



USAID
FROM THE AMERICAN PEOPLE

ENSURING ESCAPES FROM POVERTY ARE SUSTAINED IN UGANDA

LEO

Leveraging Economic
Opportunities

REPORT NO. 27



Photo Credit: ACDI/VOCA

MARCH 2016

This publication was produced for review by the United States Agency for International Development. It was prepared by Lucy Scott, Vidya Diwakar, and Moses Okech of the Overseas Development Institute (ODI) for ACDI/VOCA with funding from USAID/E3's Leveraging Economic Opportunities (LEO) project.

ENSURING ESCAPES FROM POVERTY ARE SUSTAINED IN UGANDA

LEO

Leveraging Economic
Opportunities

REPORT NO. 27

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.

CONTENTS

- EXECUTIVE SUMMARY 1
- I. INTRODUCTION 3
- II. THE UGANDA CASE STUDY 4
- A. What is the extent of transitory escapes in Uganda and why is this important?** 5
 - 1. Poverty reduction and economic growth in Uganda 5
 - 2. Drivers of poverty reduction and escapes from poverty in the last 10 years 6
 - 3. The rise of the ‘insecure non-poor’ 7
 - 4. Poverty dynamics and transitory escapes 8
- B. Why do some households escape poverty only to fall back into it while others escape poverty and remain out of poverty over time?** 11
 - 1. Initial household resource base 12
 - 2. Initial household attributes and capacities 14
 - 3. Household activities 16
 - 4. Household shocks 22
 - 5. Regional differences in resources, attributes and activities 23
 - 6. Robustness of poverty line 24
 - 7. Household-level strategies 26
 - 8. Implications for USAID and for work to promote sustained pathways out of poverty 32
- III. REFERENCES 37
- ANNEX A: APPROACH TO PARTICIPATORY WEALTH RANKING 39
- ANNEX B: TEMPLATE FOR LIFE HISTORY INTERVIEWS 42
- ANNEX C: SUMMARY STATISTICS FROM DATASET 48
- ANNEX D: REGRESSION RESULTS 51

EXECUTIVE SUMMARY

Since the early 1990s, Uganda has experienced substantial reductions in poverty. Using the national poverty line, the poverty headcount has declined from 56 percent in 1992/93 to just over 20 percent in 2012/13. Economic growth, the end of conflict, and sound macroeconomic management have all contributed strongly to this success. However, as people have moved out of poverty, the number of people living at a level less than twice the poverty line—termed the ‘insecure non-poor’ in the Ugandan context—has risen. In 2012/2013, as many as 14.7 million people were ‘insecure non-poor’ meaning they were extremely vulnerable to falling into poverty in the event of shocks or stressors, such as drought or an episode of ill-health.

The specific focus of this report is on ‘transitory escapes’, i.e., on those households which, having successfully escaped from poverty, return to living in it once again. Analysis of the Uganda National Panel Survey (UNPS) reveals that transitory escapes are a significant phenomenon in Uganda. In particular, between 2005 and 2011, 9% of all households experienced a transitory escape from poverty. Of those households that escaped poverty between 2005 and 2009, around 40% were again living in poverty by 2011. The fact that many people escape poverty only to live at a condition just above the poverty line is a contributory factor for the high level of transitory escapes in Uganda.

This report combines analysis of UNPS data with qualitative research approaches; key informant interviews, life histories and participatory wealth ranking to investigate further the drivers of transitory poverty escapes. 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 in the future. 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 enterprises) of households which enable them to escape poverty sustainably and minimize the likelihood of transitory escapes. It disaggregates these findings by sex of the household head, arguing that different factors are associated with transitory escapes for female-headed households than for their male counterparts.

What matters? Specific findings include the following:

- The amount of cultivable land owned lowers the risk of transitory poverty escapes for both male- and female-headed households, but increases the risk of impoverishment for male-headed households—possibly due to disputes over land ownership.
- Increased asset value reduces the relative risk of transitory escapes among male-headed households, but increases this risk among female-headed households. The latter finding could be because of the increased exposure of female-headed households to theft and asset-grabbing. Analysis of sex-disaggregated resource base determinants suggests there is a need for measures to help female-headed households protect their wealth base to strengthen the security of their poverty escapes.
- Households with more livestock are less at risk of transitory escapes. Small livestock (chicken and goats) are a particularly important source of ‘insurance’ for poor households which sell them to cope with shocks and stressors.
- Larger households and those with a greater share of dependents have an increased risk of transitory poverty escapes. Social assistance directed towards female-headed households that are larger and include the elderly may help reduce the risk of transitory escapes.
- Primary education is associated with a reduced likelihood of transitory escapes across male- and female-headed households, but more so for the latter group.

- The risk of transitory poverty escapes and impoverishment is reduced when the household head has a job, particularly a government or private job as opposed to own-account work.
- Male-headed households are less likely to experience a transitory escape if they own a non-farm enterprise, though the same association does not hold for female-headed households. This could be because female-headed households tend to engage in less capital-intensive and potentially less profitable types of enterprise. If so, there may be policy or program development implications.
- Sustained success in crop agriculture will require market-oriented farmers with access to sufficient land and the means to prepare that land. In particular, it requires behavior change among farmers to be more market-oriented in their production.
- Remittances are important for female-headed households to experience sustained poverty escapes.
- It is not the experience of a single shock but the accumulation of multiple shocks over time that exacerbate living conditions, ultimately propelling households into negative poverty trajectories.

What can be done? Recommendations include the following:

- *Encourage longer-term support.* In particular, through longer-term planning or strategy cycles, which ensure continuity of support through projects being appropriately sequenced and linked.
- *Work towards changing values and behaviors.* Female empowerment and tackling unequal gender relations as a root cause of poverty remains central in efforts aimed at ensuring that escapes from poverty are sustained. Changing farmer behavior, in particular through encouraging farmers to think about marketing arrangements for their crops from the outset, is important, as is the need to encourage savings behaviors to help sustain poverty escapes.
- *Promote mentoring.* Household- and individual-level mentoring and follow-up is useful in providing continuous support to enable them to successfully follow new livelihoods activities and to maintain interest in these activities.
- *Focus on market linkages and not just increasing production.* Respondents continually highlighted the importance of market development in order to ensure people are able to operate profitable farm and non-farm enterprises.
- *Acknowledge longer-term shocks and stressors in policy and program development.*
- *Encourage the development of holistic approaches and linkages.* Holistic approaches to promoting sustained escapes from poverty may ‘layer’ different interventions to ensure households and individuals have the economic opportunities to improve their situation as well as the support to be able to sustain these improvements over-time. Projects may also link beneficiaries to support services implemented by the government, or the public- or private-sector. Appropriate linkages are also needed to help households to manage risks.

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,¹ 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 agenda².

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. 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.

¹ 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. All findings use national poverty lines.

² USAID (2012) defines resilience as the ability of people, households, communities, systems and countries to mitigate, adapt to and recover from shocks and stresses in a manner that reduces chronic vulnerability and facilitates inclusive growth.

II. THE UGANDA CASE STUDY

The objectives of this Uganda case study 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-impoverishment’ 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 Uganda.

This study brings together:

- New analysis of the four most recent publicly-available rounds of the nationally representative Uganda National Panel Survey from 2005/06, 2009/10, 2010/11 and 2011/12. The questionnaires for each year cover individual-, household-, and community-level variables and include the collection of household income and consumption data in order to assess poverty status. In this study, we analyze the 1,797 households for which data was available across the four survey rounds to identify the characteristics of households on different poverty trajectories.
- Insights from key informant interviews with development stakeholders in Kampala, Kole/Lira and Mpigi districts. Kole and Lira are in the northern region, while Mpigi District is in central Uganda, approximately 40 kilometers from Kampala. We conducted 16 key informant interviews in Kampala, three in Lira District, and two in Mpigi. The districts were purposefully selected based on the following criteria: (i) at least 15 percent of sample households in the UNPS either experienced a transitory poverty escape or experienced sustained escapes; (ii) they are focus districts for USAID activities (Kole/Lira for Community Connector and Mpigi for HarvestPlus); and (iii) Social Assistance Grants for Empowerment (SAGE) operates in at least one of the two visited districts.
- Information from participatory wealth ranking and interviews with local leaders in three communities; two communities in Kole District (one where USAID is operating and one where it is not), and one in Mpigi District. Specifically, we conducted historical participatory wealth ranking for three points in time (2006, 2011, and 2016) using pre-determined 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 A gives more details of this approach.
- Life history interviews with the female, and if possible male, head of those households identified during the participatory wealth ranking 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 B. We conducted life histories with five households in each of the three communities. The life histories, along with key informant interviews, were analyzed using MAXQDA with codes used to identify those factors associated with sustained poverty escapes, impoverishment, and transitory escapes.
- Existing policy and program assessments and evaluations (see References).

- Wider literature on the extent and nature of impoverishment and transitory escapes, and the success of anti-poverty efforts in Uganda (see References).

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

This section begins by discussing the trends and drivers of poverty reduction in Uganda since the 1990s, followed by growth of the insecure non-poor in the country. It then proceeds to examine poverty dynamics, according to both the UNPS dataset and qualitative interviews, followed by an introduction of the subset of transitory escapers.

1. POVERTY REDUCTION AND ECONOMIC GROWTH IN UGANDA

Uganda has seen significant success in reducing poverty; the proportion of the population living in poverty—whether measured using the national or international poverty line—more than halved from 1993 to 2013. According to the national poverty line, the proportion of the population living in poverty declined from 56.4 percent in 1993 to 19.7 percent in 2013. Even given criticisms of the low-level of the national poverty line (van Camphenout et al. 2014; Daniels and Minot 2015), over the last ten years Uganda reduced the proportion of the population living under \$1.25 a day faster than any other country in sub-Saharan Africa (World Bank 2015). In reducing poverty by two thirds Uganda has surpassed the 50 percent reduction of extreme poverty specified by Target 1A of the Millennium Development Goals (UNDP 2015). More recent measures of multidimensional poverty also reveal a positive picture; between 2009/10 and 2012/13, the share of the population in multidimensional poverty reduced by 10.1 percentage points, greater than the corresponding reductions in income poverty (MoFPED 2014).

Uganda's strong performance on income poverty is mainly attributed to high and sustained economic growth rates, averaging close to 7 percent over the last two decades, and an increase in more secure and productive forms of employment (UNDP 2015). Macroeconomic stability, post-conflict rebound, and pro-market reforms generated a sustained period of high growth during 1987–2010, with GDP increasing at an annual average rate of 6.9 percent. However, per capita GDP grew more slowly at 3.6 percent per year, largely due to the country's high fertility rate (World Bank 2015).

High growth rates in the 1990s were in part due to a coffee price boom until 1996, economic reform measures, and the country's recovery from the economic collapse of the preceding two decades. Economic development during the 1990s was accompanied by government investments in physical infrastructure, and targeted interventions directed partly towards improving and integrating agricultural value chains. Poverty reduction during this period was especially strong in cash crop farming, manufacturing, and trade. Those involved in cash crop farming represent over half of the poverty reduction that took place in the first half of the 1990s (Appleton 2001), though price-effects meant that urban groups benefitted as much as their rural counterparts during the 1990s coffee-boom (Chant et al. 2008).

While income poverty has declined in the country since 1992, and especially among cash crop farmers, cross-country variations during the 1990s and early 2000s were large. The North in particular experienced lower poverty reduction, as did rural areas. Death, displacement, and a loss of assets and livelihood stemming from conflict contributed to the poor performance in the North during the 1990s and early 2000s. Conflict and insecurity there reduced livelihood options and exacerbated other household shocks, driving households below the threshold or deeper into poverty.

Since the end of the LRA conflict in the North in 2006, there has been significant poverty reduction across all regions of the country. In the last ten years, poverty reduced by 18 percentage points in the Central region; 19 points in the Northern region; 22 points in the Eastern region; and 24 points in the West. The Northern region remains the poorest part of the country, but the gap has narrowed significantly. Since 2009/10, the East has seen the slowest progress in reducing income poverty, reflecting adverse weather conditions, a high dependency ratio, and growing population pressures contributing to land fragmentation and soil degradation (MoFPED 2014). Nationally, economic growth has decelerated to 5.5 percent during FY2011–14, largely attributable to shocks, including global turbulence, aid disruptions, and weather; domestic policy slippages (such as increased election-related spending); and a waning growth dividend from the first spurt of reforms (World Bank 2015).

2. DRIVERS OF POVERTY REDUCTION AND ESCAPES FROM POVERTY IN THE LAST 10 YEARS

Within an enabling environment of macroeconomic stability and sustained (though more recently slowing) economic growth, some of the main factors attributed with declines in poverty over the previous 10 years are as follows:

a. Increased agricultural incomes and specialization. Subsistence farming is the main source of income for 53 percent of the poorest 40 percent, and for 51 percent of households living below the national poverty line. Poverty reduction among households primarily engaged in agriculture accounted for 53 percent of the reduction in poverty from 2006 to 2010, and 77 percent of the reduction in poverty from 2010 to 2013 (World Bank 2015).

Linked with increasing agricultural incomes, households first increased and then reduced the diversity of crops they grow. In 2005/06 smallholders tended to diversify their production as they became better-off, and only the richest 30 percent of households specialized in their crop production. In other words, most farmers sought to reduce the risks they faced by cultivating a larger variety of crops rather than focus on a narrow range of farming activities. As incomes have grown smallholders have become less vulnerable, reducing the need to diversify production and facilitating gains from specialization. But in some cases farmers may be forced to cultivate fewer crops, due to land constraints for instance. The average number of crops farmed has fallen across the country, but the largest fall was in the eastern region, which partly reflects returns to specializing in cash crops such as sugar, and also declining soil fertility (MOFPED 2014).

b. Household economic diversification. Households today are significantly more likely to have multiple sources of income than those 20 years ago. 76 percent of households still earn some income from agricultural production, but it is the most important source of income for only 42 percent of households, and only 26 percent of households rely on agriculture exclusively. The dramatic growth of off-farm employment over the last 20 years is a key driver of poverty reduction—over 70 percent of households earn income from either wage employment or non-agricultural enterprises (MOFPED 2014). Diversification of activities also provides a way to build resilience and prevent transitory escapes. Particularly important is to diversify livelihoods risk profiles, thereby reducing the likelihood of catastrophic losses from any one type of shock or stressor. Abuka et al. (2007) show that encouraging off-farm employment in Uganda could help reduce vulnerability to poverty.

Since the 1990s, the growth in off-farm employment among the poorest 40 percent has predominantly been in the form of nonfarm self-employment, and to a lesser extent wage employment. According to national

statistics, the bottom of the consumption distribution has largely transitioned into self-employment in the informal sector to supplement their incomes, while those who have transitioned to wage employment have generally had higher levels of education (World Bank 2015).

c. Education. Analysis of UNPS data to investigate the factors associated with poverty escapes between 2005/06 and 2009/10 reveals that the heads of those households that escaped poverty had significantly more years of schooling (on average, 4.1 years in total) than those remaining in poverty over the period (who had a total of 3 years of schooling on average; Ssewanyana and Kasirye 2012). Meanwhile, household heads who completed primary education earned 10 percent more than those who failed to complete it, partly the result of a greater ability of households to move into nonfarm self-employment or (with higher levels of education) employment (World Bank 2015). In terms of contributing to sustained poverty escapes, education is argued to be a “portable asset” that contributes to resilience in post-conflict situations (Bird, Higgins and McKay 2013).

d. The ‘peace dividend’ in the North. The diminution of conflict in Northern Uganda has been associated with a dramatic reduction in the number of people trapped in chronic poverty (from 45 percent in 2005/06 to 26 percent in 2009/10). This is possibly explained by the ‘post-conflict bounce back’ in which formerly internally displaced people return home, restart their livelihoods, and accumulate assets (CPAN 2013). The Peace, Recovery and Development Plan for Northern Uganda (2007-2010) however, highlighted the continued rebellion and lawlessness in certain sub-regions of the North, despite the 2006 truce between the government and the LRA, meaning insecurity in certain parts of the region continued after this date.

3. THE RISE OF THE ‘INSECURE NON-POOR’

BOX 2: THE INSECURE NON-POOR AND THE POVERTY LINE IN UGANDA

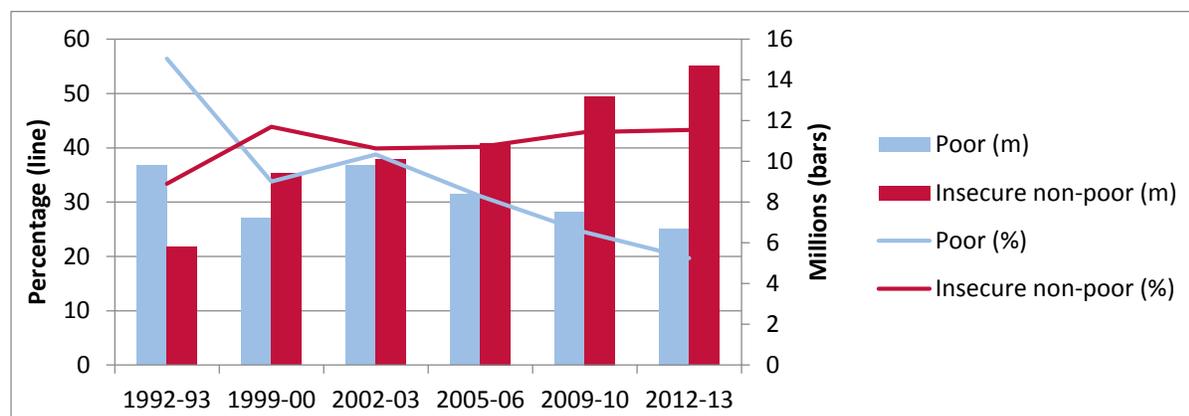
We use the term ‘insecure non-poor’ in this paper following its wide usage in the Ugandan development discourse. It is defined as those living above the national poverty line but on less than twice the national poverty line (World Bank 2015). These individuals are distinguished on account of the volatility of their incomes and the risk they face of becoming poor in the event of household shocks or economic hardship. In other country contexts, the insecure non-poor have been called the ‘vulnerable non-poor’ or variations thereof (Azam and Imai, 2009).

However, since the insecure non-poor cohort comprises those directly above the Ugandan poverty line, comparing the group to vulnerable non-poor populations in other countries is problematic. This is because the official poverty line in Uganda most closely represents an ‘extreme’ or severe food poverty line when compared to other country contexts. Use of the Ugandan poverty line is thus likely to understate the extent of poverty incidence in the country (ESP, 2012). Indeed, Daniels and Minor (2015) find that poverty in Uganda between 1995 and 2010 has fallen much more slowly than suggested by official poverty statistics. In this context, at least some of the insecure non-poor in the Ugandan context are likely to be defined as poor in other countries.

As discussed above, since the 1990s there has been a strong decline in the proportion and number of people living in poverty, as illustrated in figure 1. The figure also shows the high level of vulnerability to poverty in Uganda. In particular, as the number of people living in poverty has reduced, the number of people living just above the poverty line and vulnerable to falling back into poverty in the event of shocks and stresses has

increased (World Bank 2015). Specifically, around 43 percent of Ugandans were insecure non-poor in 2013 (World Bank 2015). The potential for those insecure non-poor households to fall into poverty is very real; 29 percent of those households classified as insecure non-poor in 2005/06 had fallen into poverty by 2011

Figure 1: Poverty and insecurity headcount and shares in Uganda 1992–2013



Source: MoFPED, 2014

4. POVERTY DYNAMICS AND TRANSITORY ESCAPES

The increasing number of insecure non-poor is a concern often masked by the more optimistic portrayal of standard poverty trends in the country. Moreover, the aggregate picture of a steady decline in the number of people living in poverty since 2002/03 (figure 1) conceals yet another more complex picture: while some households have moved out of poverty, some have slipped into poverty, and others have remained poor or non-poor over the period. Table 1 gives details of these movements into and out of poverty over different periods of time, highlighting how, despite aggregate poverty reduction, during certain periods at least 10 percent of the population actually slipped into poverty.

Table 1: Poverty dynamics in Uganda 2005/06–2013/14

	2005/06 2009/10	2009/10 2010/11	2010/11 2011/12	2011/12 2013/14
Stayed out of poverty	1,125 (62.6%)	1,140 (63.44%)	1,063 (59.15%)	746 (51.0%)
Slipped into poverty	181 (10.07%)	277 (15.41%)	232 (12.91%)	162 (11.1%)
Moved out of poverty	292 (16.25%)	155 (8.63%)	190 (10.57%)	294 (20.1%)
Remained in poverty	199 (11.07%)	225 (12.52%)	312 (17.36%)	259 (17.7%)
N (households)	1,797	1,797	1,797	1,463

Source: 2005/06–2009/10, 2009/10–2010/11, 2010/11–2011/12 own analysis of UNPS. 2011/12–2013/14 (UBOS 2015)

The poverty dynamics presented in table 1 indicate a possible slowdown in poverty reduction over the last decade. In particular, the table shows an increase in the share of those remaining in poverty over the period, as well as a decreasing share of those who have stayed out of poverty since 2009. However, this more pessimistic snapshot is somewhat offset by the increasing share of households escaping poverty and decreasing share of those becoming impoverished between the rounds over the same period. Moreover, it is worth keeping in mind that the table relies on a panel dataset subject to the usual concern of household

attrition. In the UNPS dataset, households that drop out or are new due to household splits are on average better off, and so excluding this group from the analysis is also likely to understate the true magnitude of poverty reduction (Duponchelle et al., 2014).

In addition to dynamics presented by the dataset, the qualitative component of this work investigated the drivers of poverty dynamics at the community level in more detail. Table 2 presents the findings from interviews with local leaders and participatory wealth ranking. It highlights the diverse reasons given for descents into and escapes from poverty.

Table 2: Events and drivers of poverty dynamics in particular communities over previous 5 and 10 years

	2006	2011 (+ drivers of dynamics in previous 5 years)	2016 (+ drivers of dynamics in previous 5 years)
National context	Election Speculation of election violence led to people withholding food stocks, driving up market prices	Election Food price spike 2011 East African drought	Election
Mpigi Community is strategically located next to Katonga River and became the site of a battle in 1986 between NRA guerrillas and government army	Lack of a reliable health facility in the area meant long distances to access medical services No good school in the community; only those who could afford it were able to send children to far away, costlier schools No access to a reliable market for local produce; barter trade was commonly employed. Business people from Kampala would exploit the community by buying cheaply directly from the farms.	Cutting down vegetation led to people having to buy charcoal for cooking Fake inputs provided by traders People planted fast yielding crops such as vegetables and sweet potato	Loss of communal land to 'investors' (2012) has left a permanent mark Dry-spell (2013) caused crop failure, including major staples such as beans, sweet potato, maize and bananas, leading to severe hunger Widespread theft of animals and food by individuals from Kampala (since 2014) Construction of schools, training establishments, boreholes and public toilets
Kole (community I) Between 2006 and 2011 the vast majority of villagers moved upwards	Last period of LRA insurgency —many displaced relatives living with them, resulting in many mouths to feed Still unable to plant crops at the right time, meaning low yields	Increased availability of family planning (from 2009) Able to cultivate at required time, and stored food no longer at risk of theft	Community Connector intervention means greater understanding of importance of food storage, membership of village savings and loans (VSL) groups, adoption of new farming techniques (since 2013) SAGE (since 2014/15)

Kole (community 2)	Last remnants of the LRA insurgency still terrorised the community. There was widespread fear and rumours about rebels coming back; hence it was difficult to cultivate farms, let alone to plan for the long-term.	Secondary school fees had been increasing Poor rainfall 2010/11/12 Poor price of cotton meant people just left it in the fields (2010)	Yields are decreasing due to land exhaustion SAGE, Northern Uganda Social Action Fund II (school building and oxen provision), World Vision school construction
--------------------	---	--	--

Poverty dynamics presented thus far reveal variations in the numbers of households that have escaped or slipped into poverty over the years. We next examine specific poverty trajectories within the dataset and qualitative results: transitory escapes, impoverishment, and sustained escapes. In particular, the focus of this paper is on transitory escapes. To investigate transitory escapes in more depth we analyze four rounds of the UNPS, and specifically characteristics of households on different poverty trajectories across those four rounds. More detail of the poverty trajectories is given in box 3.

BOX 3: TRAJECTORIES—TRANSITORY ESCAPERS, IMPOVERISHED, AND SUSTAINED ESCAPERS

Trajectories and shares per trajectory (for each of the four rounds P= poor; N=non-poor):

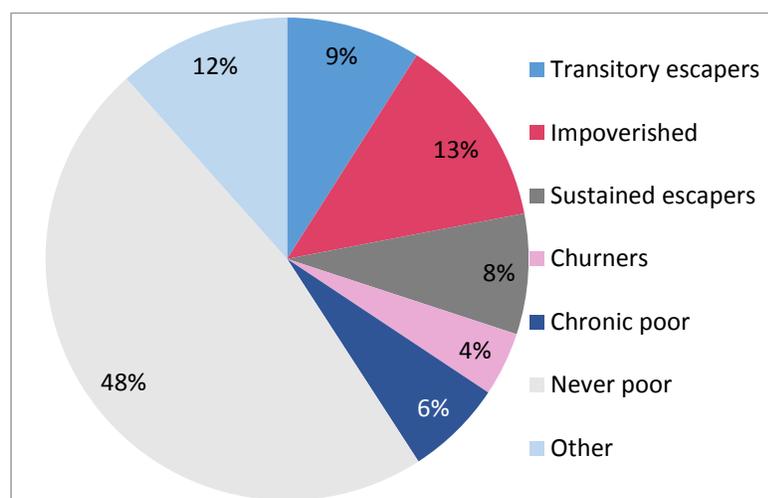
- **Transitory poverty escapes:** PPNP (19.8%), PNNP (40.1%), PNPP (40.1%)—households that were initially poor, subsequently escaped poverty, but did not sustain this escape and ultimately fell back into poverty by the end of the survey period.³
- **Impoverishment:** NPPP (24.0%), NNPP (31.8%), NNNP (44.2%)—households that began the survey period non-poor, but at some stage fell under the poverty line and remained in poverty for the remaining survey rounds.⁴
- **Sustained poverty escapes:** PNNN (80.7%), PPNN (19.3%)—households that were under the poverty line in initial survey rounds, but crossed the threshold in at least the last two periods.

The share of transitory escapers and other subgroups is shown in figure 2. Almost half of the sample was never poor across the four survey rounds, while just 6 percent were chronically poor. The shares of transitory escapers and sustained escapers are approximately equal in the sample.

³ Transitory escapers are not necessarily close to the poverty line during their non-poor period, but subsequently regress into poverty and do not necessarily escape it again. This differs from the churning poor, who Hulme, Shepherd, and Moore (2001) describe as those with “mean expenditures over all periods close to the poverty line but sometimes poor and sometimes non-poor in different periods”.

⁴ It is also worth noting that the last trajectory may be a sign of churning as opposed to impoverishment. However, data limitations prevent us from testing this. We nevertheless do speculate further on this concern in Section 6, where we adopt a poverty band to check the robustness of our results.

Figure 2: Poverty trajectories in Uganda, 2005–2012



In the 2012-2013 round of surveys, 38 percent of the sample of transitory escapes households were female-headed, as was just under a third in the sample of impoverished and sustained escapers. Completion rates of primary education for the household head stood at 14 percent of the sample among transitory escapers, but double that among the impoverished, and 26 percent among the sustained escapers. Labor market characteristics are also distinguishable between the three categories, with heads of households who experienced a transitory escape more likely to be own account workers relative to heads in the other groups. Similarly, re-impooverished households tend to be located in rural areas, own less cultivable land, and have a lower total value of assets relative to the other two groups. Finally, we see regional variations in the incidence of transitory poverty escapes across the sample, with 15 to 16 percent occurrence in the Eastern and Northern regions, compared to under 5 percent in other parts of the country. Summary statistics from the data analysis are presented in Annex C.

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 draws-on analysis of four waves of the UNPS as well as life history interviews (see box 4 for a summary of the analysis approach) to examine further why some households are able to experience sustained escapes, while others experienced a transitory escape or became impoverished. This section is structured around, and investigates how, the following factors help or hinder sustained poverty escapes:

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

Results in this section are presented as a pooled regression, disaggregated by the sex of the household head, and also disaggregated by region of residence. The full regression results are presented in Annex D.

BOX 4: ANALYSIS APPROACH

We employ a series of pooled multinomial logistic regressions to investigate determinants of transitory escapes and impoverishment, relative to sustained escapes. In our equations, the base outcome is whether a household has exhibited one of the trajectories of sustained escapes outlined in box 3. We control for characteristics of the household head, in addition to a set of household demographics and regional variables. In our equation:

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

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

where *Poverty Trajectory*_{*i*} is probability of the household *i* experiencing a transitory poverty escape, becoming impoverished, or sustaining a poverty escape,

Head is a vector of variables defining the characteristics of the household head,

Region is a set of dummy variables stating which region of Uganda the household resides in, and whether it is located in an urban or rural area, and

H is a vector of household specific controls.

Results are presented in the following section. In interpreting the tables, a variable coefficient of value greater than one indicates that a household has a higher risk ratio of the outcome, relative to the base category of sustained poverty escape. Transitory escapers and the impoverished are the outcomes that we individually compare to this same reference group.

1. INITIAL HOUSEHOLD RESOURCE BASE

In the regression results, an increase in the logarithm of household per capita expenditure is associated with a decrease in the risk of transitory poverty escapes across regressions. Intuitively, richer households that are further away from the poverty line are less likely to be under the poverty line, let alone to experience a transitory escape.

Key finding: The amount of cultivable land owned lowers the risk of transitory escapes across specifications, but increases the risk of impoverishment among male-headed households.

An increase in the amount of cultivable land owned by a household lowers the risk of transitory poverty escapes, though results are not statistically significant. Interestingly, the amount of cultivable land owned renders a male-headed household more at risk of impoverishment, while the opposite holds true for households with a female head. Only the former is significant at conventional levels. Subsequent loss of land through land disputes could be one reason why the amount of land owned at baseline is associated with impoverishment among some households, as the experience of Adroa Jones in Mpigi District reveals:

Adroa Jones is 26 years old. He started his first enterprise in 2003 when he began cultivating sweet potato on a piece of land given by his father and selling it. He also occasionally engaged in fish mongering. He got married in 2011. Around the time of his marriage things were not so bad. He had a little money, and three goats and some chickens. However he fell into a land wrangle with his neighbor and he ended up the loser. He had to sell off his animals to buy a little piece of land where he settled his family. This left him very poor.

In a country where gender differentials in land ownership often put women at a disadvantage (Abuka et al. 2007), increased ownership of cultivable land could be a precious resource for women partly due to its relative scarcity among the subgroup. This could potentially provide female heads with a source of security and reduce the vulnerability of their households to a larger extent than households with male heads. While we would also expect female-headed households to be more vulnerable to land disputes and loss, particularly from relatives, the fact that these households have held onto their land renders them less at risk of subsequently becoming impoverished.

Key finding: Increased asset value reduces the relative risk of transitory escapes among male-headed households, but increases this risk among female-headed households.

The logarithm of household asset value is also associated with a statistically significant reduced relative risk of transitory escapes among male-headed households. However, the opposite is true among female-headed households, though not statistically significant. The qualitative research highlights difficulties female-headed households can face in protecting their asset-base from theft and ‘borrowing’ by other family members. Though theft can be an issue for all households (particularly of livestock in the Northern region until the early 2000s), this situation may be particularly pronounced in the case of female-headed households. This is illustrated below:

Acanit Karwana is 80 years old. Ten years ago her husband died and she now lives on her own though her eight children, three girls and five boys, live in the same village with their children. She says that her sons would help her, but their wives won’t let them—she would not be living like this if they helped her! When her husband died they were doing well; they had built up their assets through farming and investing in cattle. They had a cattle kraal—there were so many cattle. Since her husband died, her animals have been scattered. Her relatives tricked her: she lent them some cattle and then they did not return them. Since she is a woman they know she has no power to make them give the cattle back. In the end she just gave up, saying, “After all, they are my relatives and my children.” Acanit now has no cattle and instead farms a small garden close to her house. Here she grows beans, which she shares with her neighbors, friends and relatives, and she goes and eats with them as well. Sharing, she explains, is a reciprocal safety net to ensure one gets from neighbors what one lacks. (Kole District).

Key finding: Households with more livestock are less at risk of transitory poverty escapes.

Households with livestock over the median in the first year are associated with declines in the risk of transitory escapes, though results lack statistical significance. Indeed, small livestock, particularly goats and chickens, act as an important insurance against risk by helping smooth consumption during times of distress.

Joseph Katungi has five goats. He says that he needs to spare them in case they want to sort out emergencies, so he is reluctant to sell them. Last year he borrowed USH 500,000 from a VSL. He struggled to repay it within the three-month period. He had to lease out some of his land to repay the loan as he did not manage to earn the money. They still have enough land to farm, feed themselves, and sell some surplus crop. This is why he rented out his land, rather than risking a longer-term loss of livestock.

2. INITIAL HOUSEHOLD ATTRIBUTES AND CAPACITIES

Resources may be insufficient for sustained poverty escapes if households do not have the capacity to manage and use those resources well.

Key finding: Larger households and those with a greater share of dependents have an increased risk of transitory poverty escapes.

UNPS analysis reveals that household size is associated with a statistically significant increase in the relative risk of transitory escapes. A key challenge faced by large households is having to provide for many dependents. In our regressions, an increase in the share of dependents increases the risk of transitory escapes across specifications, and increases the risk of impoverishment among female-headed households. An increase in the share of children also increases the relative risk of transitory escapes among female-headed households, though the coefficients relating to the share of both dependents and children lack statistical significance. The life histories highlighted how having a large number of children was often a driving factor in children being withdrawn from school due to an inability to afford secondary school fees. Daniel Gonza's story illustrates this:

Daniel went to school until Senior 4. He started Senior 5 but due to a lack of money he had to stop going to school. His father had worked in a bank and used his pension to educate the children. But he had seven children and the money became exhausted. As Daniel was the youngest he had to stop going to school. (Kole District)

Often these children are required to engage in labor to support family income and so may temporarily help prevent transitory escapes, as suggested by the pooled regression results. However, the ability to sustain poverty escapes for future generations is unlikely if these children do not complete schooling. Moreover, some couples interviewed during the qualitative fieldwork have realized the difficulties of supporting a large number of children and, as part of planning for a more secure future, are carefully thinking about the number of children they will have. Joseph Katungi and Robert Irumba are two such examples:

Joseph and Esther's plan for the future is that their children be well-educated. They need to work hard on the farm to achieve this, and so far they have not managed it. Esther wants to stop at two children, but Joseph wants one more.

Robert and his wife Maris have one child. She is four years old and will start school next year. For now, Robert and Maria will not have any more children. They will have one more if they find a stable life.

That the share of children and dependents, and an enlarged household size can all affect the likelihood of transitory escapes is particularly concerning given that Uganda has one of the highest fertility rates in the world—at 6.2 children per woman (World Bank 2015). Under the 'current path' the International Futures Centre predicts that the fertility rate of Uganda will decline to less than four children per women by 2040 as the country experiences positive development trends in education (particularly female education), contraception use, infant mortality, and income (IFs 2015). Meanwhile, household size is larger among the poorest 40 percent of households (at six members on average) than the richest 60 percent (4.6 members on average; World Bank 2015).

The demographic characteristics of the household form one set of drivers influencing the incidence of transitory poverty escapes and impoverishment; another involves the characteristics of the household head

specifically. The next section explores this latter category, examining in particular the education of the household head as a driver of poverty dynamics.

Key finding: Primary education is associated with a reduced likelihood of transitory escapes across male- and female-headed households, but more so among the latter group.

Education can open up opportunities and enable pathways out of poverty (CPAN, 2014). In Uganda, households where the female head has completed primary education have a lower relative risk ratio of transitory escapes, though statistically insignificant. In terms of descriptive statistics, figure 3 indicates that completion of primary education is much higher among heads of households with sustained poverty escapes relative to transitory poverty escapers, and both of these are much higher among male-headed households relative to those with female heads. This is indicative of the positive role played by education in contributing to improved poverty trajectories and sustained escapes. Interestingly, though, households with female heads who have completed primary education also have a higher risk of impoverishment, suggesting that primary education alone does not necessitate an upward trajectory.

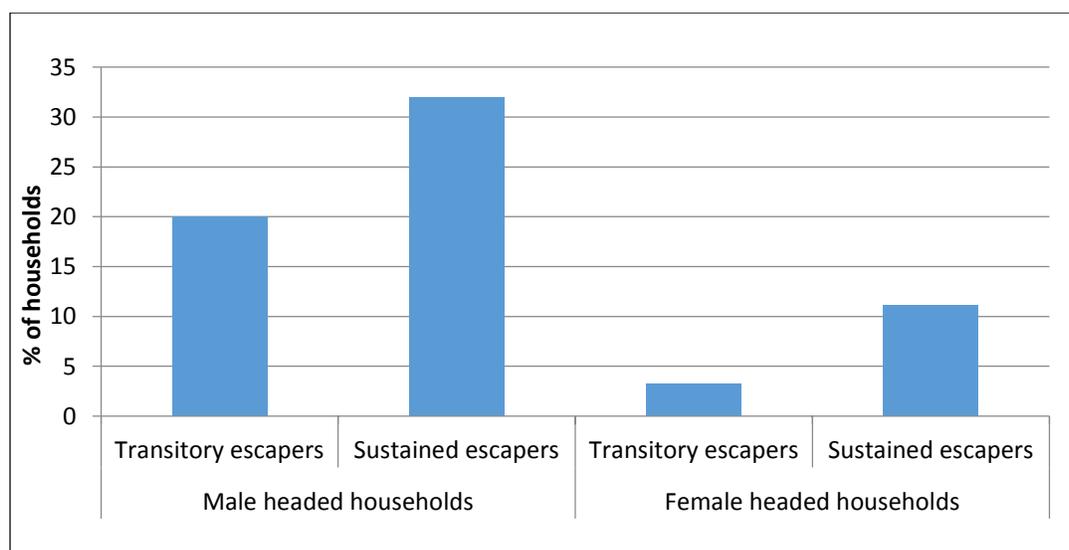
Meanwhile, qualitative research highlights some female-specific barriers, frequently related to social norms around the role of women, which girls face when trying to continue with, and complete, their education.

Ruth Apio is 29 years old. She went to school until Primary 2, and enjoyed going to school. Then her father told her that it was a waste to keep paying money for girls, and he would only continue to pay for her brothers to attend school.

Edith Mori is 53 years old. Her parents were farmers and they also had 40 heads of cattle. She has eight siblings and is the first born. Her parents forced her to drop-out of school when she was in Primary 2 as she was needed to look after the cattle. Her brothers were allowed to continue to go to school.

In this context, female heads who have managed to overcome these barriers to complete primary education are at an advantage and may consequently be less at risk of transitory poverty escapes.

Figure 3: Completed primary education disaggregated by sex of household head, 2012



3. HOUSEHOLD ACTIVITIES

This section investigates the activities different households pursue given their varied resources and attributes. In particular, it examines the job of the household head, engagement in crop agriculture, the role of having a non-farm enterprise, and remittances.

Key finding: If the household head has a job the risk of transitory escapes and impoverishment is reduced, and this is particularly for a government or private job as opposed to own-account work.

Completion of education is largely ineffective in preventing poverty declines if not followed by the uptake of a means of income generation for the household. Unfortunately, the link between education and the labor market in Uganda is quite weak. Among household heads working in a government or private capacity, 46 percent have completed secondary education. Under 30 percent have completed only primary education, leaving a quarter of these employees who have not completed this basic level of schooling.

Social connections, access to information on job opportunities and ‘being in the right place at the right time’ are all important in gaining access to a job. The example of Joyce and Henry Opio (box 5) shows that, despite not achieving at school, he was able to access salaried government work.

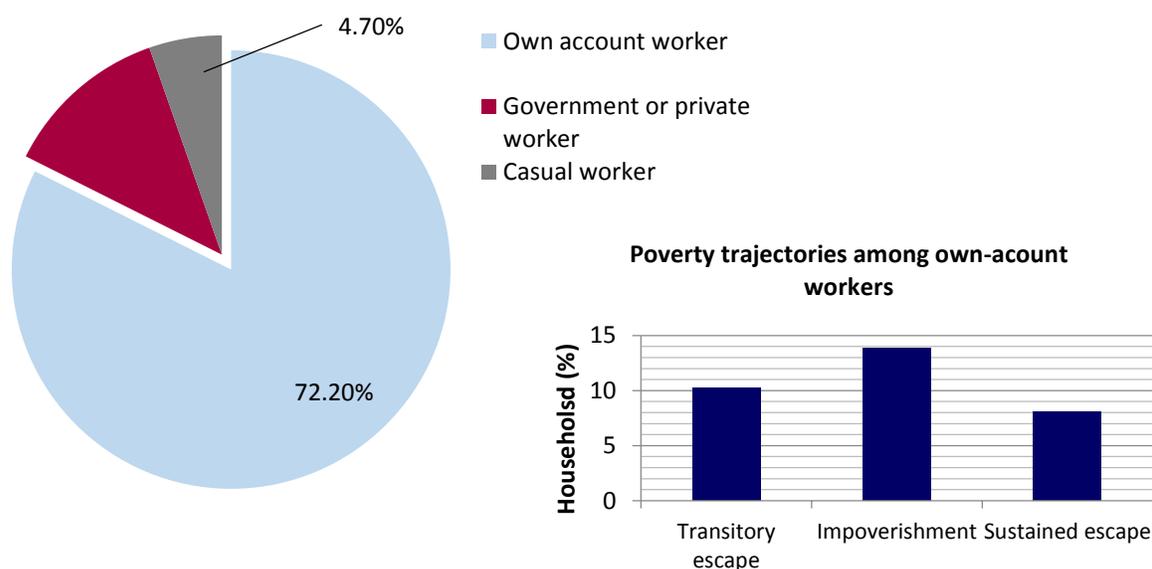
BOX 5: GAINING A SALARIED JOB WITHOUT ACHIEVING AT SCHOOL—GOOD LUCK

Joyce left school in 1996, after she had been going to school for three years. She got married in 1997 when she was 14 years old and had her first child then. The man she married, Henry, was in Primary 7. He continued to study, and she dug their fields. But, he did not do well at school. He managed to get a place to train to be a primary school teacher, but he still did badly. So he went back and helped Joyce work in the fields.

In 1999, Henry joined the auxiliary police force at a very low level. But then he was deployed to help keep the peace and he worked as a police officer. He was lucky; he worked his way up the ranks and he now has a formal employment contract. Since then, life has become better as they have his salary.

Despite the weak link between education and employment, households in which the head does have a job, including own-account work, are associated with a lower risk of transitory escapes and impoverishment, though results are not significant at conventional levels. When we disaggregate these jobs according to the self-identified primary occupation of the household head, we see that employment is concentrated in own account work, and among the sample of own account workers, households are more likely to be on an impoverishment trajectory relative to transitory poverty escapes sustained escapes (figure 4). Empirically to test this link, we ran another pooled regression on the entire sample, but disaggregated by the type of work, and saw similar results in the direction of association (see Annex D for results). Specifically, household heads who self-identify their primary occupation as own account workers, those who work in public and private employment, and casual workers are all associated with a lower relative risk ratio of transitory escapes and impoverishment. The risk of impoverishment is lowest among households where the head works in a government or private capacity—jobs which may be associated with more prestige and security.

Figure 4: Employment activities and type of poverty trajectory, 2011/2012



Casual work, in contrast, provides households with the lowest risk of transitory escapes, with the result statistically significant. Two characteristics are important if casual work is to contribute to sustained poverty escapes: (i) the frequency and regularity of this work; and (ii) its pay. Box 7 points to the difficulties casual workers can face in finding work, and how social connections and a mobile phone can play an important role in making workers aware of different opportunities. Cash transfers meanwhile, can play an important role in stimulating local markets through increasing the incomes of some of the poorest households, and so contributing to increasing casual wage rates—box 6 presents more information.

BOX 6: CASH TRANSFERS CONTRIBUTE TO INCREASING CASUAL LABOR WAGES

SAGE makes cash transfers of USH 25,000 per month, with the transfer being made every other month.

- Vulnerable Family Support Grant: A composite index based on demographic indicators of vulnerability such as disability, age and orphanhood determines eligibility (this grant is being phased out).
- Senior Citizens Grant (SCG): People above 65 years of age are registered into the program (above 60 years in the Karamoja region).

The midline qualitative evaluation, conducted twelve months after the baseline survey, reveals that SAGE may be having positive spillovers on the local economy. In particular, it suggests that there might be increased demand for casual labor as a result of SAGE transfers, which is leading to a positive and significant impact on male non-agricultural wages. The evaluation suggests that this is the result of beneficiaries using their transfer to hire casual labor for strenuous tasks including collecting water.

From our fieldwork, the case of Acanit Karwana, an 80 year old SCG beneficiary, corroborates this finding. She has combined the money she receives from SAGE with money from selling the acacia trees on her homestead. As well as using this to purchase cement, she also hired young people in the village to build her house. Rather than spending her SCG each month, she saved it in order to build a permanent house.

Source: Merttens et al. (2015) and own findings

The findings from this qualitative research also reveal that obtaining a private job with a salary is not a panacea for sustained poverty escapes. This is particularly the case if salaries do not keep pace with living costs. With Uganda's 'youth bulge,' there is little chance of labor market tightening; with 57 percent of the population currently below the age of 18, the number of labor market entrants is projected to increase from 800,000 a year currently to 1.5 million in 2040 (MFPED 2014 in UNDP 2015). The experience of Samuel Gonza illustrates this (box 7).

BOX 7: LEAVING A PRIVATE JOB TO RETURN TO FARMING

Samuel went to school until Senior 4. He left school in 2004 after his father, a primary school teacher, died. In 2009 he started his first job—for KK Security in Kampala. He was in Kampala visiting a friend and that was how he found out about the opportunity. In 2011 he married Maria, who was 16 when they got married. Maria stayed in the village while Samuel worked in Kampala. He then transferred to Lira branch, still working for KK Security.

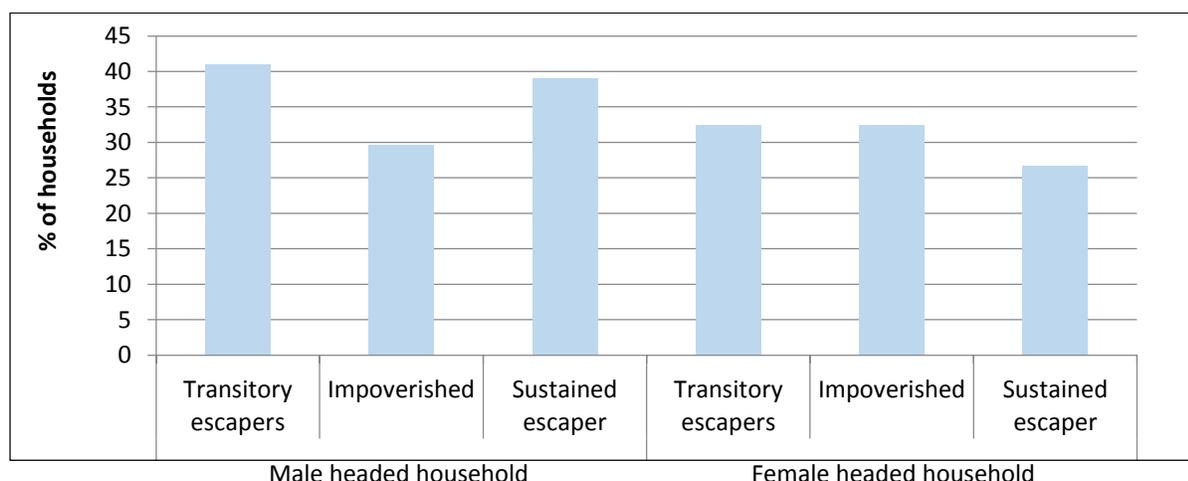
Samuel left KK Security in 2013 as his salary was so low—US\$ 220,000 a month. Along with supporting his wife and paying rent in the town, it was not adding up. So he came back to farming, although farming has been harder than he expected due to unreliable weather.

Key finding: The risk ratio of transitory escapes relative to poverty escapes reduces in households that own a non-farm enterprise, though not for female-headed households.

As noted in the introduction, household economic diversification, particularly through engaging in non-farm activities—both wage work and self-employment—has been a driver of poverty reduction. The results of our UNPS analysis indicate that the risk ratio of transitory escapes and impoverishment relative to sustained poverty escapes reduces in households that own a non-farm enterprise. Though results are not statistically significant, the finding is reflective of literature which stresses the importance of diversification away from the agricultural sector to improve welfare and smooth household income. It may indicate that the government, in addition to increasing agricultural investments, should also concurrently promote non-farm employment generation.

Interestingly, female-headed households owning a non-farm enterprise are, in contrast, more at risk of transitory escapes, though again results are statistically insignificant. Descriptive statistics indicate that among female-headed households, sustained escapers are less likely to own a non-farm enterprise relative to transitory escapers and the impoverished (figure 5). However, the rate of ownership of a non-farm enterprise among sustained escapers is almost equal to transitory escapers and higher than the impoverished among male-headed households. The regression finding may be the result of the different types of enterprise female- and male-headed households are able to start—a situation illustrated further in this section (boxes 8 and 9) through the experiences of Kasozi Kato in Mpigi District who was able to start a capital-intensive business (though this was ultimately unprofitable) and the petty-trade activities of Linda Gonza in Lira District.

Figure 5: Ownership of a non-farm enterprise disaggregated by sex of household head, 2012



Promoting off-farm self-employment is not without its challenges. As previously mentioned, education is important, and not just any education. To ensure that non-farm self-employment is able to contribute to sustained escapes from poverty, market development and the integration of the poor into market systems is required. As Bird and Shinyekwa (2005) found, the accumulation of assets through thin or distant market systems may not be an available pathway out of poverty for households in many rural areas. While investments in rural roads have acted to reduce households’ distance from markets in recent years in Uganda, engagement in market systems remains limited without policies aimed at encouraging rural enterprise and gainful employment (Williamson and Canagarajah, 2003).

Three years ago, Alex Damba in Kole District learnt how to repair radios from his uncle, but he points to the difficulties in this activity in terms of building his resilience; “You have to take whatever people offer to pay. Say USH 1000—everyone here is broke. But, I’m still able to make something every week from repairing small items.” As illustrated in box 6 above, cash transfers can stimulate local wage markets and can also play a role in increasing demand for services such as for repairs.

The story of Linda Gonza in Kole District describes the sometimes precarious role non-farm self-employment and wage employment can play in a household livelihoods portfolio and in preventing transitory escapes (box 8).

BOX 8: LIMITED MARKET RESTRICTS THE OPPORTUNITY FOR A PROFITABLE NON-FARM ENTERPRISE

Linda Gonza lost her mother when she was 10 years old and her father when she was 12. As the eldest of three children, she initially lived with them but after her sister got hit by a car and died and her brother disappeared, her aunt came and looked after her. She then grew up with her aunty and uncle who were reasonably well-off as her uncle was a local police officer with a salary. When she was 17 years old she got married. She never got the chance to go to school.

After marriage Linda and her husband settled on her parent’s traditional land; people let her settle there as her husband was reasonably well-off. Her eyes were opened to enterprises after her mother died. Then she sold small amounts of crops at the roadside.

Now she farms cassava and maize on their land. She tries to grow other crops but all her gardens are in the same place and other crops like beans just don't do well on her land. In addition she is often involved in petty-trading. Sometimes she goes to town and buys cabbages and sells them in the village. Other times she fries fish or roasts pork and sells it at the road-side. In September 2015 she created a small-enterprise selling pancakes at the local market and on the roadside, but there is just no market for it. The enterprise was making a loss, and the bicycle on which she relies to go into town and buy produce has broken, so she has since stopped engaging in small enterprises.

Meanwhile her husband works away from the village, usually as a construction worker. In 2010 he tried his luck in South Sudan as a construction worker; he did not have a job lined-up. After a year there, he sent back not a lot of money—just USH 100,000—and with this they bought cement and laid the foundations of the house. Every year since then they have saved-up and each year bought 1-2 bags of cement.

Her husband normally takes construction work if he is fit and healthy, but he often gets cheated by the contractor. Now he is in Kampala. He has many friends—he gets on well with people—and his friends call him up and let him know when work is available. He sends money back home through mobile money. And he passes information onto other friends if it is a good site.

But now things are tough for Linda and her family: there are school fees (they have five girls), money is needed to finish the house, the bicycle is broken so she can't get to town to buy produce to then re-sell in the village, and her husband is not doing well finding work.

One challenge in establishing a thriving farm- or non-farm enterprise is a lack of access to start-up capital. This barrier may be larger for women, which may partly explain women's concentration in less profitable and less capital intensive enterprises. In the story above, Linda's unprofitable petty-trading had run-down her business capital. The breakdown of her bicycle, and an inability to finance its repair, then brought to an end her attempts to make trading profitable as she was no longer able to ride into town. In contrast, Kasozi Kato was able to access credit to enter into a more capital-intensive non-farm activity, namely owning and operating a taxi—although this ultimately also proved unprofitable (box 9).

BOX 9: REGULATORY CHANGES CAN AFFECT THE PROFITABILITY OF SOME NON-FARM ENTERPRISES

Kasozi Kato got married in 1994. He did not have much at marriage except one cow and a small piece of land. His first enterprise was in 1991 as a farmer. He sold groundnuts, sweet potato, beans and tomatoes at the local market.

After making some money through crop cultivation, Kasozi bought a second-hand taxi on a hire-purchase basis in 2002 and used to drive it between Kampala and Masaka. The taxi business was doing well until 2006 when the government increased taxes and levies on transport operators. He found himself losing a lot of money instead; so he sold off the taxi at a loss and used the money to pay off a few debts. With the collapse of the taxi business he went back into subsistence farming.

Lately, he also takes his produce to markets in Kampala and Masaka using public transport.

Box 10 provides some evidence on how the provision of start-up capital (often combined with training and mentoring) has helped people establish profitable businesses.

BOX 10: LESSONS FROM DEVELOPMENT PROGRAMS PROMOTING PROFITABLE SELF-EMPLOYMENT

The Youth Livelihoods Fund was launched in January 2014 to respond to high unemployment among 18 to 30 year olds. It is administered by the Ministry of Gender, Labor and Social Development, and works in 112 districts. The Fund comprises two components: (i) creation of opportunities for apprenticeships and technical training; and (ii) livelihoods support through finance for income generating activities. Groups of 10-15 youth decide on their investment decision. To date, 46 percent of funds have been spent on agricultural activities (pigs, poultry, crops, goats and dairy, in that order); 26 percent of funds on trade (including selling agricultural produce, livestock and petty-trade) and 10 percent of funds on the service sector (such as vehicle repair services). The finance is offered as a soft loan, with no interest accrued for the first 12 months. In addition, the groups of youth are supported to develop a business plan and receive regular mentoring. Strong mentoring and the promotion of a savings culture are seen as crucial for sustained success, though the nature of entrepreneurship means that some businesses are bound to fail, particularly when the entrepreneur has a minimal skill-set.

The youth groups are also linked with other government programs and support. For businesses in the agricultural sector, groups are linked with different actors in the production and marketing chain. The Youth Livelihoods Fund has learned from the shortcomings of the Youth Venture Capital Fund, which offers loans to individuals with a 15 percent interest rate, and requires youth to have an existing formally registered business, as well as collateral. Because of these requirements, uptake by youth has been low. The Youth Livelihoods Fund will be evaluated by 3ie during 2016.

Key message: Sustained success in crop agriculture requires market-oriented farmers with access to sufficient land and the means to prepare that land.

An increase in the amount of cultivable land owned was found to reduce the risk of transitory escapes in regression results, as outlined earlier. This message goes further by suggesting that it is not merely access to the land alone, but access to the means to prepare the land and a change in behaviors that will lead to sustained improvements and success in crop agriculture. Indeed, key informants continually raised the importance of behavior change among farmers to increase their productivity and success in crop agriculture and for this to contribute to sustained poverty escapes. In particular, there is a need for rural smallholders to switch from being ‘reluctant farmers’ to viewing farming as a business enterprise. This includes being willing to try new varieties and to consider marketing arrangements from the outset, including when making crop planting decisions.

Smallholders also point to the importance of not selling all food crops, but of keeping some stored to tie them over until the next season or to be sold for cash in the event of emergencies. However, this requires having enough land and yields which are more than sufficient to meet immediate needs. Joyce Apio, who is now 32 years old, explains how her father farmed cassava, beans, pigeon peas, sesame, groundnut, sorghum and cow peas; he was able to farm so many different crops as he had oxen to prepare the land. Joyce’s father and mother worked only as farmers. They stored the food they harvested to pay for laborers to weed the next season. They would then sell some crops in the market for cash for emergencies, such as sickness, and for

inputs for the next season—but they were always careful not to sell too much. Acanit Karwana also points to the importance of post-harvest handling and storage. Back when the British were still in Uganda, she explains, there was a locust invasion: “The locusts consumed all the leaves and everything green. We survived as we had a full granary of old crop, so this was enough to see us through to the next year. We didn’t mix old and new crops then.” A key challenge today is that the land is not as fertile as previously and, as was universally reported during the fieldwork, yields were declining, putting at risk this mechanism for preventing impoverishment and transitory escapes.

Key finding: Remittances are important for female-headed households to experience sustained escapes from poverty.

Households sometimes rely on assistance to help smooth consumption and prevent poverty descents. In the dataset, this assistance includes participation in a savings group, obtaining a loan, having insurance, or obtaining a transfer (generally a remittance). Empirical results indicate that female-headed households that receive this assistance are less likely to become impoverished, while male-headed households are more likely to do so, though results lack statistical significance. When the same regression is run using transfers alone, a similar trend emerges. It is likely that female-headed households, which tend to be poor or may exist due to the death of a primary male income earner, rely on these forms of assistance, especially remittances, on a regular basis to meet household consumption needs. There may also be higher perceived legitimacy for women to obtain remittances and other forms of assistance. Among male-headed households, however, assistance including remittances may be more likely in response to a shock, or perhaps be of a lower value, insufficient to prevent impoverishment. The next section examines household shocks in more detail.

4. HOUSEHOLD SHOCKS

Key finding: It is not the experience of a single shock but the accumulation of multiple shocks over time that exacerbate living conditions, ultimately propelling households into negative poverty trajectories.

Surprisingly, households that have experienced an isolated shock are less likely to experience a transitory escape or become impoverished relative to households that have experienced a sustained poverty escape, with the latter statistically significant. However, an increase in the number of shocks is associated with a higher risk of transitory escapes and impoverishment, with the risk of transitory escapes higher among female-headed households, and this is also statistically significant. These results together suggest that in Uganda it is not the experience of a single shock but the accumulation of multiple shocks over time that exacerbate living conditions, ultimately propelling households into negative poverty trajectories.

In terms of the types of shocks that households face, environment-related shocks appear most often, occurring in 40 percent of the sample across the years. Female-headed households that experienced a transitory escape were 6 percentage points more likely to have experienced an environmental shock across the sample, with 36 percent of the cohort experiencing such a shock in the final survey year alone.

Beyond environment-related shocks, negative events to household members such as health-related shocks can generate large expenses, harming well-being trajectories and precipitating re-impoverishment. In the last round of the panel, summary statistics indicate that the non-poor spent three times more per month on health expenses compared to households below the poverty line. An increase in the log of health expenses per month is, however, associated with a lower risk ratio of transitory escapes and impoverishment relative to

sustained escapes. It could be that households that spend on health concerns prevent worse outcomes and so help guard against triggers that may precipitate re- impoverishment.

Household shocks and the other drivers of poverty trajectories are likely to vary not only by the sex of the household head, but also by the region in Uganda in which the household resides. As mentioned previously, the incidence of transitory escapes itself differs by region, suggesting the drivers may be varied. As such, the next subsection outlines regional differences in resources, attributes, and activities.

5. REGIONAL DIFFERENCES IN RESOURCES, ATTRIBUTES AND ACTIVITIES

Key finding: The Eastern region has the highest risk ratio of transitory poverty escapes relative to sustained poverty escapes.

In Eastern Uganda, households are four times more likely to experience a transitory poverty escape than to experience a sustained escape. Households in the East are also three times more at risk of being impoverished. Households in the Northern region are twice as likely to experience a transitory poverty escape relative to the sustained escape category. All results are statistically significant at conventional levels. These results reinforce the need for region-specific policies and programs that target households at risk of poverty descents. In particular, local governments should be involved in implementing social protection schemes geared towards safeguarding sustained escapes in regions most prone to transitory escapes. These schemes should target households displaying characteristics which may render them more prone to poverty descents.

When disaggregating results by the sex of the household head, we see that in the East, the risk ratio of transitory escapes relative to sustained escapes increases for men but decreases among women relative to the pooled sample. The trend reverses when impoverishment is the outcome, with female-headed households five times more likely to be impoverished. However, the largest difference comes in the Northern region, where the risks of transitory escapes and impoverishment relative to sustained escapes are four and six times larger for female-headed households, respectively. In contrast to regional variations that consistently render households more likely to experience a transitory poverty escape, albeit to differing degrees, urban dwelling is associated with a reduction in the relative risk ratio of transitory escapes to sustained escapes.

The regional controls above do not allow for an exploration into whether households with certain characteristics dwelling in different regions face unique challenges that increased their risk of transitory escapes and impoverishment. To investigate these interactions between Uganda's disparate regions and other determinants of transitory escapes, a series of regressions are next run where the sample is disaggregated by region of household residence (see Annex D for results). We exclude the Western region from the empirical analysis, as the subset of transitory escapers is too small for interactions to be analyzed substantively. Results indicate variations in the risk ratio of transitory escapes relative to sustained escapes across determinants:

- **Receipt of assistance, and of transfers alone, are both associated with a higher risk of transitory escapes and impoverishment only in the North**, with the latter statistically significant. It could be that transfers, which are primarily remittances, to poor households in the North are ineffective given that during the period of the last panel survey round (2011/12) pockets of insecurity remained in some parts of the region (Acholi and Lango) as the result of raiding by the Karimojong. The strength of remittances and social assistance transfers in this environment is likely to be compromised, resulting in the positive association displayed in the regression.

- **Completion of primary and secondary education among household heads is associated with an increased risk ratio of impoverishment relative to sustained escapes in the Northern region**, though not statistically significant. This could reflect the breakdown of conventional associations that take place in situations of conflict and potentially remain in the post-conflict period.
- **Owning an enterprise is associated with an increased risk of transitory poverty escapes only in the North**, though again results are statistically insignificant. With pockets of insecurity remaining in some districts of the Northern region in 2011/12, it could be that owning an enterprise there is a less secure means of sustenance.
- **An increase in the number of shocks in the North is associated with a statistically significant higher risk of transitory escapes relative to sustained poverty escapes, compared to other regions**. In the North, household shocks may be amplified following a period of prolonged insecurity, which may render households unable to respond effectively and so be more prone to transitory escapes (Bird, Higgins, and McKay, 2013).
- **Female-headed households in the North and Central regions have a statistically significant higher risk of transitory escapes**. Those in the North also have a higher risk of impoverishment, though statistically insignificant. This reflects the literature that women disproportionately are indirect victims of conflict.

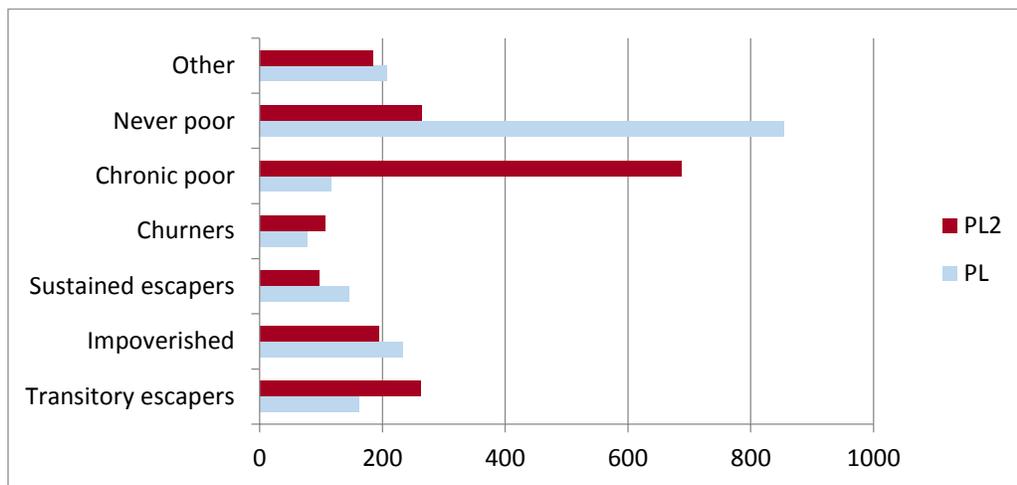
6. ROBUSTNESS OF POVERTY LINE

a. "UPPER" POVERTY LINE

Empirical results so far have relied on an official poverty line in the country. As earlier stated, this official line most closely represents an “extreme” poverty line, and so may not be a true representation of the extent of poverty incidence in the country (ESP, 2012). In an effort to address this concern, we next construct a second “upper” poverty threshold. To do so, we treat the poverty line as numerically equal to two times the stated poverty line in the UNPS dataset. This is the level at which the government classifies insecure non-poor populations. Employing this upper poverty line, the number of households that are never poor reduces by over two-thirds to rest at 264 households in the subgroup, a decrease from almost half to just 15 percent of the households in the dataset (figure 6). Similarly, the number of chronically poor households doubles by almost six-fold, to constitute 38 percent of the sample.

Among our subsamples of interest, there are decreases in the numbers of impoverished and sustained escapers from the upper poverty line, and a notable increase in the number of transitory escapers. This suggests that at least some of those households previously classified as sustained escapers were in fact only very slightly above the poverty line and thus remained highly vulnerable. Similarly, part of the reason for a decrease in the number of impoverished households is that many households that began the period non-poor according to the lower poverty line are now defined as poor, as again they subsisted at a level just above the line. The increase in transitory poverty escapers conveys that there were many households who were just above the lower poverty line, who temporarily escaped poverty and a state of vulnerability, but subsequently declined back into that state of vulnerability, even if not extremely poor during any of the given rounds of surveying.

Figure 6: Poverty subgroups according to lower and upper poverty lines



To empirically assess the determinants of poverty trajectories according to this upper poverty line, we next employ multinomial logit regressions using the new line to identify transitory escapers, impoverished, and households experiencing sustained poverty escapes. Statistically significant results are consistent across a majority of variables, supporting the directional association of determinants of transitory escapes found by our earlier results (see Annex D for results). Two notable exceptions are as follows:

- **Female-headed households in the North are less at risk of impoverishment and transitory escapes.** Compared to earlier results using the lower poverty line, where female-headed households in the region were more than four times at risk of transitory escapes relative to sustaining a poverty escape, this finding of a lower risk using the higher poverty line suggests that the insecure non-poor are less prone to unfavorable poverty trajectories in the North.
- **Disability is associated with a statistically significant increase in the risk ratio of transitory escapes and impoverishment among female-headed households.** Female heads of households with persons with disabilities experience discrimination on account of their sex, household health, and state of economic vulnerability. This means that policies targeted towards one of the three intersecting inequalities are often insufficient in preventing poverty descents. Rather, these households require targeted measures to ensure their risks are properly understood and addressed.

b. EXPLORATIONS INTO A POVERTY BAND

As earlier established, Uganda has a large portion of individuals and households that are insecure non-poor. The same is true among the subset of transitory escapers. Among this subset, households were insecure non-poor in 82 percent of the instances in which they were not under the poverty line. That so many transitory escapers were relatively close to the poverty line during their temporary escapes from poverty suggests that perhaps at least some of these households may have been churning. In an effort to distinguish churners from

transitory escapers, we next set a band that is over and under 5 percent of the national poverty line.⁵ This allows us to reduce misclassification of poverty categories that may stem from measurement error. Using this poverty band, the share of sustained escapers remains relatively constant and the share of transitory escapers and impoverished only marginally reduces by 1 to 2 percentage points. This suggests that the majority of households initially classified as transitory escapers in our sample are in fact likely to be transitory escapers as opposed to churners, lending further credence to our empirical analysis of drivers.

The analysis thus far has focused on the drivers of transitory escapes and impoverishment as they compare to sustained poverty escapes. In the next section, we use results of this analysis to shift the focus away from an explicit consideration of causes, to explore the types of activities households could engage in to reduce the incidence or risk of transitory escapes.

7. HOUSEHOLD-LEVEL STRATEGIES

Households often engage in a variety of activities with the aims of (i) improving their situation and placing themselves on a pathway out of poverty; and/or (ii) protecting themselves against real and perceived shocks and stressors. Ending extreme poverty and promoting sustained poverty escapes ultimately means that both these objectives must be addressed; it is not a case of trading one off against the other. This section investigates the strategies households pursue, dividing these into stepping-up; stepping-out, and hanging-in strategies (Dorward 2009).

a. STEPPING-UP STRATEGIES

Following stepping-up strategies involves entrepreneurial livelihoods portfolios with households accumulating high-value assets around one predominant livelihood activity. For the households spoken to as part of this research, this strategy would only apply to pursuing crop agriculture. However, we understand that in Karamoja stepping-up through livestock rearing is more appropriate.

Stepping-up through crop agriculture typically involves growing high-value crops, whether food-crops (such as vegetables or groundnuts) or non-food crops (including tea, coffee, sugar cane and cotton, which we refer to here as ‘cash crops’).

Insights from qualitative data collection reveal the importance of crop-diversification, and particularly growing drought-resistant crops, and crops with different lengths of growing-season, to protect non-poor insecure households that are ‘stepping-up’ through agriculture in the event of unpredicted weather patterns. Robert Irumba in Kole District explains that if his crops fail, his family survives by eating cassava, which does not fail. Occasionally he takes casual work if his crops fail, to earn money and buy other types of food. He explains that the rains have recently been quite unreliable, which has made it difficult to grow high-value crops like soya—a crop he knows can earn him good money as there is a market for it. However, he says that with enough land and labor to diversify crops, a reasonable living can be made from farming: “Not all the seasons are bad; you may get it wrong with the first rains and then get it right with the second rains. It’s manageable.” Robert is only occasionally able to afford improved seeds, and appreciates the high yields

⁵ This follows a draft suggestion from Bob Baulch, regarding setting comparable poverty lines across country contexts, in discussions with the Chronic Poverty Advisory Network.

produced by improved varieties of maize. Due to the inaccuracy of weather forecasts on the radio, he studies the rains and starts planting when the rain is sustained.

Interviews with local leaders in Kole District also highlight the importance of growing different types of crop to cope with changing weather patterns and so to prevent slides back into poverty; in particular, a mixture of staple crops (cassava, maize, millet, sweet potato), high-value crops (sunflowers, soya, groundnut) and ‘relish’ (pigeon peas, beans, cow peas, vegetables). They explain that in June there is a period of serious hunger when most crops are planted but are not yet ready to harvest, but that if a farmer has managed his land, by November, “they have food and money and are able to get married!” Using the local slogan “*apur pe tur*” they explain: “Farmers only bend in June; they don’t break!” However, as the agricultural officer in Mpigi notes, cultivating too many crops can mean that none of them do well, and this acts as a real constraint to households experiencing sustained poverty escapes.

Sometimes though, farmers do ‘break’ or experience a transitory poverty escape. While farmers with sufficient land and labor appear able to withstand one poor season, re-impooverishment can be the result of two consecutive years of poor harvest or due to catastrophic losses associated with reliance on cash crops. Analysis of the UNPS reveals that cash crop production⁶ is associated with an increase in transitory escapes and impoverishment in the pooled regressions. It is possible that households engaging in the production of cash crops substitute away from food crops and so reduce their ability to smooth consumption in times of distress. Because of this, as well as the potential gender implications of a focus on cash crops (with women frequently being excluded from the cultivation of sugar cane, for instance), bilateral agencies such as GIZ and USAID, often encourage farmers to continue with the cultivation of staple crops alongside high-value crops.

The experience of Ssenyonjo Edward in Mpigi District highlights an over-reliance on cash crops, causing him to fall back poverty (see box 11). While cash crops can significantly increase household incomes, they can be vulnerable not just to weather-related shocks but also to market-related shocks. Farmers in Kole District described leaving cotton in the ground when the sale price significantly dropped a few years previously. Kiho Apio explains:

“My father used to grow cotton when I was a child. He worked in the cotton cooperative union of Uganda, and was a big man in the Union. When I started my own house, my husband and I used to grow cotton, but by 2002 we stopped. It wasn’t working out—the price was low; co-operatives used to give free pesticides, but then they stopped and the market price went down.”

⁶ Cash crops here are narrowly conceptualized in terms of coffee, tea, cotton, tree plantations, sugar cane, soya and sunflowers. The rationale is that if the market for these crops collapses, they cannot be eaten, unlike other cash crops such as high-value fruit and vegetables.

BOX 11: TRANSITORY ESCAPES THROUGH A COMBINATION OF FAILURE OF A CASH CROP AND A SERIOUS HEALTH SHOCK

Ssenyonjo Edward's parents came from the same village where he now lives in Mpigi. His father was a fisherman and his mother was a subsistence farmer. He was the first-born of eight children.

He went to school, but dropped out in Senior 3 in 1989 because of his father's death in a boat accident. There and then he became a breadwinner to his siblings, and so stopped schooling and went into fish mongering at the age of 14. He learnt the trade from his father while he was still alive. He realized he had to stand up 'as a man.'

In 1992 he bought his first piece of land, which was three-quarters of an acre. He got married in 1993 at the age of 25, and now has five children.

Ssenyonjo later learnt that he could sell some fish and get into the coffee business, which proved to be more lucrative. At the peak of it, in 2005, he used to sell two truckloads a week during harvest. But in 2006 there was a heavy outbreak of coffee wilt disease, which completely destroyed his crops. He had workers to pay amidst other pending obligations and soon fell into debt. In 2014 he got infected by a complicated disease and needed an expensive operation. That further depleted his resources; he drew down his savings and sold some small livestock.

After the failure of the coffee business he changed strategy and went into growing food crops. He mainly grows yams, cassava, beans, and sweet potato (the most important crop) but on a very small scale. He buys the vines from a local potato vine multiplier in the village.

He also sold off a few pigs that he had, and rented a piece of land for growing more food crops. He sells his produce mainly by the roadside since the village is located along the highway to Kampala, but occasionally sells at Nakawa market in Kampala. He travels there by public transport. In the future he plans to construct a permanent, brick house for his family, and to see all his children complete secondary school.

Ssenyonjo's life history is visually depicted on page 35.

b. STEPPING-OUT STRATEGIES

Households pursuing stepping-out strategies follow a range of activities in order to advance their wealth. As with stepping-up strategies, stepping-out strategies involve entrepreneurial livelihoods portfolios and the accumulation of high-value assets, but these portfolios incorporate a range of activities. In the context of the households spoken to as part of this research, these activities often include own-account farming, private/government labor, and a non-farm enterprise. Successful stepping-out strategies require the household to include several fit and healthy income earners who share a future vision (see boxes 12 and 13). Ownership of small livestock and the ability to undertake casual labor (though not as a primary activity) also act as coping strategies if crops fail.

BOX 12: STEPPING-OUT THROUGH FARMING, A SALARIED JOB AND RENTING-OUT ROOMS

When Joyce started their household she was 14 years old. She and her husband dug and cultivated the land. They had no other income generating activities and, other than a few chickens, no animals. They had a bed and kitchen utensils and two huts—one in which they lived and the other for cooking.

Joyce's husband was lucky and obtained a job as an auxiliary policeman two years after they married. After he was deployed in the north, she went with their young child to live with him. However, after several years she left her husband there and came back home to start making bricks and to build a house so they could better themselves. During the school holidays, when there were no fees to pay, they slowly bought cement and iron-sheets to construct a permanent house.

Joyce notes that you can't depend on a salary alone. Soon three children will need fees to go to secondary school. When their first daughter got married four years ago, they got four cattle and ten goats as the bride price. (Their daughter had passed her O-levels and completed some catering training.) They sold two of the cattle and added money from her husband's salary to buy more land. The remaining two cows have now given birth, so they once again have four cows. They also sold six of the goats and bought some land near a day-school. They plan to build a semi-permanent structure there, as they realize the school needs more housing—they hope the school will rent the rooms from them.

Joyce also farms their three acres of land. She grows vegetables year-round on the plot of land near the river bed. She sells cabbages in the village most Fridays. In the VSL, each member specializes in growing one vegetable so as not to saturate the market. The children also work hard and help her with farming at the weekend.

If times are tough, she will sell some of the remaining four goats or some chickens. Alternatively, if the crop fails, they will look for other ways of getting money, including through casual labor—in particular, mining sand and selling this to builders.

Joyce's life history is visually depicted on page 35.

BOX 13: STEPPING-OUT THROUGH FARMING, TRADITIONAL HEALING AND TOOTH REMOVAL

Dembe got married in 1986 when she was about 22 years old. They started their household with three goats. Life was not hard—she has skills as a traditional healer, which she learned from her grandfather; he passed his gifts onto her.

From the age of 15, she started traditional healing – not as a business, but rather when people asked her for help. Initially people gave her money to say thank you for her treatment, and so then she decided to turn it into a business. When they were first married she did healing, both she and her husband farmed, and her husband helped to remove people's teeth. With this money they bought chickens and goats.

They had nine children, although two have died; her last born is 10 years old. She is still paying school costs for two children. Five of their daughters are now married, but her husband wasted the bride wealth—though it did not amount to much: two cows and two goats in total. One of the girls eloped.

School costs are expensive. Two children are still in school: one in P3 and another in P6. Both are in UPE schools, which are supposedly free, but you have to pay USH 80,000 every term for the ‘development fund’ as well as buying uniforms.

In 2014 she was certified for healing by the government, which is trying to integrate and regulate traditional healers; the inspectors check her herbs and drugs regularly. She also pays business registration taxes of USH 20,000 per year, since she has been certified. However, this certification has increased her recognition in the village and now more people trust her. Each week she sees 3-10 people. A few days ago her phone was broken; she must get it fixed or she will lose business. Her biggest problem is a lack of water for washing patients. She would like to develop an inpatient facility as sick people are often carried to her house.

Her husband is not very well now, and so he can no longer run his teeth-removing business. He also has occasional mental health breakdowns.

When they started their household they just had three goats, but now they are better-off and have four cows and two goats. They improved their situation through farming, healing and tooth removal. There was drought and erratic weather last year, and so they are predicting that in 2016 there will be a lot of hunger. If she faces extreme difficulties, she takes casual work as a quick solution. There are usually others who are doing quite well and are able to offer labor opportunities; this is because there are other households where children are sending money home from outside the village, meaning their parents have enough money to hire people either to dig or to harvest.

c. HANGING-IN STRATEGIES

Under these strategies, households pursue a range of activities with the aim of surviving, and maintaining and protecting their current welfare. No activity is sufficiently profitable to provide for the household, and they lack additional capital or labor to significantly increase the productivity of any one activity. Diversification across different activities can be the result of desperation, rather than a proactive choice to minimize risk. UNPS analysis supports this, revealing households have a greater risk ratio of transitory escapes relative to sustained escapes with a higher total number of jobs. It is likely the case that at-risk households are forced to take on more, often poor quality, jobs to supplement household income.

James Apio provides an example of a household head who, along with his wife Ruth, has managed to keep his household above water through combining his earnings from self-employment with income from farming (see box 14). In particular, the household’s limited improvements have been wiped out by several years of poor health. In addition, James and Ruth have had to regularly take loans from local villagers to fill the mismatch between their income and expenditure, and these loans have incurred interest payments. Meanwhile, with only one adult who is fit for work in terms of cultivation, any profits from James’ non-farm activities are frequently spent on hiring-in labor to farm their fields for food.

BOX 14: HANGING-IN THROUGH COBBLING, FARMING, LIVESTOCK ACCUMULATION AND TAKING LOANS

James Apio went to school until Primary 5. He went to a school for children with disabilities, but girls were abducted from a nearby school in Aboke by the LRA, and so the school closed and he never went back to school. The school has recently re-opened: children with disabilities are able to board and children without a disability go as day pupils. The most painful experience during his childhood was experiencing his disability, which came like malaria when he was about ten years old.

The most positive experience from childhood was when he developed livelihoods skills so he could run enterprises and earn some money. He started his first enterprise at 19 years old, cobbling shoes. He got married when he was 20, and he is now 29.

Now he does many small jobs in the village. He repairs radios and also cuts hair. His shop is mobile; he goes and sits under a tree and people come to have their hair cut for USH 500. He trained at school, but he has no money for clippers so he uses a comb and a razor blade. James has a new wheelchair which he bought using the money from his enterprises.

There was a point when they were growing enough crops to be able to sell some. Goats and pigs were multiplying. He had income from cutting and repairs. But then they had sicknesses and bad times, which brought a big slump. They sold all their livestock (four goats, three pigs and six chickens) in 2013 to pay for health care. Both the adults and the children were ill. They went to a health center at the sub-county town five miles away. Ruth walked with the children as they have no bicycle. The treatment worked, and now she is having a period of good health.

In 2014 their life changed again as James got a job as the cobbler at a school repairing children's shoes. Ruth cultivates their two acres of land where they grow soya, beans, cassava, pigeon pea and groundnut, which she sells at the local market. When they have enough money, she pays to hire-in labor to help her on the land.

In the future they hope to no longer need to take loans for living costs from wealthy people in the village.

BOX 15: HANGING-IN THROUGH PETTY ENTERPRISES, SUPPORTING DEPENDENTS AND EPISODES OF ILL-HEALTH

In 1963 Doris Ejau married a police officer in Kenya, and she lived with him there for seven years. But her in-laws harassed her when she did not get pregnant, and so she returned to the village, where her parents and siblings still lived in 1970. Upon her return, she built a grass thatched hut. She survived by farming, making local bread to sell, and brewing local spirits. She had her own means to live on, though things were not easy.

Doris took on the role of taking care of her parents, as they were old and weak. Her brother, who lives in the village, was still in school, so she also helped to pay the fees for him. In addition she helped to support the seven children of another brother who had died.

There were still some cows at home. She also planted trees. Her parents were 'moderately rich'; they had animals, but some died from disease. When Doris got sick eleven years later and had to be hospitalized, her

parents helped to pay for the operation and related costs. But she paid most of the costs herself with her money from brewing spirits. Following her hospitalization, Doris' hand never worked properly again.

Since coming back from Kenya, with the exception of being hospitalized for a few months, her life has remained consistent. Although she has repeatedly fallen sick, she has been able to launch and run small enterprises, including selling goats and sheep, making bread, brewing spirits, and cultivating crops.

Doris has not been able to grow her businesses because her parents became weak. She did everything for them: she bought food and clothes; her brothers were still too young to help and her elder brother's attention was on his new wife and new household.

Now she is not desperate. She hires people to help her grow her own food. She uses the SAGE grant to buy medicine. Her younger brother does now try and help her, but he is married and she does not want to bother him.

However, she is close to desperate as she has no energy to work, and has to sell food to hire-in workers. In her old age, the only good thing is she has had a steady period of good health, unlike previously. But now life is complicated and more demanding.

8. IMPLICATIONS FOR USAID AND FOR WORK TO PROMOTE SUSTAINED PATHWAYS OUT OF POVERTY

Analysis of four rounds of UNPS data reveals that just 8 percent of households experienced sustained escapes from poverty during the period from 2005/06 to 2011/12. Over the same period, 9 percent of households experienced a transitory poverty escape; i.e., they escaped poverty and then returned to living in it. Particularly worryingly, of those transitory escapers, 40 percent remained poor in the final two survey rounds; or over two annual harvest cycles. Transitory poverty escapes for one year could be an indication of the vagaries of agricultural incomes, in particular the failure of a particular crop or set of crops. Households are frequently able to recover from such a setback, for instance through taking casual labor, drawing-down on savings or selling small livestock. In contrast, remaining in poverty for two consecutive years is likely to indicate a more structural decline in living conditions.

Panel data analysis for this case study reveals several important areas of focus to support sustained escapes from poverty. Certain determinants have differential effects on transitory escapes and impoverishment when disaggregated by sex, suggesting that different approaches are needed for male- and female-headed households. Table 3 gives more details, and some of these are expanded upon below.

Differences between female- and male-headed households are particularly pronounced with regards to the **resource base**. Female-headed households are at a higher risk of experiencing a transitory escape than a sustained escape if they have a higher asset value, while the opposite holds true for male-headed households. Again, in contrast to their male-headed counterparts, female-headed households are less at risk of transitory escapes if they have infrastructure, such as a private toilet or a member who owns a mobile phone. In terms of female-specific risk determinants, there appears to be a need for measures to help female-headed households protect their wealth base from theft and other loss to increase the security of their poverty escapes.

Attributes and capacities are another key area in which gender differences emerge. Specifically, while having more children reduces the risk of transitory escapes among female-headed households, household size, proportion of dependents, and age of the household head all increase the risk of impoverishment. The

opposite holds true for male-headed households. Social assistance directed towards female-headed households that are larger and include the elderly could help reduce some of the burdens these households face and so may decrease the risk of transitory escapes.

Household activities are a form of risk diversification that tends to work well for female-headed households, and not well for the male comparator group. Cash crops reduce the risk of transitory escapes and impoverishment among female-headed households, and assistance also reduces the risk of impoverishment among this group. However, an increase in the number of jobs increases the risk of impoverishment among this group. Moreover, owning an enterprise aggravates the risk of transitory escapes among female-headed households, possibly on account of the low quality and profitability of this form of activity as undertaken by women. This may be the result of female-headed households having less ability to engage in capital- and labor-intensive forms of enterprise.

Table 3: Summary of determinants with sex-disaggregated variations

TRANSITORY ESCAPERS	M	F	IMPOVERISHMENT	M	F
Resource base					
Asset value	–	+	Per capita expend.	+	–
Private toilet	+	–	Asset value	–	+
Mobile phone	+	–	Rooms per person	–	+
			Livestock	–	+
			Cultivable land	+	–
			Urban residence	+	–
Activities					
Non-farm enterprise	–	+	Cash crop	+	–
Cash crop	+	–	Assistance	+	–
			Number of jobs	–	+
Attributes and capacities					
Share of children	+	–	Primary education	–	+
Age	+	–	Household size	–	+
			Share of dependents	–	+
			Age	–	+
Shocks					
Shock	+	–	Health expenditure	–	+

Note: only variables shown where there is a different direction of association for male- and female-headed households. Significant results are highlighted.

Beyond the specific areas of intervention highlighted above and through the UNPS analysis, the key informant interviews reveal several ways in which development interventions can be designed and implemented to support sustained escapes from poverty:

Longer-term support. This observation stems from a realization that sustained poverty reduction is not something which can take-place within a two- to three-year timeframe. In particular, through longer term planning or strategy cycles, which ensure continuity of support through projects being appropriately sequenced and linked.

The importance of changing values and behaviors. In particular, respondents point to the importance of female empowerment and tackling unequal gender relations as a root cause of poverty, to ensure that escapes from poverty are sustained.

BRAC's approach under Empowerment and Livelihood for Adolescents (ELA) illustrates the synergies between changes in attitudes and achieving economic and poverty reduction outcomes. ELA's results include not only increased incomes, but also a greater likelihood of girls following safe sex practices (box 16).

Changing farmer behavior, in particular through encouraging farmers to think about marketing arrangements for their crops from the outset, is stressed in the interviews. Similarly, the importance of encouraging savings behaviors, including membership in a VSLA, is stressed across the interviews as being necessary for benefits to be sustained.

BOX 16: BRAC'S EMPOWERMENT AND LIVELIHOOD FOR ADOLESCENTS

BRAC's ELA program combines interventions to affect social, economic and health dimensions of girls' lives. The program targets 13-30 year olds, with a focus on girls who are out of school. There are five distinct program components: Adolescent Development Centers, life skill training, livelihood training, microfinance, and community and parent forums.

The ELA program had a significant impact on engagement in income generating activities, personal income, savings, entrepreneurial ability, and level of savings. In addition, after the program, the girls were not only more knowledgeable about issues such as sexually transmitted infections, HIV/AIDS, and pregnancy, but were also more likely to follow safe sex practices.

The program addressed the issue of sustained poverty escapes through:

1. *Adopting a holistic approach.* The hypothesis was that combined interventions would be more effective with adolescent girls than single-pronged interventions aiming to improve labor market outcomes solely through skills training, or to change risky behaviors solely through education. Rather, there are positive synergies between the two.
2. *Family planning.* This included training and awareness raising on adolescent health, recognizing that large households have high economic demands.
3. *Livelihoods input supply.* ELA did not just focus on livelihoods training, but also on input supply, to enable girls to put their training into practice. This included assets such as chicks for girls trained in poultry production; and small 'kick start' grants for start-up capital.
4. *Empowering women and girls.* This was particularly through economic empowerment, including helping them learn how to grow crops and contribute to household incomes.

BRAC's experience with microfinance has shown the need for multiple businesses to spread risk.

Source: Interview and Bandiera et al. (2012)

Value of mentoring. One challenge is providing individuals and households with continuous support to enable them to follow new livelihoods activities successfully and to maintain interest in them. BRAC in their

ELA program, NUSAF II, and the Youth Livelihoods Fund all incorporate household-level mentoring and follow-up. As explained in the case of NUSAF II:

“People get excited and do good things, but you need to be there for them to maintain that excitement. This means the importance of follow-up—where you discuss problems and agree what to do. Without follow-up even very successful people will slowly drop the care and rigor with which they follow new activities. For instance, oxen will get old; you need to think about their replacement in time otherwise you will struggle. If people are left alone, there is a very high risk of them falling back. The investment will remain but the activities will fall.”

Importance of focusing on market linkages and not just increasing production. Respondents continually highlighted the importance of market development to ensure people are able to operate profitable farm and non-farm enterprises. They identified the failure of contract farming arrangements as due to farmers being forced to side-sell produce to get immediate cash, and stressed the need for farmers to have access to suitable sources of finance to tide them over from planting to the sale of the crops. In addition, it was noted that farmers are more likely to benefit if there is a choice of companies to sell to or enter into contracting arrangements with. However, in many cash crop market chains there are only a few private companies purchasing farmers’ products.

Incorporation of longer-term shocks and stressors. In Uganda, this includes environmental degradation, with community-level fieldwork regularly highlighting land exhaustion and declining yields. As stressed in box 16 above, family planning is also important, particularly given the association in the UNPS analysis between large household sizes and transitory escapes.

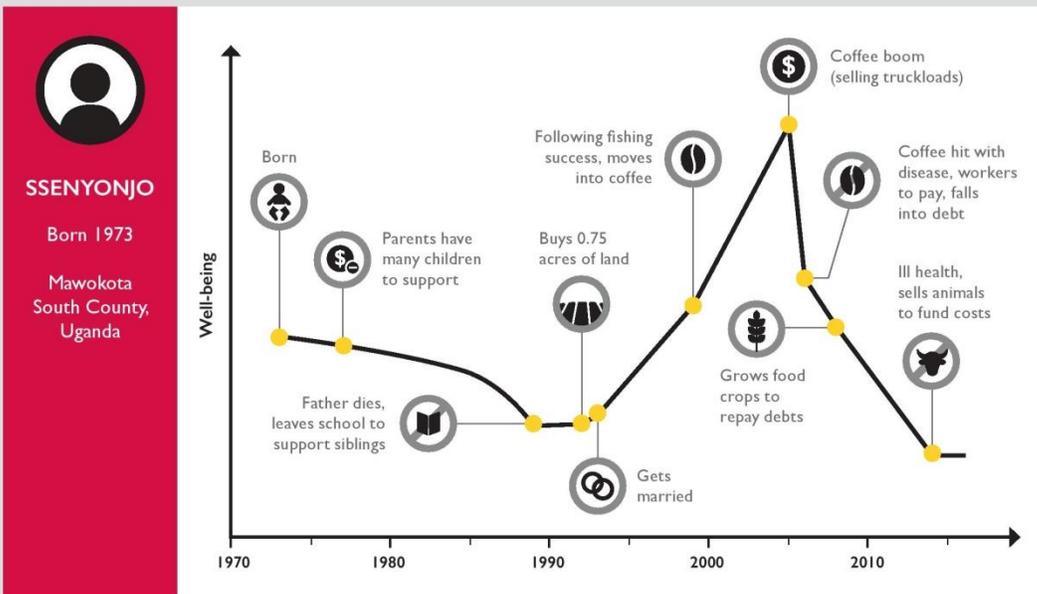
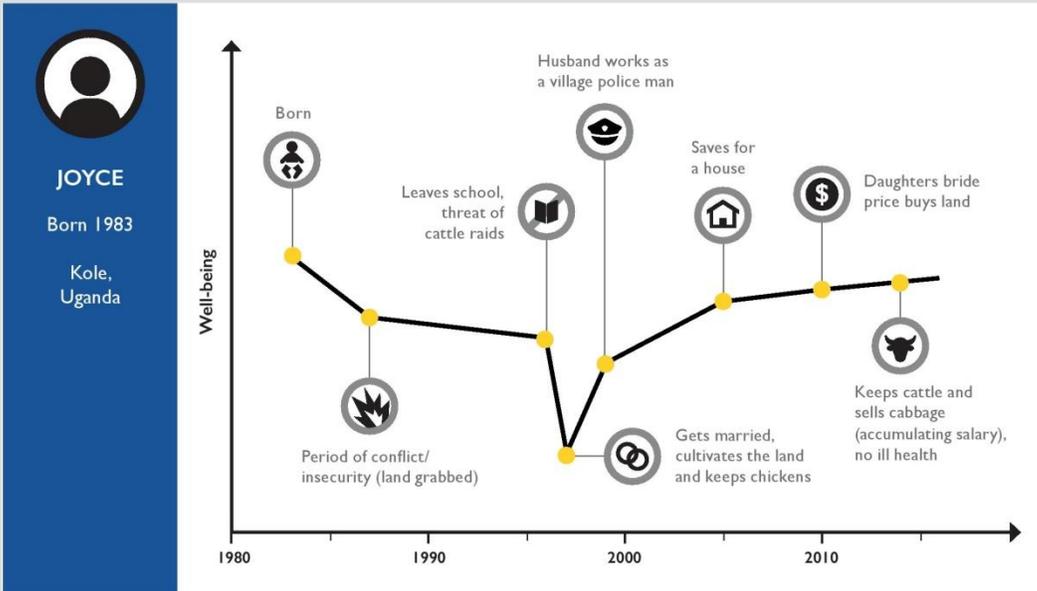
Holistic approaches and linkages. BRAC’s ELA program illustrates a holistic approach to promoting sustained escapes from poverty. The same organization ‘layers’ different interventions to ensure that households and individuals both have the economic opportunities to improve their situation as well as the support to be able to sustain these improvements over-time.

An alternative approach to being holistic involves ensuring ‘linkages’ to relevant support, following analysis of the main risks and stressors facing different types of household and for different economic opportunities. This support could be provided by a development project, the government (e.g., vocational training and education, social protection) or the private sector (e.g., for output markets or input supplies). Linking to services supplied by the government, public-sector organizations, and private-sector businesses necessitates an assessment of their capacity to absorb additional resources and meet this need.

Specifically, appropriate linkages are needed to help households manage risks. A study in Southern Somalia highlights two key drivers of resilience: (i) diversification of risk factors—rather than just diversification of income sources; and (ii) access to resources and services. ‘Stepping-out’ strategies are one way through which households work to diversify their risk factors, engaging simultaneously in a range of activities. ‘Stepping-up’ strategies, meanwhile, involve accumulating a narrow set of resources and focusing on one activity to achieve high returns. However, without linkages to the key forms of service to support that activity (e.g., veterinary services in the case of livestock; output markets for cash crops) these strategies will remain high-risk for households that are either poor or insecure non-poor, and so unable to self-insure. In supporting ‘stepping-up’ strategies, therefore, it is important to identify the major risks and stressors facing households in their various activities, and the linkages necessary to ensure they can maintain the advantages of specialization over the long-term.

LIFE HISTORIES

UGANDA



III. REFERENCES

- Abuka, CA., M. Atingi-Ego, J. Opolot and P. Okello (2007), Determinants of poverty vulnerability in Uganda, IIS Discussion paper #2003, <http://www.tcd.ie/iis/documents/discussion/pdfs/iisd203.pdf>.
- Bandiera, O.; Buehren, N.; Burgess, R.; Goldstein, M.; Gulesci, S.; Rasul, I. and M. Sulaiman (2012) 'Empowering Adolescent Girls: Evidence from a Randomised Control Trial in Uganda'.
- Bird, K. and Shinyekwa, I. (2003) 'Multiple Shocks and Downward Mobility: Learning from the Life Histories of Rural Ugandans', Chronic Poverty Research
- Bird, K., and Shinyekwa, I. (2005). Even the rich are vulnerable: Multiple shocks and downward mobility in rural Uganda. *Development Policy Review*, 23(1): 55–85.
- Bird, K., Higgins, K., and McKay, A. (2010) 'Conflict, education and the intergenerational transmission of poverty in Northern Uganda'. *Journal of International Development*, Vol 22 Issue 7: 1183-1196.
- Chant, L.; McDonald, S. and A. Verschoor (2008) 'Some consequences of the 1994-1995 coffee boom for growth and poverty reduction in Uganda.' *Journal of Agricultural Economics* 59 (1): 93-113.
- CPAN (2014) The Chronic Poverty Report 2014-2015: The road to zero extreme poverty. London: Chronic Poverty Advisory Network.
- CPAN (2013) The Second Chronic Poverty Report – Uganda. Is Anybody Listening? Development Research and Training and Chronic Poverty Advisory Network.
- Daniels, L. and N. Minot (2015) Is Poverty Reduction Over-Stated in Uganda? Evidence from Alternative Poverty Measures. *Social Indicators Research* 121: 115-133.
- Duponchelle, M., A. McKay, and S. Ssewanyana (2014), The dynamics of poverty in Uganda, 2005/6 to 2011/12: Has the progress stalled?. Paper presented at the CSAE conference 2015. Mimeo.
- Expanding Social Protection (2012), Poverty, vulnerability, and inequality in Uganda. Ministry of Gender, Labor and Social Development; Republic of Uganda.
<http://www.socialprotection.go.ug/pdf/Policy%20publications/Poverty,%20Vulnerability%20and%20Inequality%20in%20Uganda.pdf>
- Hulme, D., Shepherd, A. and Moore, K. (2001) Chronic Poverty: Meanings and Analytical Frameworks. CPRC Working Paper No. 2. Manchester: CPRC (available at www.chronicpoverty.org).
- IFS (2015) Advancing development in Uganda: Evaluating policy choices for 2016-21 and selected impacts to 2040. Frederick S. Pardee Center for International Futures.
- Irwin, B., and Campbell, R. (2015), Market systems for resilience. LEO Report #6, USAID.
- Krishna, A., LUmoye, D., Markiewicz, M., Kafuko, A., Wegoye, J., and Mugumya, F. (2006), Escaping poverty and becoming poor in 36 villages in Central and Western Uganda. *Journal of Development Studies* 42 (2): 346 - 370.
- Mercy Corps and TANGO (2013), What Really Matters for Resilience? Exploratory Evidence on the Determinants of Resilience to Food Security Shocks in Southern Somalia.

- Merttens, F.; Pellerano, L.; O’Leary, S.; Sindou, E.; Attah, R.; Jones, E. and S. Martin (2015) Evaluation of the Uganda Social Assistance Grants for Empowerment (SAGE) Program. Impact after one year of program operations 2012-2013. Oxford Policy Management and Economic Policy Research Centre, University of Makerere.
- Ministry of Finance, Planning and Economic Development (MoFPED); (2014) Poverty Status Report 2014: Structural Change and Poverty Reduction in Uganda. Economic Development Policy and Research Department. November 2015.
- Scott, L., Hanifnia, K., Shepherd, A., Muyanga, M. and Valli, E. (2014) ‘How resilient are escapes out of poverty’. CPAN Challenge Paper 2. London: Chronic Poverty Advisory Network
- Ssewanyana, S. and I. Kasirye (2012), ‘Poverty and inequality dynamics in Uganda: Insights from the Uganda National Panel Surveys 2005/6 and 2009/10, EPRC Research Series #94, Kampala, Uganda
- Sumner, A. (2013), ‘Disaster Resilience in a poverty reduction goal: Resilience in the context of poverty reduction post-2015: the new geography of poverty and risk’. In Mitchell, T., Jones, L., Lovell, E., Comba, E. (2013) (eds) Disaster risk management in post-2015 development goals: potential targets and indicators. Chapter 6 pp 57-71. London: Overseas Development Institute.
- UNDP (2015) Millennium Development Goals Report for Uganda 2015. Special Theme: Results, Reflections and the Way Forward.
- Van Campenhout, B.; Sekabira, H. and D.H. Aduayom (2014) Consumption bundle aggregation in poverty measurement: Implications for poverty and its dynamics in Uganda.
- Williamson, T. and Canagarajah, S. (2003) ‘Is There a Place for Virtual Poverty Funds in Pro-Poor Public Spending Reform? Lessons from Uganda’s PAF’, Development Policy Review 21 (4): 449-80.
- World Bank (2015) Uganda Systematic Country Diagnostic: Boosting Growth and Accelerating Poverty Reduction. December 4th 2015.

ANNEX A: APPROACH TO PARTICIPATORY WEALTH RANKING

Process on entering the community:

First: **speak separately to local leaders.** Ask the leaders for a history of the village including; the factors taking people into poverty and moving them out of poverty. Ask for major events in the village 5 years ago and 10 years ago. Ask for the main drivers of impoverishment and of poverty escapes 10 years ago and 5 years ago and today and discuss any differences between them. Discuss the main development initiatives in the village.

In Uganda it is not possible to access the household identifiers from either the UNPS or from previous UNHS.

This means that the research needs to re-create household wealth trajectories over the previous 10 years (roughly to co-inside with UNPS survey rounds of 2005/06, 2009/10 and 2011/12) using participatory wealth ranking. There were elections in 2006, 2011 and 2016 so use the elections as events for benchmarking

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 (in the non-USAID village do not mention that we are working with USAID – keep it general).
2. Introduce to focus group the different wealth categories – as have already been determined by previous research by Village Enterprise in 2014⁷ (see Table below). Ask the FGD their opinion on those different wealth categories (during each FGD these categories were slightly adapted). Display the wealth categories and talk through them.

⁷ Participatory Wealth Rankings as A Tool for Targeting and Evaluation: Do participatory methods successfully identify the poor and measure change in their lives? A.J. Doty, Village Enterprise (March 2014).

Wealth categories for participatory wealth ranking (households don't have to have all characteristics)

	Assets	Education	Nutrition	Other
Indicators of rich households	- Many cows -Owns retail shop -Motor vehicle -Permanent house (cement walls)	The majority of children in school	All members have a balanced diet	Employs others Job with pension Has good business
Indicators of moderately rich households	-Owns 2-3 acres of land -Semipermanent house (with iron sheet roof) -Motorcycle -Several cows -Multiple sets of clothes	Children can attend private school	Eat 3 meals per day	Owns a business
Indicators of poor households	Small plot of land -Mud house -One bed	-Can only afford government schools -Not all children attend -Children drop out after primary school	Can only afford one or two meals per day.	Household head cultivates for someone else
Indicators of very poor households	-Household is landless -Does not own their home -Grass thatched roof Roof in disrepair/leaking -Clothes torn and dirty -No mattress -No bedding	-Children not in school -Cannot afford school fees	Can only afford one meal per day	-Casual labor -No steady income -Cannot afford medications -Cannot afford medical care

Poverty line between moderately rich and poor households

3. Ask those households present to assign their current situation (2016) to a particular wealth category through attaching post-it notes to the large piece of paper.
4. Then ask them about their situation 5 years previously and ask them to assign themselves to a category for that time. In Uganda – use 2011 – this was the date of the previous national election.

5. Explain to the focus group how households are on different wealth trajectories and start a discussion about the reasons behind impoverishment and upwards mobility between 2011 and 2016. Start to fill into a table like below (table below).
6. Do the same for 10 years previously – for Uganda this is 2006 – the war was ending, people were returning to the village (in the north) and again there were elections.
7. Explain to the focus group how households are on different wealth trajectories and start a discussion about the reasons behind impoverishment and upwards mobility between 2011 and 2006. Continue to fill into a table like below (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.

Table 2: Main reasons for impoverishment and upwards mobility

Between 2005 and 2010 (10 years ago and 5 years ago)		Between 2010 and 2015 (today and 5 years ago)	
Bullet point drivers of upwards mobility	Bullet point drivers of downwards mobility	Bullet point drivers of upwards mobility	Bullet point drivers of downwards 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...)
10. Have a discussion of the different types of support/ program involvement of households on the different trajectories. Ideally we can then conduct life histories with households receiving different types of support e.g. SAGE, being in farmers organizations)

ANNEX B: TEMPLATE FOR LIFE HISTORY INTERVIEWS

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 a formatted 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 years– 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 life and to learn more about why such changes happened. Positive and negative events.
- Obtain informed consent
- The interview will be anonymous – it won't have their name on it.
- You are going to take notes - these notes will only be seen by other members of the research team.
- You will write short stories from the interview – some of these (without their name) will be seen by other people.
- Ask permission to take a photograph (if you will do so)
- Other people will see their photograph (without their name)

Getting started

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

Genealogy/demographic

- Draw genealogy tree or table and note sex/ages (date birth) of household members; who's married to whom; include multiple spouses and circle the respondents household; level of education of each household member.
- 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, cart, plough, tractors, number of houses, 'state' of houses (i.e., tin roof?), clothes/household items, mode of transport, consumer durables (e.g., mobile phone). Get as accurate estimate as possible, but rough magnitude is better than no magnitude at all, e.g., more than 5 cows but less than 20].

- Can you rank your livelihoods now? (i.e., primary, secondary, tertiary livelihood).
- For the household
- Probe for all other livelihoods activities/sources.
- What assets do you have in the household? Can you rank them in terms of value?

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

Childhood

[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?). Monogamous/ polygamous marriage – how many wives did your father have?
- Siblings
- Same mother same father - How many? Birth order?
- Step-siblings? How many?
- 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 during your childhood. (I.e. primary, secondary, tertiary livelihood)?
- 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.)?

- What assets did your parents have? Can you rank them in terms of value?
 - House and compound: Describe your house and compound you were a small child (e.g., at age 8 years old)
 - building materials,
 - size - number of rooms;
 - layout and use of different rooms;
 - furnishings; decorations; home garden/ yard;
 - pit latrine/ other; size of compound,
 - 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 – and type of food and number of meals/day?
 - Leisure activities?
 - Health of interviewee and family during childhood?
- Relationships
 - Key relationships: patrons, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, 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, moneylender, etc.)
 - Note carefully all changes in asset levels
 - Note changes in livelihoods
 - Looking back over this early part of your life are there any positive events or periods that stand out?
 - Probe opportunities
 - Investment
 - Acquisition
 - Aspiration
 - Resilience

Youth

- 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?
- 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?
- How did you get this job/ start this enterprise/ move into this livelihood activity? Did you get help from anyone?
- If so, who and how did this work?
- Describe working conditions/ constraints/ profitability/ shocks/ risks/ coping strategies
- Looking back over your youth are there any difficult events or periods that stand out? (use this question to probe shocks, coping strategies, changes in asset levels, changes in livelihood strategies)
- Looking back over your youth are there any positive events or periods that stand out? (Use this question to probe opportunities, investment, acquisition, aspiration, resilience)
- Assets during youth and before marriage/starting own household: What assets did you have before starting 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: patrons, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, banks

Young adulthood

- Marriage
 - Are you married?
 - How did you meet your husband/ wife?
 - Parent's/ family's views of the match?
 - Bride-price/ dowry/ land inheritance at marriage?
 - Move to your spouse's village – feelings about that/ problems; setting up home; relationship with in-laws/ extended family/ community; relationship with spouse (this looks like a good point to ask about gender)?

- Assets at marriage
 - How was your mother and father's assets divided up at your marriage – what did you get – what did you give away (bridewealth) – who owned what?
- Livelihoods at marriage:
 - What were your livelihoods at marriage, and during young adulthood?
 - Rank in terms of levels of income
 - Social networks that helped you get the jobs/work?
 - Describe working conditions/ constraints/ profitability/ shocks/ risks/ coping strategies?
- 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?
- Relationships
 - Key relationships: patrons, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, banks
- Looking back over your early adulthood are there any difficult events or periods that stand out? (Use this question to probe shocks, coping strategies, channels of support [relatives, friends, NGOs, church, moneylender etc.], changes in asset levels, 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, investment, acquisition, aspiration, resilience)

Late adulthood

- Looking back over your late adulthood are there any difficult events or periods that stand out? (Use this question to probe shocks, coping strategies, channels of support [relatives, friends, NGOs, church, moneylender etc.], changes in asset levels, 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 opportunities, investment, acquisition, aspiration, resilience)

- Relationships
 - Key relationships: patrons, friends, employers, richer households, social networks, kinship networks, employment relations, cooperatives, banks
- Livelihoods during late adulthood
- Assets during late adulthood
 - 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.
 - Compare livelihoods at marriage and now and account for changes

Older age

- How is life during older age?
- Working or not work?
- Health?
- Widowhood: age when spouse died; implications; feelings; change in status
- Relationships with others: responsibilities; support from children; role in community; status?
- Looking back over your older age are there any difficult events or periods that stand out? (use this question to probe shocks, coping strategies, channels of support [relatives, friends, NGOs, church, moneylender etc.], changes in asset levels, 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 opportunities, investment, acquisition, aspiration, resilience)

ANNEX C: SUMMARY STATISTICS FROM DATASET

Table 1: Household who experienced a transitory escape

	Obs	Year 1	Year 2	Year 3	Year 4
Resource base					
Value of assets (Ugandan Shs)	162	417514.8	6539792	5470784	5918364
Phone ownership (%)	162	0.00	0.33	0.44	0.49
Amount of cultivable land owned (acres)	162	1.88	2.04	1.68	1.61
Livestock>median in 2005 (%)	162	0.09	0.10	0.09	0.11
Household has piped water (%)	162	0.04	0.03	0.04	0.05
Household has private toilet (%)	162	0.32	0.44	0.46	0.38
Household has electricity (%)	162	0.00	0.01	0.00	0.00
Rooms per person (number)	162	0.55	0.45	0.48	0.33
Distance to market* (km)	162		32.12	32.23	32.03
Urban dwellers (%)	162	0.06	0.06	0.06	0.06
Attributes and capacities					
Household size	162	6.43	6.55	6.47	8.78
Share of children (%)	162	0.50	0.54	0.56	0.42
Share of dependents (%)	162	0.57	0.63	0.65	0.64
Age (years)	162	43.12	43.12	43.12	48.75
Female head (%)	162	1.31	1.31	1.31	1.38
Head with primary education (%)	161	0.16	0.16	0.22	0.14
Head with secondary education (%)	161	0.01	0.02	0.02	0.02
Activities					
Head is employed (%)	162	0.95	0.86	0.80	0.90
Total jobs in household	162	3.03	3.30	3.04	3.68
Household produces cash crops (%)	162	0.27	0.24	0.31	0.30
Household has non-farm enterprise (%)	162	0.38	0.48	0.46	0.38
Household receives assistance (%)	162	0.49	0.64	0.60	1.00
Shocks					
Number of shocks	162	3.16	1.35	0.78	0.56
Presence of shock (%)	162	0.80	0.77	0.51	0.41
Health expenditures per capita/month (Shs)	161	5304.97	13285.48	13789.06	14034.16
Household with at least one disabled members (%)	162	0.21	0.23	0.19	0.27

Table 2: Impoverished households

	Obs	Year 1	Year 2	Year 3	Year 4
Resource base					
Value of assets (Ugandan Shs)	233	857123.2	7470994	5607566	8030695
Phone ownership (%)	233	0.05	0.37	0.37	0.46
Amount of cultivable land owned (acres)	233	2.74	2.02	1.72	1.82
Livestock>median in 2005 (%)	233	0.09	0.06	0.05	0.06
Household has piped water (%)	233	0.07	0.07	0.09	0.09
Household has private toilet (%)	233	0.41	0.52	0.50	0.51
Household has electricity (%)	233	0.03	0.03	0.02	0.02
Rooms per person (number)	233	0.87	0.57	0.60	0.44
Distance to market* (km)	0		28.84	29.00	28.94
Urban dwellers (%)	233	0.11	0.11	0.11	0.11
Attributes and capacities					
Household size	233	5.22	5.79	5.74	7.70
Share of children (%)	233	0.47	0.46	0.48	0.41
Share of dependents (%)	233	0.54	0.53	0.56	0.61
Age (years)	233	42.23	42.23	42.23	47.79
Female head (%)	233	1.26	1.26	1.26	1.30
Head with primary education (%)	232	0.28	0.24	0.27	0.28
Head with secondary education (%)	232	0.05	0.05	0.05	0.05
Activities					
Head is employed (%)	233	0.96	0.91	0.76	0.92
Total jobs in household	233	2.73	3.13	2.54	3.30
Household produces cash crops (%)	233	0.37	0.31	0.33	0.38
Household has non-farm enterprise (%)	233	0.35	0.39	0.40	0.30
Household receives assistance (%)	233	0.58	0.69	0.69	1.00
Shocks					
Number of shocks	233	3.18	1.02	0.61	0.46
Presence of shock (%)	233	0.73	0.68	0.47	0.36
Health expenditures per capita/month (Shs)	228	13041.23	17255.92	11345.92	14234.23
Household with at least one disabled members (%)	233	0.22	0.21	0.16	0.22

Table 3: Sustained escapers

	Obs	Year 1	Year 2	Year 3	Year 4
Resource base					
Value of assets (Ugandan Shs)	145	554595.1	9111725	7962319	7922790
Phone ownership (%)	145	0.02	0.39	0.46	0.50
Amount of cultivable land owned (acres)	145	2.21	1.98	1.92	2.14
Livestock>median in 2005 (%)	145	0.10	0.14	0.11	0.16
Household has piped water (%)	145	0.05	0.05	0.04	0.06
Household has private toilet (%)	145	0.34	0.46	0.38	0.45
Household has electricity (%)	145	0.00	0.01	0.01	0.04
Rooms per person (number)	145	0.69	0.59	0.74	0.46
Distance to market* (km)	0		35.97	36.03	35.77
Urban dwellers (%)	145	0.10	0.10	0.10	0.10
Attributes and capacities					
Household size	145	5.99	5.52	4.99	7.79
Share of children (%)	145	0.44	0.56	0.68	0.30
Share of dependents (%)	145	0.52	0.66	0.80	0.60
Age (years)	145	44.86	44.86	44.86	50.57
Female head (%)	145	1.29	1.29	1.29	1.31
Head with primary education (%)	145	0.23	0.20	0.26	0.26
Head with secondary education (%)	145	0.03	0.05	0.06	0.04
Activities					
Head is employed (%)	145	0.97	0.87	0.77	0.92
Total jobs in household	145	3.08	3.01	2.25	3.13
Household produces cash crops (%)	145	0.35	0.29	0.28	0.30
Household has non-farm enterprise (%)	145	0.37	0.46	0.45	0.35
Household receives assistance (%)	145	0.51	0.68	0.73	1.00
Shocks					
Number of shocks	145	2.32	1.11	0.83	0.52
Presence of shock (%)	145	0.68	0.73	0.59	0.41
Health expenditures per capita/month (Shs)	143	5310.84	21091.37	17796.21	30752.38
Household with at least one disabled members (%)	145	0.23	0.27	0.22	0.34

*Not available in 2005 module

ANNEX D: REGRESSION RESULTS

Table 1: Drivers of transitory escapes and impoverishment, pooled and by gender of household head

VARIABLES	Experienced a transitory escape			Impoverishment		
	All	Male	Female	All	Male	Female
Log (per capita monthly expenditure)	0.592*** (0.119)	0.642* (0.165)	0.553 (0.213)	1.255 (0.234)	1.594** (0.373)	0.584 (0.212)
Assistance	0.882 (0.164)	0.960 (0.209)	0.495 (0.218)	1.238 (0.214)	1.365 (0.274)	0.641 (0.271)
Household size	1.154*** (0.0465)	1.095* (0.0555)	1.278*** (0.106)	0.906** (0.0368)	0.859*** (0.0428)	1.071 (0.0955)
Share of children	0.684 (0.495)	0.523 (0.458)	1.133 (1.809)	0.902 (0.583)	0.999 (0.826)	0.237 (0.316)
Share of dependents	2.098 (1.382)	2.823 (2.338)	1.462 (2.037)	0.605 (0.368)	0.532 (0.428)	1.928 (2.221)
Age of household head	0.992 (0.0344)	1.003 (0.0422)	0.959 (0.0754)	0.998 (0.0320)	0.999 (0.0383)	1.008 (0.0758)
Age-squared	1.000 (0.000358)	1.000 (0.000443)	1.000 (0.000788)	1.000 (0.000334)	1.000 (0.000405)	1.000 (0.000746)
Female head	1.191 (0.241)			0.998 (0.190)		
Head with primary education	0.759 (0.166)	0.803 (0.190)	0.631 (0.567)	1.065 (0.207)	0.888 (0.191)	9.087*** (6.545)
Head with secondary education	0.395* (0.206)	0.446 (0.247)	2.34e-07 (0.000690)	0.862 (0.350)	0.942 (0.419)	1.78e-08 (4.08e-05)
Number of shocks	1.145** (0.0627)	1.092 (0.0674)	1.358** (0.189)	1.125** (0.0590)	1.114* (0.0645)	1.091 (0.151)

Presence of shock	0.886 (0.197)	1.274 (0.337)	0.341** (0.172)	0.672* (0.137)	0.910 (0.217)	0.352** (0.167)
Log (per capita monthly health expenditure)	0.871** (0.0598)	0.825** (0.0693)	0.927 (0.128)	0.973 (0.0611)	0.903 (0.0689)	1.177 (0.162)
Household with disabled member	0.822 (0.180)	0.948 (0.269)	0.719 (0.287)	0.776 (0.156)	0.891 (0.232)	0.584 (0.223)
Head is employed	0.788 (0.266)	0.904 (0.399)	0.446 (0.286)	0.754 (0.233)	0.971 (0.392)	0.384 (0.235)
Jobs per person	1.211 (0.445)	1.042 (0.493)	1.860 (1.291)	1.285 (0.418)	0.928 (0.387)	3.299* (2.105)
Rooms per person	0.552** (0.165)	0.491* (0.179)	0.590 (0.375)	0.976 (0.238)	0.871 (0.266)	1.690 (0.846)
Piped water	1.343 (0.666)	1.083 (0.611)	1.439 (1.708)	2.112* (0.904)	1.821 (0.869)	2.974 (3.798)
Private toilet	1.213 (0.233)	1.441 (0.334)	0.850 (0.355)	1.417** (0.246)	1.195 (0.249)	3.003*** (1.180)
Electricity	2.93e-06 (0.00168)	8.05e-06 (0.00345)	0.516 (879.2)	5.636** (4.897)	5.137* (4.830)	2.654e+06 (3.368e+09)
Log (asset value)	0.887 (0.0665)	0.785*** (0.0736)	1.268 (0.191)	0.923 (0.0645)	0.884 (0.0762)	1.071 (0.160)
Mobile phone	0.916 (0.207)	1.480 (0.403)	0.188*** (0.0965)	0.674* (0.141)	0.826 (0.205)	0.184*** (0.0956)
Cultivable land area	0.960 (0.0339)	0.943 (0.0457)	0.998 (0.0682)	1.033 (0.0279)	1.079** (0.0386)	0.883 (0.0716)
Livestock > median in 2005	0.750 (0.159)	0.761 (0.188)	0.847 (0.420)	0.742 (0.146)	0.730 (0.166)	1.105 (0.545)
Cash crops	1.100 (0.213)	1.160 (0.277)	0.950 (0.370)	1.086 (0.194)	1.318 (0.287)	0.627 (0.238)
Non-farm enterprise	0.939	0.844	1.362	0.910	0.857	0.995

	(0.164)	(0.180)	(0.500)	(0.149)	(0.168)	(0.371)
Eastern	3.875***	4.832***	2.585*	3.052***	3.184***	5.145***
	(0.983)	(1.505)	(1.421)	(0.701)	(0.894)	(2.645)
Northern	2.133***	1.752*	4.303***	1.538*	1.096	6.400***
	(0.558)	(0.580)	(2.291)	(0.368)	(0.325)	(3.327)
Western	1.171	1.433	0.961	2.957***	4.234***	1.744
	(0.406)	(0.618)	(0.646)	(0.803)	(1.435)	(1.022)
Urban	0.837	0.707	1.156	1.267	1.620	0.146**
	(0.311)	(0.316)	(1.003)	(0.408)	(0.594)	(0.142)
2009/2010	2.138**	1.802	2.788	1.178	1.123	1.620
	(0.681)	(0.700)	(1.847)	(0.341)	(0.396)	(1.016)
2010/2011	1.792*	1.705	1.436	1.045	1.216	0.664
	(0.564)	(0.658)	(0.920)	(0.303)	(0.434)	(0.412)
2011/2012	1.557	2.238	0.822	1.313	2.445	0.414
	(0.748)	(1.483)	(0.720)	(0.612)	(1.606)	(0.350)
Constant	2,274***	6,263***	225.1	0.755	0.153	94.27
	(4,901)	(17,141)	(957.3)	(1.499)	(0.378)	(387.7)
Observations	1,163	827	336	1,163	827	336

See form in parentheses

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

Table 2: Employment disaggregated drivers of transitory escapes and impoverishment

VARIABLES	Experienced a transitory escape	Impoverishment
Head is own account worker	0.615 (0.186)	0.774 (0.217)
Head in government or private capacity	0.478 (0.248)	0.479 (0.216)
Head in casual labor	0.386** (0.184)	0.508 (0.218)
Household controls	Yes	Yes
Constant	4,112*** (8,938)	1.032 (2.058)
Observations	1,161	1,161

Table 3: Drivers of transitory escapes and impoverishment, by region

VARIABLES	Experienced a transitory escape			Impoverish		
	Central	Eastern	Northern	Central	Eastern	Northern
Log (per capita monthly expenditure)	0.773 (0.414)	1.066 (0.457)	0.334*** (0.131)	1.394 (0.620)	2.910*** (1.182)	0.446** (0.159)
Assistance	0.259*** (0.129)	0.610 (0.221)	1.712 (0.596)	0.597 (0.261)	0.964 (0.343)	1.730* (0.571)
Household size	0.993 (0.0749)	1.091 (0.0975)	1.343*** (0.125)	0.951 (0.0718)	0.779*** (0.0725)	1.179* (0.105)
Share of children	7.256 (12.59)	0.0231** (0.0351)	2.544 (3.809)	5.075 (8.624)	0.349 (0.479)	0.644 (0.848)
Share of dependents	0.182 (0.300)	13.70* (19.13)	1.487 (2.013)	0.0136*** (0.0226)	0.723 (0.939)	1.600 (1.914)
Age of household head	0.894 (0.0810)	1.278*** (0.109)	0.892* (0.0601)	1.092 (0.0878)	1.131* (0.0828)	0.912 (0.0578)
Age-squared	1.001 (0.000910)	0.997*** (0.000914)	1.001* (0.000745)	0.999 (0.000814)	0.998** (0.000759)	1.001 (0.000703)
Female head	1.724 (0.904)	0.399** (0.183)	2.339** (0.883)	0.861 (0.416)	0.480* (0.208)	1.669 (0.613)
Head with primary education	0.568 (0.362)	0.402** (0.163)	0.920 (0.373)	0.529 (0.274)	0.469* (0.184)	1.049 (0.395)
Head with secondary education	2.45e-06 (0.00329)	0.320 (0.237)	0.161 (0.200)	6.76e-07 (0.000773)	0.525 (0.353)	1.422 (1.042)
Number of shocks	0.831 (0.125)	1.143 (0.128)	1.424*** (0.167)	0.904 (0.118)	1.121 (0.124)	1.432*** (0.164)
Presence of shock	1.946 (1.110)	0.814 (0.372)	0.534 (0.240)	2.913** (1.526)	0.395** (0.174)	0.592 (0.246)

Log (per capita monthly health expenditure)	0.848 (0.160)	0.840 (0.119)	0.994 (0.121)	0.921 (0.157)	0.967 (0.130)	1.094 (0.122)
Household with disabled member	0.323* (0.199)	0.648 (0.258)	0.945 (0.420)	1.170 (0.553)	0.425** (0.165)	0.991 (0.395)
Head is employed	0.865 (0.795)	0.410 (0.294)	0.720 (0.475)	3.125 (3.215)	0.474 (0.333)	0.368* (0.216)
Number of jobs in household	1.017 (0.860)	0.671 (0.547)	1.882 (1.348)	3.688* (2.686)	0.274* (0.211)	3.729** (2.386)
Rooms per person	0.482 (0.479)	1.195 (0.590)	0.0814*** (0.0596)	2.446 (1.869)	0.933 (0.444)	1.061 (0.518)
Piped water	7.717 (13.18)	1.525 (1.406)	2.72e-07 (0.000288)	5.669 (8.287)	1.964 (1.801)	3.107 (2.746)
Private toilet	1.402 (0.684)	0.910 (0.333)	1.527 (0.579)	1.163 (0.499)	1.293 (0.459)	1.352 (0.470)
Electricity	9.94e-06 (0.00673)	0.498 (739.7)	6.364e+06 (2.376e+10)	11.79 (18.34)	455,872 (5.461e+08)	1.261e+07 (3.446e+10)
Log (asset value)	0.864 (0.175)	0.726* (0.130)	0.835 (0.118)	0.907 (0.151)	0.855 (0.148)	0.845 (0.110)
Mobile phone	0.831 (0.502)	0.362** (0.170)	2.612** (1.117)	1.703 (0.919)	0.199*** (0.0928)	1.354 (0.556)
Cultivable land area	0.940 (0.119)	1.042 (0.0798)	0.972 (0.0480)	1.008 (0.0836)	1.123 (0.0820)	1.037 (0.0453)
Livestock > median in 2005	0.650 (0.459)	0.488* (0.207)	0.947 (0.341)	1.645 (0.865)	0.733 (0.294)	0.637 (0.227)
Cash crops	2.706** (1.313)	1.773 (0.743)	1.059 (0.399)	1.066 (0.461)	2.227** (0.894)	1.181 (0.432)
Non-farm enterprise	0.672	0.548*	1.290	1.280	0.500**	1.035

	(0.312)	(0.186)	(0.413)	(0.501)	(0.165)	(0.316)
Urban	3.356	0.599	0.495	2.065	1.264	1.236
	(5.081)	(0.473)	(0.281)	(2.633)	(0.928)	(0.574)
2009/2010	1.566	7.295***	2.962	0.592	1.900	3.760**
	(1.227)	(4.944)	(1.975)	(0.402)	(1.234)	(2.319)
2010/2011	0.797	6.624***	2.236	0.743	1.842	2.484
	(0.632)	(4.412)	(1.471)	(0.523)	(1.182)	(1.518)
2011/2012	6.415	5.058	0.668	6.442	5.211	1.140
	(7.798)	(5.276)	(0.609)	(7.386)	(5.287)	(1.067)
Constant	4,101	60.20	924,477***	0.00916	0.00323	27,443***
	(22,376)	(271.7)	(3.859e+06)	(0.0437)	(0.0137)	(103,939)
Observations	213	411	377	213	411	377

See form in parentheses

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

Table 4: Drivers of transitory escapes and impoverishment, pooled and by gender of household head, according to “upper” poverty line

VARIABLES	Experienced a transitory escape			Impoverishment		
	All	Male	Female	All	Male	Female
Log (per capita monthly expenditure)	0.526*** (0.108)	0.504*** (0.123)	0.478 (0.231)	0.901 (0.192)	0.950 (0.237)	0.538 (0.282)
Assistance	0.987 (0.203)	0.940 (0.215)	0.750 (0.471)	1.225 (0.262)	1.382 (0.331)	0.411 (0.262)
Household size	1.124*** (0.0501)	1.076 (0.0555)	1.433*** (0.164)	1.050 (0.0485)	1.038 (0.0543)	1.214 (0.157)
Share of children	1.794 (1.076)	2.215 (1.935)	1.599 (1.875)	1.824 (1.259)	1.037 (0.961)	10.02 (16.57)
Share of dependents	0.639 (0.372)	0.560 (0.496)	1.223 (1.265)	0.187** (0.124)	0.318 (0.292)	0.0471** (0.0726)
Age of household head	0.991 (0.0325)	1.004 (0.0441)	0.840** (0.0706)	0.970 (0.0323)	0.999 (0.0449)	0.748*** (0.0655)
Age-squared	1.000 (0.000332)	1.000 (0.000471)	1.001 (0.000729)	1.000 (0.000338)	1.000 (0.000484)	1.002*** (0.000770)
Female head	1.024 (0.221)			0.996 (0.226)		
Head with primary education	0.635** (0.131)	0.517*** (0.122)	1.135 (0.724)	0.993 (0.211)	0.747 (0.183)	2.805 (1.837)
Head with secondary education	0.486** (0.161)	0.614 (0.240)	0.0756*** (0.0731)	1.117 (0.361)	1.150 (0.443)	0.917 (0.733)
Number of shocks	1.128* (0.0769)	1.121 (0.0898)	1.385** (0.220)	1.188** (0.0814)	1.206** (0.0970)	1.401** (0.222)
Presence of shock	0.714	0.879	0.202***	0.667*	0.837	0.229**

	(0.166)	(0.240)	(0.115)	(0.160)	(0.235)	(0.138)
Log (per capita monthly health expenditure)	0.989	1.028	0.779	1.046	1.063	0.879
	(0.0687)	(0.0849)	(0.126)	(0.0748)	(0.0896)	(0.150)
Household with disabled member	1.109	0.841	3.265**	1.043	0.822	3.480**
	(0.255)	(0.244)	(1.667)	(0.252)	(0.247)	(1.902)
Head is employed	1.195	0.980	1.650	0.872	0.897	0.786
	(0.402)	(0.434)	(1.132)	(0.304)	(0.409)	(0.577)
Number of jobs in household	1.004	1.188	0.941	1.468	1.366	1.206
	(0.356)	(0.549)	(0.652)	(0.543)	(0.639)	(0.935)
Rooms per person	0.636**	0.569**	0.603*	0.963	1.178	0.634
	(0.118)	(0.152)	(0.164)	(0.175)	(0.307)	(0.257)
Piped water	0.691	0.586	1.154	0.772	0.881	0.985
	(0.238)	(0.242)	(0.891)	(0.264)	(0.350)	(0.825)
Private toilet	0.861	1.053	0.417*	0.914	1.017	0.659
	(0.170)	(0.244)	(0.208)	(0.189)	(0.245)	(0.353)
Electricity	0.803	0.663	5.774	2.262**	2.148*	8.970*
	(0.369)	(0.363)	(7.544)	(0.894)	(0.976)	(11.27)
Log (asset value)	0.908	0.856*	1.187	0.909	0.899	1.146
	(0.0645)	(0.0738)	(0.191)	(0.0663)	(0.0779)	(0.198)
Mobile phone	0.726	0.941	0.258**	0.950	1.241	0.271**
	(0.173)	(0.261)	(0.155)	(0.237)	(0.361)	(0.173)
Cultivable land area	1.000	1.007	0.995	1.007	1.019	0.976
	(0.0227)	(0.0272)	(0.0714)	(0.0232)	(0.0277)	(0.0821)
Livestock > median in 2005	0.959	1.049	0.720	1.222	1.183	1.650
	(0.213)	(0.272)	(0.405)	(0.280)	(0.317)	(0.971)
Cash crops	0.786	0.705	1.162	0.913	0.665	2.279

	(0.164)	(0.172)	(0.613)	(0.198)	(0.169)	(1.283)
Non-farm enterprise	1.024	1.274	0.361**	1.146	1.368	0.654
	(0.194)	(0.282)	(0.168)	(0.224)	(0.310)	(0.325)
Eastern	2.072***	2.422***	1.098	1.677**	1.427	3.062
	(0.510)	(0.700)	(0.726)	(0.427)	(0.427)	(2.119)
Northern	0.966	1.321	0.315**	0.468***	0.489**	0.392
	(0.246)	(0.425)	(0.178)	(0.129)	(0.170)	(0.244)
Western	1.981**	2.320**	1.762	2.674***	3.237***	2.921
	(0.577)	(0.806)	(1.177)	(0.779)	(1.113)	(2.098)
Urban	0.829	0.912	0.363	1.267	1.337	0.887
	(0.247)	(0.335)	(0.240)	(0.386)	(0.490)	(0.654)
2009/2010	2.323***	2.200**	3.650*	1.237	1.122	2.346
	(0.699)	(0.786)	(2.567)	(0.385)	(0.416)	(1.741)
2010/2011	2.310***	1.988*	5.755**	1.373	1.320	2.881
	(0.739)	(0.746)	(4.429)	(0.454)	(0.510)	(2.353)
2011/2012	1.887	3.724	1.007	1.533	3.714	1.013
	(0.988)	(3.310)	(1.004)	(0.857)	(3.381)	(1.124)
Constant	20,450***	34,603***	4.274e+06***	32.68	4.680	1.833e+07***
	(44,628)	(91,348)	(2.298e+07)	(72.64)	(12.49)	(1.022e+08)
Observations	1,161	853	308	1,161	853	308

See form in parentheses

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

U.S. Agency for International Development

1300 Pennsylvania Avenue, NW

Washington, DC 20523

Tel: (202) 712 0000

Fax: (202) 216 3524

www.usaid.gov