Pro-Poor Livestock Policy Initiative

A Living from Livestock

Pathways out of Poverty in Western Kenya and the Role of Livestock

PPLPI Working Paper 14

EASYPol
On-line resource materials for policy making

Pro-Poor Livestock Policy Initiative
A Living from Livestock
Pathways out of Poverty in Western Kenya and the Role of Livestock

by

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for the

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

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Acknowledgements

1. PREFACE

This is the fourteenth of a series of Working Papers prepared for the Pro-Poor Livestock Policy Initiative (PPLPI). The purpose of these papers is to explore issues related to livestock development in the context of poverty alleviation.

Livestock is vital to the economies of many developing countries. Animals are a source of food, more specifically protein for human diets, income, employment and possibly foreign exchange. For low income producers, livestock can serve as a store of wealth, provide draught power and organic fertiliser for crop production and a means of transport. Consumption of livestock and livestock products in developing countries, though starting from a low base, is growing rapidly.

The objectives of this study were to obtain a better understanding of households' pathways into, and out of, poverty, with poverty defined from the communities' own perspective. The authors used a community-based methodology called the 'stages of progress' approach to assess household poverty dynamics in 20 communities and for over 1,700 households representing two different ethnic groups in Western Kenya. The proportion of households that had managed to escape poverty over the last 25 years was ascertained, as well as the proportion of households that had fallen into poverty during the same period. The major reasons for movements into or out of poverty were elicited at both the community and household-level, and in particular, the role that livestock play in the different pathways was examined.

2. EXECUTIVE SUMMARY

A community-based methodology called the 'stages of progress' approach was used to assess household poverty dynamics in 20 communities and for over 1,700 households representing two different ethnic groups in Western Kenya. The objectives of the study were to obtain a better understanding of households' pathways into, and out of, poverty, with poverty defined from the communities' own perspective. The proportion of households that have managed to escape poverty over the last 25 years was ascertained, as well as the proportion of households that have fallen into poverty during the same period. The major reasons for movements into or out of poverty were elicited at both the community and household-level, and in particular, the role that livestock play in the different pathways was examined.

Ten communities in Vihiga District and ten in Siaya District were included in the study. Vihiga District (Western Province), with an extremely high population density of 886 persons per square km, has seen average farm sizes steadily declining to a current 0.5 ha. Poverty rates here are amongst the highest in Kenya, rising from 53 percent in 1994 to 58 percent in 1999. HIV prevalence rates rose from 12 percent in 1994 to 25 percent in 2000. In Siaya District (Nyanza Province), with a lower population density of 316 persons per square km, 47 percent of the population fell below the rural poverty line in 1994, increasing to 64 percent in 1999. While average farm sizes are higher in Siaya, most of them are located on lower potential agricultural land than that found in Vihiga. Most of Siaya's population depends on small-scale agriculture (mainly subsistence crop farming), local businesses, livestock production and fishing. Siaya has the highest levels of HIV prevalence and HIV-related sickness and death rates in Kenya, rising from 14 percent in 1994 to 27 percent in 2000.

Key to the approach used was to define with the participating communities a common understanding of poverty. What, for example, does an extremely poor household do when a little bit of money becomes available to the household? Which expenses are usually the first to be incurred? As a little more money flows in, what does this household do in the second stage? The third stage? And so on.

Discussions of these questions provoked lively debate among assembled villagers followed by high levels of consensus as to the successive stages of household progress from acute poverty to economic self-reliance. Most interesting was the broad agreement across nearly all villages on the sequence of these stages. The results show that households, as they climb out of poverty, typically first acquire food, then (in the following order) clothes, shelter, primary education for their children, and small animals including chickens, sheep and goats. Beyond these initial stages of progress, households are no longer considered poor.

A remarkably similar understanding of poverty exists within the different villages and across the two main ethnic groups found in Vihiga and Siaya Districts of western Kenya. In almost all the villages, purchasing local cattle came in the first stage beyond the poverty threshold drawn by the villagers. Community members were then asked to describe each current household in the village in terms of whether they were above or below that poverty line 25 years ago (a full generation) and today. The reasons why particular households had moved into or out of poverty were discussed at the community-level and followed up in more detail with individual households. The field researchers conducting this study received considerable facilitation training towards delving in detail into the reasons, many of which are 'nested' or linked, for household movements into and out of poverty.

The results show considerable movement over the last 2½ decades by households in this region both into and out of poverty, and the main reasons behind households' escape from poverty are completely different (i.e. not merely the opposite) from the reasons for descent into poverty, and hence have different policy implications.

In Vihiga District, 27 percent of households managed to escape from poverty in the last 25 years, while 11 percent fell into poverty at the same time. In Siaya District, only 8 percent of households managed to climb out of poverty, while 29 percent became impoverished during the same period.

A similar set of reasons for these movements, while varying slightly from village to village, was found to be broadly shared among all the study villages. Most households (73 percent) in both districts that escaped poverty over the last 25 years did so because they diversified their income sources when a household member obtained a job in the urban formal or informal sector. Over 80 percent of these jobs (accounting for a total of 61 percent of successful escapes) were found within the private sector.

Of the households that escaped poverty, a major reason for 57 percent of those that did so was by diversifying on-farm income through cash crop production. These households were able to produce and consistently sell either surplus food crops (sorghum, maize, bananas) or cash crops (tea, sugarcane, rice).

In 42 percent of the cases, households that had escaped poverty diversified their on-farm incomes through livestock, ranging from poultry to dairy animals. Diversification of income

sources through livestock farming emerged as a particularly important strategy for escaping poverty in Vihiga District.

Poor health and health-related expenses were the principal reasons overwhelmingly cited as responsible for households declining into poverty in both Districts (cited by 73 percent of households that had fallen into poverty). Following these were heavy funeral expenses, particularly the slaughter of a household's livestock assets, mentioned in 63 percent of the cases. Over half of households cited low levels of education within the household as another critical factor in explaining why they became poor.

The striking importance of health and health-related problems and expenses in poverty status is also seen in India and in other areas of western Kenya and Tanzania. The devastating loss of livestock assets due to funerals is also found in other African countries such as Madagascar and Zambia. And the critical importance of non-farm income diversification in pathways out of poverty has been highlighted in many other studies across Africa.

The findings of this study have implications in terms of what has been referred to as 'cargo net' versus 'safety net' interventions. Cargo nets help poor people climb out of poverty; safety nets stop people from falling into poverty. Redistributive programs to build up the assets of poor people (such as giving heifers to poor households) may be effective in achieving long-term reductions in chronic poverty, but will have to be complemented by safety net policies. The results of the study suggest that the most important safety nets required by poor households in western Kenya are those that help protect the health and improve the education of community members.

This study has highlighted the key role that livestock play in both pathways into and out of poverty. On-farm diversification of income sources away from a sole reliance on crops through investment in chickens, sheep, goats and/or cattle helped many of the households in the study escape poverty. Given that investment in large animal stock is typically beyond the means of the poorest households, this finding suggests that projects that provide a heifer or a loan to buy a sheep or goat, for example, could provide a one-time transfer sufficiently substantial to help households lift themselves out of poverty. Such livestock acquisitions, however, must be accompanied by policies and interventions that reduce the risks associated with keeping farm animals alive and productive in harsh environments. And without safety net strategies aimed at the huge health and education constraints facing these communities, livestock-related investment strategies may well fail.

To open up opportunities for poor households to benefit from livestock even more than they do now, problems of poor roads and market infrastructure, widespread insecurity and high and multiple animal disease risks will have to be addressed. The potential for dairy enterprises in particular would be much larger if some of these risks were lowered. These are areas where local, regional and national authorities have an obvious role to play. Improving access to appropriate information regarding livestock management and disease strategies is an area where research organisations can help.

3. INTRODUCTION

A community-based methodology called the 'stages of progress' approach, developed initially in India (Krishna 2004), was piloted among five rural communities in Western and Nyanza Provinces of Kenya in 2002[1]. The goal was to test the methodology for appropriateness in assessing household poverty dynamics in Western Kenya. By eliciting the communities' own definition and understanding of poverty, and with the help of rigorous comparative inquiries conducted in partnership with community members, the proportion of households that managed to escape poverty over the last 25 years, as well as the proportion of households that had fallen into poverty during the same period was ascertained. The major reasons for movements into or out of poverty were also successfully elicited at both the community and household-level. It was found that livestock played an important role in both pathways, and sought to extend the methodology to obtain a more thorough understanding of that role.

Objectives

The objectives of this study were to obtain a better understanding of households' pathways into, and out of, poverty, with poverty defined from the communities' own perspective.

Target audience

This module targets policy analysts and decision makers who work in either public administrations (central and local), NGOs, political parties, professional organizations or in consulting firms and are willing to enhance their understanding of the potential role of livestock to poverty alleviation and promote the design of evidence-based pro-poor livestock sector policies.

Required background

Readers can follow links included in the text to other EASYPol modules or references[2]. See also the list of EASYPol links included at the end of this module.

4. METHODOLOGY

4.1. Study area

The study was carried out in Vihiga District (Western Province) and Siaya District (Nyanza Province) (Figure 1). Vihiga District is largely occupied by the Luhya ethnic community. It is predominantly a high potential agricultural area covering approximately 563 square kms. The soils are reasonably fertile, with an average annual rainfall of 1800-2000 mm, spread over two growing seasons. In 1999, the estimated population was 498,883 persons (GOK,

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[1] This initial pilot study was undertaken in a collaboration of ILRI and Duke University researchers, with funding from USAID and assistance from ICRAF and some of their local research and extension partners.

[2] EASYPol hyperlinks are shown in blue, as follows:

    a)   training paths are shown in **underlined bold font**
    b)   other EASYPol modules or complementary EASYPol materials are in ***bold underlined italics***;
    c)   links to the glossary are in **bold**; and
    d)   external links are in *italics*.

2001b).   Population growth rates are high despite a widespread incidence of HIV/AIDS, resulting in an extremely high population density of 886 persons per square km. The average farm size has been steadily declining and is now 0.5 ha, and declining soil fertility is a widespread problem (Mango, 2002). The average household size is 6 persons (WAC, 2002). A large proportion of the labour force is engaged in agricultural and livestock production activities. Poverty rates are amongst the highest in Kenya. In 1994, 53 percent of Vihiga District's population fell below the rural poverty line, increasing to 58 percent in 1999 (GOK, 1998, GOK, 2003). HIV prevalence rates remain high, up from 12 percent in 1994 to 25 percent in 2000 (GOK, 2001a).

Figure 1: Study sites and poverty incidence for Siaya District in Nyanza Province and Vihiga District in Western Province of Kenya.

Source: CBS, ILRI, 2003
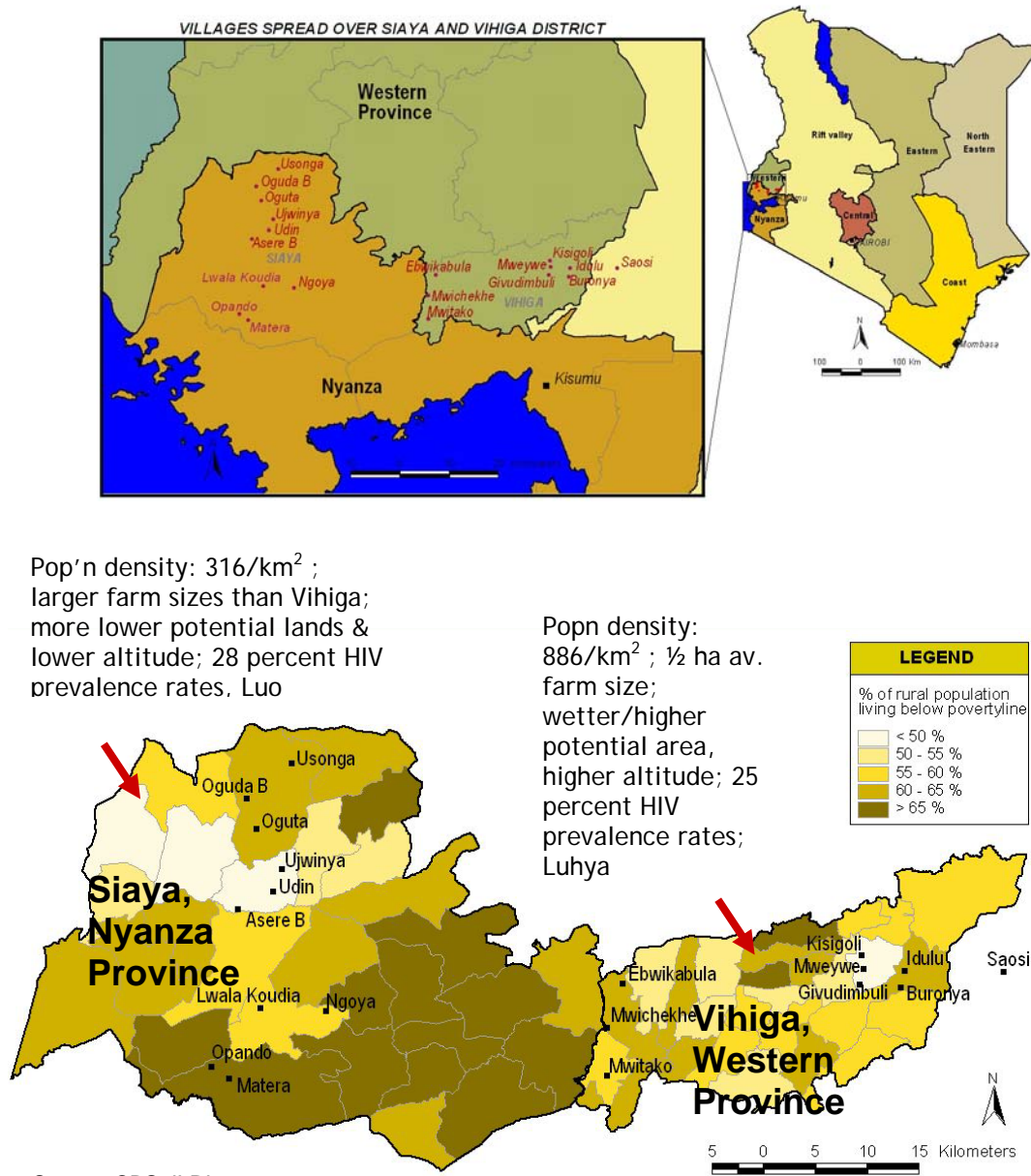
Siaya District covers an area of 1,520 square kms (almost 3 times larger than bordering Vihiga District) with an estimated population of 480,184 persons (GOK, 2001b). The District is largely occupied by the Luo ethnic group. Siaya's altitude ranges from 1140 to 1500m above sea level, with some of the high altitude areas receiving an average annual rainfall of 1800 to 2000 mm, but much of the District's area is lower altitude and has lower agricultural potential than that found in Vihiga District. Soil fertility is generally low (Mango, 1999). Population growth rates remain high here as well, and population density increased from 253 in 1989 to 316 persons per square km in 1999 (still less than half the population density of Vihiga District). In 1994, 47 percent of Siaya District's population fell below the rural poverty line, increasing to 64 percent in 1999 (GOK, 1998, GOK, 2003). The majority of Siaya's population depends on small-scale agricultural production (mainly subsistence crop farming), small-scale local businesses, livestock production as well as fishing for communities next to Lake Victoria. Siaya District has the highest levels of HIV prevalence and HIV-related morbidity and mortality rates in Kenya. These prevalence rates have increased rapidly from 14 percent in 1994 to 27 percent in 2000 (Opiyo, 2001; GOK, 2001). The study sites (Locations and study villages within each District) and their corresponding official poverty rates are shown in Figure 1.

4.2. Approach

Participatory approaches have been used in Kenya in an attempt to better understand levels of, and factors affecting, poverty (e.g. Narayan and Nyamwaya, 1996, Marenya et al., 2003, WAC, 2002). One drawback of such studies is that they typically come up with 'shopping lists' of needs and constraints facing communities, but are seldom able to address the underlying processes or dynamics of poverty. There are few poverty studies available that examine poverty in a dynamic context in Kenya (or elsewhere — a review of the relevant literature is not given here, but can be found in Krishna et al., forthcoming). Such studies typically rely on panel data collected for the same households over a period of time, and are costly and time-consuming to conduct.

The community-based methodology for assessing household poverty dynamics used in this study aims to overcome these limitations. It starts by eliciting an understanding of how community members define poverty themselves and what strategies and region-specific reasons help explain households' escape from poverty and households' decline into poverty. Households that are poor strive to progress further and to overcome poverty. The strategies that they adopt are related directly to how they understand their condition. Adopting a local understanding of poverty is useful thus not only to identify who is poor and who is not. Working with a local understanding of poverty also helps to appreciate much better what people are doing to deal with poverty as they see it.

4.3. Stratification and choice of villages

The communities included in the study were chosen by first making use of new high-resolution poverty maps for Kenya that give poverty measures at the Location level (CBS, 2003).3 Locations with higher versus lower incidence of poverty and higher versus lower concentrations of poor people were chosen in order to capture a range of poverty levels and

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[3] Poverty incidence is defined here as the percentage of the population living below the rural poverty line (defined by the Government of Kenya as KShs 1,239/adult equivalent/month, or roughly $.55/day). A Location is the second smallest administrative unit in Kenya, which varies considerably in size and population. Each District is divided into multiple Locations, and most Locations are made up of several villages.

densities. Four locations were chosen from each District (8 Locations in total) – 2 Locations with a greater than 50 percent poverty incidence (1 Location contributing to more than 5 percent of the District's poor population and 1 Location with less than 5 percent of the District's poor population) and 2 Locations with less than 50 percent poverty incidence (1 Location contributing to more than 5 percent of the District's poor population and 1 Location with less than 5 percent of the District's poor population). From each of the selected Locations, 2 to 3 villages were selected randomly from a list provided by the District Officer.

4.4. The Stages of Progress methodology

The Stages of Progress methodology involves a facilitated group discussion followed by household-level interviews. Teams of facilitators from each region were first trained in the method in a week-long training session led by a trainer from India with extensive experience with the approach. The training included practical sessions in 2 villages, although this data was not included in the analysis.

With a goal of eliciting shared collective memories about different households' conditions today and 25 years ago,[4] the first step of the approach involved gathering a diverse and representative community group made up of different segments of the community. While all villagers are invited, it is not necessary to have them all, but men as well as women must be represented in this group. It is also important to have in attendance older members from each community segment, as it is the older members who are best able to speak knowledgeably about households' situations 25 years ago and in the intervening period.[5] In order to assure maximum possible attendance, an advance party was sent to each of the randomly selected villages. This advance party met with the village elder and village chief, explaining the objectives of the project, determining the venue and time of the village meeting, and extending an invitation for all villagers to attend. In all the study villages, it was possible to get a significant proportion of the community members to attend (and very few dropped out during the exercise[6]).

Next, the objectives and procedures of the study were clearly described to the group. In particular, in eliciting poverty information, it was important that the group understand that no tangible benefits would accrue to anyone from participating (or not) in the study. Most of these communities are accustomed to visitors arriving in their village with the express intent of launching some new development program (e.g. digging a well, building a school), so there is an incentive to deliberately misrepresent their material conditions if they think that they will be more likely to gain the benefits of such programs if they are seen as 'poorer'.
The third, and critically important step, was to discuss and define a common understanding of poverty and of what it means for some household in the community to be regarded as poor. The rest of the exercise hinges upon this step. The assembled community group was then asked: What does an extremely poor household do when a little bit of money becomes available? Which expenses are usually the very first to be incurred? As a little more money

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[4] A period of 25 years was selected for this study because it corresponds roughly to one generation for a household. Periods of time much shorter than this are not very reliable for examining trends in household mobility. For instance, Walker and Ryan (1990:99), referring to their stated inability to draw any conclusions from their nine-year panel data for households claim that "Nine years is too short a time to analyze issues that pertain to income mobility, which ultimately can only be addressed with intergenerational data."

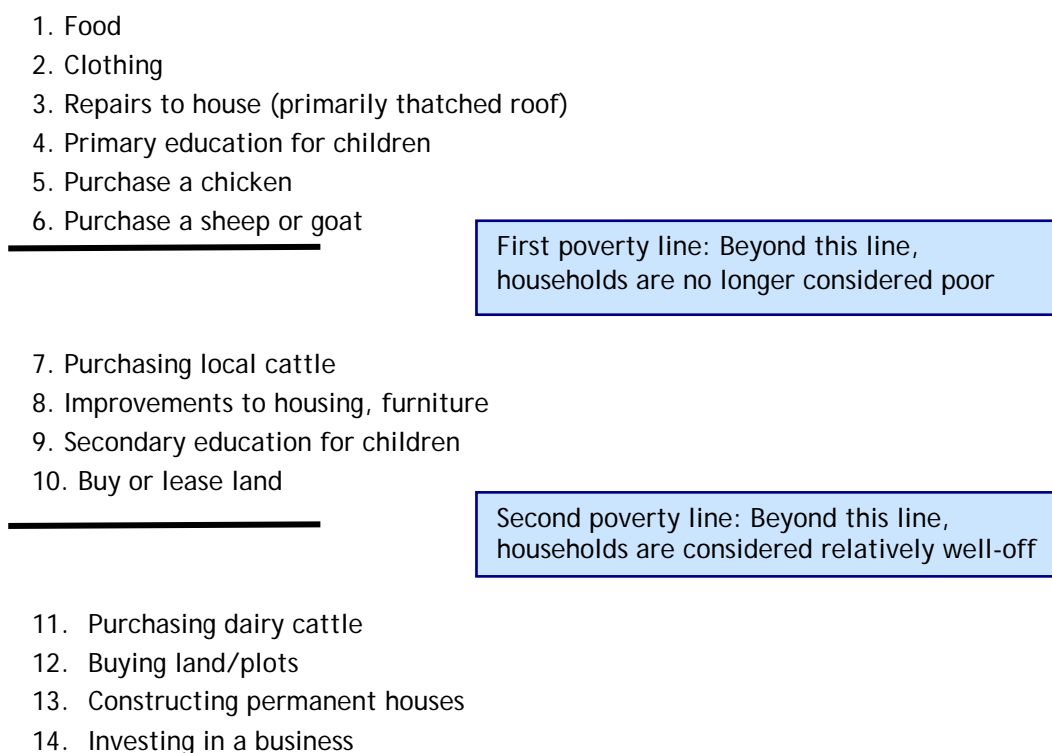[5] A commonly known signifying event was used to fix the earlier period, as discussed below in Step 4.

[6] When asked why attendance didn't drop during the afternoon, as often happens in participatory group exercises, participants gave two main reasons – first, the topic was something 'they thought about every day of their lives', and second, that they had never been asked these questions before and they were learning from it.

flows in, what does this household do in the second stage? What does it do afterwards, in the third stage, in the fourth stage, and so on?

Discussions on these questions elicited very active participation and debate from the assembled villagers. There was general consensus in each village at the end of these discussions, however, on what constituted the successive stages of households' progress from acute poverty to a progressively better state. Most interesting, there was broad agreement across nearly all villages on the sequence of these stages. Figure 2 represents a typical sequence of these Stages of Progress as recorded in the ten Luhya-speaking villages of Vihiga District and the ten Luo-speaking villages of Siaya District. Not all households go through each of these stages in exactly the same linear sequence from first to tenth, but most households do traverse at least the first six stages in the order defined.[7]

The results show that as households progress upward out of poverty they first acquire food, then clothes, then basic shelter, then use money to pay for their children's primary school costs, and then acquire small animals, including chickens, sheep and goats. Once households have reached and passed this particular stage, they are no longer regarded poor within villages in this region.

Figure 2: Stages of Progress

1. Food
2. Clothing
3. Repairs to house (primarily thatched roof)
4. Primary education for children
5. Purchase a chicken
6. Purchase a sheep or goat

> First poverty line: Beyond this line, households are no longer considered poor

7. Purchasing local cattle
8. Improvements to housing, furniture
9. Secondary education for children
10. Buy or lease land

> Second poverty line: Beyond this line, households are considered relatively well-off

11. Purchasing dairy cattle
12. Buying land/plots
13. Constructing permanent houses
14. Investing in a business

The first horizontal line in Figure 2 represents the first poverty line as it was constructed and perceived socially by community members for these 20 villages. Over half of the villages had the same initial six stages and drew the first poverty line after the six stages (although the

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[7] After reaching this level of relative prosperity, households tend to diverge somewhat in the later stages, e.g., some among them rent land before purchasing cattle. Until they have advanced past Stage 6, however, households tend to follow similar stages in their pathways out of poverty.

order of the stages varied somewhat, with some households putting clothing before shelter, or education after chickens). The other villages added an additional stage before the first poverty line that included purchasing kitchen utensils, plastic buckets or furniture and for 2 villages, farm implements.

Differences in where the poverty line was drawn occurred in four villages where purchasing sheep or goats was put after the first poverty line rather than before it. In two of the Luhya-speaking villages, Mwichekhe and Elukala, in Vihiga District, the residents felt they needed to progress through two additional stages before they consider themselves to be safely out of poverty. Until they reach Stage 8, i.e., until they are also in a position to improve their dwelling structures and to purchase cattle, these villagers consider themselves to be still in a state of poverty. No significant differences resulted, however, even when stages across all villages were harmonized in terms of numbers of households that are poor today or that were poor 25 years ago.

Households that have not been successful in progressing beyond Stage 6 considered themselves to be poor in these localities – and they are commonly regarded as such by other villagers.[8]

The fourth step was to choose a defining event that occurred roughly 25 years ago that everyone could clearly remember. While it is important to investigate household mobility over a time period of at least 20-25 years that corresponds roughly to one generation, as discussed above, merely saying "25 years ago" to refer to the earlier period can give rise to considerable confusion. In Kenya, this 'signifying event' was Kenya's first president, Jomo Kenyatta's death in 1978. Nearly all older villagers remembered this event vividly.

The next step was to list all the households in the village. Considering households of today as the unit of analysis, the group was asked to describe each household according to their poverty status today and in the earlier period. This involved referring continuously to the shared understanding of the stages of growth out of poverty already agreed upon. Ranking each household's progress in terms of the successive stages of progress helped verify who was indeed poor in each period, and it also helped to assess in relative terms how poor they were in each period — e.g. could they afford food, but not shelter or clothes or primary school fees? Did they progress through each of these stages, but were unable to go on to the next stage, for example, possessing first chickens and then sheep and goats?

The assembled community members were quite forthcoming in these discussions, and it was possible to proceed quite expeditiously down the list of households, ascertaining each household's poverty status today, 25 years ago, and also in the intervening period. There were relatively few disagreements regarding these classifications, and those that arose were resolved through discussion and debate among the assembled participants.

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[8] Some differences in this local understanding of poverty were reported by residents of the Luhya-speaking villages, Mwichekhe and Elukala, in Vihiga District. While the sequence of stages is broadly similar even in these villages, what is different is the local understanding of where within this sequence of stages one draws the poverty line. The residents of these two villages need to progress through two additional stages before they consider themselves to be safely out of poverty. Until they reach Stage 8, i.e., until they are also in a position to improve their dwelling structures and to purchase cattle, these villagers consider themselves to be still in a state of poverty. No significant differences resulted, however, even when stages were harmonized across all villages in terms of numbers of households that are poor today or that were poor 25 years ago.

This led to a categorization of households into the following 4 categories:
1. Poor 25 years ago and poor now   (*Remained poor*);
2. Poor then and not poor now   (*Escaped poverty*);
3. Not poor 25 years ago and poor now   (*Became poor*); and
4. Not poor 25 years ago and not poor now (*Remained non-poor*)

4.5.   Reasons for poverty status and movements

Next, a random sample of at least 40 percent of households was drawn from each of the four categories.   For these households, the group was asked to describe the circumstances associated with the direction that the household had taken with respect to poverty status over the past 25 years. This required quite a high level of training for the facilitators in how best to get at the 'real reasons', as it is often difficult to extricate the most critical reasons from other inter-linked factors. It involved asking open-ended questions and considerable probing, such as "How was Household X able to move out of poverty in this time? What were the major factors related with its escape from poverty?", followed by, for example, "So the livestock of this household that has fallen into poverty died due to disease. But other households' livestock also died at the same time, and these households have not fallen into poverty. So why did this particular household suffer relatively more from this loss? What else was relevant to their particular case?"

These in-depth inquiries into the reasons that households had followed particular poverty pathways were conducted for a total of 816 households in the 20 villages. In each case, it was important to dig deeply to ascertain the most critical reasons, which were often a combination of reasons, and the facilitators all became progressively more skilled at this task.   For example, when the reason 'someone in the household received an education' was given for a household escaping poverty, further probing usually led to the fact that it was the person with the education that got a steady job and it was the steady income from the job that helped lift the household out of poverty. Both the education and job are important, but as many receive an education and are unable to use it to lift their household out of poverty, the job is the most important reason being sought. The experience gained in the pilot investigations and training sessions with a facilitator from India with considerable experience in the approach helped considerably at this stage of the approach.

The final step of the approach was to conduct household-level interviews among the same random sample of households to verify and go deeper into the reasons for change (or stability). This served to triangulate and verify the group responses, but there also could be relevant factors that were unknown outside the particular household. After learning from the community gathering about factors associated with selected households' trajectories, individual members of all such households were separately interviewed.[9]

It typically took two days to complete this inquiry in a small village (composed of less than 100 households) and from three to four days for larger villages (more than 100 households). Participating villagers were assured that everything they said at the meeting would be held in strict confidentiality insofar as individual households were concerned.

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[9] Performing these cross-checks turned out to be more important for completing the information provided by the community groups than for dealing with conflicting information, which was rare.

5. RESULTS AND DISCUSSION

A remarkably similar understanding of poverty exists within these different villages and across the two main ethnic groups found in Vihiga and Siaya Districts. This understanding of poverty guides households' livelihood strategies throughout the region. Thus understanding poverty in terms of these local understandings leads to a much more accurate and effective identification of successful and unsuccessful household strategies for getting out of poverty; definitions of poverty invented by external researchers and imposed from above are bound to be less accurate.

The number of households varied from one village to another (72—117 households in Vihiga and 39—113 households in Siaya), with an average number of households per village of 97 and 73 in Vihiga and Siaya, respectively. A total of 1,706 households were classified in this study using the stages of progress method. 243 households out of the total 1,706 households within these 20 villages (i.e., 14 percent of all present–day households) have remained poor over the past 25 years. On the other hand, members of 316 households (18.5 percent) that were considered poor 25 years ago have managed to overcome poverty in the intervening period. This achievement is offset, however, by the experiences of another 325 households (19 percent), who have fallen into poverty during the same time period. 48 percent (822) of the households remained non-poor. Table 1 provides the complete breakdown for all 1,706 households in these 20 Kenyan villages and the number of households sampled during the community-level exercise and followed up with in the individual household interviews.

Table 1: Number of households in the villages studied, and number of households covered in further exploration of reasons at the community and household-level, by the four poverty pathway categories

	Remained Poor	Escaped Poverty	Became Poor	Remained Non- Poor	Total
Entire village, as described by community group	244	315	326	821	1,706
Reasons discussed in community-level discussions	163	172	202	282	819
Reasons followed up at the household-level	132	119	168	209	628

Table 2 presents in detail the numbers of households that changed or remained in the same poverty categories over the last 25 years10 across the study villages, highlighting some of the

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[10] A note of caution is in order while interpreting these figures. Households today and households 25 years ago are not strictly comparable. Some households that exist today did not exist 25 years ago, and some households that existed 25 years ago do not exist today. By regarding households of today as the unit of analysis, as mentioned above, what is, in fact, being compared, is inherited versus acquired status: did a person who was born to poverty remain poor, or did she escape from poverty in the past 25 years? Is another person who was part of a non-poor household 25 years ago still non-poor, or has she fallen into poverty in this time? New households, that is, recent in-migrants are not captured in the analysis, however, they were reportedly not numerous in these regions. Perhaps more seriously in a region with such high HIV infection rates, capturing households that have disappeared during the period was beyond the scope of this study. If the households that

inter-village and inter-District differences. Comparing the trends across the two Districts', it is clear that considerably more households in Siaya District (29 percent) have become poor over the last 25 years than is the case in Vihiga district (11 percent).

Table 2:   Percent of households falling in the four different poverty pathway categories in Kenya by study village

	Poverty Incidence by Location[11]	Remained Poor	Escaped Poverty	Became Poor	Remained Not Poor
Vihiga District (n=971 households)		16.5	26.5	11.2	45.8
Ebwikabula	61	9.7	56.6	3.5	30.1
Buronya	62	15.3	47.2	5.6	31.9
Mweywe	50	7.1	30.6	3.1	59.2
Idulu	62	11.1	29.9	6.8	52.1
Kisigoli	50	6.5	32.5	14.3	46.8
Mwitako	58	13.3	20.0	11.4	55.2
Saosi	62	10.5	17.4	10.5	61.6
Givudimbuli	50	6.9	4.6	10.3	78.2
Mwichekhe	61	49.1	12.5	20.5	17.9
Elukala	58	27.9	14.4	25.0	32.7
Siaya District (n=735 households)		11.3	8.0	29.4	51.3
Oguda B	65	6.7	21.7	15.0	56.7
Oguta	65	16.7	14.3	21.4	47.6
Ngoya	56	3.0	6.9	14.9	75.2
Udin	49	14.6	9.8	35.4	40.2
Lwala	56	7.2	13.0	39.1	40.6
Matera	73	3.8	5.7	32.4	58.1
Opando	73	4.2	2.1	29.2	64.6
Ujwinya	49	25.0	6.6	34.2	34.2
Asere B	49	15.9	1.8	32.7	49.6
Usonga	65	23.1	5.1	41.0	30.8
Average, all villages (n=1706 households)		14.2	18.5	19.1	48.2

The results show considerable change in households' poverty status over the last generation across these western Kenya communities. They also show a large inter–village and inter-District differences in movements into and out of poverty. While an average of only 8

have vanished due to death or migration systematically came from one of the four categories 25 years ago, the dynamics from that starting poverty position may be inadvertently misrepresented. Due to the indiscriminate nature of the HIV-AIDS pandemic, malaria and other disease problems in this part of the world, however, there is no reason to believe that the households that have vanished were only the wealthiest or poorest ones, for example.

[11] Percent of individuals (not households) falling below the rural poverty line of KShs 1,239/adult/month, GOK, 2003.

percent of households escaped poverty in Siaya District over the last 25 years (with a range of 2-22 percent), 26 percent did in Vihiga District (with a much larger range of 5-57 percent). 29 percent of Siaya's and 11 percent of Vihiga's households fell into poverty over the same period[12].

Across all the villages studied, 14 percent of households remained poor, 18.5 percent escaped poverty, 19 percent became poor and 48 percent remained non-poor.

No single reason accounts for escape or descent for a particular household or village. Important to note is that different sets of reasons are associated with escapes from poverty compared to descents into poverty, and this finding holds across all villages.

Another quite striking finding is that a similar set of reasons, while varying somewhat from village to village, is broadly shared among all the study villages (and that these reasons are remarkably similar to those found in the India studies — see Krishna, 2004 and Krishna et al., forthcoming).

It is also interesting to compare poverty incidence estimates using the government's expenditure/consumption approach (Column 1 in Table 2) and the communities' own asset-based definition from this study (by adding the percentage of those that remained poor and the percentage that became poor, Columns 2 and 4 in Table 2). For 70 percent of the villages, the communities' own estimated percentage of households that are poor was significantly lower than the official estimates. For 20 percent of villages, these estimates were very similar, and for 10 percent, the community-derived poverty incidence was higher than the official statistics. This is perhaps not surprising, given that each poverty estimate is based on fundamentally different concepts, i.e. expenditure/consumption flows versus assets.

5.1. Exploring the factors behind poverty status and changes since 1978

A sample of 819 households was initially selected during the community-level discussion stage in order to explore more fully the reasons that could possibly explain individual households' poverty status and the change (or lack of) since 1978. This figure included at least 40 percent of all households within each of the four categories. This was followed up with household-level interviews for a sub-sample of 628 households in order to cross-check the reasons and more fully understand individual households' poverty pathways. The reasons for poverty status and movements given during household interviews mirrored the reasons given by the community group in almost all instances, but the household surveys added details and in some cases, additional reasons.

The major reasons for escape from, and decline into, poverty from the perspective of household members interviewed is discussed below and relates to the original 819 households identified during the community-level discussion.

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[12] Why there have apparently been much higher movements into poverty in Siaya than Vihiga is difficult to answer and an area for further sociological research, particularly since many of the reasons for movements into and out of poverty were so similar across the Districts. Possible contributing physical factors are that for much of Siaya District, agricultural potential and soil fertility is lower than that found in Vihiga, and many areas are at lower altitude and thus hotter with higher disease risks (human and animal).

5.1.1. Reasons for escape from poverty

The vast majority of households (73 percent) that have escaped poverty over the last 25 years did so because they were able to diversify their household income sources through someone in the household obtaining a job in the formal sector (either in the private or public sector). Over 80 percent of these jobs (accounting for a total of 61 percent of successful escapes) were found within the private sector. Government jobs were associated with only 13 percent of these cases. Table 3 presents the nine most important reasons for escaping poverty, as described by these relatively successful households. The petty trade/business category captures employment in the informal sector, through trading, setting up a small kiosk (duka), etc.

Another important reason behind households' successful escapes from poverty (57 percent) was on-farm income diversification through cash crop production. These households were able produce and consistently sell either surplus food crops (sorghum, maize, bananas) or cash crops (tea, sugarcane and rice).

Table 3: Major reasons for escaping poverty (percentage of households that had escaped poverty mentioning the reason and ranking). *

Reason for Escaping Poverty	Overall	Vihiga	Siaya
Employment in private or public sector	73.3 (1)	68.9 (1)	83.0 (1)
Cash income from crop farming	57.0 (2)	57.1 (2)	56.6 (2)
Diversification into livestock farming	41.9 (3)	47.1 (3)	30.2 (6)
Help from relatives or friends	39.5 (4)	35.3 (4)	49.1 (4)
Petty trade/business	35.5 (5)	26.9 (6)	54.7 (3)
Small family size	33.1 (6)	30.3 (5)	39.6 (5)
Education	18.0 (7)	24.4 (7)	3.8 (8)
Bride wealth	8.7 (8)	8.4 (8)	9.4 (7)
Households escaping poverty (number)	172	119	53

* these numbers do not add up to 100 percent because more than one reason could be cited

In 42 percent of cases of escape out of poverty in the sample households, households did so by diversification of on-farm income sources, primarily through the acquisition of livestock (ranging from poultry to dairy animals). Diversification of income source through livestock farming emerged as a particularly important strategy of escaping poverty in Vihiga (cited by 47 percent of the households escaping poverty), while in Siaya, diversification through petty trade emerged as an important strategy (mentioned by 55 percent of successful households). Since going to the city is not equally open to all able, willing and even educated household members (see Krishna, 2004 and Barrett, 2003 for discussions of the required connections and networks often requisite for obtaining formal employment), improving returns from farming turns out to be an important option for households where formal employment isn't feasible, or just doesn't work out.

In 35 percent of the cases, households that had escaped poverty diversified their incomes by successfully establishing a small business in rural areas (e.g. small towns) within the vicinity of their native village. The different types of trade mentioned by these households were: retail shop, livestock trading, fish trade, timber, firewood and charcoal sales, butchery, shoe-making, selling fruits and vegetables, weaving baskets, brick-making, trading in cereals, brewing alcohol (changaa), and selling paraffin.

Other reasons mentioned by households that had escaped poverty included small (and large) family sizes, acquisition of assets such as livestock acquired due to bride wealth customs (i.e. acquired by households when their daughters marry), and assistance through community organizations including women's groups and NGO's.

5.1.2. Reasons for falling into poverty

Poor health and health-related expenses was overwhelmingly the most critical reason for households' declining into poverty (Table 4). Seventy-four percent of households that have fallen into poverty, i.e., 149 out of 202 households, mentioned sickness, poor health, and high healthcare expenses as a principal reason for their households' decline into abiding poverty.[13] This trend was equally strong across the two Districts, with 69 percent of Vihiga households and 77 percent of Siaya households citing poor health and health-related expenses as the principal factor explaining their households' decline into poverty. Death of the major earner due to illness was mentioned as a principal reason for falling into poverty in 33 percent of these cases. Among the households that cited this as a reason, 79 percent of the cases were associated with the death of the household head (usually the husband). The resulting dependence of survivors, including orphans, upon other households, thereby increasing the burden on these households, contributed principally to descent into poverty in another 32 percent of cases.[14]

Table 4:   Major reasons for becoming poor (percentage of households that had fallen into poverty mentioning the reason and ranking). *

Reason for Becoming Poor	Overall	Vihiga	Siaya
Poor health and health related expenses	73.8 (1)	68.8 (1)	76.8 (1)
Heavy funeral expenses	64.4 (2)	62.3 (2)	65.6 (2)
Low level of education	53.0 (3)	50.7 (3)	54.4 (3)
Large family size	38.1 (4)	39.0 (5)	37.6 (6)
Unproductive land	37.6 (5)	19.5 (8)	48.8 (4)
Death of a major income earner	33.2 (6)	19.5 (9)	41.6 (5)
High dependencies	33.2 (7)	39.0 (6)	29.9 (7)
Low pay jobs (casual jobs included)	26.2 (8)	24.7 (7)	27.2 (8)
Small landholdings (accidental loss of	25.3 (9)	45.5 (4)	23.2(9)

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[13] It is not just HIV-AIDS that is responsible for these households' decline into poverty. Poor health and high healthcare expenses have been ravaging these households' economies for a long period, before AIDS emerged as a major scourge in Sub-Saharan Africa. AIDS is the crushing blow, however, that devastates households already weakened by longer term illnesses and ensuing poverty. Given the confines of this study, exactly how many households are specifically seriously affected by AIDS was not determined.

[14] Since multiple reasons could be given for households' poverty status transition in a downward (or upward) direction, these percentages do not add up to one hundred.

livestock in Siaya)			
Households becoming poor (number)	202	77	125

these numbers do not add up to 100 percent because more than one reason could be cited

If a single pathway were to be selected to control or limit households' descent into poverty in this region, healthcare provision would be chosen unhesitatingly for improvement. Three other reasons were cited along with health-related issues, however, as contributing to declines into poverty in these villages. Heavy expenses related to funerals (including slaughter of the household's livestock assets) were mentioned in 63 percent of these cases. Almost all cases associated with the death of a major income earner involved the slaughter of livestock for the funeral feast.

Large family size was mentioned as a contributing factor in 38 percent of cases of households declining into poverty, and small landholdings resulting from uneconomic subdivision of land coupled with low fertility (unproductive land), was mentioned in 62 percent of these cases. Unproductive land was more of a problem in Siaya District, while small landholdings was cited as a major problem in Vihiga District. Large family size and land subdivision are quite often closely related, and households' recognition of these factors as important causes of deepening poverty goes together with a growing acceptance of family planning within these communities. The provision of family planning services is, however, uniformly poor and often non-existent in this area. Making such services available to the quite receptive populations in these villages should be, therefore, a high priority of the Kenyan government and development agencies.

Accidental loss of livestock through disease epidemics and theft was an important contributing factor mentioned by 23 percent of the Siaya households that had become poor over the last 25 years.

Other reasons mentioned included the loss of a job resulting from retrenchment, sacking or retirement (19 percent), laziness, drunkenness and polygamy. Drunkenness and laziness, often thought to be important causes of enduring poverty among the rural poor, were found to be perceived as relatively insignificant reasons in these villages. In less than 12 percent of all cases of descent overall was either drunkenness or laziness cited.

5.1.3. Reasons for remaining poor

Low levels of education, poor health and health-related expenses, funeral expenses, small land sizes, unproductive land, large family size and high levels of dependency were cited as important reasons for households' remaining poor. Over 60 percent of the households mentioned low levels of education and poor health and health-related expenses as a principal reason for remaining poor. This in turn leads to high death rates and the corresponding burden for households to cover the high funeral-related expenses — mentioned as an important reason for staying poor by 58 percent of households in this category.

Though similar reasons were mentioned for remaining in poverty across the two Districts, there were slight differences in the ranking of the reasons, as presented in Table 5. In Vihiga District, small land size (cited by 67 percent of households) was the single most important reason for remaining poor, followed by low levels of education, poor health and health-related

expenses, and heavy funeral expenses. In Siaya District, however, poor health and health-related expenses (cited by 77 percent of households) was the single most important reason, followed by heavy funeral expenses, low levels of education, and unproductive land.

Table 5: **Reasons for Remaining Poor (percentage of households that remained poor mentioning the reason and ranking).** *

Reason for Remaining Poor	Overall	Vihiga	Siaya
Low level of education	65.0 (1)	65.3 (2)	64.7 (3)
Poor health and health related expenses	63.2 (2)	53.6 (3)	76.5 (1)
Heavy funeral expenses	58.3 (3)	51.6 (4)	67.7 (2)
Small landholdings	47.2 (4)	67.4 (1)	19.2 (8)
Unproductive land	46.6 (5)	39.0 (6)	57.4 (4)
Large family size	31.3 (6)	40.0 (5)	19.1 (9)
High dependencies	30.1 (7)	20.0 (9)	44.1 (5)
Low pay jobs (casual jobs included)	28.8 (8)	31.6 (7)	25.0 (7)
Death of a major income earner	26.4 (9)	21.1 (8)	33.8 (6)
Households that remained poor (number)	163	95	68

* these numbers do not add up to 100 percent because more than one reason could be cited

5.1.4. Reasons for remaining non-poor

Households in this category (282 in total; 140 in Vihiga and 142 in Siaya) were asked about how they managed to remain non-poor, and what their views were regarding some of the challenges and reasons for decline from a non-poor status. Similar reasons for households' escaping poverty were given as reasons for households' remaining non-poor. Almost 80 percent of those households that remained non-poor largely attributed it to a member of their household obtaining a job. Private sector jobs accounted for 43 percent of these cases, with government jobs mentioned by 36 percent of these relatively well-off households. The role of on-farm diversification of income sources through food and cash crop sales and livestock acquisition was cited in 80 percent of these cases. Similar to poor households, poor health and health-related expenses, heavy expenses associated with furnerals, high dependency ratios (in particular, more orphans to support) and large family sizes, declining land fertility and small landholdings were cited as critical challenges facing these non-poor households.

5.2. The role of livestock in Pathways out of Poverty

The last stage of the household-level interviews included questions as to the particular role that livestock has played in the households' rise, fall or lack of change in poverty status.

The 20 villages all had a range of different livestock species that included poultry (chicken, ducks, turkey, guinea fowl, pigeon, quills), rabbits, pigs, goats, sheep and cattle (primarily local breeds, but also cross-bred dairy cows). Cattle were ranked by all as the most important species, followed by shoats (sheep and goats) and chicken. Economic uses varied greatly by species, but generally included a source of food (milk, meat, blood, ghee and eggs), cash income, hides and skins, manure and draft power (in Siaya District only). Cultural uses also varied by livestock species and included dowry payments, fly whisks, horns, drums, house walls, ceremonies, bulls for mourning the dead and slaughter during funerals, payment of fines, and driving away evil spirits and cleansing for cattle, sheep and goats. In Siaya District,

livestock services are available at the Divisional Headquarters through the Government's Veterinary Department, with a program on tsetse control and an NGO — FITCA and CARE, working in the village of Matera. Other NGOs found working in Vihiga included NALEPGOK, AFRICA NOW and the CHAVAKALI Christian partner's development agency.

Despite the fact that the communities recognized the important role livestock play in improving their livelihoods, they are currently faced with several constraints leading to low productivity. Their suggestions (not prioritized) for ways in which the productivity of livestock could be improved included:

- Improved access to information on livestock husbandry/management
- Improved access to information on livestock diseases and disease management
- Access to credit for acquiring livestock including dairy animals
- Improved veterinary services through regular visits by the veterinary extension officers
- Provision of livestock inputs at subsidized cost by the government
- Improved security through police patrols to curb livestock theft
- Construction/rehabilitation of cattle dips and community water projects
- Improved infrastructure (roads and communication) and thus marketing

Several of the reasons cited by households for falling into, or escaping poverty, are directly related to livestock. Others are indirectly related.

For households declining into poverty, heavy funeral-related expenses (including the slaughter of livestock), catastrophic asset losses due to livestock theft and livestock disease, losses of livestock due to the 'bride price' custom whereby the father of the bride must be given livestock by the groom's family, poor human health and related expenses (often leading to the sale or slaughter of animals), and small landholdings (related to shortages of grazing lands and feed) were the chief livestock-related reasons.

For households escaping from poverty, on-farm diversification through livestock was cited as a critical factor.

5.2.1. Livestock-related reasons for falling into, and remaining in, poverty

In both Luhya and Luo communities, livestock is typically slaughtered by the household who has lost a member in order to feed the guests attending the funeral. The family is also responsible for the costs of the coffin and transport of the deceased and often the guests to the home village. Poorer households often end up selling their livestock to offset these funeral-related expenses. 52 percent of sampled households that remained poor in Vihiga mentioned this as a principal reason for remaining poor, and 73 percent of these slaughtered livestock (mainly cattle) to feed mourners, and an additional 4 households sold livestock to offset funeral expenses. In Siaya, 68 percent of study households that remained poor cited funeral expenses as a principal reason for remaining poor, and 78 percent slaughtered the last of their livestock to feed mourners.

62 percent of households that became poor over the last 25 years in Vihiga mentioned funeral expenses as a principal reason for falling into poverty. 75 percent of these households slaughtered livestock, and 13 percent sold livestock to offset funeral expenses. In Siaya, 66 percent of households that had fallen into poverty mentioned funeral expenses as a principal reason, and 84 percent of these had slaughtered livestock — ranging from a goat to as many as 4 bulls. In all 20 villages, funeral expenses ranked second after poor health and health-related expenses as the principal reason for becoming poor. The case of Leah Atieno Oyugi, Case Study 1, highlights this widespread reason households fall into poverty.

Case Study 1. Leah Ationo Oyugi — Losing livestock due to funerals and becoming poor.

Leah was born in 1918 and attended primary school for only one year. She married Oyugi Madara of Madara village, Siaya district, in 1948. They had 18 children (16 girls and 2 boys). 13 girls died in early childhood and 2 died as adults after getting married. Her two sons also died as adults. One was killed in an accident and the other after a long illness. By 1978, her husband had taken up tailoring as a profession, which he continued until his death in 1999.

Leah lives in a semi-permanent house that was constructed for her by her late son who was a police officer. She works on her husband's plot, which she says is very productive. In 1978, her household was not poor, and they had many livestock. However, most of them have since died and many were slaughtered. Two bulls were slaughtered when her husband died. A bull was slaughtered for each of her two sons' funerals, and a cow was slaughtered when her daughter in-law died. The only type of livestock remaining in Leah's compound are some local chickens. She attributes her decline into poverty to the deaths and related loss of livestock assets that hit her family so hard. To subsist, she now makes and sells charcoal, as there is nobody left to help support her.

Poor health and health-related expenses ranks first as one of the explanations behind households' becoming poor across all 20 study villages (69 percent). For households that remained in poverty, poor health and health- related expenses ranked as the second most important reason (65 percent). The relationship between this reason and livestock was discovered in the detailed household stories, where many households mentioned having to sell off their livestock in order to meet their health-related obligations.

Accidental or catastrophic losses were also mentioned as important reasons for becoming (21 percent) and remaining poor (9 percent). 56 percent of households in these two categories that cited this reason lost their livestock due theft or diseases. Gaudencia Anyika's household, Case Study 2, remains in poverty in large part because her livestock were stolen. Some of the diseases mentioned were anthrax, East Coast Fever (ECF) and trypanosomiasis. Livestock species affected included poultry, pigs, sheep, goats and cattle. Losses due to livestock disease were especially common in Siaya, with tsetse flies and trypanosomiasis mentioned as serious constraints to livestock production.

Case study 2. Gaudencia anyika: livestock thefts keep her household poor.

> Gaudencia is 75 years old and is a widow. She lives in Udin village in Siaya district and did not go to school due to illness during her childhood. By 1978, she was staying at home practicing subsistence farming since her husband, the family breadwinner, had died some 4 years back. In 1985, her brother gave her money to start a petty business. This business enabled her to pay for her children's primary education. In 1992, she fell ill and could not continue with her business. In 1993, 8 of her cattle were stolen. This weakened her economic status considerably. Later she restocked with four cattle paid as bride wealth when her two daughters got married. However in 1997, two bulls were stolen from her kraal and she is now left with only two cows. She subsists and supports 6 grandchildren off of her 1/16 ha piece of land.

A custom practiced throughout western Kenya, called bride price, is that the husband must pay the bride's family when marrying their daughter. This 'bride wealth' is in form of cattle and/or goats. Some families receiving the livestock have managed to escape poverty in this manner, but equally, some families (particularly those with many sons) fall into poverty through the loss of their livestock due to this custom.

5.2.2. Livestock-related reasons for escaping poverty

On-farm diversification through livestock farming ranked fourth as a reason for escaping poverty. 42 percent of households that had escaped poverty mentioned this reason. 96 percent of these households were keeping livestock (mainly cattle, including dairy and shoats). 26 percent were involved in dairy farming (all the dairy households were from Vihiga district). (See Case Study 3).

Case Study 3: Bwana Lupalo escapes poverty through dairy.

> Bwana Lupalo is 55 years old. He lives in Buronya Village in Vihiga district. 25 years ago, he was still a student in secondary school. He came from a very poor family. His parents were peasant farmers who owned a very small piece of land (0.3 ha) and had no livestock. After his secondary school, he joined the police force. With his salary from the police force, he managed to buy 1.5 ha of land where he has established his compound. On this piece of land he grows tea, maize, bananas and fruit trees. He has 4 cross-bred dairy cows and uses a semi-zero grazing system. His dairy cows produce enough for his families' consumption needs, plus he has extra milk to sell each day. Dairy farming has been his main source of income since his retirement from the police force. In fact, Lupalo mentions that he earns more from dairy than he did as a policeman. His status has very much improved compared to 25 years ago. Furthermore, he has two daughters in the police force. They are married and bride wealth was paid to him.

6. CONCLUSIONS

While the official poverty statistics for Kenya suggest high and steadily increasing poverty rates throughout western Kenya over the last few decades, this dynamic micro-level examination reveals that in fact 18 percent of the study village households have managed to escape poverty and 19 percent have fallen into poverty during the same time. There are active pathways both into and out of poverty, and the reasons for, and livelihood strategies associated with, each pathway are different. What this means is that different projects, programs and policies will be needed to address the different pathways.

Households that are poor strive to improve their situation and to overcome poverty. The strategies that they adopt are related directly to how they understand their condition. The stages of progress method helps us to learn more about the local understanding of poverty and the strategies that various households adopt to deal with poverty. Adopting a local understanding of poverty is useful thus not only to identify who is poor and who is not. Working with the local understanding of poverty also helps in gaining a much richer understanding of what people are doing to deal with poverty as they see it.

This approach is much less extractive and more empowering than formal survey approaches. After the community-level discussions, the group is left with a clear understanding of where households in their community stand, what direction each is moving in, and the major reasons behind each households' poverty status and movement over time. This information can be used by community leaders when approaching government officials with requests for specific services or policy changes, for example.

The findings of this study are supported by studies elsewhere, which suggests that they have more widespread relevance beyond Kenya. In particular, the striking importance of health and health-related problems and expenses is also seen in India (Krishna, 2004), and in other areas of western Kenya and Tanzania (Yamano and Jayne, 2002). The critical importance of non-farm income diversification in pathways out of poverty has been highlighted in many other studies across Africa as well (e.g. Marenya et al., 2003, Barrett et al., 2001, Reardon, 1997). The staggering impact in terms of households falling into abject poverty due to losses of livestock in response to funeral-related customs was also found in Madagascar (Freudenberger, 1998) and India (Krishna, 2004).

The findings of this study have implications in terms of what Barrett calls 'cargo net' versus 'safety net' interventions (Barrett, 2003). Cargo nets help poor people climb out of poverty, while safety nets should stop people from falling into chronic poverty. Barrett and McPeak argue that redistributive programs to build up the poor's assets (e.g. giving heifers to poor households) may only be effective in achieving sustainable, long-term reductions in chronic poverty when complemented by safety nets (Barrett and McPeak, 2003). The results suggest that probably the most important safety nets required by poor households in western Kenya will be those aimed at protecting and improving human health and education.

This study has highlighted the key role that livestock play in both pathways into and out of poverty. On-farm diversification of income sources (away from a sole reliance on crops) through investment in chickens, sheep, goats and/or cattle is an important strategy that helped many of the households in the study escape poverty. Given that investment in livestock, particularly cattle, is typically well beyond the means of the poorest households, this finding suggests that projects that provide a heifer or a loan to buy a sheep or goat, for example, could

have a potentially large impact in terms of providing a one-time transfer that lifts households out of poverty. However, without policies and interventions undertaken first to reduce the large risks associated with keeping those animals alive (discussed further below), such a policy prescription remains shaky in this region.

Loss of livestock assets due to funeral customs and high death rates was one of the top reasons for households' decline into poverty. Since no policy decree from above is going to solve this complex problem, community-based approaches are clearly called for. Are there communities in Kenya or elsewhere, for example, that have come up with innovative solutions to this problem? More research is needed here, as is increasing awareness of this difficult problem and more widespread involvement of civil-society organizations in seeking solutions.

Opening up more opportunities for poor households to benefit from livestock still faces many challenges in this region. Poor roads and market infrastructure, widespread insecurity, and high and multiple animal disease risks loom large for poor households throughout the region. The potential for dairy, for example, would be much larger if some of these risks were lowered. These are areas where the local, regional and national Kenya governments have a clear role to play. Improving access to appropriate information regarding livestock management and disease strategies is another area where researchers and other agencies can help.

In terms of providing Kenyan policy makers with relevant and timely information to inform pro-poor policy decisions, it would be extremely beneficial to apply this approach more widely across Kenya. In particular, it would be very informative to capture a wider range of livelihood strategies, agricultural systems and environments. The stages of progress approach offers a valuable complement to formal welfare monitoring surveys (which measure poverty levels but say little about poverty dynamics), and if done in conjunction with them (e.g. by strategically picking a sample of the same villages where the formal survey if being carried out), could provide a wealth of information for those attempting to monitor and evaluate progress towards poverty alleviation goals.

7.   READERS' NOTES

7.1.   EASYPol links

The following EASYPOL modules form a set of materials which can be used to strengthen the background of the user:

- ✓ *Pro-Poor Livestock Policy Initiative: A Living from Livestock - Research Report: Dynamic Poverty Processes and the Role of Livestock in Peru* [EASYPol Module 192]

- ✓ *Pro-Poor Livestock Policy Initiative's Livestock Development Goals: Application of LDG1 to Peru, Senegal and Viet Nam* [EASYPol Module 193]

- ✓ *Pro-Poor Livestock Policy Initiative: A Living from Livestock – Working Paper 6: Review of Household Poultry Production as a Tool in Poverty Reduction with Focus on Bangladesh and India* [EASYPol Module 194]

✓ ***Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Research Report : Pro Poor Livestock Policies – Which Poor to Target?*** [EASYPol Module 195]

✓ ***Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Working Paper 35: The Political Economy of International Development and Pro-Poor Livestock Policies: A Comparative Assessment (Revised and Expanded)*** [EASYPol Module 196]

✓ ***Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Working Paper 25. International Rules, Food Safety and the Poor Developing country Livestock Producer*** [EASYPol Module 198]

✓ ***Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Working Paper 17. Funding Animal Healthcare Systems: mechanisms and Options*** [EASYPol Module 199]

✓ ***Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Working Paper 10. The Role of Livestock in Economic Development and Poverty Reduction*** [EASYPol Module 200]

Issues addressed in this module are further expanded in the following modules:

✓ ***Value Chain Analysis. Constructing the Commodity Chain functional Analysis and Flow Charts***. [EASYPol Module 043]

8. REFERENCES AND FURTHER READINGS

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MODULE METADATA

1. EASYPol module	197

2. Title in original language

English	Pro-Poor Livestock Policy Initiative: A Living from Livestock – PPLPI Working Paper 14
French	
Spanish	
Other language	

3. Subtitle in original language

English	Pathway Out of Poverty in Western Kenya and the Role of Livestock
French	
Spanish	
Other language	

4. Summary

The authors used a community-based methodology called the 'stages of progress' approach to assess household poverty dynamics in 20 communities and for over 1,700 households representing two different ethnic groups in Western Kenya. The major reasons for movements into or out of poverty were elicited at both the community and household-level, and in particular, the role that livestock play in the different pathways was examined. The main reasons behind households' escape from poverty are different from the reasons for descent into poverty, and hence have different policy implications in terms of what has been referred to as 'cargo net' versus 'safety net' interventions. Cargo nets help poor people climb out of poverty; safety nets stop people from falling into poverty. Redistributive programs to build up the assets of poor people (such as giving heifers to poor households) may be effective in achieving long-term reductions in chronic poverty, but will have to be complemented by safety net policies.

5. Date

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7. Module type	☐ Thematic overview
	☐ Conceptual and technical materials
	☒ Analytical tools
	☐ Applied materials
	☐ Complementary resources

8. Topics covered	☐ Agriculture in the macroeconomic context

by the module	☐ Agricultural and sub-sectoral policies ☐ Agro-industry and food chain policies ☐ Environment and sustainability ☐ Institutional and organizational development ☐ Investment planning and policies ☒ Poverty and food security ☐ Regional integration and international trade ☐ Rural Development
9. Subtopics covered by the module	
10. Training path	
11. Keywords	Poverty, livestock, Western Kenya, Vihiga District, Siaya District, stages of progress.