety nets in place, abandonment, divorce, or widowhood for a woman means downward mobility. This is particularly due to the limited availability of socially acceptable income-generating activities for women in rural areas, especially for those with limited educations. Livestock rearing, as previously mentioned, is frequently in the domain of women; working as a maid is another option. Though Sadia's husband is still alive, he is very ill: "I'm the head of the family now as my husband does nothing; he doesn't go to market—I've to do everything and hence I'm the head. I shoulder the responsibility of my family single-handed." Her situation, as described in Box 5, is therefore indicative of the realities faced by the second type of female-headed household.

#### **BOX 5: THE LIMITED INCOME GENERATING OPTIONS FOR RURAL WOMEN**

In 2006, Sadia's husband broke his collarbone while moving earth on a construction site. Since then, he has not been able to undertake any manual labor. He was the primary wage earner. After her husband broke his collarbone, Sadia started working in other people's houses for the first time. She boiled paddy, winnowed rice, cleaned the cow shed, swept the courtyard, and washed the utensils and clothes in three houses. Each day, she worked in two houses and she would get almost 5 kg rice from the two daily as wages. By selling the rice that she got working at other people's houses, she purchased chili, oil, salt, turmeric, onion, and garlic. Her sister and father also helped her out, to which she exclaims, "Can I sit idle for the help to be given by my father and sister? I've to feed myself."

After working for six months, her 16-year-old son demanded that she stop working as a maid and that, instead, he would work as an agricultural laborer. Sadia explains, "He doesn't want anybody to say that his mother works as a maid."

### **3. HOUSEHOLD ACTIVITIES**

**Key finding: An increase in remittances is associated with a statistically significant reduction in the risk of impoverishment but a not statistically significant increase in transitory escapes. Female-headed households that receive remittances, in contrast, are less likely to experience transitory escapes.**

Panel data analysis reveals that an increase in the amount of remittances that a household receives is associated with a statistically significant reduced risk of impoverishment but an increased, though not statistically significant, risk of experiencing a transitory poverty escape. However, the risk of transitory poverty escapes reduces (though is still not statistically significant) amongst female-headed households

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<sup>18</sup> Interview Ahmed Akhter, IFPRI, and Mahmuda, USAID.



that receive remittances. It could be that remittances to rural male-headed households are less likely to indicate migration with the objective of increasing household income but rather are indicative of migration as a result of desperation in order to cope with a crisis.

Life histories reveal several instances of successful and failed migrations. Selim's experience is a positive one. In 2014, his eldest son went to Malaysia to find work. His son's journey was a success, and as a result, Selim now receives Tk 10,000–15,000 per month in the form of international remittances. Bansari explains how in 2013 her husband acquired Tk 4 lakh through borrowing from relatives and taking a high-interest loan from a neighbor so that he could emigrate to Iraq. He has now been in Iraq for three years and sends back Tk 10,000 every month. With this money, Bansari has repaid the loans and has leased and purchased land. Because of the money from her husband, Bansari says that the family is now running well. In three to four years' time, she would like her 15-year-old son to go abroad as well.

It is also worth stressing here that the returns on investments in the form of international migration are not always seen and that migration alone is not always a route toward sustained poverty escapes. Rather, some households engage in asset sales, deplete their savings, and borrow extensively to finance a family member's migration. Moreover, in instances where the recruitment agent is corrupt and disappears with the money, or the job abroad is in fact unavailable or provides less remuneration than originally anticipated, poverty traps may become an inescapable reality for many (Kabeer 2004). The case of Ranya Begum's and Bakul's sons (Box 6) illustrates this particular danger. The migration of Amran Ali's son meanwhile reveals that even migration which is successfully arranged, and with the correct paperwork, may not be as economically attractive as initially thought (Box 6).

#### **BOX 6: INTERNATIONAL MIGRATION, NOT ALWAYS A GOLDEN GOOSE**

Three years ago, a broker from Gopalganj came to Fasiatala village. Ranya's elder son wanted to be sent to Oman by that broker. The broker came to her house and explained that migration to Oman required Tk 4 lakh. Ranya sold 10 *katha*<sup>1</sup> of land for Tk 3.5 lakh. This was land that she'd got from her father. She then borrowed the rest of the money and paid the broker. But Ranya's son was not able to go Oman. The broker left the area, taking her money with him.

In 2012, Bakul's husband planned to go to the Maldives with the help of his friend who asked for Tk 1.5 lakh to arrange this. Bakul and her husband sold one cow for Tk 39,000 and found another Tk 90,000 through mortgaging out some of their land. In addition to this, they had some savings. Through all of these means, they arranged the Tk 1.5 lakh. Her husband went to the Maldives and spent two years there. During the time he was there he sent back money, and they released their land from the mortgage. But after two years, her husband found out that his visa for the Maldives was illegal, and he was imprisoned in the Maldives. After three months in prison he came back to Fasiatala. Then they struggled to run the family because they had spent all their savings and sold assets for him to go to the Maldives. The money that he sent back over the two-year period was insufficient to cover those losses. The household's economic condition started to decline. Then they took a loan from the NGO ASA and started to cultivate paddy and vegetables again. Thanks to a huge harvest their condition started to improve again. Now they belong to the middle class.

Amran Ali's son wanted to go to Saudi Arabia, and he needed Tk 3 lakh total to go. His son's father-in-law gave Tk 70,000, and Amran Ali put forward the rest. He borrowed Tk 1 lakh from the landlord – his accrued interest of 60 maund of paddy per year on this loan. His son came back after two years, and by then, the loan had not been repaid. His son came back as he was homesick, and he came back with Tk 16,000 in cash. He also brought back a blanket containing many possessions.

Local migration, meanwhile, can have the objective of improving a household's situation, as shown in the success story from Bakul's childhood when her father moved to Jessore for work and then chose to make

it his permanent home. He was able to earn more money in Jessore than he could have done in the rural areas; then, when he was older, they returned to the village. Ishwar, however, describes the role of migration in his late teens, before marriage, instead as a means of ensuring his family's survival. As a teenager, Ishwar had to work as an agricultural day laborer alongside his father in order to support the family, which was going through a rough patch. With Tk 2,000, which he had managed to save, he started a small business selling jute with a friend. However, this business capital slowly disappeared due to the daily needs of his family. As he explained, "I was then wandering aimlessly as a vagabond. I worked as a reaper, a mason, and did odd jobs to earn a living and contributing to our family income and moved to far off places like Jessore, Noapara."

**Key finding: Employment, or self-employment, of the head of household renders a household less likely to experience a transitory poverty escape and become impoverished. If the head of household engages in non-agricultural work, this is an even stronger guarantor of sustained poverty escapes.**

Panel data analysis reveals that the head of household having a job<sup>19</sup> is associated with a reduced risk of transitory escapes and impoverishment, though the result lacks statistical significance. Meanwhile, non-agricultural work as the primary occupation of the head of household (whether employment or self-employment) is also associated with a reduced risk of transitory escapes and impoverishment, though again the results are not statistically significant.

Two important limitations of using household surveys to assess job status in rural Bangladesh were highlighted during the qualitative fieldwork:

1. Under-reporting of income-generating activities by female-headed households. Kabeer (2004) found that many women who identify their primary occupation as "housework" engage in activities such as rearing livestock, growing vegetables, producing handicrafts, and even being active in small businesses. As such, even female heads who are "unemployed" in the data set may in fact engage in or contribute to income-generating activities that are not captured by the household questionnaire.
2. Identification of primary occupation can be difficult. The time spent on and money earned from different occupations varies throughout the year. Across almost all the life histories conducted, all heads of household had more than one occupation at the time of the interview.

The life history interviews highlighted the following different forms of non-agricultural work that household members engaged in in the immediate vicinity that contributed to improving the household condition:

- *Masonry*: Amir's father earned Tk 300–400 a day from working as a mason, and when he was a teenager, Amir joined him, earning Tk 100–150 daily—a higher wage than either of them could have achieved if working as an agricultural day laborer. Receiving both these wages, the family lived well. Amir has now started his own household, and he still works as a mason for the majority of the time. However, it is difficult to support his young family (he also has a young child) as a mason; there is hardly any masonry work during the rainy season. During this period, he tries to find work as a rickshaw puller. However, this is not always possible and so they often need to take a loan or a shop loan to see themselves through the rainy season (see also Box 10).
- *Garments and sewing*: In Ranya's household, her son and his wife work in garments in Dhaka and send back Tk 3,000 every month to help with household costs. Meanwhile, Ranya sews hand-

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<sup>19</sup> Having a job is used here to refer to individuals engaged in any income-generating activity – either through employment or self-employment (including own-account agriculture). Heads of household who do not have a "job" therefore include female-headed households where the woman identifies herself as a "housewife" and households in which the head is "retired," is a student, or refers to himself or herself as "disabled" or "unemployed." It is not possible to disaggregate between self-employment and wage labor.

crafted *kantha* (quilts). For each *kantha*, she receives Tk 1,400, while making one takes four to five days.

- *Earth cutting*: Earth cutting is done as part of government road-building schemes and is also related to loading private trucks. Sadia's husband cut earth from highlands and paddy fields and then loaded it onto trucks for filling in ponds and other low-lying land in Jessore. He cut earth for more than 10 years because the daily wages were higher than for other types of labor, such as agricultural labor.
- *Trading of agricultural crops*: Akhter Hussein's father combined working on his own land and working as an agricultural day laborer with trading in vegetables. His father "bought raw materials from the storehouse and then sold the raw vegetables sitting on the roadside in Barinagar market." With the money he made from this, he was able to lease-in land. He also had a shop where he tried to sell vegetables and other goods. Akhter now runs this shop. However, he only opens it in the late afternoon and evening as there are just not enough customers during the daytime. They now mainly only keep running the shop in memory of his father as it has become a place where people congregate and sit. Akhter says that up until now, the shop has not made a profit.
- *Renting out agricultural machinery (including tractors and irrigation pumps)*

However, engaging in non-farm work is not necessarily a win-win. As the story of Akhter Hussein's father's shop, above, illustrates, some forms of self-employment can prove to be unprofitable. In other cases, accessing certain forms of salaried work not only requires personal connections but also entails up-front costs (Box 7).

#### **BOX 7: ACCESSING SALARIED GOVERNMENT JOBS VIA UP-FRONT PAYMENTS**

Rafiqul gave Tk 3 lakh in bribes to get his son a job in the air force. He sold 10 katha of land to get this money. However, Rafiqul's son did not get the job, and he lost all the money. Rafiqul points to the long-term implications of the loss of his land for household well-being, stating that "10 katha [of] lands are more important than bank's Tk 10 lakh."

One of Neela's relatives was serving in the army, and in 2011, he offered to arrange an army job for her brother if they paid Tk 1 lakh as a bribe. For this, her father took Tk 50,000 from different moneylenders in the village and another Tk 50,000 as a loan from the Jagoroni Chakro Foundation. Her brother successfully got the job. However, in that year, they suffered much. They had to reduce spending on education and other basic household expenses including food and clothing. In the long term though, this sacrifice was worth it for her brother who got a well-paying job.

While getting a regular, salaried job is an ambition for some, Ishwar's story illustrates how, for some individuals, entrepreneurship and self-employment can be viewed as a more desirable and effective route for sustained poverty escapes (Box 8).

## **BOX 8: COMBINING SALARIED WORK WITH ENTREPRENEURSHIP, THEN RELYING SOLELY ON SELF-EMPLOYMENT TO ACHIEVE AN UPWARD TRAJECTORY**

Ishwar was born in 1970. After getting married at 17 years old, he went to Jessore, accompanied by two friends, to join the training of the *Ansar* (internal security force). At that time, a certificate was awarded after a month-long training and on the basis of performance. Ishwar successfully achieved the certificate. Those who achieved this certificate were then eligible for jobs as security guards, but this kind of recruitment also depended on the recommendation of the Ansar VDP commander and obtaining this recommendation required a bribe. Ishwar sold his cow and gave Tk 1,500 to a commander as a bribe for a job reference, but he still failed to get the job and lost Tk 700. Later he met the Ansar VDP commander and secured a job as a security guard on a night coach of an intercity bus by paying Tk 2,000 as bribe. He was given a fixed salary of Tk 900 per month by the bus company. However, there were other benefits in terms of food, which were worth Tk 150 per month. Moreover, a seat was allotted to the security guard in the bus, but Ishwar would sell the seat to a passenger for Tk 200 and stand instead. In addition, he was entitled to get from the bus owner a packet of “Navy” brand cigarettes each night of the journey, and as he did not smoke, he would sell the cigarette packet, too. In addition, he would buy 10 Indian sarees from Tulotola in Jessore and carried them to Dhaka. In this way, he could earn Tk 100 more per day.

Within the first three months of getting his job, Ishwar had paid off his father’s old debt of Tk 10,000 from Pubali Bank with his salary and additional income from working on the intercity bus. After six months on the job, he leased 300 decimals of land for Tk 3,000, and after another year, he leased 33 decimals of land for Tk 5,000. He leased out the land. In this way, he was able to pull his family out of poverty step by step, explains Ishwar.

After two years at his job, in 1989, robbers stabbed a member of the Ansar VDP to death while looting the belongings of the coach passengers one night. After this incident, the security guards demanded at least three guards for each bus, but none of the bus owners could accept their demands. Rather, they stopped recruiting Ansar VDP members for this job and decided to try protecting themselves. Consequently, he lost his job. Ishwar had only Tk 15,000 in cash then.

In the early 1990s, he dealt in rice for a couple of years, and alongside this, he helped his father and brothers work on leased land. He also started taking out loans for others. He took out a loan of Tk 6,000 in his father’s name from Krishi Bank and bought paddy for Tk 125–130 per maund. His total collection of paddy that year became 60 maund. After hoarding the paddy for some time, he sold the paddy before the next paddy harvest for Tk 200 per maund. Thus his total capital was Tk 12,000. He bought paddy with that money, and with the addition of paddy from his own land, the total amount of paddy became 80 maund. He sold the paddy when its price became high, and he leased 18 decimals of land for Tk 10,000.

At that time, he also joined a textile mill in Jessore as a night guard and was paid a salary of Tk 1,500 per month. Including overtime, he was able to earn Tk 2,000 per month. Alongside his night guard job, he started cultivating irri rice and *amon* for two seasons a year on his own and leased land. He also sold rice at his house. He would earn daily profits of Tk 40–50 with which he would meet the daily necessities of his household. His other sources of income began to thrive. He earned Tk 2,000–3,000 per year by rearing some goats, too. Between 1993 and 1994, he bought for the first time 29 decimals of land from his brother-in-law for Tk 13,000. Several years later, he also bought some land from his father and inherited land from him as well. With his salary and his profits from farming and trading rice, he was able to buy 16–17 decimals of land almost every year, eventually owning 132 decimals of land. With his increasing land purchases, he gave more attention to his farming job. He left the job at the textile mill after serving there as a night guard for six years. He was making a daily profit of Tk 200 from dealing in rice.

**CONTINUED ON NEXT PAGE**

## BOX 8 CONTINUED

In 2004, he started selling pesticides, diesel, and fertilizer along with a man named Lutfar from his village. In the very first year, they made a profit of Tk 7,500. On the advice of his wife, he started selling fertilizer himself the next year and made a profit of Tk 50,000. After two to three years, he made a profit of Tk 1 lakh per year. After continuing this business for six to seven years, the dealership was introduced and eventually wholesalers stopped giving commodities on credit. Thus, his profits margin were greatly reduced.

At present, Iqbal Hossain's annual income is about Tk 1.5 lakh from his diesel, rice, cow, and goat businesses. Now, he produces about 200 maund paddy a year. Whenever he needs some extra money, he takes loans from various NGOs. He also borrowed money from these NGOs while purchasing his lands. He still buys land. As to his future plan, he said, "I had a mind to set up a rice mill with a big terrace."

As noted previously, nearly all heads of household among the 24 households from which life histories were collected are engaged in more than one occupation. While the minority have managed to diversify into non-agricultural activities, the majority are engaged in multiple activities that are linked to the agricultural cycle, meaning that they have not managed to diversify their risk factors. In particular, almost all heads of household cultivate their own land while also engaging in at least one other form of labor. **From the life histories, it emerged that heads of household from households experiencing sustained poverty escapes engage in at least one non-agricultural activity in addition to cultivating their own land.**

## 4. HOUSEHOLD SHOCKS

**Key finding: Experiencing a series of shocks in short succession is associated with transitory escapes.**

Analysis of the household panel data reveals that while households that have experienced one shock are less likely to experience a transitory poverty escape, an increase in the number of shocks increases the risk of transitory escapes. However, shock variables in the empirical equations lack significance, and their magnitudes are largely negligible. Certainly, there are limitations as to what survey data can tell us about household shocks. This is due to incomplete response categories in shock modules as well as a lack of depth on how shocks, coping strategies, and poverty are linked.<sup>20</sup> In addition, the one-off nature of shocks means that they may often be missed in household surveys, despite their long-term impacts on household poverty dynamics (Baulch and Davis 2008). This finding is also similar to that found internationally, with data analysis revealing that while one shock can be manageable, a succession of shocks are critical in driving people into poverty (Baulch 2011).

In contrast, life history interviews undertaken for this study provide a richer understanding of the role of shocks in poverty trajectories. They particularly highlight the important role that health shocks play in driving re-impoveryishment, either in terms of an especially significant episode of illness for the primary income earner; a series of smaller health shocks; or health shocks that occur in close succession to other types of shocks.

A series of health shocks afflicted Ranya Begum. In the past, she had to sell land to provide Tk 13,000 for her elder daughter's uterus infection. She then had to sell even more land and trees in the same year when her son also fell ill and required clinical care for three months. For this illness, Ranya expended Tk 3 lakh 50 thousand. In the last three years, Ranya has also been sick. For her diabetes and pain, she spends Tk

<sup>20</sup> <http://www.tandfonline.com/doi/pdf/10.1080/00220388.2014.959934>.

500 each month. Fortunately, her eldest son sends her Tk 3,000 a month, and she receives irregular payments from her daughter so that she can afford the costs of medicines. However, to cope with their family's medical expenses, Ranya has reduced her amount of food consumption.

Part of the problem is that health shocks require an infusion of cash in a relatively short period of time, which does not allow its victims to apply for an NGO loan, even though these types of loans in principle are mainly designed to be given to households for productive investments. Moreover, no one has health insurance, which is not available in fieldwork villages; as a result, families experiencing health shocks often end up borrowing the required funds from relatives or informal money lenders, with the latter incurring extremely high interest rates.

While health shocks repeatedly came up as household stressors in the life history interviews, a succession of health and non-health-related shocks also acted to promote poverty descents and transitory escapes. Sadia Begum incurred a cost of Tk 80,000 for her daughter's dowry and marriage in 2002, of which Tk 50,000 was borrowed from a local lender. It took her four to five years to repay the loan, which they managed through selling their cows and crops, and using her husband's income from agriculture. The family's ability to rely on her husband was jeopardized in 2006, however, when he became seriously injured during his day job. Treatment for his injury cost Tk 10,000 in addition to ongoing medication; to deal with the expenses, the family had to sell the biggest cow in their herd. In addition to dowry and health shocks, political disturbances also inflicted pain on the family two years later when her husband was threatened during the parliament elections due to his support for the Bangladesh Nationalist Party. This resulted in a mental illness that required psychiatric help amounting to Tk 9,000 in just one day. To this day, he lives in constant fear. This condition coupled with his illness reduced the amount of work that he is able to perform and his income-earning potential. Sadia explains how, due to this series of shocks, her family "can just manage our daily meal but we are yet to be solvent again since our daughter's marriage. So we have to spend carefully as we are faced with financial constraint at the moment."

## 5. HOUSEHOLD STRATEGIES

**Key finding: Asset sales and obtaining a loan are coping strategies associated with a reduced risk of transitory escapes and impoverishment.**

We next ran the same set of regressions but included a variable to capture coping strategies. Specifically, the independent variable of interest in two sets of equations is: 1) whether the household relies on an asset mortgage or sale, or 2) whether they take out a loan as a primary coping strategy when confronted by a negative shock. Results indicate that households that engage in these coping strategies are at a lower relative risk of transitory poverty escapes and impoverishment, though none of these results are statistically significant at conventional levels.

However, the qualitative research highlights how the type of asset sale in the first instance is likely to make a difference. Specifically, for households that have to sell off land in a distress sale due to a shock, this could be problematic as it reduces their wealth and is likely to worsen their well-being trajectory over time. Shompa Khatun's situation best illustrates this scenario (Box 9).

### **BOX 9: DISTRESS SALES OF LAND CAN WORSEN A HOUSEHOLD TRAJECTORY**

Shompa experienced several hardships over the last two decades. First, her daughter had pneumonia, for which she sold a cow for Tk 30,000 and spent Tk 5,000 of this on her daughter's treatment. Unfortunately, her daughter died just a few months after birth. With the remaining Tk 25,000, her husband bought 7 *shotangsho*<sup>1</sup> of land, where he cultivated paddy and jute. He also continued to work as an agricultural day laborer. In 2007, her well-being improved after her husband secured a job as a mason through the help of a friend.

However, Shompa's situation took a turn for the worse when in 2013 a storm broke her kitchen rooftop. As a result, her husband cut bamboo and began to repair the rooftop, during which time he had a stroke. Unfortunately, Shompa was at a neighbor's house at the time running errands, so she came upon her husband later. She immediately rushed him to Jessore Hospital with the help of a friend. To generate funds to pay for her husband's treatment, Shompa sold 7 *shotangsho* of land for Tk 35,000. The treatment proved unsuccessful, so she then had to take her husband to Dhaka. Again, circumstances proved unfavorable, and her husband died five days later. Today, Shompa is destitute, subsisting through cultivating 10 *katha* of land that she leased from her elder brother. The land she parted with in a distress sale was her last available productive asset.

The seven *shotangsho* of land that Shompa sold in response to a negative shock provided a one-time lump sum payment in distress, but in the long term, this payment failed to offer her a means of escaping poverty or improving her well-being. In addition, she has now lost a critical source of future income and food.

The life histories also reveal that taking a loan, while potentially effective for some households, is not always sustainable or effective. Moreover, formal loans often do not reach households most in need that face a crippling shock or series of shocks. For instance, it is particularly difficult to access appropriate finance to pay for health shocks. Rafiqul explains that he takes loans from his brothers and his neighbors but not from NGOs as the speed of loan acquisition is too slow and does not meet his or his family's pressing health needs.

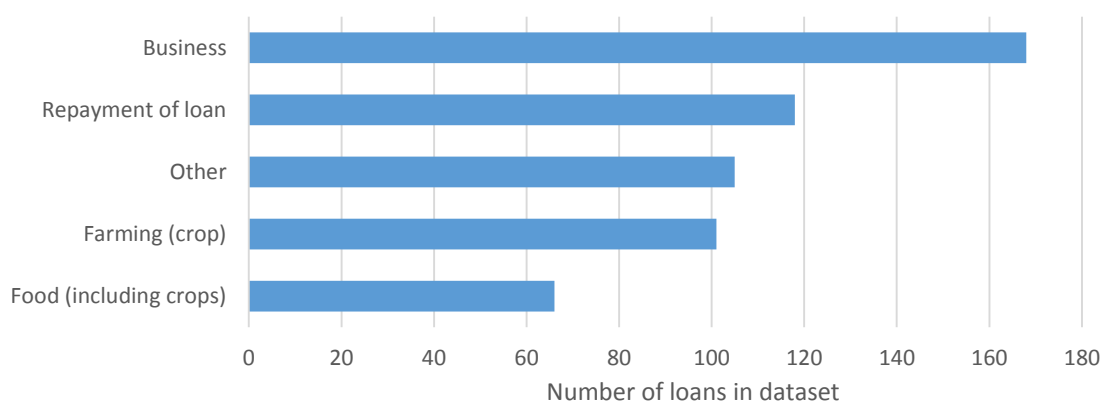
Another issue is that these loans, when they are obtained, are sometimes exploitative. For example, natural disasters that occurred almost every year wreaked havoc on Shofiqul's lands; as a result, he regularly needed to secure loans from local moneylenders. In these instances, the lenders would often be the buyers of his jute and paddy. The process of loan acquisition, he notes, was arduous. For example, there would be a long wait, and when the loan was finally agreed to, the main condition imposed was that Shofiqul would not be able to sell his crops anywhere without the agreement of the lender. Shofiqul is now taking out loans in order to repay previous loans (see Box 4).

To explore the impact of loans outside of their use as a coping strategy, we further investigated the panel data and constructed a separate variable indicating whether a household has an outstanding loan at the time of the questionnaire. As the loan variable could only be constructed from the MG data set, the resulting equation makes use of this subsample alone from the Chronic Poverty and Long-Term Impact Study. Findings illustrate that households that have taken out a loan are less likely to experience a transitory escape though more likely to become impoverished. While these results lack statistical significance, they do point to the double-edged sword that loans sometimes become. Though loans may promote wealth ascents for some families, difficulties in repaying for others creates a hardship that could propel some households into a downward spiral (Kabeer 2004).

Figure 5 tabulates the five most common reasons for loan acquisition in the MG data set, representing over two-thirds of all loans taken out in the sample. Most of these loans (63 percent) come from NGOs

operating in the country, with the Grameen Bank capturing a quarter of NGO loans. Results indicate that 14 percent of loans that were outstanding at the time of survey were requested to repay other loans, the second largest reason for loan acquisition. The fifth most common use of loans was for food.

**Figure 5: Five Most Common Reasons for Loan Acquisition**



*Source: Analysis of MG subsample from the Chronic Poverty and Long Term Impact Study.*

**Key finding: Government and NGO assistance reduces the risk of transitory escapes and impoverishment, though the results are not statistically significant.**

Panel data analysis reveals that households that receive some form of assistance, defined in the equation as assistance from government and NGO programs, including education stipends, pensions, and allowances, are less likely to experience a transitory poverty escape or become impoverished, though the results are not statistically significant at conventional levels. Using other survey data in Bangladesh, Ahmed et al. (2016) found that there is a threshold beyond which assistance becomes useful. Specifically, social safety net transfers that are more than 15 percent of total household income prevent households from sliding into poverty. However, as Box 10 illustrates, government social safety nets are not open to everyone and require substantial up-front payments. If government social safety nets are to be an effective tool to prevent impoverishment and re-impoverishment then they need to be more effectively targeted.

**BOX 10: DIFFICULTIES ACCESSING SOME GOV'T SOCIAL SAFETY NETS**

Mahbuba in Ishwaripur: Two months ago, her father-in law had to make an “unofficial payment” of Tk 3,000 in order to receive an elderly allowance card. Since obtaining the card, he now receives Tk 400 per month as an old-age allowance.

Rafiqul in Icchapur explains that his mother is 70 years old. She lives with her younger son and though she really needs it, she does not get the old-age allowance. Rafiqul explains that all the government allowances are given to the relatives of the local chairman and the counselor. In this village, ordinary people did not get any government safety nets without money.

Amran Ali in Banstalli village explains that neither he nor his wife have ever benefitted from any government safety nets. He explains that, “...political cadres get these. As we are not in those cadres so we do not benefit.”



**Key Finding: Households where the man and woman work together are more likely to experience sustained poverty escapes.**

The life histories highlight the importance of a husband and wife working in partnership and together if the household is to experience a sustained escape from poverty. As Amran Ali, who is approximately 60 years and has experienced a sustained poverty escape, explains, “My wife has made a great contribution to my present condition.” He has also put 12 katha of land in his wife’s name to demonstrate to his children and their families the significant contribution that she has made, a contribution which may not be as visible to his children as Amran Ali’s physical labor. Rasheda’s father also points to his and his wife’s joint contributions toward putting the family on a sustained pathway out of poverty (Box 11).

**BOX 11: WORKING AS A TEAM**

Rasheda’s father is the primary breadwinner. He earns money through cultivating his own land, working as an agricultural day laborer and as a mason. At 5:00 a.m., he goes out to their fields to work and returns home at 8:00 a.m. Then he does masonry work from morning until afternoon. He earns nearly Tk 2,000 a week by doing masonry work. He prefers masonry work to agricultural day labor as this earns him a greater wage. He previously worked solely as an agricultural day laborer, and he really struggled to provide three meals a day for his family.

Rasheda’s mother also goes to their fields every day to do smaller tasks, such as weeding. She is also responsible for arranging for the tractor of a relative to be rented out, and she receives Tk. 2,500 per bigha of land prepared. She has to return half of the total income earned through renting the tractor to its owner annually. Apart from this, she also rears the cattle and raises the poultry at her homestead. At present, she is raising one cow. As Rasheda’s father is illiterate, her mother completed class 8.

Ishwar, whose upward trajectory is described in Box 8, is keen to mention the important role that his wife has played in their success. In addition to managing the household, she plays an important role in supervising the rice business when Ishwar is away and in rearing the goats. He is extremely proud to have a wife who plays such an instrumental role in the progress of their family.

**Key Finding: Sustained poverty escapes have often involved not just hard work but also recognizing opportunities and taking a risk that pays off.**

As Davis (2007) notes, common causes of poverty escapes for some households drive the impoverishment of others, for they are accompanied by considerable risk. The two most noticeable instances of this are (i) paying the up-front money required to send a family member abroad for work; and (ii) taking an NGO loan for a productive investment. Given the important role that both of these can play in sustained poverty escapes, minimizing the risks associated with these two activities could be a promising area of support. Particularly in relation to taking an NGO loan, Rasheda Khatun’s father (Box 12) points to the importance of the loan he took being a soft loan with flexible terms and conditions. He sees this loan as a “tipping point” when the well-being of the household started to improve significantly.

### **BOX 12: TAKING A SOFT AND FLEXIBLE LOAN TO ENABLE A STEP-CHANGE IN LIVELIHOODS**

Nearly 20 years ago when Rasheda was a one-year-old child, the NGO Banchte Shekha launched its program in Banstalli village to give soft loans to villagers on easy terms and conditions. Rasheda's parents took a loan of Tk 6,000 and bought two calves for Tk 5,000 and with the remainder Rasheda's father started growing paddy. At the end of the year, they sold one small cow for Tk 5,000 and with that money cultivated crops on leased-in land. After a couple of years, he sold the other cow for Tk 18,000 with which Rasheda's parents bought two cows for Tk 10,000. With the remaining Tk 8,000 they leased-in 10 katha of land. On this land, he grew mustard for the first time and got a bumper crop that year, harvesting as much as 13 maund of mustard.

With the proceeds of selling the mustard, he leased in more land where he started cultivating boro paddy and seasonal vegetables. Twelve years ago, when Rasheda was only nine years old, her father bought 10 katha of cultivable land for Tk 35,000. He accumulated the money to buy this through selling a cow and crops. Her father then grew chili in 5 katha of the newly purchased land and paddy in the other 5 katha. That year, through selling chilli, they made a profit of Tk 28,000. Her father bought another 8 katha of cultivable land with this profit.

### **BOX 13: TAKING AN NGO LOAN FOR PRODUCTIVE INVESTMENT**

During the first 10 years of their marriage, Ranya's husband worked as a mason and as an agricultural wage laborer. Ranya, meanwhile, raised ducks, hens, cattle, and goats on their homestead. Eighteen years ago, an NGO named Jagoroni started working in Fasiatala. Every week, Ranya saved Tk 2 with Jagoroni. Having built up her creditworthiness, she then took out a loan of Tk 1,200, which she used to buy paddy from people's land. She dried and milled the paddy, and her husband would sell the rice in the market. This trade yielded a good profit and enabled them to build a new house.

**Key Finding: Households that experience sustained poverty escapes cultivate more than once a year, switch crops regularly depending on market prices, and store crops to sell them when the price is high.**

All life histories with sustained escapers point to the importance of “active” cultivation. Shofiqul stresses, in particular, the significance of new crop varieties, including irri rice, in enabling sustained poverty escapes: new crop varieties enable more than one season of crops to be produced on the land. “The Ershad government brought in irri rice to remove poverty,” he explained. More recently, farmers have been complementing paddy cultivation with that of other vegetables. IFPRI points to the current low price of rice, which is encouraging some farmers to switch to high-value crops. However, cultivation of these crops requires capital and can be risky as they are less hardy in the face of environmental shocks and stresses.<sup>21</sup> The experience of Amran Ali's sustained escape highlights the importance that “intelligent cultivation” has played in his upward trajectory (Box 14).

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<sup>21</sup> Interview Akhter Ahmed, IFPRI.

#### **BOX 14: SUSTAINED POVERTY ESCAPES BASED ON CROP CULTIVATION AND AGRICULTURAL-LINKED LIVELIHOOD ACTIVITIES**

Amran Ali is 60 years old and his family currently own 6 bighas of land. They also have two irrigation pumps, two cows, 600 kg of rice stored in the house, and Tk 8,000 in cash from selling the rest of that paddy. They are going to buy a cow with this money. Amran Ali is also a livestock service provider as he learned this skill from a local Hindu master in the village.

During his childhood, Amran Ali's father was landless. Amran Ali explained that his own success came about through hard work; in his words, there has been no night and no day in his life as all the time he has been working. According to him, there is no improvement without hard work. In particular, he has worked a lot on the land as a sharecropper and day laborer, and more recently he has worked on his own land. He now has pain in his neck from all the years he has worked hard. He is still working hard at 60 years old. As a child, Amran Ali reared livestock for other people and worked as an agricultural day laborer. Later in his youth, unbeknownst to his father, he would get up very early in the morning to sharecrop with his brother. His father also managed to lease some land, and he and his brother also worked on this.

He saved money from working on leased land, from sharecropping, and from agricultural day labor and then bought some land. Together with his brother, they bought 7 decimals of land for Tk 4,000. They bought it before his marriage. When he got married approximately 45 years ago, he and Zahirion worked on this land growing rice. Both of them also worked in the paddy fields as day laborers. They stored some of the paddy after the harvest and sold it several months later when the price was higher. They then also started growing wheat as the profit on this was greater; again, they stored some for two to three months and then sold it when the price rose.

Both he and his wife sharecropped land and did day labor on others' land. He was also a businessman as he collected rice from the field, processed it at home with Zahirion, and then sold it to the market.

After a while, Amran Ali was able to take out a mortgage on his 2 bighas of land and bought 5 katha of land. He planted cucumber on the mortgaged land, which was profitable, and then he grew rice on his own land. About 15 years ago, he used money from selling paddy to buy a calf. After the calf grew up, he sold it and then bought two irrigation machines, which they now rent out. In 10 years, they estimate that they have earned Tk 1 lakh in profit from renting out the irrigation machines. Now, when he can, he buys cattle with any profit from crops. He sells these after several years, making a profit. Cattle are an asset that increases in value very quickly, he notes.

Now Amran Ali is growing more vegetables, and he is making money from these by selling them in the bazaar. He is aware of which vegetables will be profitable, and he cultivates those. He farms rice paddy on lowland and vegetables on the upper lands. After harvesting the paddy, he plants jute on the lowlands. He learns from farmers in other places or in neighboring fields and, having learned from their experiences, tries to cultivate them on his lands.

Amran Ali has been fortunate that neither he nor Zahirion nor their four children have faced any large health shocks. However, he notes that they regularly experience tribulations in agriculture including loss of crops through disease or natural disaster, as well as the loss of several cattle. He points out that Bangladesh has the most fertile land in the world, and without these shocks, everyone would be very rich. However, for the large part, he is able to manage these shocks: while crops may fail in one season, he is able to make back those losses with the next harvest. In the meantime, he normally has food stores with which to feed his family, and they are able to take an advance from the rice dealer. He notes that now that they have enough of their own land, everything will be fine.

## C. ANALYSIS OF POVERTY DYNAMICS USING A POVERTY BAND

**Key Finding:** It is unlikely that transitory escapers are churners. However, amongst the group of households that have larger variations in their per capita expenditure between survey years, owning cultivable land is minimal, suggesting that earlier results may understate the importance of land ownership in helping prevent severe re-impoverishment.

We next created a 5 percent band of uncertainty above and below the poverty line around which poverty status is now defined. This was done to reduce measurement errors in the identification of transitory escapers and distinguish between “churners” and transitory escapers. Following this strategy, only two out of three households originally identified as transitory escapers remain. However, it is only a limited methodological concern that the remaining one out of three transitory escaping households may be churners, as none of these households vacillate purely within the 5 percent poverty thresholds while following the general inverted U-shape trajectory across survey waves. In other words, in at least one of the three points in time, the household has a level of per capita expenditures that is outside the 5 percent band of uncertainty around the poverty line.

Though the majority of the households previously classified as transitory escapers are not churners, it is nevertheless worth examining which factors, if any, are different between the two groups of certain and potential transitory escapers.<sup>22</sup> Creating summary statistics of the two groups, the only noticeable difference is in the amount of cultivable land owned. In 2010, the group of certain transitory poverty escapers for the most part did not own any cultivable land, while the subset of potential transitory poverty escapers owned at least a little cultivable land—specifically, a median of 0.13 acres. This suggests that the negligible magnitude of cultivable land ownership in reducing the risk of transitory poverty escapes may have been slightly understated in the earlier analysis. However, we cannot be certain of this in the absence of regression-based analysis, which requires larger sample sizes than currently available within these subsets of certain and potential transitory escapers.

## D. INVESTIGATING TRAJECTORIES OUT OF EXTREME POVERTY

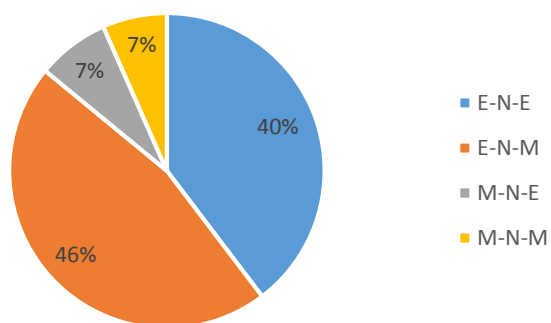
**Key Finding:** Two out of five households both begin and end the survey periods in extreme poverty. More positively, three out of four households that have sustained their poverty escape have begun from a baseline of extreme poverty.

While 10 percent of households in the data set are identified as transitory poverty escapers, this says little about the magnitude of their poverty ascents and subsequent descents. Examining their trajectories in more detail (Figure 6), we find that two out of five households experiencing a transitory poverty escape both started and ended the period in extreme poverty. These households had thus gone a long way toward becoming non-poor in 2006 but then plummeted back into extreme poverty by 2010.

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<sup>22</sup> Here, we define certain transitory escapers as those that are transitory poverty escapers who never have a per capita expenditure within the poverty band. Potential transitory escapers, in contrast, are those whose expenditure is within the poverty band during at least one of the survey waves.

**Figure 6: Movements into and out of Poverty and Extreme Poverty**



*E=extreme poor; M=moderate poor; N=non-poor*

While sample sizes are too small to robustly test the determinants of these transitory escape trajectories through regression analysis, we can nevertheless examine some of their characteristics descriptively. Heads of households experiencing transitory escapes that have begun and ended the period in extreme poverty tend to have lower levels of education compared to other transitory escape trajectories displayed in Figure 6. Just 8 percent of this

subsample has completed primary education, compared to a quarter that has completed primary education amongst those transitory escapers who started or ended the period in moderate poverty as outlined in Figure 6. Similarly, persons with disabilities are more common within these households, and their heads of household are relatively less engaged in non-agricultural employment. In terms of their household resource base, it is also less common for these households to have improved water sources or a sanitary toilet and also to own cultivable land.

Among the subset of sustained escapers, we observe that three out of four households that have experienced sustained poverty escapes have done so from a baseline of extreme poverty. This is in spite of having low levels of human capital endowments and resource bases, as measured by primary education and cultivable land, relative to those that sustainably escaped from a baseline of moderate poverty. This presents cause for optimism as it suggests that in Bangladesh households living in extreme poverty are also able to escape poverty in a sustainable manner.

## **E. IMPLICATIONS FOR USAID AND FOR WORK TO PROMOTE SUSTAINED PATHWAYS OUT OF POVERTY**

Analysis of three rounds of panel data collected as part of the Chronic Poverty and Long-Term Impact Study reveals that 41 percent of households experienced sustained escapes from poverty during the period from 1997/2000 to 2010. Over the same period, 10 percent of households experienced a transitory poverty escape.

The panel data analysis for this case study reveals several important areas of intervention to support sustained escapes from poverty in rural areas. Table 3 gives more details and summarizes the main findings. The results presented in Table 3 include those where the variable is significant either in driving transitory poverty escapes or in driving impoverishment. The livestock, dependency ratio, and job variables, while all not statistically significant at conventional levels, are also presented as they emerged as important issues based on the qualitative life histories; the direction of this association is the same as the panel data analysis finding. As mentioned earlier in this report, the small sample sizes of households that experienced transitory poverty escapes or became impoverished is likely to have contributed to some findings being not statistically significant at conventional levels.

**Table 3: Summary of Determinants from Panel Data Analysis**

	Transitory escapes	Impoverishment
<b>Resource base</b>		
Per capita expenditure	-	-
Asset value	-	-
Cultivable land area	-	
Livestock number	-	-
Private toilet	-	+
Electricity	-	-
Piped water	+	+
<b>Attributes and capacities</b>		
Dependency ratio	+	+
Female-headed household	-	-
Head of household has education	-	-
<b>Activities</b>		
Head of household has a job	-	-
Head of household involved in non-farm activities	-	-
Receipt of remittances	+	-

*Significant results are presented in white cells.*

*+ means that this determinant increases the likelihood of experiencing a transitory poverty escape, or becoming impoverished, relative to experiencing a sustained escape.*

In terms of the **household resource base**, **land** is an important asset that is associated with a statistically significant reduction in the likelihood of a household experiencing a transitory poverty escape relative to experiencing a sustained escape. Land is important both as a source of food and income: households can mortgage out land as a source of income. As such, it becomes important to ensure that land markets operate effectively and that people feel confident in the security of their land titles if they mortgage or lease out land.

**Livestock** is another important asset in preventing re-impovertment and transitory escapes. Livestock can be reared with the purpose of asset accumulation through bull rearing and “livestock ladders”: households invest in cattle with profits earned from rearing poultry and small ruminants. In addition, small ruminants are an important asset that can be sold to cope with a shock. Protecting these livestock assets, including through access to effective and affordable veterinary care, is therefore important for sustaining pathways out of poverty. Livestock rearing is also an income-generating activity that women can engage in on and around the homestead. Livestock are therefore often an important livelihood activity for households where **women and men work as a team to sustain poverty escapes**.

Given the importance of household resources in ensuring sustained poverty escapes, a number of development programs in rural Bangladesh are transferring resources directly to extreme poor households. The theory of change around these asset transfer programs is that a group of people who, while living in extreme poverty, are given the necessary support or a “big economic push” or a series of economic pushes are able to experience sustained poverty escapes without receiving government safety nets over the long term. This approach is also known as the “graduation approach”: this approach supports the transfer of assets accompanied by a regular stipend, training, and the promotion of savings behavior. BRAC’s Challenging the Frontiers of Poverty Reduction - Targeting the Ultra-Poor (CFPR-TUP) project and the large-scale, Department for International Development (DFID)-funded extreme poverty programs, including the Chars Livelihoods Programme (CLP) and Shiree, are all based on the graduation approach (see Box 15 and Box 16).

### BOX 15: THE MEDIUM-TERM IMPACTS OF THE GRADUATION APPROACH AS IMPLEMENTED BY BRAC

An evaluation of the medium-term impacts of BRAC’s CFPR-TUP project uses a large-scale randomized control trial that covers over 21,000 households in 1,309 villages. These households are surveyed four times over a seven-year period. One objective of the evaluation is to study how women’s choices over labor activities in village economies correlate with poverty and whether enabling the poorest women to take on the activities of their richer counterparts can set them on a sustainable trajectory out of poverty.

At baseline, the poor mostly engage in low return and seasonal, casual wage labor while wealthier women solely engage in livestock rearing. The program enables poor women to engage in livestock rearing, increasing their total earnings. This leads to asset accumulation (livestock, land, and business assets) and poverty reduction, both accelerating after four and seven years. In other words, these impacts continue and even increase following the end of the beneficiary’s two-year period of intensive program involvement.

Meanwhile, these gains do not come at the expense of others. The livestock-rearing businesses of non-beneficiaries are not crowded out, and wages received for casual jobs increase as the poor reduce the labor supply for labor-intensive activities. *Source: Bandiera et al (2016).*

### BOX 16: THE SUSTAINABILITY OF IMPROVEMENTS IN LIVES FOLLOWING CLP INTERVENTIONS

The CLP provides targeted extremely poor households with an intensive package of support for 18 months. Following the end of this support, it then assesses households’ status against 10 graduation criteria. These cover domains of income/consumption; assets; nutrition; female empowerment; vulnerability; and access to services. If a household achieves six of these 10 criteria, then it is deemed to have graduated successfully. The table below shows the proportion of beneficiary households achieving successful “graduation” after having received CLP support. It shows how, in the case of CLP beneficiaries, 66.2 percent continue to achieve at least six of the 10 graduation criteria five years after CLP support was provided.

However, the table also reveals that there is neither a linear increase over time nor a consistent proportion of beneficiaries who remain graduated, potentially suggesting the fragility of gains made. CLP staff point to the fact that households still rely heavily on wage labor, which has a significant bearing on three of the graduation criteria. Meanwhile, supply and demand for labor fluctuates throughout the year, and the inability of an income earner to work can have serious implications for the level of household income.

Years after CLP support end	0 Years*	1 Year	2 Years	3 Years	4 Years	5 Years (2014 annual survey)
CLP 1				69.6	49.2	66.2
2.1	66.7	66.6	54.0	75.0		
2.2	81.3	65.1	74.5			
2.3	86.7	90.4				
2.4	91.1					

\*Within 3 months of support ending

*Source: Kenward et al. (2015)*

A primary reason for the success of the graduation approach is that **households are regularly monitored and mentored**. Follow-up and regular household visits (every week in the case of BRAC's STUP) reflect the fact that asset accumulation requires appropriate and suitable reinvestments. This requires building the capacity and skills of beneficiaries both to increase the output from their investments and also to know how to assess market conditions and identify appropriate times and places to sell produce and then re-invest the proceeds. Amran Ali's sustained poverty escape (Box 14) clearly reveals the importance of regularly switching crops depending on market prices as well as selling livestock during periods when the market price is high.

In terms of **household attributes and capacities, education** emerges as important for ensuring sustained poverty escapes in both the qualitative and quantitative research. The head of household having completed primary school reduces the likelihood of a transitory poverty escape relative to experiencing a sustained poverty escape while the head of household completing secondary school reduces this likelihood even further. In male-headed households, the level of education of the female spouse is also important (Ahmed et al. 2016), and this may also be related to higher levels of female empowerment and decision making within the household. An important tipping point in the lives of girls is if they are prematurely withdrawn from school, either due to poverty or because of early marriage. Interventions that aim to keep girls in school until the completion of secondary education, or its equivalent, therefore remain crucial.

**Building human capital is important to increase returns from self-employment and to gain access to a more stable "job."** In several of the life histories, parents had invested in their children going to college so that they would not have to work in the fields during adulthood. However, in all instances, parents were worried about the types of job that education would enable their children to access, with teaching being seen as the most viable option. Ensuring that educated youth, and their parents, are aware of the types of job that they could access is therefore important. In addition, **building adolescent skills** is viewed by the key informants as critical for future generations to sustain any improved living conditions. They point to the **importance of vocational training**, particularly training that is aligned with labor market requirements and activities that women are able to engage in. In general, the current system is outdated given current market conditions and focuses on skills such as plumbing and carpentry which, given the social context, are also inappropriate for women.

In terms of **household activities**, while engagement in non-farm activities emerges from both the panel data analysis and the life histories as important for sustaining poverty escapes, the life histories and key informant interviews highlight further how **self-employment is often insufficient to prevent transitory poverty escapes**. A key lesson from implementing the graduation approach is that microenterprise development frequently does not provide households with a sufficiently regular income to enable them to use that income to manage shocks. In the context of Shiree, which transfers productive assets to extreme poor households, this means that the income-generating activity that beneficiaries select is a secondary income source for those households that manage to avoid transitory escapes. This is reflected in the findings from the life histories where households experiencing sustained poverty escapes combined different income sources, spanning both wage labor and microenterprises (e.g., crop agriculture and livestock rearing). Even those households with their own land continued to work as agricultural wage laborers on others' land or as masons in order to earn daily wages and extra income.

The vast majority of development interventions in Bangladesh support entrepreneurship and microenterprise development. However, given that **households that experience sustained poverty escapes have labor income in addition to that from self-employment**, including income from own-account farming, it may be that a key question for development interventions is what can be done to increase access to and incomes from different jobs? The qualitative fieldwork highlights a number of potential avenues:



- **Reducing the risks associated with international migration:** This could include making people aware of the economic returns from migration – in particular, the salary required in order to make this an economically viable proposition. Given that female-headed households that receive remittances are significantly less likely to experience a transitory poverty escape than a sustained escape from poverty, this could be a particularly interesting area to investigate.
- **Increasing connections between rural areas and growing export-oriented industries,** such as the RMG sector.

Investments in agriculture also remain important for sustained poverty escapes. From the life histories, all the households that experienced sustained escapes achieved this through engaging in a combination of agricultural and non-farm activities. *Improving agricultural productivity and marketing* therefore remains essential to prevent re-impooverishment, particularly given the dependence of non-farm activities in rural areas on the agricultural economy. Indeed, with a few exceptions (such as masonry and international migration), the majority of non-farm activities in rural areas should be viewed as agriculture-driven non-farm employment.<sup>23</sup> The viability of non-farm activities in rural areas, such as small shops, very much depends on local purchasing power, itself largely a function of the success of engagement in agriculture.

**Access to appropriate finance is required to sustain poverty escapes.** Despite widespread access to finance in rural Bangladesh, this is not necessarily appropriate for people’s needs. From both the FGDs and life histories, being trapped in vicious cycles of loan repayments is an important driver of transitory poverty escapes. In particular, flexible terms and conditions emerge as important for credit to be able to contribute to sustained poverty escapes. Meanwhile, it is important that different types of credit are designed for (i) helping households quickly access finance in the instance of health shocks and (ii) enabling productive investments.

**Addressing health shocks is critical.** Both the life histories and the experiences of implementing the graduation approach<sup>24</sup> highlight again and again the role of health shocks in driving both transitory poverty escapes and impoverishment. Health insurance is not available in Bangladesh, with the exception of a few NGO-led initiatives. Given the poverty of the poorest households, if health insurance were to be accessible for them, their premiums would need to be subsidized.

In addition to addressing short-term health needs, it is important to recognize that *some households become re-impooverished due to members developing a chronic illness or entering old age*. The panel data analysis reveals that government and NGO stipends are associated with a reduced likelihood of transitory poverty escapes or becoming impoverished, though the findings are not statistically significant. It is important that households that become labor constrained or that have to bear regular medical expenses for chronic illnesses are **linked with government safety nets**. It is estimated that around 5 percent of households are labor constrained, requiring continued assistance over time. However, there are currently difficulties in terms of targeting these safety nets as well as the often inadequate level of benefits that they provide.

In order to prevent escapes from poverty being transitory, economic interventions need to be accompanied by interventions that aim to change long-term behaviors. Of particular importance are interventions that aim to change behavior related to (i) savings and developing a habit of saving and (ii) promoting women’s empowerment. Intensive approaches are needed to change behaviors, such as door-to-door campaigns by NGOs to increase the use of contraception. It is also possible that some people will listen more to people, or champions, from the local community rather than external NGO staff. One particularly prevalent cause of transitory poverty escapes is dowry payments. Some progress does seem to

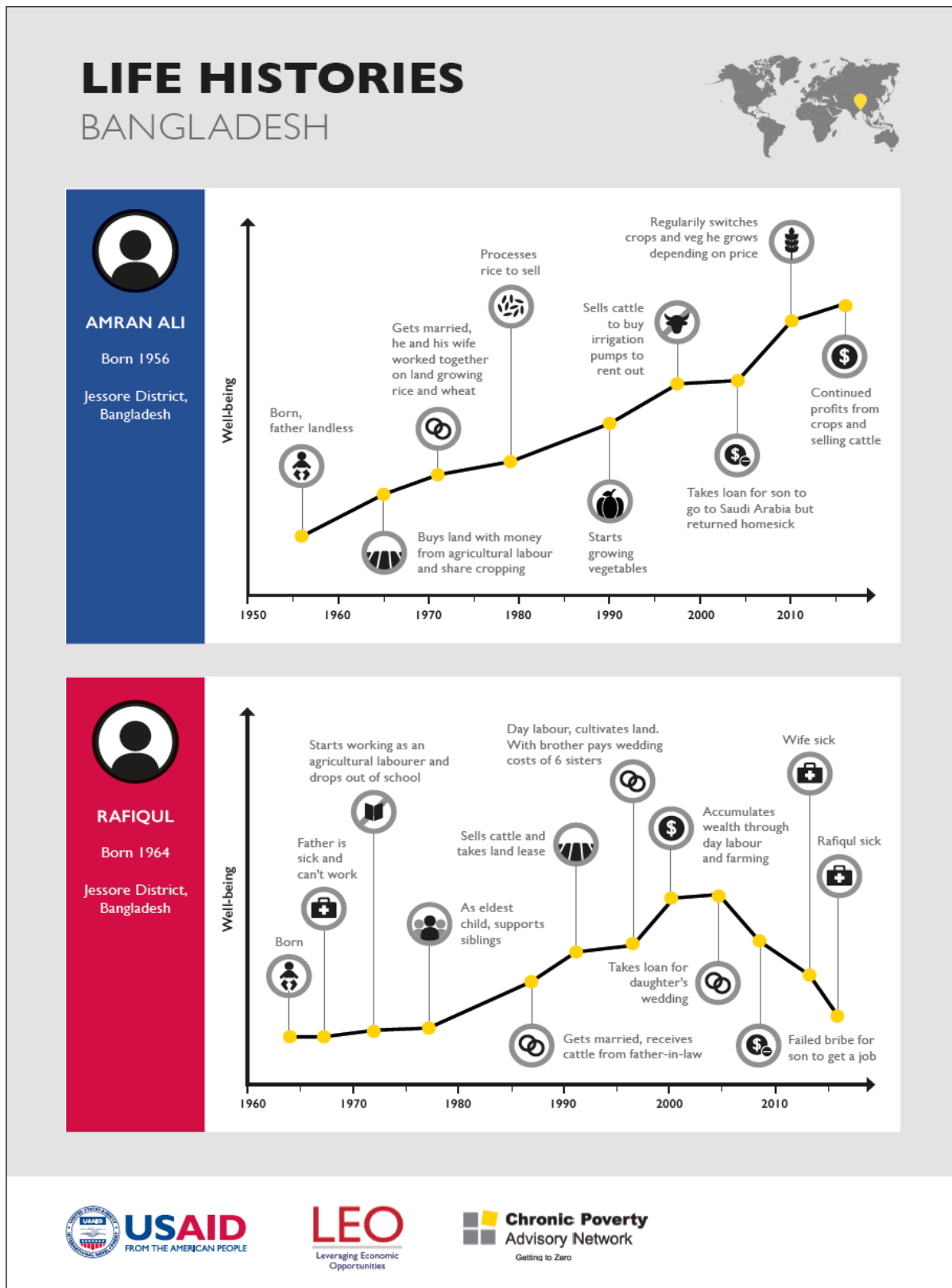
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<sup>23</sup> Interview Akhter Ahmed, IFPRI.

<sup>24</sup> Interviews with Mushtaque (BRAC), BRAC-TUP team, Arifur Rahman (DFID), and Syed Hashemi (CGAP).

have been made here: during community-level fieldwork, people referred to payments as “gifts” and stressed that they were not forced to give them, though this was not necessarily reflected in interviews.

**Figure 7: Life Histories, Bangladesh**



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# ANNEX A: PANEL STUDIES IN THE CHRONIC POVERTY REPORT

**Enquête Permanent Agricole (EPA) conducted by the Ministry of Agriculture of Burkina Faso** focuses on the rural population. The sampling frame is based on the agricultural census and comprises agricultural households, which consists of 81.5 percent of all households – 95 percent of rural households and 45 percent of urban households. In particular, the sample frame includes agricultural households that are not engaged exclusively in horticulture – accounting for 94.2 percent of households in rural areas and 5.8 percent of households in urban areas. The sample is selected in two stages: first villages and then farms. The sample is stratified by farm size (Ministere de L’Agriculture de l’Hydraulique et des Ressources Halieutiques, Burkina Faso, 2009). Source of analysis: Wetta et al. (2011).

**Enquête de Suivi de la Pauvrete, Vulnerabilites et Pauvrete Chronique au Senegal** has a sample size of 1,200 households. Broadly speaking, the sample is nationally representative but is not necessarily representative of smaller geographic areas and regions. Source of analysis: Fall et al. (2011).

**Ethiopian Rural Household Survey (ERHS)** is representative of households in non-pastoralist farming systems in Ethiopia. Given that only 15 communities are sampled, generalizations to the whole of rural Ethiopia should be made with caution (Dercon et al. 2012; Dercon and Hoddinott 2011).

**India National Council for Applied Economic Research (NCAER)** panel follows 13,000 rural households across a 12-year period from 1993/94 to 2004/05. Data are derived from nationally representative sample surveys carried out by the NCAER. Source of analysis: Krishna et al. (2011).

**Indonesia Family Life Survey (IFLS)** is representative of around 83 percent of the Indonesian population covering 13 out of 33 Indonesian provinces (Widyanti, et al. 2009).

**Indonesia National Socio-Economic Survey (Susenas)** covers a nationally representative sample (Dartanto and Nurkholis 2013).

**Kagera Health and Development Survey (KHDS)** is representative of the Kagera region in Tanzania. Conclusions can be generalized to rural Tanzania, as shown by Christiaensen et al. (2013) and Beegle et al. (2011), but results have to be interpreted with caution.

**KwaZulu-Natal Income Dynamics Study (KIDS)**. The initial 1993 KIDS survey was part of the World Bank Project for Statistics on Living Standards and Development and was, therefore, designed to be representative at the provincial level. The later 1998 and 2004 surveys excluded white and colored households due to their small numbers and high concentration in few clusters (May et al. 2006).

**Mexican National Rural Household Survey (ENHRUM)**. Data from the first round is from 2002, and data from the second is from 2007. The sampling strategy was designed by the Mexican National Institute of Statistics and Geography to be representative of Mexican rural communities with populations between 500 and 2,499 habitants (representing more than 80 percent of Mexico’s rural population). The country was divided into five regions, and 16 villages were selected from each region. The sample consists of more than 1,700 randomly selected households located in 80 villages from 14 Mexican states. The results presented here are from a panel consisting of 1,529 households (Gomez Urquiza and Lopez-Feldman 2013).

**Nepal Living Standards Survey**. Approximately 1,200 households are covered in the panel between the 2003/04 NLSS2 and the 2010/11 NLSS3. This panel is a sample from the national cross-sectional survey,

which is constructed to be nationally representative. The sources of analysis are Mascie-Taylor (2013) and Gaiha et al. (2014a).

**Pakistan Rural Household Survey 2001 and 2010.** The first round, the Pakistan Rural Household Survey (PRHS), was carried out in 2001 in rural areas of 16 districts selected from all four provinces. The 2010 round re-covered these 16 original panel districts. An urban sample was also added to the third round (though the figures presented here just give the rural panel), and it was renamed the Pakistan Panel Household Survey (PPHS). The sample may, however, have over-represented the poorer regions. (Arif and Farooq 2012).

**Philippines Family Income and Expenditure Survey (FIES)** provides a sample that represents the whole country and its 17 regions. Source of analysis: Reyes et al. (2011).

**South Africa's National Income Dynamics Study (NIDS)** cross-section samples are nationally representative (Finn and Leibbrandt 2013). Source of analysis: Scott et al. (2014).

**Tanzania National Panel Survey** is a nationally representative panel survey. The first round was conducted in 2008/09 and the second in 2010/11. Altogether, the NPS sample is comprised of 409 clusters (census enumeration areas in urban areas and villages in rural ones) and 3,265 households (Tanzania National Bureau of Statistics 2012). Source of analysis: Tanzania National Bureau of Statistics (2012).

**Tegemeo Agricultural Survey, Kenya** is conducted nationwide and is representative of rural, non-pastoralist households in Kenya, covering all eight major agroecological zones (Suri et al. 2008). It is representative of about 85 percent of the rural Kenyan population and about 60 percent of the rural areas (land surface). This is because the data set excludes the North Eastern region, which is sparsely populated but constitutes about 40 percent of the Kenyan land. Source of analysis: Scott et al. (2014).

**Ugandan National Panel Survey (UNPS)** covers a nationally representative sample of households (UBOS 2010). Source of analysis: Scott et al. (2014).

**Vietnam Household Living Standards Survey (VHLSS)** is a nationwide survey that is representative of the whole country, its eight regions, and its provinces as well as urban and rural parts. Source of analysis: Baulch and Hoang Dat (2011).

# ANNEX B: SUMMARY STATISTICS

Table 1: Transitory Escape Households

	Obs	Wave 1	Wave 2	Wave 3
<b>Resource base</b>				
Per capita expenditure (Bangladeshi Taka - BDT)	121	413.68	1137.00	1251.73
Value of assets (BDT)	121	23,444.54	25,197.59	41,512.64
Amount of cultivable land owned (acres)	121	56.08	29.86	31.14
Livestock > median in wave 1 (%)	121	0.28	0.20	0.23
Household has piped water (%)	121	0.71	0.61	0.69
Household has private toilet (%)	121	0.18	0.74	0.83
Household has electricity (%)	121	0.07	0.29	0.32
Rooms per person (number)	121	0.44	0.30	0.39
<b>Attributes and capacities</b>				
Household size	121	5.46	4.93	5.27
Share of children (%)	121	0.48	0.27	0.34
Share of dependents (%)	121	0.52	0.34	0.39
Age (years)	121	44.26	49.57	50.89
Female head (%)	121	1.10	1.14	1.14
Head with primary education (%)	121	0.11	0.17	0.18
Head with secondary education (%)	121	0.01	0.02	0.02
<b>Activities</b>				
Head is employed (%)	121	0.93	0.85	0.85
Total jobs in household	121	3.13	1.89	2.04
Employment in non-agriculture	121	0.56	0.56	0.53
Household receives assistance (%)	121	0.36	0.68	0.49
Household receives remittances (%)	121	0.08	0.48	0.17
Household receives loan (%), MG sample	57	0.84	0.74	0.68
<b>Shocks</b>				
Number of shocks	121	3.30	3.30	0.19
Presence of shock (%)	121	0.95	0.95	0.47
Health expenditures per capita/month (BDT)	121	124.71	490.31	633.90
Household with at least one disabled members (%)	121	0.48	0.48	0.48



**Table 2: Impoverished Households**

	Obs	Wave 1	Wave 2	Wave 3
<b>Resource base</b>				
Per capita expenditure (Bangladeshi Taka - BDT)	48	827.96	1044.45	1257.50
Value of assets (BDT)	48	23,196.38	26,741.94	41,033.44
Amount of cultivable land owned (acres)	48	65.11	41.88	34.28
Livestock > median in wave 1 (%)	48	0.38	0.23	0.17
Household has piped water (%)	48	0.83	0.60	0.73
Household has private toilet (%)	48	0.29	0.83	0.83
Household has electricity (%)	48	0.10	0.21	0.25
Rooms per person (number)	48	0.64	0.28	0.32
<b>Attributes and capacities</b>				
Household size	48	4.27	4.69	5.02
Share of children (%)	48	0.35	0.30	0.34
Share of dependents (%)	48	0.38	0.34	0.41
Age (years)	48	42.46	47.93	51.46
Female head (%)	48	1.04	1.08	1.08
Head with primary education (%)	48	0.10	0.08	0.10
Head with secondary education (%)	48	0.02	0.00	0.00
<b>Activities</b>				
Head is employed (%)	48	0.98	0.88	0.88
Total jobs in household	48	2.58	1.75	2.06
Employment in non-agriculture	48	0.56	0.38	0.44
Household receives assistance (%)	48	0.31	0.56	0.40
Household receives remittances (%)	48	0.06	0.29	0.10
Household receives loan (%), MG sample	24	0.79	0.67	0.79
<b>Shocks</b>				
Number of shocks	48	3.19	3.19	0.19
Presence of shock (%)	48	0.96	0.96	0.42
Health expenditures per capita/month (BDT)	48	137.36	213.40	250.27
Household with at least one disabled members (%)	48	0.44	0.44	0.44

**Table 3: Sustained Escapers**

	Obs	Wave 1	Wave 2	Wave 3
<b>Resource base</b>				
Per capita expenditure (Bangladeshi Taka - BDT)	484	441.55	1546.92	2574.92
Value of assets (BDT)	484	20,783.47	54,097.68	98,503.96
Amount of cultivable land owned (decimals)	484	105.92	69.56	69.85
Livestock > median in wave 1 (%)	484	0.48	0.22	0.26
Household has piped water (%)	484	0.86	0.64	0.76
Household has private toilet (%)	484	0.32	0.85	0.93
Household has electricity (%)	484	0.12	0.45	0.71
Rooms per person (number)	484	0.54	0.36	0.43
<b>Attributes and capacities</b>				
Household size	484	5.61	4.70	4.37
Share of children (%)	484	0.43	0.23	0.27
Share of dependents (%)	484	0.47	0.30	0.34
Age (years)	484	44.21	50.20	50.18
Female head (%)	484	1.07	1.13	1.15
Head with primary education (%)	484	0.23	0.29	0.31
Head with secondary education (%)	484	0.09	0.08	0.09
<b>Activities</b>				
Head is employed (%)	484	0.95	0.85	0.84
Total jobs in household	484	2.29	1.86	1.96
Employment in non-agriculture	484	0.57	0.50	0.51
Household receives assistance (%)	484	0.35	0.49	0.36
Household receives remittances (%)	484	0.11	0.53	0.18
Household receives loan (%), MG sample	378	0.67	0.72	0.61
<b>Shocks</b>				
Number of shocks	484	2.58	2.58	0.19
Presence of shock (%)	484	0.96	0.96	0.44
Health expenditures per capita/month (BDT)	484	147.37	310.66	584.19
Household with at least one disabled members (%)	484	0.45	0.45	0.45

# ANNEX C: APPROACH TO PARTICIPATORY WEALTH RANKING

In Bangladesh, it is not possible to access the household identifiers from the Long Term Poverty and Impact Study. However, we have the village identifiers, and given that USAID also works in some of those villages, we are able to return to them for this research.

This means that the research needs to recreate household wealth trajectories over the previous 10 years using participatory wealth ranking. UP elections provide a useful way of roughly pinning down an event in the last five years and one in the last 10 years.

Specifically, it will conduct historical participatory wealth ranking for three points in time using pre-determined wealth classifications.

Approach to historical wealth ranking (estimated time 2.5 hours):

1. Assemble a focus group of 15–25 participants. Explain the purpose of exercise – stress that this is research and there will be no direct benefits coming from this exercise.
2. Introduce the focus groups to different wealth categories, which have already been determined by previous research (see table below). Ask FGD participants their opinion on those different wealth categories (these categories were slightly adapted during each FGD). Display the wealth categories and talk through them.

Wealth categories for participatory wealth ranking (households do not have to have all characteristics).

	<b>Assets</b>	<b>Education</b>	<b>Nutrition</b>
Indicators of very rich households (khub dhoni)	Household assets or income that is equal to 10 acres (or more) of cultivable land for medium-sized households. Owns profitable medium or large business (e.g., renting out agricultural machinery) or has government/NGO job. Has savings, receives remittances, has many cattle.	All children in school will complete secondary education or beyond.	Balanced diet
Indicators of rich households (dhoni)	Household assets or income that are equal to 2 to 10 acres of cultivable land for medium-sized households. Owns profitable medium-sized business or has government/NGO job. Has some cattle.	The majority of children are in school; some will complete secondary schooling.	Three meals a day, has a varied diet
Indicators of medium households (medhom)	Household assets or income that are equal to 1 to 2 acres of cultivable land for medium-sized household. Tin house, regular job. They can maintain their assets in the face of a common shock.	Children do not complete secondary education or receive external support to complete secondary school.	Eat three meals a day but not a very varied diet
Indicators of poor households (gorib)	Less than 1 acre of cultivable land for medium-sized households. Small house with insufficient rooms.	Not all children attend school.	2–3 meals a day but poor quality. Eat meat 1–2 times a month.

	<b>Assets</b>	<b>Education</b>	<b>Nutrition</b>
	Livestock in the same house. In the face of a common shock, they would become very poor.	Children cannot complete primary school.	
Indicators of very poor households (khub gorib, na keye chole)	Landless or near landless. Most depend on day labor (rickshaw, poultry, sharecropping, etc.). Jute/thatched house in poor condition.	Children not in school. Parents cannot afford uniforms and class materials.	Not enough food, which is harmful to health.

For the purposes of identifying households which are transitory escapers, the poverty line is set between the level of medium and poor households in the above table.

3. Ask those households present to assign their current situation (2016) to a particular wealth category by attaching post-it notes to the large piece of paper.
4. Then ask them about their situation five years ago and ask them to assign themselves to a category for that time period.
5. Explain to the focus group how households are on different wealth trajectories and start a discussion about the reasons behind impoverishment and upward mobility between 2011 and 2016. Start to fill in a table, like the table below.
6. Do the same exercise for 10 years prior.
7. Explain to the focus group how households are on different wealth trajectories and start a discussion about the reasons behind impoverishment and upward mobility between 2011 and 2006. Continue to fill in a table, like the table below.
8. Ask if they know of any households in the community on PNN or PNP trajectories? Write those names on post-its and stick on the large paper.

#### Main Reasons for Impoverishment and Upward Mobility

<b>Between 2005 and 2010 (10 Years Ago and Five Years Ago)</b>		<b>Between 2010 and 2015 (Today and Five Years Ago)</b>	
Bullet point drivers of upward mobility	Bullet point drivers of downward mobility	Bullet point drivers of upward mobility	Bullet point drivers of downward mobility

9. Investigate if there are any differences in reasons for impoverishment across the two time periods (e.g., opening of a health center may have resulted in a fall in health shocks, climatic conditions, etc.).
10. Have a discussion about the different types of support/program involvement for households on the different trajectories. Ideally, we can then conduct life histories with households receiving different types of support (e.g. stipends, being in farmer organizations).

# ANNEX D: LIFE HISTORY INTERVIEW TEMPLATE

Life Histories with one head of household, either male or female. Ideally, they will be the person who took part in the FGD. If that is not possible, then whichever of the male or female household head who is available.

## IMPORTANT POINTS

- The outputs of the life history interview will be: 1) a narrative of the respondent's life and 2) a life history map (see end of document for an example).
- Map the life of the respondent against the pre-determined well-being classifications.
- Life periods are:
  - Childhood: 0–12 years
  - Youth: 13 years to marriage/start of own household OR 20 years (whichever is relevant)
  - Young adulthood: Marriage/start of own household or 20–40 years
  - Late adulthood: 40 years – 60 years
  - Old age: 60 years +
- Ensure you identify well-being levels at these points:
  - Childhood
  - Just before start of own household/marriage
  - Just after start of own household/marriage
  - Now
- Focus on upward and downward mobility and reasons for these changes (why the upward or downward mobility in well-being)

## Introduction, focus, and consent

- When you arrive at the household, introduce yourself and the research.
- Purpose of the research
- Explain our focus in as much depth as you need to – that you want to understand changes in assets and well-being during their lives and to learn more about why such changes happened. Positive and negative events. Explain to them that at five different points in their lives you will be asking them the following questions: what has enabled them to improve their lives; if they have fallen back, why have they done this; if they were able to manage in the face of shocks, how were they able to do this.
- Obtain informed consent, i.e., ensure that the respondent agrees to take part in the interview
- The interview will be anonymous: it will not include their name.
- You are going to take notes and record the interview; these notes will only be seen by other members of the research team. The recording will only be made available anonymously to the people who will be transcribing the interview.
- You will write short stories from the interview; some of these (without their names) will be seen by other people.
- Ask permission to take a photograph (if you plan to do so)

- Other people will see their photographs (without their names)

### **Getting started**

- Write down interviewee's name, age, and gender and the interviewer's name
- Note individual's appearance and demeanor (happy, sad, anxious, etc.)
- Describe house and compound

### **Genealogy/demographic**

- Draw genealogy trees or tables and note sexes/ages (dates of birth) of the household members (nuclear household or if there are other family members living in the same homestead, include those members); who's married to whom; include multiple spouses and circle the respondent's household; and the level of education of each household member (especially the person being interviewed and the spouse).
- If it is a female-headed household, ask how it became this way (for example, death of husband or migration or other circumstance).
- Focus on people within the household

### **Livelihoods and assets now**

[Note for researchers: You can choose whether to do this now or do this chronologically.]

[Note to researchers: Interested in physical assets, which may include land, livestock, implements (hoes, trailers, carts, ploughs, and tractors), number of houses, "state" of houses (i.e., tin roof), clothes/household items, mode of transport, consumer durables (e.g., mobile phones). Get as accurate an estimate as possible, but rough magnitude is better than no magnitude at all (e.g., more than five cows but less than 20).

- Can you rank your livelihoods now? (i.e., primary, secondary, and tertiary livelihoods)
- For the household
- Probe for all other livelihood activities/sources
- What assets do you have in the household? Can you rank them in terms of value?
- Does your house have electricity?
- Do you have a mobile phone?
- Do you own the land you work on? If you had to sell it, whose decision would it be? Sharecropping, leasing, or mortgaging—which type? Or are you working off someone else's land?

[Note to researcher: This is a good point to locate the respondent on Y-axis of the life history diagram.]

### **Childhood** – approximately 0–12 years old

[Note to researcher: at this point, we are getting at parent's livelihood and assets.]

- When and where were you born?
- Parents: Where are your parents from? (Origins of the family: in the case of migration from another place, when did they move and why?)
- Siblings: How many? Which birth order? Are they sisters or brothers?
- Education: What level of education did your parents have? What level of education do you and your siblings have? How was your education and your siblings' education funded?
- Livelihood of parents: Can you rank your parents' livelihoods (i.e., occupation during your childhood)? What was the main occupation of your parents? What was their second occupation/source of income? What was their third occupation/source of income?
- If involved in crop agriculture, which crops and why?

- Who were the crops sold to? Who did you get agricultural inputs from?
- What was the nature of those relationships (i.e., selling crops/getting inputs, etc.)?
- Assets of parents: What assets did your parents have? Can you rank them in terms of value or importance for income generation?
- House and compound: Describe your house and compound when you were a small child (e.g., at age 8 years old).
  - Electricity?
  - Building materials?
  - How did it compare with other compounds in your village?
  - How did it compare with the house that you live in now (much better, better, the same, worse, much worse)?

[Note to researcher: This is a good point to locate the respondent during childhood on Y-axis.]

- Home life:
  - Relationship with parents and siblings
  - Responsibilities – what were your chores?
  - How was work divided among different members of the family (young, old, men, women)?
  - Food – type of food and number of meals/day?
  - Leisure activities?
  - Health of interviewee and family during childhood?
- Relationships for building livelihoods and coping with shocks:
  - Key relationships: landlords, friends, employers, richer households, social networks, neighbors, kinship networks, employment relations, cooperatives, and banks
  - Looking back over this early part of your life, do any difficult events or periods stand out?
  - Probe shocks, coping strategies taken, channels of support (relatives, friends, NGOs, church, moneylenders, etc.)
  - Note carefully all changes in asset levels, ask if there are any assets that have been particularly important for escaping poverty? Any death of livestock that has been influential?
  - Note changes in livelihoods. Any non-farm income/activity/enterprise? How did they get this?
  - Looking back over this early part of your life are there any positive events or periods that stand out?

**Youth**– approximately 13 years to marriage (or 20 years old, whichever is more appropriate)

- When did you leave school?
- Probe around if, when, and why respondent left school?
- Livelihoods: What livelihood activities did you engage in and can you rank them from the most important to the least important in terms of income?
- If involved in crop agriculture, which crops and why?
- Who were the crops sold to? Who did you get agricultural inputs from? What was the nature of that relationship?
- First job/enterprise/livelihood activity: What was it? Rank livelihood activities at this period of your life in terms of their importance to household income and food security (e.g., farming, livestock rearing, job, small enterprise, etc.)?
- How did you get this job/start this enterprise/move into this livelihood activity? Did you get help from anyone?
- If you migrated away from the village, did you have a job before you went? How did you find this job? How did you send money back to your family?
- If you started a non-farm enterprise, why did you decide to start this? If so, who and how did this work?

- Describe working conditions/constraints/profitability/shocks/risks/coping strategies associated with the different livelihoods activities.
- Any credit/loans taken out? For what? Largest amount? Ever taken loans to repay loans?
- Any participation or engagement in social safety nets? How important is this for your household? When/ in what event has it been especially important?
- Looking back over your youth, are there any difficult events or periods that stand out? (Use this to probe for shocks, coping strategies, changes in asset levels, and changes in livelihood strategies.)
- Looking back over your youth, are there any positive events or periods that stand out? (Use this to probe for opportunities, investments, and resilience.)
- Assets during youth and before marriage/starting own household: What assets did you have before starting your own household? How does this compare with assets during childhood? Account for changes in asset holdings – probe reasons for sales and main source of finance for purchases or main reasons for acquisitions and from whom.
- Key relationships: landlords, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, and banks

### Young adulthood

- Marriage:
  - Are you married?
  - How did you meet your husband/wife?
  - Parent's/family's views of the match?
  - How much was the dowry? Was all of it able to be paid? What was the source of the dowry and where did it go?
  - Move to your spouse's village – feelings about that/problems; setting up home; relationship with in-laws/ extended family/community; relationship with spouse
- Livelihoods:
  - Assets at marriage – in particular productive assets – livestock, agricultural implements, land, rickshaw, etc.
  - What livelihood activities did you engage in, and can you rank them from the most important to the least important in terms of income and food security? Which were the most important assets for following each particular activity?
  - Describe the working conditions/constraints/profitability/shocks/risks and coping strategies associated with each of these livelihood activities.
  - If involved in crop agriculture, why are you farming? Which crops are you farming? Who owns the land on which you farm? If sharecropping/leasing, what are the arrangements of this? Is it easy to find land to sharecrop/lease here?
  - Have price changes of agriculture goods (either inputs such as seeds or the sales price of crops) affected you? How?
  - How did you get any better livelihoods during these years?
  - Did you ever migrate? How did you get the good/better job if you did?
  - Social networks that helped you get jobs/work?
  - Any credit/loans taken out? For what? Largest amount? Ever taken loans to repay loans?
- Children:
  - Make sure dates of births have been identified
  - Any difficulty with births?
  - How have you financed the education of your children?
  - Remittances from older children/kin
- Health:
  - Health of interviewee and family?
  - Impact on household well-being?



- Were there any periods of sickness? If so, who was sick, and where did you go for treatment? How much did it cost, and how did you find that money?
- Relationships
  - Ask about the relationships that were important for building their livelihoods and for coping with shocks.
  - Key relationships: landlords, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, banks
  - Any participation or engagement in social safety nets? How important is this for your household? When/in what event has it been especially important?
- Looking back over your early adulthood, are there any difficult events or periods that stand out? (Use this question to probe for shocks, coping strategies, channels of support [relatives, friends, NGOs, churches, moneylenders, etc.], changes in asset levels, and changes in livelihood strategies.)
- Looking back over your early adulthood, are there any positive events or periods that stand out? (Use this question to probe opportunities, investments, aspiration, and resilience.)

### **Late adulthood**

- What assets does the household now have? Which assets were particularly important for the different livelihood activities?
- Compare assets at marriage and now and account for changes. Account for changes in asset holdings – probe reasons for sales and main source of finance for purchases or main reasons for acquisitions and from whom.
- Were any assets particularly important for escaping poverty? Has the loss of any particular asset been important in a household experiencing any downward mobility? How did the household cope with the loss of this asset?
- Compare livelihoods at marriage and now and account for changes. For instance, is there now any non-farm income/activity/enterprise? What was the source of finance for this? Why did they decide to start this?
- If involved in crop agriculture, why are you farming? Which crops are you farming? Who owns the land that you farm on? If sharecropping/leasing, what are the arrangements of this? Is it easy to find land to sharecrop/lease here?
- Have price changes of agriculture goods (either inputs such as seeds or the sales price of crops) affected you? How?
- Has there been any change in the profitability of these livelihoods between early adulthood and late adulthood? Has the nature of shocks facing these livelihoods changed over time?
- Health
  - Health of interviewee and family?
  - Impact on household well-being?
  - Were there any periods of sickness? If so, who was sick, and where did you go for treatment? How much did it cost, and how did you find that money?
- Important relationships for sustaining livelihoods and coping with shocks:
  - Key relationships: landlords, friends, employers, neighbors, richer households, social networks, kinship networks, employment relations, cooperatives, and banks. If any of these relationships have been important, how have they been important?
  - Any participation or engagement in social safety nets? How important is this for your household? When/in what event has it been especially important?
- Looking back over your late adulthood, are there any difficult events or periods that stand out? (Use this question to probe for shocks, coping strategies, channels of support [relatives, friends, NGOs, church, moneylenders, etc.], changes in asset levels, and changes in livelihood strategies.)
- Looking back over your late adulthood, are there any positive events or periods that stand out? (Use this question to probe for opportunities, investment, acquisition, aspiration, and resilience.)

## Older age

- How is life during older age?
- Working or not work? Are you able to support yourself? If not, who is supporting you?
- Health?
- Were there any periods of sickness? If so, who was sick, and where did you go for treatment? How much did it cost, and how did you find that money? If you are taking regular medication, where do you get this from?
- Widowhood: Age when spouse died; implications; feelings; change in status?
- Relationships with others: responsibilities; support from children; role in community; status?
- Any participation or engagement in social safety nets? How important is this for your household? When/in what event has it been especially important?
- Looking back over your older age, are there any difficult events or periods that stand out? (Use this question to probe for shocks, coping strategies, channels of support [relatives, friends, NGOs, church, moneylenders, etc.], changes in asset levels, and changes in livelihood strategies.)
- Looking back over your older age, are there any positive events or periods that stand out? (Use this question to probe for opportunities, investment, acquisition, aspiration, and resilience.)

# ANNEX E: REGRESSION RESULTS AND ANALYSIS APPROACH

The Bangladesh transitory poverty escape study employed pooled multinomial regressions. This was chosen to maintain methodological consistency across country reports where in some cases we were faced with small sample sizes in our subset of interest yet a variety of predictors. While pooling data does not remove endogenous household-specific characteristics or allow the examination of changes within households over time, pooled models have gained popularity not only because of the “small N” problem which we face in this study but also because it allows investigation into variables with minimal or non-existent variability, which we were also interested in examining in our study.

Table 1: Drivers Associated with Poverty Trajectories *The last two columns include an interaction term (remittance\* female head)*

VARIABLES	Transitory escapes	Impoverishment	Transitory escapes	Impoverishment
Log (per capita monthly expenditure)	0.0548*** (0.0150)	0.609 (0.202)	0.0555*** (0.0152)	0.613 (0.203)
Assistance	0.979 (0.145)	0.831 (0.169)	0.978 (0.145)	0.830 (0.169)
Remittance	1.007 (0.185)	0.606* (0.172)	2.363 (1.363)	0.424 (0.386)
Remittance* Female head			0.478 (0.227)	1.366 (1.026)
Household size	1.019 (0.0493)	1.000 (0.0783)	1.020 (0.0494)	0.999 (0.0783)
Share of children	1.752 (1.280)	0.915 (0.941)	1.818 (1.330)	0.896 (0.923)
Share of dependents	1.256 (0.808)	1.361 (1.196)	1.246 (0.803)	1.375 (1.208)
Age of household head	0.933* (0.0334)	1.026 (0.0587)	0.931** (0.0333)	1.027 (0.0587)
Age-squared	1.001** (0.000364)	1.000 (0.000587)	1.001** (0.000364)	1.000 (0.000586)
Female head	0.662 (0.206)	0.263*** (0.130)	0.823 (0.277)	0.233** (0.135)
Head with primary education	0.692* (0.134)	0.358*** (0.110)	0.692* (0.134)	0.357*** (0.110)
Head with secondary education	0.209***	0.0733**	0.211***	0.0733**

VARIABLES	Transitory escapes	Impoverishment	Transitory escapes	Impoverishment
	(0.106)	(0.0757)	(0.107)	(0.0756)
Number of shocks	1.030	0.982	1.029	0.982
	(0.0439)	(0.0575)	(0.0439)	(0.0575)
Presence of shock	0.965	0.861	0.964	0.860
	(0.220)	(0.260)	(0.221)	(0.260)
Log (per capita monthly health expenditure)	1.047	1.004	1.043	1.004
	(0.0388)	(0.0491)	(0.0388)	(0.0492)
Household with disabled member	0.907	0.659*	0.891	0.657*
	(0.142)	(0.145)	(0.141)	(0.145)
Head is employed	0.944	0.747	0.886	0.756
	(0.316)	(0.360)	(0.298)	(0.370)
Number of jobs in household	1.095	0.993	1.089	0.993
	(0.0696)	(0.101)	(0.0695)	(0.102)
Rooms per person	1.087	1.264	1.122	1.246
	(0.216)	(0.334)	(0.223)	(0.332)
Piped water	1.355*	1.208	1.358*	1.206
	(0.243)	(0.294)	(0.244)	(0.294)
Private toilet	0.658**	1.166	0.661**	1.168
	(0.126)	(0.309)	(0.126)	(0.310)
Electricity	0.922	0.582**	0.926	0.581**
	(0.163)	(0.150)	(0.164)	(0.150)
Log (asset value)	0.895*	0.882	0.895*	0.882
	(0.0564)	(0.0781)	(0.0565)	(0.0782)
Cultivable land area	0.997**	1.000	0.997**	1.000
	(0.00116)	(0.00135)	(0.00116)	(0.00135)
Livestock > median in first year	0.869	0.915	0.865	0.918
	(0.158)	(0.221)	(0.158)	(0.222)
Non-farm enterprise	0.835	0.441***	0.835	0.442***
	(0.136)	(0.0952)	(0.136)	(0.0953)
Thana controls	Yes	Yes	Yes	Yes
2006/2007	36.84***	2.774**	36.28***	2.746**
	(13.35)	(1.234)	(13.14)	(1.222)
2010	106.3***	2.826*	104.4***	2.789*

VARIABLES	Transitory escapes	Impoverishment	Transitory escapes	Impoverishment
	(48.80)	(1.616)	(47.96)	(1.598)
Constant	3.472e+08***	46.54	2.814e+08***	49.89
	(6.921e+08)	(123.5)	(5.617e+08)	(133.1)
Observations	1,958	1,958	1,958	1,958

See form in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 2: Effect of Coping Strategies on Poverty Trajectories**

Coping strategy:	Asset sale		Take out a loan	
	Transitory escapes	Impoverishment	Transitory escapes	Impoverishment
Log (per capita monthly expenditure)	0.131***	1.584	0.131***	1.601
	(0.0382)	(0.564)	(0.0382)	(0.569)
Coping strategy	0.934	0.920		
	(0.176)	(0.238)		
Assistance			0.954	0.939
			(0.159)	(0.217)
Remittance	0.969	0.900	0.969	0.901
	(0.159)	(0.208)	(0.159)	(0.208)
Household size	0.996	0.600	0.996	0.600
	(0.203)	(0.192)	(0.203)	(0.192)
Share of children	1.000	1.060	1.000	1.061
	(0.0536)	(0.0959)	(0.0536)	(0.0957)
Share of dependents	1.236	0.738	1.255	0.749
	(1.069)	(1.006)	(1.086)	(1.021)
Age of household head	1.857	1.664	1.842	1.670
	(1.419)	(2.012)	(1.408)	(2.019)
Age-squared	0.966	1.026	0.966	1.027
	(0.0394)	(0.0673)	(0.0393)	(0.0675)
Female head	1.000	1.000	1.000	1.000
	(0.000406)	(0.000691)	(0.000405)	(0.000692)
Head with primary education	0.691	0.231**	0.698	0.235**
	(0.236)	(0.134)	(0.237)	(0.136)

<b>Coping strategy:</b>	<b>Asset sale</b>		<b>Take out a loan</b>	
Head with secondary education	0.723 (0.156)	0.378*** (0.132)	0.715 (0.154)	0.374*** (0.131)
Number of shocks	0.144*** (0.0918)	0.0944** (0.0981)	0.145*** (0.0921)	0.0950** (0.0987)
Log (per capita monthly health expenditure)	1.020 (0.0445)	0.990 (0.0608)	1.017 (0.0440)	0.987 (0.0602)
Household with disabled member	1.063 (0.0433)	1.050 (0.0591)	1.063 (0.0433)	1.051 (0.0591)
Head is employed	0.867 (0.153)	0.534** (0.138)	0.864 (0.153)	0.530** (0.137)
Number of jobs in household	0.766 (0.277)	0.591 (0.325)	0.774 (0.280)	0.602 (0.331)
Rooms per person	1.125* (0.0770)	1.048 (0.118)	1.126* (0.0772)	1.050 (0.119)
Piped water	0.618 (0.278)	1.905 (1.011)	0.615 (0.276)	1.880 (0.996)
Private toilet	1.391* (0.279)	1.136 (0.317)	1.391* (0.279)	1.132 (0.315)
Electricity	0.623** (0.127)	1.220 (0.349)	0.625** (0.127)	1.222 (0.350)
Log (asset value)	0.872 (0.179)	0.601* (0.181)	0.871 (0.179)	0.599* (0.181)
Cultivable land area	0.887* (0.0618)	0.849 (0.0845)	0.886* (0.0618)	0.848* (0.0845)
Livestock > median in first year	0.998** (0.00122)	0.999 (0.00155)	0.998** (0.00122)	0.999 (0.00155)
Non-farm enterprise	0.996 (0.202)	1.134 (0.307)	0.988 (0.201)	1.118 (0.304)
Thana controls	0.945 (0.171)	0.516*** (0.125)	0.939 (0.170)	0.514*** (0.124)
2006/2007	14.71*** (5.821)	1.357 (0.677)	14.71*** (5.819)	1.342 (0.668)
2010	35.99*** (17.78)	1.023 (0.646)	35.56*** (17.62)	1.000 (0.633)

<b>Coping strategy:</b>	<b>Asset sale</b>		<b>Take out a loan</b>	
Constant	1.153e+06***	0.0962	1.146e+06***	0.0881
	(2.522e+06)	(0.289)	(2.508e+06)	(0.263)
Observations	1,527	1,527	1,527	1,527

See form in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1

**Table 3: Loans in MG subsample**

<b>VARIABLES</b>	<b>Transitory escapes</b>	<b>Impoverishment</b>
Log (per capita monthly expenditure)	0.0312*** (0.0119)	0.404** (0.178)
Loan	0.882 (0.208)	1.123 (0.358)
Assistance	1.074 (0.215)	0.866 (0.235)
Remittance	1.100 (0.285)	0.764 (0.284)
Household size	1.067 (0.0783)	1.099 (0.126)
Share of children	1.501 (1.384)	0.281 (0.337)
Share of dependents	0.411 (0.322)	0.942 (0.884)
Age of household head	0.909** (0.0438)	0.965 (0.0670)
Age-squared	1.001** (0.000492)	1.000 (0.000724)
Female head	0.582 (0.267)	0.712 (0.418)
Head with primary education	0.903 (0.238)	0.202*** (0.109)
Head with secondary education	0.367 (0.281)	2.26e-07 (0.000212)
Number of shocks	1.059 (0.0677)	0.958 (0.0890)

VARIABLES	Transitory escapes	Impoverishment
Presence of shock	0.832 (0.241)	1.073 (0.411)
Log (per capita monthly health expenditure)	1.036 (0.0536)	0.983 (0.0684)
Household with disabled member	0.752 (0.165)	0.468** (0.149)
Head is employed	0.958 (0.465)	1.453 (0.954)
Number of jobs in household	1.050 (0.113)	0.822 (0.143)
Rooms per person	1.589 (0.648)	1.628 (0.706)
Piped water	1.919** (0.568)	1.023 (0.365)
Private toilet	0.812 (0.218)	1.489 (0.554)
Electricity	0.884 (0.202)	0.733 (0.236)
Log (asset value)	0.778*** (0.0751)	0.768** (0.0970)
Cultivable land area	0.997** (0.00175)	1.000 (0.00234)
Livestock > median in first year	1.138 (0.259)	1.178 (0.365)
Non-farm enterprise	0.754 (0.165)	0.552** (0.161)
Thana controls	Yes	Yes
2006/2007	112.1*** (66.66)	6.036** (4.253)
2010	443.8*** (311.9)	9.135*** (7.628)
Constant	4.373e+09*** (1.161e+10)	654.0* (2,167)
Observations	1,376	1,376

See form in parentheses

\*\*\* p<0.01, \*\* p<0.05, \* p<0.1