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Livelihood Diversification through Migration among a Pastoral People: Contrasting Case Studies of Maasai in Northern Tanzania

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Abstract

This paper brings together over two decades of research concerning the patterns and processes of livelihood diversification through migration among Maasai pastoralists and agro-pastoralists of northern Tanzania. Two case studies, one from the Ngorongoro Conservation Area and the other from the Simanjiro plains, jointly demonstrate the complexity of migration within a single ethnic group. We analyze the relationship between wealth and migration and examine some of the consequences of migration for building herds, expanding cultivation, and influencing political leadership. We further argue that migration in Maasai communities is becoming a cultural norm and not only a response to economic conditions.

Keywords

livelihood diversification; migration; pastoralism; Maasai; Tanzania

Introduction

Popular depictions of a Maasai warrior portray a young man standing on one leg, balanced by his herding stick looking over a vast African landscape. In the distance may be a large herd of cattle, kicking up dust clouds as they move slowly through a semi-arid rangeland. This image hides the fact that most pastoral families no longer depend solely on livestock and have now diversified their livelihoods by incorporating cultivation, selling livestock for

purely commercial reasons, selling milk and beadwork in local towns or urban areas, and migrating to urban centers to find work. All of these non-herding activities have been written about, but most of the literature has focused on the adoption of cultivation and commercialization of the livestock sector (Homewood 2009); less has been written about selling milk and beadwork or labor migration of young men. It is the latter of these activities that we address in this paper. Here, other images emerge: young Maasai men in traditional *shukas*¹ gathered around a shade tree in the middle of the day in the center of a large city; a Maasai man walking the perimeter of a beach hotel on the Tanzanian coast, carrying a club or short sword; or a young man, again dressed in a *shuka*, riding a small motorcycle, stopping by the side of the road, pulling out a jeweler's glass to examine a gemstone, making an offer to buy it, then riding away in a cloud of dust, as his offer was refused.

We have been working among Maasai pastoralists in northern Tanzania for more than two decades and have witnessed some of the first waves of migration, first in the Ngorongoro Conservation Area. In 2004, we began work in the Simanjiro District of Tanzania (our second case) and saw how migration to work as middlemen in the gem business provided opportunities for many to profit and for some to become rich. In this paper we use these case studies to fill a gap in the pastoral literature relating to labor migration, to demonstrate the complexity of migration within a single ethnic group, and to examine some of the consequences of migration for building herds, expanding cultivation, and influencing political leadership. In addition we argue that migration has become an important aspect of Maasai economy and society, and we examine how the concept of “poverty” is perceived among some migrants.

Patterns of Diversification

Much of the literature on pastoral peoples published in the last fifteen years has been concerned with the diversification of pastoral livelihoods. This is especially true for Africa where droughts and disease have reduced overall livestock numbers in some areas, and human population growth has resulted in a steady decline in livestock to human ratios in most areas (McCabe 2003). Pastoral peoples have diversified their livelihoods in a number of ways, the most common of which are the adoption or intensification of cultivation (Fratkin and Roth 2005; Homewood 2008; McCabe et al. 2010; O'Malley 2003; Sachedina and Trench 2009) and the commercialization of the livestock sector (; Ensminger 1992; Homewood 2008; McPeak and Little 2006.). Other diversification strategies include selling milk and petty trade, which is often associated with women's activities outside of the home (Buhl and Homewood 2000; Little and Fratkin 1994).

Although the case studies presented here have relevance for a number of literatures, we specifically address the literature on livelihood diversification among pastoral peoples. This follows and builds on research results published previously (McCabe, Leslie, and Deluca 2010). Among the major topics examined in the literature on pastoral livelihood diversification are: why people are diversifying, which segments of pastoral societies are diversifying, and whether diversification is temporary or likely to become a regular feature

¹*Shuka* is the Swahili term for the red cloth traditionally worn by Maasai (*il karesh* in the Maa language)

of pastoral societies (Brockington 2001; Homewood 2009; Lesorogol 2008; McCabe 2003; McCabe et al. 2010). As far back as the 1960's, Fredrik Barth (1961) considered which segments of the Basseri of Pakistan were diversifying. He found that wealthy herd owners invested in urban properties, and then felt they needed to be in the towns to look after their investments, while the poor became laborers for the more wealthy households. Thus, the top and bottom wealth categories settled and engaged in non-pastoral activities. Little et al. (2001) found that the wealthy and poor segments of pastoral societies in northeastern Kenya were more likely to diversify their livelihoods than those in the middle wealth category. Wealthier families are able to take advantage of economic opportunities to build wealth and reduce risk, while poor families have to adopt different livelihood activities in order to survive. Homewood et al. (2009) argue that all segments of the Maasai communities that they have worked with have diversified economies.

While the research on labor migrations and pastoralists in sub-Saharan Africa is limited, its importance should not be underestimated. The primary focus has centered on the question of why people migrate. Some scholars suggest that migrations are driven by poverty (Loftsdottir 2008), and others conclude that labor migrations are driven by notions of identity and in some cases may be likened to a rite of passage (Hampshire 2002; Tacoli 2001). Loftsdottir shows us that economics and identity are not mutually exclusive, as WoDaabe in Niger migrate to alleviate poverty and, by reinvesting the profits in their herds at home, strive to maintain their livelihoods and identities as pastoralists. Another question that receives attention in the literature is how migrations take place. There is general agreement that migrations are strongly linked to social networks and that these networks are critical for connecting migrants to housing, jobs, and support systems (De Haan et al 2002; Hampshire 2002; Hampshire and Randall 2002). Many scholars suggest that migrations are a family-level decision that aims to reduce risk for the entire family (Loftsdottir 2008). With respect to the Maasai, May and Ikayo (2007) and May and McCabe (2004) examine, among other aspects of migration, the potential impact of HIV/AIDS on both those who migrate and those remaining in the rural areas and issues of dress and identity. Smith (2012) examines the process and impact of migration of Maasai to the tanzanite mines, a topic that we address later in this paper.

In summarizing the literature on diversification Homewood identifies three dimensions of this phenomenon among pastoral peoples: "poverty strategies driven by necessity; risk-management strategies making the best of difficult unpredictably changing ecologies and economies; and strategies of wealth investment and accumulation" (2009:238). In the two case studies presented below, we focus on diversification through migration and examine all three dimensions of diversification mentioned by Homewood. However, we argue that while economic explanations are important, other issues, such as the desire of young men to be independent of their fathers and migration becoming a cultural norm, are important influences on the patterns and processes of pastoral diversification and migration.

For each case study we ask five basic questions:

1. Who is migrating?
2. Where are they going?

3. What are they doing?
4. Why did they migrate?
5. What are the consequences of migration - for themselves, their families, and the larger community they came from?

Data and Methods

The research reported here took place over the last twenty years in northern Tanzania, including more than twelve years in the Ngorongoro Conservation Area (NCA) and eight years in the Simanjiro plains. This research primarily focused on various aspects of land use and the diversification of the pastoral economy, but in both areas, labor migration became increasingly important over time. Consequently, the MacArthur Foundation funded a study specifically on migration in the NCA, and migration became part of an ongoing longitudinal study of livelihoods in Simanjiro. In addition, two dissertations (May 2002 and Smith 2012) focused on different aspects of Maasai migrations. We draw on all of this work here. Figure 1 shows the location of study communities and destinations for labor migrations.

The NCA study incorporated survey interviews, structured group interviews, and in-depth individual interviews from four different villages. In Simanjiro, we have worked principally in Emboreet, Loibor Soit, Sukuro, and Terat. We conducted surveys on livelihood practices, including migration in 2003 and 2005, and we have monitored a panel of approximately 100 families every year since 2005. We also conducted group and individual interviews about migration. This gives us a quantitative database and a qualitative understanding of the complexities surrounding the causes and consequences of migration.

NCA Case Study

Our intensive work in the NCA spanned the years 1989 – 2004, examining land-use, livelihood diversification, pastoral mobility, demography and human health, with a special focus on migration from 2002 to 2004. Since then, we have made shorter annual trips, and one of our research assistants lives in the NCA, so we have fairly good information about livelihood changes and migration up to the present.

Background

The NCA has been managed under a dual mandate of conserving the fauna and flora of the area and protecting and safeguarding the interests of the resident Maasai since its creation in 1959. Two issues have rendered the dual mandate problematic: the increase in human population and the adoption of cultivation by the pastoral Maasai. We have written about this previously (McCabe 2003; McCabe et al. 1992; McCabe et al. 2010) but provide a brief overview here, as it relates closely to the issue of livelihood diversification through migration. When the NCA was created, there were approximately 6,000 people living within its boundaries. Although the vast majority of the people living there depended exclusively on livestock for their livelihood, cultivation was allowed. Today there are almost 65,000 people living in the NCA, but there has been no significant increase in livestock numbers. As the human population grew, demand to supplement the livestock based economy through

cultivation increased, although this was not the only incentive to adopt cultivation (McCabe et al. 2010).

In 1975, the Conservation Authority banned cultivation, as they viewed it incompatible with conservation, but it was practiced illegally in remote parts of the NCA. In 1992, the ban was lifted; however, various restrictions were put in place. Maasai families could farm only one acre per married woman, use only hand tools, and they were prohibited from importing labor. Although small in scale, cultivation became an important part of Maasai household economies, as evidenced by the fact that almost all households began to cultivate when the ban was lifted. This contributed to improved nutrition and a decrease in the number of animals that were sold in order to buy grain (McCabe et al. 2003). Despite the importance of cultivation to households, in other circles cultivation was perceived to be a threat to the value of the NCA as a UNESCO World Heritage Site, and the ban was reinstated in 2012.

Migration in the NCA

While conducting surveys on livelihood practices and livestock mobility we began to notice that beginning in 1994, young men were leaving the western villages of Kakesio, Ossinoni, and Endulen. There was little or no out-migration prior to this time. These young men went primarily to the Lake Victoria region, especially to the towns of Mwanza and Shinyanga to find work. In many ways this was preferable to cultivation, as many young men viewed cultivation as unappealing and a non-Maasai way of life. By the year 2000, such migration had spread to most villages in the NCA, but the destinations also included the towns of Arusha and Karatu, with a few people going to the border areas inside Kenya. From 2000 to 2003, we interviewed 47 household heads in the NCA concerning migration and also conducted numerous group discussions. In addition, we traveled to Mwanza and Shinyanga to interview Maasai from the NCA who had migrated there.

Of the 47 household heads interviewed, 33 had family members who had migrated. The vast majority were sons in the warrior age grade (*ilmurran*), and almost all went seeking work as guards. In discussions with migrants, the most common reasons for leaving were “poverty” and “hunger.” When asked about the causes for poverty the most common answer was livestock disease, especially *ndigana* (East Coast Fever) and *ormilo* (bovine cerebral theileriosis). Our data on livestock confirmed a high mortality rate from these diseases, and thus, many families had far fewer animals than needed for subsistence. Coupled with restrictions on cultivation, this created a strong incentive to seek other means to generate income.

However, in group interviews it was clear that the need for money and establishing independence from their father were also important incentives for young migrants. Traditionally, when a boy is born he is given a cow or heifer; he may also be given another animal at certain times during his life. These animals and all their offspring will form the basis for the payment of bridewealth and a starter herd upon the death of his father. Or they will be used to start a son's herd if the father feels that it is time for his son to create an independent household. Until the death of the father, or the allocation of a father's livestock, a young man will remain a dependent within his father's household. The desire of young men to become independent of their fathers was a frequent reason given for migration.

Marriage patterns are changing, and young men of the warrior age grade are no longer restricted from getting married; however, a man needs livestock for bridewealth payment and for the new family to subsist. Working as a guard seldom makes young men enough money to start a family, but this does sometimes happen. The need for money is not restricted to young migrants but is a common response among adult men to the question: How are things different today, from when you were young? Now money is needed for clothes, cell phones, and hospital fees, as well as to buy livestock and veterinary medicine. Wage labor is one way that a young man with few livestock can pay for these new necessities. This has to a large extent replaced the practice of poor people herding livestock for wealthier herd-owners and receiving a calf at the end of the year as payment.

The Process of Migration

The process by which young men migrate was fairly uniform throughout the NCA. Men often discussed migrating with their friends and age mates but rarely with family members. Family members usually realized that a son or brother had migrated when they did not see him in the morning. When asked why migrants did not discuss this with their family, the universal response was that they were afraid they would not be allowed to leave, especially by their father. It often took weeks or even months for family members to learn where the son or brother had gone or how he was doing. Commonly, but not invariably, a prospective migrant would accompany a more experienced migrant who had returned for a brief visit home.

Success?

Some migrants returned home for good, having made little or no profit and, in a few cases, in debt. Most of the migrants we interviewed were more successful, but only to the extent that they were able to buy a few goats every three or four months. Even so, this was often enough to keep them returning and continuing to work as guards. When we asked migrants in Mwanza how long they intended to continue to work as guards the common answer was, "Until I am successful." Here, "success" meant being able to purchase some livestock, usually goats but sometimes a calf with money saved. Once this was accomplished, they could return home and be viewed as someone who had improved their economic condition. This often took a year or longer to accomplish. Some migrants however, were able to significantly improve their situation by purchasing a number of calves and sometimes cows. These migrants usually had higher paying guarding jobs at factories or with mining companies, and they tended to stay in their jobs much longer than the unsuccessful and marginally successful migrants.

Consequences

A major concern for both migrants and those in the sending areas is HIV/AIDS. The incidence of HIV/AIDS is quite high in the urban areas around Lake Victoria and even higher in some of the mining towns, such as Geita. Although HIV/AIDS was a concern among migrants, by far the most important health risk listed by them was malaria. Malaria is sometimes a risk in NCA communities, but the cooler, drier climate of these areas greatly reduces mosquito prevalence. Many Maasai migrants had never been in an area with

endemic malaria. Being outside most of the time and rarely, if ever, sleeping under mosquito nets increased their risk of exposure above that of the general population.

An additional consequence of migration is the lack of labor for herding. At home, respondents noted that the young men who migrate would ordinarily be expected to look after the family's livestock. Now, these young men are either away, or the price to hire them has soared because they want as much money as someone who has been very successful through migration. Hired herders are now demanding Tsh 60,000 to 100,000 (U.S. \$37 to \$62) per month. As mentioned earlier, traditionally a herd-owner paid for labor by providing the herder with a calf or heifer at the end of the year. As late as 1993, Paul Spencer wrote that the Maasai have a "general lack of interest in the monetary economy" (Spencer 1993:155), but this is no longer the case. Now we see older individuals, those who would not normally be herding at this stage of their life, forced into resuming herding duties.

Simanjiro Case Study

The Simanjiro plains lie to the east of Tarangire National Park (TNP) (Figure 1) and are a critical wet season dispersal area for many wildlife species that inhabit the park. Here, like in the NCA, there are controversies surrounding pastoral development and wildlife interests. The adoption of cultivation is a major concern in both areas, but the intensity and character of cultivation is radically different in Simanjiro than in the NCA. The character of migration as a form of economic diversification is also very different in Simanjiro. Unlike most migrants in the NCA who have moved temporarily into urban areas to find work as guards, most, but not all, migrants from Simanjiro have temporarily moved to the area known as Mererani, the only place in the world where the gemstone tanzanite is mined. Unlike most African migrants to mining areas (Ferguson 1999; Moodie 1994), Maasai migrants from Simanjiro do not work as miners but act as middlemen in the gem business, buying and selling tanzanite to other small-scale brokers and to larger brokers in the nearby city of Arusha. Some Maasai men in the gem business have become quite wealthy and have invested their money in tractors, vehicles, land, and livestock. They have also influenced local level politics and have emerged as leaders, both through their economic status and their experience gained by conducting business in the multi-ethnic social environment in Mererani.

History of Migration in Simanjiro

Tanzanite, a precious gemstone, was discovered in an area just south of Kilimanjaro International Airport in 1967. At that time there was very little migration or cultivation practiced by the Maasai living in Simanjiro. The Maasai economy consisted almost exclusively of traditional forms of nomadic pastoralism, although some individuals were engaged in livestock trading. Like in the NCA, people in Simanjiro began migrating to urban areas to find work, primarily as guards, around the mid 1980s, although the receiving areas were around Arusha rather than the lake area in western Tanzania. The issues confronting the migrants were similar, including low pay and dangerous conditions.

Migration to Mererani also began in the mid 1980s, and it quickly became apparent that the possibility of making money there far exceeded that from working as guards in urban areas.

Although the work at Mererani was dangerous and HIV/AIDS emerged as a significant risk to migrants, sometime in the late 1980s or early 1990s Maasai elders in Simanjiro determined that migration to Mererani was good, and that migration to urban areas to seek work as guards was to be discouraged. By the mid 1990s about a third of Maasai families living in Simanjiro had one or more family members engaged in the gemstone business. This process has continued to the present day with some fluctuation in the number of individuals migrating.

The majority of the migrants from Loibor Soit and Sukuro went to Mererani, while the majority of those migrating from Emboreet did not, and those from Terat were evenly split. In Terat, migration continued throughout the study period but migration to Mererani dropped off markedly in 2010 and stopped in 2011. The data also suggest a slight recent decline in migration to Mererani from Loibor Soit. One possible reason for this, as told to McCabe in 2012, is the reduced availability of gemstones close to the surface. Overall, Emboreet had the lowest proportion of households with members migrating. Although we do not see a direct relationship between cultivation and migration at the household level, when questioned about why migration in Emboreet was lower than in the other villages respondents said that people in Emboreet depended more on cultivation, and they did not have the networks for migrants like the families in Loibor Soit and Sukuro. Households in Sukuro were the most active participants in the Mererani migration.

Although people migrate each year, there are spikes following the opening of a new age set and the circumcision of young men, which marks their transition from boys to warriors. This was apparent with the initiation of the Korianga age set in 1998. These data are not presented here, but during that one year, members from 29 households in our study migrated to Mererani. Prior to 1998, only one or two households had members who were engaged in migration. The systematic annual data collection began in 2005. A new age set began initiating boys in 2012, and we were told that the newly circumcised young men would soon begin to migrate, but this is not reflected in our data set. In group discussions held in January 2013, we were told that many of the newly initiated boys were too young to migrate, but elders expected them to do so as they grew older.

Given the potentially important role of wealth (or lack of it) in either forcing migration or enabling people to take advantage of new opportunities, possible associations between wealth and forms and prevalence of migration are of interest. To a large degree, Maasai wealth continues to be reckoned in terms of livestock. We calculated the wealth of each household in terms of Tropical Livestock Units (TLUs) per person. TLU is a measure used to express equivalence of different livestock species, allowing comparison of herds with different species mixes – here, cattle are given a value of 0.72, and goats and sheep a value of 0.17 (Grandin 1988). Although there were some differences among the Simanjiro villages with regard to proportions of households participating in labor migration, there were no statistically significant differences among the villages in terms of the relationship between wealth and migration. Table 1 presents the aggregate figures for the villages over the course of the study. With the exception of 2007, ANOVA of these data reveal no significant differences in average wealth between households with and without at least one member engaged in labor migration, and this holds whether migration to all destinations or only to

Mererani is considered. Although it is difficult to say definitively why households who had migrants were statistically different from the households without migrants in 2007, we reexamined the data and determined that the difference was not a result of a few outliers skewing the overall results. It is also clear that the village with the most migrants was Sukuro and that many households who did have migrants in Sukuro were quite wealthy. The table also reveals that in 2012 many of those households who did not have migrants were quite wealthy. This is most likely due to a decrease in migration to Mererani. As noted above, this is especially evident in Terat but occurred in the study villages overall – before 2010 the proportion of households with migrants to Mererani reached 1/3 in some years; the proportion was half that in 2011 and 2012. By 2012 we consistently heard that it was more difficult to make money at Mererani and many wealthier households were not sending migrants to work in the gemstone trade.

There has been a real potential for migrants to Mererani to make substantial amounts of money, but success in gemstone trading entails a learning curve and requires a “stake” of funds typically provided by the migrant's father. Given this process, we were interested to see if wealthier households were more likely to invest in a migrant's activities. In previous publications McCabe (2003) has defined wealth using Potkanski's (1997) classification based on Tropical Livestock Units (TLU) per capita. They are: destitute, below 0.5; very poor, 0.5–1.25; poor, 1.25–2.50; medium, 2.5–5.0; rich, above 5. However because it takes between 4 and 5 TLU per capita to sustain a livelihood as a pastoralist (Fratkin and Roth 1990) the above 5 TLU per capita does not appear rich to us. Therefore we have divided the rich category into moderately wealthy: (5.0–10 TLU per capita); and wealthy (above 10 TLU per capita). We have used this wealth classification in previous publications (McCabe, Leslie and DeLuca 2010).

The distribution of households with Mererani migrants according to wealth category is shown in Table 2.

Table 2 shows that migrants to Mererani come from all wealth categories. The numbers of households in the poorer categories in some years is quite small, making it more difficult to discern any underlying patterns, but in most years, the wealthier families appear to be more likely to send migrants to Mererani.

Unlike in the NCA where poverty was the overwhelming reason for migration, the main reasons for migration in Simanjiro, especially to Mererani, were to look for money, to engage in business, to get money to buy livestock, food, veterinary medicine, and to help with cultivation. Poverty was rarely mentioned, which suggests that Simanjiro migrants were pulled by prospects for increasing wealth rather than being pushed due to lack of resources at home.

Traditionally, young men went to *manyattas*² to guard herds separated from the main family homesteads during the dry season. This pattern of young men moving may be being replaced by young men migrating to towns, or in the case of Simanjiro, to Mererani. This transition is

²A *manyatta* is a distant cattle camp.

illustrated in a discussion McCabe had with a father of one of the young men circumcised at the beginning of the Korianga age set. He expressed his opinion about migration to his son by saying, “You are a warrior now – go fight for your success.” By this he meant for his son to migrate.

Processes

Unlike the process described for the NCA in which individuals leave without consulting parents or elders, migration in Simanjiro, especially for those migrating to Mererani, is often a family decision. A father may identify one or two sons who he feels will be responsible and intelligent enough to learn the gemstone trading business. It may take several months to gain the proficiency to evaluate gemstones and to understand the market. A father may choose to sell one or two cows to support his sons during this learning period. The father's assumption is that profits earned by his sons will be family profits and largely controlled by him. This assumption is often not shared by those who have migrated and discord within families may result, as the sons feel that the profits earned are theirs to do with as they choose (Smith 2012). However, this is not the only way young men gather the resources necessary to migrate to Mererani. Sometimes young men pool resources (some of which may be given by their father) and migrate as a group.

Unlike the migration to work as guards, migrants to Mererani are often engaged in a corporate enterprise. It is common for anywhere from two to twelve young men to band together in what is referred to as a “mob,” with a financial officer, secretary, and principal evaluator of gemstones (Smith 2012). This structure in many ways resembles that of a village government. These individuals will pool their funds and share profits and are also provided a measure of safety by traveling and working together as a group (Smith 2012).

Success?

Defining success for those migrating is difficult, as success means different things to different people. It is certainly the case that those who migrate to Mererani to engage in the gemstone trade are generally able to accumulate more wealth than those who migrate to find work as guards. Based on our interviews, the majority of those who migrated to Mererani were at least able to buy veterinary drugs and food for their family. Others were able to buy livestock, both small stock and cattle. Through the purchase of veterinary drugs and livestock, many of those who migrated to Mererani saw their herds begin to grow. In addition, a commonly cited use for money from Mererani was to buy enough livestock to pay bridewealth. For some, this was seen as the only way marriage was possible; for others, it increased family size. Money was also used to help pay for improved seed, to hire labor, and for other agricultural expenses, but this was seen as less important than investing the money to increase livestock herds.

One of the major differences between the NCA and Simanjiro cases is the possibility of becoming moderately or very wealthy. What is truly unusual is that becoming very wealthy has been possible through working in the gemstone trade. Many individuals who migrated to Mererani were able to help their families with substantial additional income. For the newly wealthy, non-traditional material possessions mark success. These include a modern house

(usually cinderblock) with solar panels, a satellite dish, large water containers on the roof, a four wheel drive vehicle, a motorcycle, and a tractor, all contained within a fenced compound secured by a large metal gate. It is not unusual to see a traditional Maasai homestead situated within the same compound where the successful man's mother and other female relatives live. He will also have large herds of vaccinated cattle and 100 or more acres of cultivated land. These men have changed the traditional notions of wealth in the area. When we asked in group interviews, what characterizes a rich man, all of the items above were usually mentioned. Surprisingly, people also mentioned having three or four wives and about five children per wife. Traditionally, rich men would have as many wives and children as possible, and the shift in attitudes to favor smaller numbers of wives and children marks an important shift in how wealth is perceived (Smith 2012).

Consequences

The problems caused by lack of household labor due to young men migrating in Simanjiro are similar to those seen in the NCA. The major difference is that household income from remittances from gemstone traders can more than offset the lack of labor due to their absence. This is one reason fathers will encourage young men to migrate to Mererani. Successful migrants can increase a household's wealth through purchases of livestock and veterinary medicines, as previously mentioned. They can also help with expenses such as school fees, clothing, and hospital expenses.

Another important development is that a successful migrant can pay bridewealth and marry independently of his father. This occurred with men who would not have inherited enough livestock to both pay bridewealth and start an independent household, and also with men who did not wish to wait for their allocation of livestock from their father.³ Both instances were mentioned in group discussions but did not occur within our sample families, so we cannot estimate frequencies of these actions.

The use of tractors and the ability to obtain large land allocations are common among the very successful Mererani migrants, resulting in larger scale conversions of rangeland to cultivated land. This has been a major concern for conservationists, as the Simanjiro plains are a critical wet season habitat for wildlife migrating out of TNP. Although the use of tractors is common for households in Simanjiro, wealthy households who own tractors have an additional advantage in that they can cultivate when they think it is the best time to plow. This does not ensure a good harvest but removes one barrier faced by poorer households, who must rent a tractor when it is available.

One of the major consequences of going to Mererani is the increasing influence of successful migrants on local politics. During group interviews in 2010 we were told that going to Mererani had a major influence on who was elected to local leadership positions. The rationale here was that migration was not only an economic opportunity but also served as an educational experience. Those who migrated had to learn to interact with other ethnic groups, gained knowledge of larger regional and national issues, and had to learn a new

³At various times a boy will be "allocated" animals by his father. These animals stay under the father's control until the boy inherits them when his father dies or disperses these animals to his sons so that they can establish independent households.

business. However, follow-up interviews in February 2013 indicated that going to Mererani was not necessarily important. Further probing revealed that these seemingly contradictory views were both correct. The key to political influence was demonstrating that one could be successful, and if this included success outside of traditional livelihood options, so much the better.

To gain further insight into the influence of migration to Mererani on political leadership we collected data on the migration experience and age set of current elected leaders, including the *Mwenye Kiti* (Chairman) of each of the four villages and of all constituent sub-villages.

Table 3 shows a fairly even split of local leaders in February 2013 with respect to experience in Mererani (53% had migrated, 47% had not). We were told that all those who had migrated to Mererani and were elected leaders had been successful as migrants. Table 4 reveals that the influence of success in the tanzanite trade on election to political office varies by age, and the mix of leaders with and without Mererani experience shown in Table 3 is a reflection of the balance of age set membership of the leaders. The majority of elected leaders come from two age sets: Landess (initiated 1983-1996) and Makaa (1973-1985). Those in the Makaa age set have less experience with migration. It is striking that of the thirteen leaders from the Makaa age set, only two had been to Mererani; however, fifteen of the nineteen leaders from the Landess age set had migrated to Mererani. One explanation for this is that members of the Makaa age set have demonstrated their leadership capabilities in more traditional ways and for a longer period of time. In contrast, the Landess men were able to demonstrate their leadership potential by success in gemstone trading—success often attained more quickly than is likely by traditional means. Another explanation is that it takes money to become an elected leader and the older individuals in leadership positions have had more time to accumulate wealth in traditional ways while those in the younger age set accumulated wealth more quickly in non-traditional ways. These explanations are complementary and suggest ways that younger individuals are challenging older individuals for leadership positions in an age-based society. Losorogol 2008 documented similar challenges made by youth who had non-traditional experiences among the Samburu of Kenya. We suspect that in a few years, men in the Korianga age set (1998-2012) that have experience with migration will mount a similar challenge to those in power.

Discussion

We begin our discussion by addressing the five questions outlined at the end of the introduction. We also address the three dimensions of pastoral diversification identified by Homewood, and we discuss some of the complexities surrounding the notion of “poverty.”

The majority of migrants in this study were unmarried young men, but in Simanjiro some older household heads did migrate to Mererani. Both the process of migration and the activities of migrants differ greatly between the two case studies. Guarding takes little skill and is facilitated by the reputation of the Maasai as warriors. Working as a middleman in the gemstone business takes both skill and learning. It also requires investments of money and time to learn without immediate payoffs. Both types of migration entail risks, but income earned in the gemstone business can greatly outweigh the risks, while this is far less likely

when working as a guard in an urban area. The consequences of migration in the NCA case are primarily felt at the household level: when migrants are successful, households gain supplemental income for buying livestock and veterinary drugs and for other purposes; whether or not the migrant is successful, households must cope with reduced availability of labor. In Simanjiro there are also household level costs, but the ability to buy tractors and engage in large-scale cultivation, as well as shifts in power relations, have implications at the village and ecosystem levels.

The motivations for migrating also differ between the two cases. In the NCA, migration is primarily a response to limited resources, whereas in Simanjiro it is primarily seen as a way to accumulate wealth. However, both cases share some underlying motivations, including young men's desires to become independent of their father and to start their own households. One possible reason for this is that fathers may not be allocating livestock to their sons as early as they did in the past. Focus group discussions in 2012 reflected age-related perceptions -- not surprisingly, younger men generally agreed with this idea while older men were divided. Discussing this with older men alone, those who agreed that the dispersal of allocated livestock was taking place later than in the past voiced the opinion that young men are not as responsible with livestock as young men were in the past. Some older men said that younger men wanted to have cattle but did not want to herd them or really care for them.

Another commonality between the two cases is that migration is becoming more accepted and expected among newly initiated young men. This was certainly the case for the newly initiated (1998) Korianga age set in Simanjiro. The fact that migration of young men in the NCA is so prevalent that it is difficult to hire herders suggests that it is true there as well. If those young men being initiated now and in the next few years migrate in great numbers, it will lend support to the notion that migration of young men to try to accumulate resources outside of the traditional livestock sector is becoming a cultural norm.

Given that the tanzanite trade can be so lucrative while success of NCA migrants to urban areas is generally much less assured, the question arises of why NCA migrants do not also go to Mererani. The answer surely lies in the great importance of social networks linked to the migration destinations, networks that are doubly important in Mererani, where a learning period and training by experienced gemstone traders is essential. Historical contingency here means that young men in the NCA simply do not have those contacts.

The term "poverty may have multiple meanings in light of the discussion above. In most of the pastoral literature, poverty means not having enough livestock to sustain a family. Anderson and Broche-Due, however, point out the poverty means different things in different pastoral societies, but all are based on "scarcities". The common Maasai word for poverty, *esumash*, translates directly as "hunger." In group discussions with migrants from the NCA, we frequently heard this as the motivation for migration, but in some instances those young men who mentioned poverty were from families who are not considered poor. Further questioning revealed that *esumash* can mean either short-term or long-term hunger and for these young men, it meant that they did not personally have any livestock of their own, even though their family was not poor. They may have livestock allocated to them, but

not dispersed by their father, so they considered themselves poor. This articulates with the motivation to migrate to establish their own households and with the notion that fathers are delaying dispersing livestock to their young adult sons. Because poverty is an important concept, both from an academic and a development perspective, this suggests that determining who is poor and who is not based on a calculation of a family's TLUs and other assets may be quite different from the way young migrants think about poverty with respect to themselves.

As previously mentioned, we see all three dimensions of livelihood diversification outlined by Homewood in our case studies. Migration driven by necessity is clear in the NCA, and migration as a strategy of wealth investment and accumulation is clear in Simanjiro. Making the best of unpredictable ecological and economic conditions can be seen in both places. In the NCA, the banning of cultivation has made life difficult for many families, and access to alternative sources of income is increasingly important. In Simanjiro, conservation policy has created a sense of uncertainty with respect to land tenure (Baird et al. 2009), and the variability of rainfall patterns has made cultivation challenging. Diversification can mitigate the consequences of these and other sources of uncertainty. More generally, the case studies presented here articulate well with the literature on labor migration among African pastoralists, especially the emphasis on poverty alleviation (Loftsdottir 2008), and migration becoming a rite of passage (Hamshire 2002). Our results show how migration has become an important aspect of livelihood diversification among a single pastoral people, but that the motivations, processes, and outcomes can be dramatically different even within a single ethnic group. This study also demonstrates that the implications of the migration experience may extend beyond the household – to political leadership and ecological transformations.

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References Cited

- Anderson, D.; Brosh-Due. *The Poor Are Not Us*. Oxford: James Currey; 1999.
- Baird TD, Leslie P, McCabe JT. The Effect of Wildlife Conservation on Local Perceptions of Risk and Behavioral Response. *Human Ecology*. 2009; 37(4):463–474.
- Barth, Fredrik. *Nomads of South Persia: The Basseri Tribe of the Khamseh Confederacy*. Boston: Little, Brown and Company; 1961.
- Brockington, Dan. Women's Income and the Livelihood Strategies of Dispossessed Pastoralists Near the Mkomazi Game Reserve, Tanzania. *Human Ecology*. 2001; 29(3):307–338.
- Buhl, Solveig; Homewood, Katherine. Milk Selling Among Fulani Women in Northern Burkina Faso. In: Hodgson, Dorothy L., editor. *Rethinking Pastoralism in Africa: Gender, Culture and the Myth of the Patriarchal Pastoralist*. Oxford: James Currey; 2000. p. 207–226.
- De Hann, Arjan; Brock, Karen; Coulibaly, Ngolo. Migrations, Livelihood and Institutions, Contrasting Patters of Migration in Mali. *Journal of Deelopment Studies*. 2002; 38(5):37–58.
- Ensminger, Jean. *Making a Market: The Institutional Transformation of an African Society*. Cambridge: Cambridge University Press; 1992.

- Ferguson, James. *Expectations of Modernity: Myths and Meanings of Urban Life on the Zambian Copperbelt*. Berkeley: University of California Press; 1999.
- Fratkin, E.; Roth, EA. *As Pastoralists Settle: Social, Health, and Economic Consequences of Pastoral Sedentarization in Marsabit District, Kenya*. New York: Kluwer Academic Publishers; 2005.
- Grandin B. Wealth and Pastoral Dairy Production: A Case Study of Maasailand. *Human Ecology*. 1998; #16:1–21.
- Hampshire K, Randall S. Pastoralists, Agro-pastoralists and Migrants: Interactions Between Fertility and Mobility in Northern Burkina Faso. *Population Studies*. 1999; 54:247–261. [PubMed: 11640212]
- Hampshire, Kate. Fulani on the Move: Seasonal Economic Migration in the Sahel as a Social Process. *Journal of Development Studies*. 2002; 38(5):15–36.
- Homewood, Katherine. *Ecology of African Pastoralist Societies*. Oxford: James Currey; 2008.
- Homewood, Katherine; Kristjanson, Patti; Trench, Pippa Chenevix, editors. *Staying Maasai? Livelihoods, Conservation and Development in East African Rangelands*. New York: Springer; 2009.
- Lesorogol, Carolyn K. *Contesting the Commons: Privatizing Pastoral Lands in Kenya*. Ann Arbor: The University of Michigan Press; 2008.
- Little, Peter D. Maidens and Milk Markets: The Sociology of Dairy Marketing in Southern Somalia. In: Fratkin, E.; Galvin, KA.; Roth, EA., editors. *African Pastoralists Systems: An Integrated Approach*. Boulder: Lynne Rienner Publishers; 1994. p. 165-184.
- Little, Peter D.; Smith, Kevin; Barbara, A.; Cellarius, D.; Coppock, Layne; Barrett, Christopher B. Avoiding Disaster: Diversification and Risk Management Among East African Herders. *Development and Change*. 2001; 32:401–433.
- Loftsdottir, Kristin. *The Bush Is Sweet: Identity, Power and Development among WoDaaBe Fulani in Niger*. Uppsala: Nordiska Afrikainstitutet; 2008.
- May, Ann. PhD dissertation. Anthropology Department, University of Colorado; Boulder: 2002. *Unexpected Migrations: Urban Labor Migration of Rural Youth and Maasai Pastoralists in Tanzania*.
- May, Ann; McCabe, J Terrence. City Work in a Time of AIDS: Maasai Labor Migration in Tanzania. *Africa Today*. 2004; 51(2):3–32.
- May, Ann; Ikayo, Francis Ndipapa Ole. Wearing *Illkarash*: Narratives of Image, Identity and Change among Maasai Labour Migrants in Tanzania. *Development and Change*. 2007; 38(2):275–298.
- McCabe, J Terrence. Risk and Uncertainty Among the Maasai of the Ngorongoro Conservation Area in Tanzania: A Case Study in Economic Change. *Nomadic Peoples*. 1997; 1(1):54–65.
- McCabe, J Terrence. Sustainability and Livelihood Diversification among the Maasai of Northern Tanzania. *Human Organization*. 2003; 62(2):100–111.
- McCabe JT, Leslie P, DeLuca L. Adopting Cultivation to Remain Pastoralists: The Diversification of Pastoral Livelihoods in Northern Tanzania. *Human Ecology*. 2010; 38(3):321–334. [PubMed: 21915157]
- McCabe, J Terrence; Perkin, Scott; Schofield, Claire. Can Conservation and Development Be Coupled among Pastoral People? An Examination of the Maasai of the Ngorongoro Conservation Area, Tanzania. *Human Organization*. 1992; 51(4):353–366.
- McPeak, John; Little, Peter, editors. *Pastoral Livestock Marketing in Eastern and Southern Africa: Research and Policy Challenges*. Warwickshire, U.K.: Intermediate Technology Publications; 2006.
- Moodie, Dunbar T. *Going for Gold: Men, Mines, and Migration*. Berkeley: University of California Press; 1994.
- O'Malley, Elizabeth M. PhD dissertation. Anthropology Department, University of Colorado; Boulder: 2003. *Cattle and Cultivation: Changing Land Use and Labor Patterns in Pastoral Maasai Livelihoods, Loliondo Division, Ngorongoro District, Tanzania*.
- Potkanski, T. *Pastoral Economy, Property Rights and Traditional Mutual Assistance Mechanisms among the Ngorongoro and Salei Maasai of Tanzania*. London: International Institute for Environment and Development (IIED); 1997. Pastoral Land Tenure Series, Monograph 2

- Sachedina, Hassan; Trench, Pippa Chenevix. Cattle and Crops, Tourism and Tanzanite: Poverty, Land-Use Change and Conservation in Simanjiro District, Tanzania. In: Homewood, K.; Kristjanson, Patti; Trench, Pippa Chenevix, editors. *Staying Maasai?: Livelihoods, Conservation and Development in East African Rangelands*. New York: Springer; 2009. p. 263-298.
- Smith, Nicole M. PhD dissertation. Anthropology Department, University of Colorado; Boulder: 2012. *Maasai and the Tanzanite Trade: New Facets of Livelihood Diversification in Northern Tanzania*.
- Spear, Thomas; Waller, Richard, editors. *Being Maasai: Ethnicity and Identity in East Africa*. London: James Currey; 1993.
- Tacoli, Cecilia. Urbanization and Migration in Sub-Saharan Africa: Changing patterns and trends. In: De Bruijn, Marjam; van Dijk, Rijk; Foken, Dijk, editors. *Mobile Africa: Changing patterns of movement in Africa and beyond*. Vol. 141. Leiden: Brill; 2001. p. 152

Figure 1. Study Communities and Migration Destinations

Figure 2. Households with migrants to Mererani, to other locations and without migrants by year and village

Table 1
Comparison of mean per capita wealth¹ of households with members migrating anywhere, to Mererani, or without migrants, by year (all Simanjiro villages combined)

	2006	2007	2008	2009	2010	2011	2012
	mean (sd) N	mean (sd) N	mean (sd) N	mean (sd) N	mean (sd) N	mean (sd) N	mean (sd) N
HHs with migrants anywhere ²	3.94 (4.00) N=42	**9.01 (12.95) N=36	6.59 (9.15) N=43	5.85 (6.29) N=35	4.83 (5.62) N=43	10.14 (15.72) N=34	9.56 (12.72) N=36
HHs with migrants to Mererani	4.20 (4.36) N=31	*9.40 (13.58) N=26	6.81 (9.12) N=28	5.85 (6.28) N=35	5.26 (3.87) N=21	7.75 (6.23) N=17	11.79 (10.78) N=17
HHs without migrant	3.72 (3.87) N=49	4.11 (4.70) N=72	4.52 (5.06) N=66	4.33 (7.31) N=68	4.38 (4.10) N=73	7.59 (7.15) N=72	14.91 (34.70) N=73

¹ Wealth expressed as per capita TLU's (see text).

² Includes migrants to Mererani.

*** p value = 0.0050

* p value= 0.0127

Table 2
Proportions of households with migrants to Mererani by wealth category¹ (all Simanjiro villages combined)

Wealth category ¹	2006			2007			2008			2009			2010			2011			2012		
	M ²	NC ³	%	M	NC	%	M	NC	%	M	NC	%	M	NC	%	M	NC	%	M	NC	%
Destitute	1	7	14%	2	10	20%	2	8	25%	3	7	43%	2	4	50%	0	1	0%	0	0	--
Very poor	4	20	25%	0	8	0%	1	11	9%	1	13	8%	0	14	0%	1	7	14%	0	4	0%
Poor	10	16	63%	5	24	21%	5	23	22%	8	27	30%	4	35	11%	2	20	10%	1	14	7%
Medium	8	28	29%	6	30	20%	10	35	29%	9	26	35%	7	31	23%	5	24	21%	6	35	17%
Moderately wealthy	4	12	33%	8	23	35%	6	18	33%	9	19	47%	4	19	21%	4	27	15%	4	23	17%
Very wealthy	4	8	50%	5	14	36%	4	13	31%	5	11	45%	4	13	31%	5	27	19%	6	33	18%
Total	31	91	35%	26	109	24%	28	109	26%	35	103	34%	21	116	18%	17	106	16%	17	109	16%

¹Wealth categories based on per capita TLUs (see text).

²M = number of households with migrants to Mererani.

³NC = number of households in wealth category.

Table 3
Number of village political leaders with and without migration experience in Mererani, 2013

Village	Migrated	Did Not Migrate
Loibor Soit	7	3
Emboreet	4	4
Sukuro	3	4
Terat	5	6
Total	19	17
	53%	47%

Table 4
Migration experience in Mererani of political leaders by age set, 2013

Age Set	Initiation years	Migrated	Did Not Migrate
Korianga	1998-2012	2	0
Landess	1983-1996	15	4
Makaa	1973-1985	2	11
Other	pre-1973	0	2