An analysis of the extent of migration and its impacts on the sending household in a rural area in South Africa

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Durban
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As the candidate's supervisor I have/have not approved this thesis/dissertation for submission.

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## DECLARATION

This dissertation represents original work by the author and has not otherwise been submitted in any form to any tertiary institution. Where use has been made of the work of others it is duly acknowledged in the text.

The research of this dissertation was carried out in the School of Built Environment and Development Studies, University of KwaZulu-Natal, Howard College Campus, Durban, from February 2013 to June 2014 under the supervision of Dr Daniela Casale.

## Signature

## DEDICATION

To my blessed mother Ennia Dzomba


#### Abstract

The aim of this study is to analyse the extent and nature of labour migration and its impacts on the sending households in a rural area in South Africa, namely Agincourt, Mpumalanga. This is achieved through a quantitative analysis of a cross-sectional dataset from the 2007 temporary migration module of the Agincourt Health and Demographic Surveillance System. Results indicate that most temporary migration in this area is related to the need to work elsewhere, i.e. labour migration, and that labour migrants are more likely to be men rather than women. Consistent with expectations, temporary labour migrants appear to maintain close ties with sending households, evidenced in three key features of migrants` behaviour, namely: method of communication with the household; pattern of return; and propensity to remit cash and goods to the household of origin. A number of the factors investigated here differ by the gender of the migrant, and whether children were left behind in the household by the migrant. The effect of labour migration on additional household composition changes, such as the co-migration of children, appears negligible in this sample, contrary to expectations. Interestingly, the study finds that a large percentage of migrants leave children behind in the sending households, and that more female migrants compared to male migrants leave behind at least one child in the household. These children tend to be cared for within the household by another female relative. These findings underscore the need for more inter-disciplinary and indepth research on labour migration, yielding more refined results particularly on the impact of migration on the health and well-being of children left in the sending household.


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## ACRONYMS

| APHU | Agincourt Population and Health Unit |
| :--- | :--- |
| AHDSS | Agincourt Health and Demographic Surveillance System <br> AIDS |
| Acquired Immunodeficiency Syndrome |  |
| HIV | Human Immunodeficiency Virus |
| IOM | International Organisation for Migration |
| MRC | Medical Research Council |
| CAPS | Cape Area Panel Study |
| DS | Demographic Surveillance |
| OHS | October Household Survey |
| LFS | Labour Force Survey |
| NELM | New Economics of Labour Migration |
| SASCO | South African Standards Classification of Occupations |

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## CHAPTER ONE: INTRODUCTION

The introduction undertakes to satisfy three key objectives: to locate this study by providing some brief background on the topic; to motivate for the research by providing a rationale for this particular study; and to outline the main objectives of the study and the associated core questions to be answered. Establishing a background to this study is achieved through a brief summary of findings on temporary labour migration from prior empirical and secondary studies. This includes research detailing labour migration trends in South Africa and the extent to which explanations thereof are attributable to apartheid and post-colonial policies, as well as work on the consequences of migration for the sending households. The core research question - What is the scope of labour migration and its associated impacts on sending households? - is situated within this discussion of past studies. After stating the broad problem to be investigated, the specific objectives are defined and the associated questions are outlined. The section below describes how the main contribution of this study is analysing a module on migration in the Agincourt Health and Demographic Surveillance Site (AHDSS) from 2007 that has not, to my knowledge, been analysed before. Most importantly, this module on migration includes questions that allow the researcher to assess some of the impacts of migration on the sending households that have not been included in other surveys. Presently, there is a great dearth of data on the consequences of migration on sending households, and this study seeks to help fill that gap. In order to generate a regional picture of the health and demographic experiences of a population of South Africans, the Agincourt HDSS survey samples about 70000 individuals residing in Agincourt, Mpumalanga in South Africa, and collects detailed information on a wide variety of household and individual factors. In addition to increasing knowledge in labour migration, empirical findings from this study have the potential to inform social policy in this and other areas of analysis in South Africa and parts of Sub-Saharan Africa that are similar to the study site.

### 1.1 Background and rationale for the study

Temporary labour migration has been a common feature in South Africa since before the beginning of the 20th century. Prior to 1994, it was largely made possible by a network of coercive legal arrangements restricting permanent migration and urbanisation among

Africans. This set into motion a system of active circular migration, where migrants established second homes in their places of work yet often retained membership in their household of origin by preserving certain linkages (Williams et al., 2011; Hartford, 2012). Despite the abolition of restrictive policies on the movement and settlement of people after 1994, patterns of labour mobility remained. Posel and Casale (2006) for instance note an increase by 400000 in the number of households reporting temporary migrants between 1993 and 1999. Collinson et al., (2007) find similar evidence for the years that followed: both men and women between the ages of 15-24 were $20 \%$ more likely to migrate between 1999 and 2003 than those over 25 years (18\%).

Substantial circular migration in South Africa results in remittances being a significant source of income for the sending household (Kok et al., 2003). The increased importance of remittance reflects the extent of an apartheid-orchestrated cash-based rural economy that guaranteed continuity of labour migration and the fragmentation of households, i.e. divided into rural and urban components (Bundy, 1979; Beinert, 1982). Nonetheless, migration permits individuals to maximize their return to human capital and ensures participation of a sizeable portion of the rural population in a diverse urban economy without it being completely detached from its rural base (Bigler and Kraler, 2005). The nature of connections and ties that migrants share with their households are not necessarily bound to monetary terms but are also revealed through various patterns of communication and frequency of return to the sending household (Amin, 1995).

In spite of the continued relevance of labour migration in the South African context, there are few local studies focusing on changes occurring in households from which migrants originate (some exceptions are Posel, 2004; Posel and Casale 2006; Collinson, 2006). Some studies in Nepal however, exclusively interested in highlighting the impact of gendered migration, suggest that women expand their roles and play an integral part in household decision-making during the absence of a male household head (Maharjan et al., 2012). Other studies suggest that the sustained absence of female labour migrants results in children experiencing more mobile, transient and often self-sufficient lives (Hatfield, 2010).

In South Africa, a noticeable gap in the demographic literature exists particularly in relation to the determinants of child mobility and how this is related to the migration of adult household members, male and female (Madhavan et al., 2011). One of the main reasons why little work exists analysing the consequences of labour migration on the household, and particularly children living in that household, is that good data are not easily available. Questions interrogating the impact migration has on the sending households and their members have not been included in national household surveys. Ideally, researchers would use longitudinal data to analyse the changes to the household over time as a result of migration, and this kind of data has not been readily available in the past. Even with longitudinal data, methodological issues such as determining causality in relationship complicate the ability to attribute certain changes in the household to episodes of migration. The advantage of the migration module in the 2007 AHDSS, on which this study is based, is that members of the household were asked directly about the impact migration had on key areas of the household.

### 1.2 Statement of the problem

This research aims to enhance knowledge in the study of migration in South Africa and its impact on the migrant-sending households in particular. The main thrust of the work will be ascertaining the impact of the movement of a household member on aspects of the household, such as expenditure by the household, household composition, and the mobility of its members (particularly children). As mentioned above, research in this area is limited because data and methodological constraints have hindered research on the impact of migration on the household, particularly the paucity of longitudinal data. However, data from the Agincourt Health and Demographic Surveillance System (AHDSS) 2007 present a unique opportunity to explore this topic as questions on the nature and consequences of migration were asked directly of household members. The information makes it possible for one to establish, for instance, where people migrate to; how recently they migrated; changing household structure; movement of members, in particular children; remittances sent and their uses in the household; and visitation and communication between the migrant and the household. With this information I will be able to fulfil my research objectives outlined below.

### 1.3 Aims and objectives

The main aim of the study is to examine the impact of labour migration on the sending household; specifically the household"s use of remittances, the composition of households, and the movement of its members (particularly children). As such I seek:

1) To produce a demographic profile of labour migrants in the study area and determine the extent of labour migration in comparison to other forms of migration to frame the study;
2) To examine the continued relationship of the migrant with the sending household in terms of remittances sent, visitations and other forms of communication, and most importantly;
3) To determine the consequences of labour migration in terms of a) household spending patterns, and b) household composition and movement of its members, particularly children; and lastly,
4) To explore some of the attributes of the sample of migrant parents, in particular whether their behaviour is different if they are a mother or a father.

Throughout the analysis, results will be disaggregated by the gender of the migrant, given that there are likely to be key differences depending on whether the person leaving the household is a man or a woman.

### 1.4 Key research questions

In line with the objectives stated above, the study aims to address the following set of research questions:

1) What proportion of migration in the area is related to the need to search for work elsewhere? What is the demographic profile of labour migrants in the area?
2) What is the nature of the connections/links that exist between migrants and remaining household members (in terms of remittances, visitation, and communication), and do these differ by the gender of the migrant?
3) What impact do remittance flows have on migrant-sending households in terms of spending? To what extent does migration impact the composition of the household and the movement of household members, and in particular children? Is there a difference depending on whether the migrant is male or female? For example, are children more likely to move if the migrant is female, and if not, who looks after the children left behind?
4) What are some of the demographic attributes of the sample of migrant parents? Are there any key differences if the migrant is a mother or a father?

### 1.5 Structure of dissertation

Chapter 2 presents the review of relevant aspects of the existing literature on migration, and empirical findings on the impact migration has on sending-households and their members. Chapter 3 discusses the research methodology and gives a detailed description of: the study setting; the study design; processes involved in data collection; the unit and level of analysis for this study; various data handling techniques employed in cleaning, storing and analysing the data; the methodological considerations and limitations; and the ethical issues pertinent to this study. Chapter 4 presents and discusses findings from the analysis of data collected through the Agincourt Health and Population Unit (AHPU) Health and Demographic Information System. Chapter 5 analyses the findings in terms of the theoretical and empirical literature reviewed in Chapter 2. Chapter 6 provides a summary of the thesis and directions for subsequent research.

## CHAPTER TWO: LITERATURE REVIEW

In this chapter, I begin by outlining the demographic circumstances linked with migration probabilities nationally, regionally and internationally. I then review past work discussing the effects of migration on familial contacts between temporarily absent migrants and non-migrating individuals in sending households. Finally, I review work on the effects of migration on household consumption, spending, inter-household mobility (including the impact on family composition), and children left behind.

### 2.1 An overview of internal migration

## Temporary labour migration in South Africa

Given the lack of national data on migration in South Africa prior to the 1990s, there was a concomitant dearth of literature on the trends of migratory movements. Prior to 1994, research comprised mostly of localised studies or analysis of individual segments of the population, thus preventing a comprehensive understanding of migration both nationally and provincially (Kok et al., 2003). Nevertheless, this information vacuum was occupied by researchers devoting much time to studies analysing in particular, causes underlying internal migration, processes involved, and to some extent their consequences.

Temporary or circular labour migration is a particular form of migration, which emerged to be an established feature in South Africa. It involves the movement of household members for more than six months of the year to work or to seek work (but whose return is assumed by the household respondent) (Williams et al., 2011). The focus of temporary labour migration studies in South Africa largely have been on the contribution it has made to general migration from rural to urban centres. Collinson et al. (2007) analysed the nature and extent of the urban transition in South Africa in the post-apartheid period using two data sets, namely, the South African national census of 2001 and the Agincourt Health and Demographic Surveillance System (AHDSS). The comparison between national and sub-district data highlighted that metropolitan areas saw marked net migration gains and population growth as result of permanent and temporary migration. Other prominent findings were a continuation of temporary and circular migration, and return migration from urban to rural areas after the abolishment of apartheid. Their main conclusion indicates that, through remittances, migrant workers in metropolitan areas
improve the economic outcomes in rural areas in Limpopo, Eastern Cape, KwaZuluNatal and Mpumalanga where most migrants originate from. In an earlier study, Posel and Casale (2006) noted the persistence of high circular labour migration especially in the 1950s when policies restricting labour mobility had been abolished. Their study finds no evidence nationally to suggest that circular migration subsided during the 1990s as might have been expected. Thus in South Africa, rural to urban migration especially to metropolitan areas and mines is still prevalent.

In South Africa generally, notable gains were registered in internal migration between 1993 and 1999 as noted in household survey estimates (Posel and Casale, 2006). In that period, households of all races reporting at least one labour migrant as a household member increased; however, Africans are particularly over-represented in these migratory movements. There is evidence suggesting that circular migration is a common practice in numerous black African rural populations (Kok and Collinson, 2006). Kok and Collinson (2006) note that the largest population migration stream by race is the black population constituting 3754379 individuals ever becoming migrants over the period 1996-2001. Another recent finding is that the extent of migration in African households appears to be more common in three-generation households in which persons of pensionable age live, suggesting that in post-apartheid South Africa the pension itself may help facilitate migration among working age adults or that the elderly provide childcare facilities (Posel et al., 2006). In addition to this, Collinson et al.(2007) in a study on migration and settlement change in rural South Africa, show that for every permanent move, there are three temporary migrants in the population of Agincourt (the sub-district and demographic surveillance site under which his study was set).

## Theories and evidence on the reasons for circular migration

Theoretical perspectives employed to explain and predict the extent of and outcomes associated with migration in the developing world are largely premised on the notion that mobility is a consequence of economic persuasion. Essentially, the central thesis advanced holds that migration offers real opportunities for socio-economic development, not only to participating individuals but also to their respective households. The „new economics of labour migration dominates the theoretical literature, and analyses the
extent of the household"s influence in determining migrant behaviour. The theory posits that migration is a „strategic" and collective decision made and supported by households and not necessarily a manifestation of an individual's conviction (Taylor, 1999; Kok et al., 2003).

Ngwane (2003: 689) on the other hand, and deriving from the above-mentioned underpinnings, accounts for development rural to urban migration in the South African context. He argues that the episode of absence of men fending for households of origin predating apartheid (and even the colonial era), is evidence of a collectively created need for "alternative means of being local". Other earlier studies had already sought to determine the importance of households of origin in predicting migration probabilities. For instance, Kritz and Zlotnik (1992), using data for the African-European migration system (i.e. consisting of DR Congo, Ghana and Senegal) noted a significant statistical relationship between migration and socio-demographic characteristics, thus firmly proposing that contextual variables should be integrated into the analyses of the causes and consequences of migration.

Other literature focused more on classical and household economic motivations of labour migration. The main thrust of these studies was the examination of the extent to which rural to urban migration has in the long term accelerated the growth of modern industrial and other multi-faceted urban sectors (McCatty, 2004). Underlying this is the thesis advanced by Todaro (1970), affirming that the urban households have increased opportunities for receiving additional income in comparison to rural ones thereby attracting movement. The theory posits that the labour forces (both actual and prospective) compare expected income at a given time in the urban sector with the prevailing mean rural income, and migrate if the former exceeds the latter. Todaro and Harris (1970; 139), in a more refined variant of the theory, sought to account for people`s mobility and to interpret crucial factors influencing their decision-making, so as to ascertain the consequences of internal migration for rural socio-economic development. In addition, they postulated that the typical migrant ,retains "his" links" with the rural area and the income he earns is accounted to the rural sector.

According to Skeldon (2002), these assumptions detailed above are more likely to be applicable in African regions where migrant connections to rural areas are more pronounced than elsewhere. Agesa and Kim (2001) find evidence for this in their study exploring the determinants of split and family migration in Kenya. In addition, the results suggest that in household with a large proportion of dependents the likelihood of split migration may increase because the persons responsible for the migration decision increases. In this case, there is a firm collective resolution for maximising the potential of the household.

## Migrants and their demographic characteristics

Migration is influenced by a combination of demographic individual and household attributes, as shown by Todaro, 1980; Fawcett and De Jong 1981; Kritz and Zlotnik, 1992; Tunon, 2006; and Collinson et al., 2007. Prominent among these are age, sex, marital status and other social and occupational characteristics, such as education and labour skills. Instead of using a characteristics approach, Gobillon and Pailhe (2009) track the landmarks of the human lifecycle to determine propensity for migration, i.e. demographic events shaping individual lives and migration influencing behaviour. For example, leaving home and becoming financially independent, family formation of women and men, having and raising children, and being divorced, separated or widowed are all events that can influence one's selection for migration (Gobillon and Pailhe, 2009). According to Rwelamira (2008), there are two main categories of reasons for migration selection, namely:
a) External influences in the migrant origin or destination areas (push and pull factors); and
b) Differential reactions of people to the above-mentioned influences.

In terms of external influences, in a more recent analysis of the push and pull theory as adapted in Lee (1966), Rwelamira (2008) suggests that migrants consider both the benefits of moving to a destination (pull factors) and the disincentive of staying at the origin area (push factors) and vice versa. Push factors at the area of origin include:
a) Population growth;
b) Lack of access to farm input markets;
c) Scarcity of arable land;
d) Diminishing fertility and productivity of the land;
e) Dwindling natural resource base;
f) An increasingly cash based rural economy;
g) Environmental hazards and other transient events and shocks;
h) Absence of economic opportunities.

Pull factors at the destination include:
a) Perceived higher return on labour in urban and rural non-agricultural sectors;
b) Perceived higher return in investments in rural non-agricultural sectors;
c) Employment opportunities and the associated socio-economic benefits urban centres offer;
d) The ambiance of the city life especially among the youth (the "bright lights" effect).

The differential reaction of individuals to push and pull factors largely relies on attributes such as gender, level of education attained, life cycle stage and experience with previous migrations. Ultimately, the manner in which these variables function will determine the selection and pattern of migration. While it is not possible to produce a single profile which fits all temporary migrants around the world, there are some common characteristics that can be drawn from the available literature outlined below.

Age
The largest share of the rural migrant labour force is made up of the youth. The size of their contribution is revealed in the case of China where over $70 \%$ of migrants are between the ages of 15 and 29 years (Tuñón, 2006). Rwelamira and Kistern (2003) find local evidence supporting this pattern through a case study of a rural area in South Africa. For the majority of migrants $(87.4 \%)$, the migration debut occurred between the ages of 15 and 30 years, with a mean of 23.8 years, and a mode of 20 years.

## Marital status

Marital status is a significant predictor for parenthood, yet it does not significantly reduce the propensity to migrate. Antman (2012) notes that in 2011, 50 million children were „left behind "e with relatives in the rural areas while parents migrated to urban ones in India and China alone. Whilst family migration is not common, spouse or child co-migration is on the increase because amenities demanded by both children and adults such as education and housing have wider coverage in migrant destinations (Madhavan et al., 2011).

## Gender

Several studies on rural to urban migration in developing countries show that migrants are not a random sample of the population from various sending regions (Skeldon, 2002; Deshingkar, 2004; Stark, 2006; and Collinson et al. 2009). Males, for example, are far more likely to be migrants than females. In South Africa, this is related to the forced removals of African people from commercial farms to „homelandse" (i.e. areas designated to Africans during the apartheid system of governance) from the 1960s until the late 1980s and an enduring migrant labour system (Department of Social Development, 1998). Traditionally, the labour migration system encouraged able-bodied persons, primarily males, from the economically depressed provinces and rural areas to move to the industrial and urban centres for improving their livelihoods (Posel, 2001).

However, with the growing acceptance of women in the culturally male dominated domain of the urban industrial labour force, the demographic composition of temporary rural migrant labour is increasingly female. In China in 2003, for example, of the 106 million people reported to be outside of their native community, $51 \%$ were male and $49 \%$ were female, signalling a substantial increase from the often-cited one third (State Statistical China, 2004). In South Africa, between 1993 and 1999, shifts in the gender composition of labour migrants were arguably related to the increasing involvement of women in various industrial sectors (Dobson, 2000; Collinson and Wittenberg, 2001; Posel and Casale, 2002).

Other characteristics of the migration episode also differ by gender, notably the employment status, age and length. In South Africa, in the Agincourt area, for instance, Collinson et al. (2006) find that female temporary migrants had a higher propensity to work in the informal sector ( $45 \%$ compared to $37 \%$ of male labour migrants). In a study based on several locations of rural Sub-Saharan Africa, Collinson et al. (2009) found that more than half of the males of the population were actively involved in migration and endured a longer migration career than their female counterparts.

Males are rapidly absorbed into labour migration at the turn to adulthood and are likely to remain active migrants until around age 74 years leading to male over-representation in the migration market. Deshingkar (2004), analysing panel data of several Asian countries, finds that late teenage and young adult men (i.e. aged 15 to 24 ) entering the labour market were $20 \%$ more likely to migrate than their female counterparts who exhibited a weaker propensity to migrate. Deshingkar (2004) argues that many of these developing countries are largely conservative (culturally) hence early male labour participation represents a rite of passage to manhood, and this may explain the missing women of the same age in labour related migration.

## Education and skills

In migrant demographic profiles, educational attainment and occupational status are positively related to migration probabilities. Makiwane (2010) reports that most migrants hold significantly higher education results than non-migrating individuals in households. Another trend features youth who tend to vacate villages for urban centres in order to access better higher and tertiary education facilities (Kok et al., 2003). In spite of this, the large majority of migrants reporting positive labour outcomes in destination areas are less likely to have formal training for a particular trade compared to the total sample of migrants hence they occupy low-skilled/paying jobs (Rasool, 2006).

### 2.2 The nature and intensity of ties between migrants and household of origin

## Migrant remittances

Literature from economics suggests that the majority of migratory movements taking place are subject to the prevailing socio-economic circumstances in households of origin; hence the need to improve these circumstances represents a common end for these
migrations. Notwithstanding this, most of these studies are descriptive analyses of the relationship between poverty and migration and less likely to explore causality thereof. Instead of interrogating the abovementioned themes, Nigg (1999) reviews pull factors, i.e., conditions in the target region which make it attractive for prospective migrants, and finds that they are inclusive of the demand for labour, availability of opportunities for economic development etc. Consistent with this are earlier findings by Sassen (1988) who argued that in South-East Asian countries the 1970s, the number of rural migrants to urban areas rose significantly in households with low mean monthly income.

Skeldon (2002) maintains that migration and poverty share an ambivalent relationship, such that the relative impact of migration on poverty and vice-versa is sensitive to the level of development of the area in question. Notably, across Africa, migration has played an important role in sustaining and expanding people"s livelihoods in many different ways (de Haan, 1999). Despite the absence of explicit evidence in terms of the nature and pattern of this relationship, there has been a scholarly movement suggesting that migratory movements are mostly the culmination of individual, household and macrostructural factors. Nigg (1999) for instance asserts that the social situations at the household of origin, as well as the historical and economic connections between the sending and receiving individuals need to be analysed. Therefore, it likewise becomes important to examine the causal relationship between rural-urban migration and rural migrant labour market outcomes to predict and understand the behaviour towards the household of origin.

Posel and Casale (2002) highlight the specific methodological biases associated with finding a causal relationship in migrated households by noting that among other issues, there is the potential risk of interpreting all adults leaving the household as belonging to that household. However, results from Posel and Casale (2002) indicate that individuals initially identified at the household of origin as migrant household members in fact maintained strong economic ties with these households as compared to other individuals included with permanent membership in other households.

There is a deficiency of the kind of quantitative data that may be used to make more valid inferences about migrants and their households (Bigler and Kraler, 2005). In spite of this,
the scant data available has still produced a limited amount of research work attempting to discern migrants ${ }^{\text {ec }}$ behaviour towards their households. A common explanation is that the activities of migrants in destination regions are indicative of transience yet in households they migrated from, long-term commitment to the latter is clearly represented. Adepoju (1998), in a multi-country study in Africa, notes that during migration, a dual residential arrangement is adopted for the purpose of maximising income through remittances and to retain the extended family structure in the event of illhealth or misfortune with employment. Moreover, consistent with the theoretical prediction under the new economics of labour migration (NELM), Rwelamira and Kistern (2003) find that an overwhelmingly high proportion of migrants (96.9\%) in South Africa kept contact while away through visits or by sending remittances. Moreover, these individuals lost neither their claim to household assets nor entitlements to land. Rwelamira (2008) also notes that on average, migrants would not want to settle elsewhere other than their origin households and are less likely to settle permanently in any other location than the place of origin.

The reason for this is that the logic behind the kind of migration here is to allow one household member to migrate, set up temporary and affordable accommodation and work to pay off costs associated with migration. Skeldon (2002) similarly asserts that family selection of and investment in one or more household members" migration costs compels the migrant to make regular remittances to support those left behind. Other studies in Asia alternatively propose that connections through remittance sending have a rich cultural background that surpasses minimal obligatory repayments. For example, Deshingkar (2004) indicates that remittance sending behaviour among female migrants was intricately linked with the family and cultural expectation that daughters should demonstrate their loyalty to the household and earn endorsement as dutiful and filial daughters through it.

These findings validate the NELM rationale by Taylor et al. (1996) which suggests that under normal circumstances individuals do not sever ties with the source households. Therefore, the widespread act of maintaining interactions between migrants and the rural households implies that a household unit is more desirable than an individual for
migration decisions. This further consolidates the assertion by Skeldon (2002) that migrants would like to improve their households left behind by investing back home.

## Migrant return to households

Duration of stay in destination regions provides a basis for classifying rural-urban migrants. Whilst articulating the duration problematic, past studies recognise that rural and urban migrants appear to have dual residence (i.e. entitlement to establishments both in the rural and urban areas) yet they are almost always more connected to the village. In rural South Africa, a considerably small proportion of rural migrants stay in urban areas for more than 12 successive months without returning to the household of origin (Kahn et al. 2007). The large majority, mainly composed of workers and students, spend a maximum of one and two months away respectively (Collinson et al., 2009), corresponding to their respective month-end and school term closures. Nevertheless, latest studies cite household characteristics as vital in shaping patterns of length of migration. For instance, Makiwane et al. (2012), find that having more small children (under six years) and children at school in the family is significantly associated with shorter and temporary migration episodes.

The cause for retaining interactions between migrants and households is vastly influenced by circumstantial forces prevalent in the source or destination regions. Casale and Posel (2006), note that possibilities for permanent migration are heightened as the period of absence through migration is lengthened. Consequently, links to the household risk being terminated as family members are more likely to join the migrant in the receiving area. Another possibility alluded to in Casale and Posel (2006) is the growth of fresh ties and commitments in the destination area that compete with obligations to households in sending areas. Correspondingly, return migration in rural areas in South Africa plummeted markedly between the years 1996 and 2001 (Oosthuizen and Naidoo, 2004; Lehlola, 2006), a phenomenon attributed to the burgeoning female migration both as a response to increases in their labour opportunities and due to women joining their partners in destination areas/provinces.

### 2.3 The impact of labour migration

Across numerous rural households in Africa, migration represents a socio-economic norm of life, one that plays an integral role in sustaining livelihoods through the diversification of income sources and the diffusion of risk and distribution of goods, skills, and labour (Bilger and Kraler, 2005; Bakewell, 2009). In spite of this general impression, there is a strand of literature that gives testimony to the negative outcomes of migration (Amin, 1995; Tunon, 2006; Calderon and Ibanez, 2009). These studies largely construe migration as a process prompted by the failure of individuals to make ends meet where they live. Movements conceived under such unfortunate circumstances may create new problems in both sending and destination regions through the reduction of agricultural production and increasing pressures on urban infrastructure respectively. The case against rural to urban migration is that movements are likely to cost communities vast labour market displacements.

For example, Calderon and Ibanez (2010), using data from internally dispersed people in Colombia, examined the labour market outcomes related to migration-related supply shocks. Their findings reveal that the unanticipated migrant labour surplus resulted in large negative impacts on the wages and employment prospects of all workers, and in particular for low-skilled workers. Additionally, Tunon (2006) examines the bidirectional effects of internal migratory movements in China; he maintains that they culminate in adverse labour market outcomes for urban „natives" through an oversupply of rural migrant labour. The effects, too, in sending regions can be critical, in that they can end up with an extremely lean local labour base.

Other studies suggest positive outcomes. For instance, Meng and Zhang (2010) note that increases in migrant inflow in China lead to a period of demand expansion (a precondition for economic growth), therefore the presence of rural migrant labour may not have detrimental effect on the urban „native" labour force. Several other researchers have undertaken studies focusing mainly on challenging the negative assumptions concerning labour migration both for the target and origin areas (see Skeldon, 2002; Dermurgera and Xu, 2011; Li et al., 2013).

Data and methodological constraints in previous work constitute important constraints to ascertaining the impact of migration on the welfare of non-migrating adults and children. Morrison (1980) earlier foresaw and made warnings concerning data inappropriateness. He notes that inadequacy of data inhibits the development of theory and in fact interrupts observation, thus distorting the concept-measurement relationship in analyses. Moreover, theories and research interests will be restricted to the available data. Measurement errors pose an analytical challenge to researchers" pursuits in studies analysing migration"s implications for family left behind (Mtshali, 2002; Antman, 2012). There is a bias here, related to the notion that migration may be associated with the same factors that predict consequences for family members. A key methodological restriction that comes from attributing circumstances in migrated households to the observed movement is highlighted in Antman (2012). In her study on the impact of migration on families left behind, she argues that it is impossible to generalise about whether migration is causing the outcome of interest or whether there is another unobservable variable that is associated with both migration and the outcome of interest. She emphasises that analysts should be aware of this classic ,,omitted variable problem ${ }^{\text {el }}$.

## Economic impact in sending household

In South Africa, despite the fact that transfers received from migrant household members have decreased over time, they remain a major source of income (i.e. up to 33\%) in African rural households (Casale and Posel, 2002). Rwelamira and Kirsten (2003) assessed the contribution of migrant remittances to rural livelihoods through a household survey covering up to 585 households in 24 villages in the Limpopo province of South Africa. A prevalent feature in their findings was that a large proportion of residents regard migration as a key source of support for households to supplement their livelihoods. Remittances formed a significant proportion (32\%) of the total rural household income, surpassed only by local salary and wage earnings (46\%). In their comparative exposition, Rwelamira and Kirsten (2003) reveals that, on average, local wage and salary income contributed almost R17 230 per annum while migrant

[^0]remittances (cash and goods) averaged R14 342 per annum. Another key finding was that in Limpopo province in 2002, migrants contributed an average of R7 389 in cash per annum, and also brought home goods worth between R74 and R26 000 per annum per household. Taking the in-kind remittances contribution into consideration, mean total migrant remittances were valued at R14 342 per annum per household (Rwelamira and Kirsten, 2003) - demonstrating that in-kind goods are important for household income maximisation.

The impact of migration on the spending patterns in the sending household is associated with literature generated from economic development perspectives, which suggests that the receipt of remittances may cause behavioural changes at the household level i.e. that non-migrating members tend to spend remittances on daily consumption rather than investment goods. However, there is no consensus in the international empirical literature as findings differ by country and year of analysis. A number of researchers note that a statistically significant proportion, and in most cases the majority of remittances, are spent on „noticeable" consumption goods (Skeldon, 2002; Kok et al., 2003). Spending on „productive" activities or items of human and physical investment is crowded out remittance use for current consumption (Adams, 1998).

Migration literature in the past highlights the diverse interpretations about the impact of remittances on households. In a more recent study on Ghana, Adams (2007) argues that the impact of remittances on the structure of household expenditures and consumption is often viewed pessimistically. Migration optimists in contrast highlight the prospect of positive growth effects through remittances. In line with this, both Skeldon (2002) and Tabuga (2007) find conflicting evidence regarding the impact of income stemming from remittances based on household surveys from South-East Asia. They establish that a significant proportion of internal remittances are spent on conspicuous consumption such as consumer or luxury goods, yet also that these remittances increase education and housing expenditures. Reseachers focusing mainly on rural areas in South-East Asia for have assessed how remittances alter economic situations in migrated households, yet they largely disagree over the allocation of activities regarded as ,,consumption" and ,,investment" (Rempel and Lobdell, 1978; Gunatilleke, 1986; Skeldon, 2002). For
example, while Rempel and Lobdell (1978) insists that remittances (in particular those from female migrants) are used for daily needs, Skeldon (2002) maintains that as women are increasingly gaining say on the use of household funds, a substantial amount is devoted to healthcare needs and education.

A number of empirical studies in Africa dealing with the impact of remittances on indicators of human welfare such as education, health, food expenditure/security and property ownership confirm positive outcomes in the sending household (for example, Cattaneo, 2010; Nagarajan, 2009; Collinson, 2006; Lacroix, 2011; Sabates-Wheeler, 2009). However, recent evidence from a study exploring the association between migration and food consumption patterns in sending households in Ghana rivals the traditional understanding that migration improves food consumption. Karamba et al. (2011) find that migration does not significantly affect total food expenditures per capita, and has a marginal effect on food expenditure patterns. In fact, after comparing results across various locations, the analysis revealed that only in high migration zones does migration appear to increase overall food expenditures. However, this resulted in a shift towards consumption of potentially less nutritious categories of food, such as sugar and beverages and ,eating out ${ }^{c 2}$.

In South Africa, analyses examining the structure of household consumption due to remittances are limited, that is, we do not clearly understand what percentage of consumption in various categories of goods and services are due to remittances. Moreover, the handful of analyses that are in the public domain are based mostly on two regional longitudinal surveys: the Cape Area Panel Study (CAPS) and more especially, the Agincourt Health and Demographic Surveillance System (AHDSS) (for example, Dinkelman et al., 2007; Kahn et al., 2003; Collinson, 2006; Case, 2006; Banerjee and Duflo, 2006). In objection to the conspicuous claim above, these studies largely find that remittances are disproportionately spent on education and health at the expense of everyday consumption. Kahn et al. (2003) find that labour migration to certain

[^1]occupations may expose workers to hazards such as tuberculosis, pneumonia and injury, and this may account for the increased expenditure on health.

Nagarajan (2009) more specifically explores whether remittance-receiving households consume more health promoting goods or exhibit a superior health seeking behaviour in KwaZulu-Natal over a period from 1994-2003. She finds evidence strongly suggesting that these households spend a large share of their budget allocation on nutritious foods and health expenditures. In addition, she writes that remittances make it possible for poorer households to access better quality medical care and that remittances may be more efficient a way than state transfers to target the financial needs of poorer households.

## Consequences of migration on household composition and domestic movements

This subsection sets out to highlight arguments in the literature on the effects of migration on the structure of the household. The dispersal and displacement of family members as a result of migration may unravel the form and makeup of the household as a social unit. Results reported in previous local and international work on migration suggest varying opinions regarding the social impact of migration on households. According to White (2002), movement of household members acts upon the family structure by accelerating its internal derangement and gradual fragmentation, exemplified by the rise of female-headed, skip-generation households and other arrangements.

The literature on the implications of adult migration indicates that children left behind by migrant parents are largely affected by the above-mentioned internal household changes. A number of researchers firmly hold that migration entails greater complexity in household and care arrangements than would be expected in nuclear family models, thus adversely impacting on children, who require specialised attention (Collinson et al., 2007; Meintjes, 2009; Albon, 2011; Madhavan et al., 2012). In his study of coping strategies of migrant families in South Africa, Ngwane (2003: 689), on a more positive note, maintains that the act of leaving children of migrating parents under the care of relatives is in fact an arrangement and strategy to retain an „unfragmented ce household.

The evolution of the structure, roles and responsibilities of households has been a common subject of analysis of literature dealing with migration`s impact on families left
behind in rural areas. Adepoju (1998) applied the thesis of understanding social change through migration from a cultural perspective across several countries in Sub-Saharan Africa. From such, he concludes that the African family has taken many diverse forms, functions and responsibilities. In South Africa, particularly after 1948, shifts in familial roles were largely facilitated by the volatile political and socio-economic environments, including urbanization, industrialization and modernization (Sadie, 1994; Lehlola, 2006; Schatz et al., 2011; Makiwane et al., 2012). For example, Posel and Casale (2002) find that a significant proportion of women taking part in labour migration were increasingly assuming a larger role in their households. Financial entitlements acquired through migrant labour participation among rural women constitute a major factor in the criterion of selecting a household head and consolidating membership in the household. Labour migration in this case functions as a catalyst in reinforcing and endorsing double membership of women in their maiden households and households of marriage. In these settings, women play a vital role in providing assets and resources and diversifying sources of income (Quisumbing and Dick, 2001)

Increasingly, inter-household co-operation and how it intersects with household composition emerges as a theme in literature on local internal migration. This thread of work is drawn from studies mapping out the extent of multiple household memberships as a result of migration. Collinson et al. (2006) write that this is a concept whereby a household is spatially divided into different components i.e. across two or more geographical places, such that members can be benefited by the activities of different places, while staying connected as a household. Typically, this level of cohesion indicates the extent of household connectedness based on kin relations and further demonstrates how transient living arrangements of extended family members impacts household composition. Mtshali (2002) finds that, in the case of a shortage of sleeping accommodation in one household, some members, particularly children would go and sleep in their relative's homestead for as long as the crisis endured. However, she finds that additional activities inevitably occur in temporary living arrangements, for instance, "sleeping" often entails also eating dinner, breakfast and participation in some household tasks, such as fetching water, milking and laundering. The considerable movement of people in and out of particular households has largely been sustained by a network of
relationship between households, which may be given more relevance by migration (Spiegel, 1984; Maitra, 2001; Neves, 2008; Mbiti, 2007) ${ }^{3}$.

## Effects on children of migrants

Presently in South Africa, there is a great dearth in national data on accurate patterns of child mobility, hence limited research assessing outcomes of migration on children that remain in or leave the sending household. In the international discourse on migration, scant attention has been given to children and a limited range of statistics on migration provides data disaggregated by age. There also is very little information on how migration affects the well-being of children left behind by their migrant parents.

The impact of migration on the welfare of resident non-migrating children may be either positive or negative, and is largely mediated by a range of circumstances in the sending household and outcomes in the receiving region. Evidence from previous literature suggests that the effects on children left behind are not entirely attributable to observed migratory movements but a culmination of various other associated circumstances. For instance, migrants` children benefit through better nutrition and access to healthcare if the migrant reports positive labour outcomes in the receiving region (Wright and Hall, 2010). However, other studies contend that co-migration instead would produce positive results regarding the welfare of children if schools and health facilities, for example, are readily available and of higher quality in the receiving areas (Atmore, 2008; Madhavan et al., 2009; Muhwava et al., 2010; Hall and Posel, 2012).

Internationally, open labour markets have been positively motivated, because of their potential impact on human capital accumulation by the poor, through the migration of low-skilled workers from developing to industrial countries. According to Mansuri (2006), the large remittance flows from migrants to their communities of origin underscores this aspect of migration. Above all, these migrations have the capacity to improve future employment for children present in migrated households if long term

[^2]investments are channelled towards human capital development. Mansuri (2006) thus explores the relationship between temporary labour migration and investment in child schooling probabilities in Pakistan. She finds that the potential positive gains of temporary labour migration on human capital accumulation are large and especially so for girls, yielding a very substantial reduction in gender inequalities in access to education. Lu and Treiman (2006) noted that receipt of remittances in Chinese rural households was associated with heightened educational spending and investment in activities, reducing the impact of parental absence. Further insightful findings on the outcomes for children left behind by migrant parents come from studies analysing variations based on the sex of the migrant. Based on panel data from Burkina Faso, women appeared to support schooling more than men. This set of results is based on the conceptual premise that women display altruistic behaviour by investing more towards the development of children as compared to men, through for instance time, money and psycho-social support, especially in matters concerning education (Kabore and Pilon, 2006).

A possibility receiving considerable attention in the international literature, and alluded to above in Mansuries study, is that the effects of migration on education may vary with the gender and age of the child left behind. Meyerhoefer and Chen (2011) note that parental labour migration in China is linked with a notable interruption in the educational progress of girls, a finding they suspect is due to shifting girlse time to domestic chores. This was noted more when grandmothers, rather than other prime-aged individuals, were left in charge of non-migrating children (van de Glind, 2010). Similarly, Hanson and Woodruff (2003) find a negative effect of migration on schooling of older children in Mexico and suggest that the absence of adult role models in the household may increase the childrearing responsibilities for girls specifically. In contrast, Acosta (2011) offers evidence that remittances result in a decrease in child wage labour in El Salvador and girls benefit from an increase in schooling while boys do not.

## Living and care arrangements for children left in sending households

Some South African studies trace and document the residence and care outcomes of children left by migrant parents. In one rare study by Kautzky (2009), variations in
childcare arrangements (patterns of child domestic care prompted by migration) were determined mostly by the gender and nationality of migrants. In his study conducted in a rural area bordering Mozambique in the South African province of Limpopo, Kautzky (2009) finds that female migrants of South African descent were more likely to rely on complex childcare arrangements than male migrants of Mozambican origin-(this is to say that childcare arrangements were made where a female relative took care of children belonging to the migrant for the duration of his/her absence). Kautzky (2009) argues that this may be due the ready availability of extended family members in the case of South Africans compared to the Mozambicans who may have left most other their relatives in Mozambique. This supports earlier work by Kahn et al. (2007) arguing that temporary female migration, despite increasing household income through remittances, aggravates the need for alternative childcare arrangements. This reiterates the importance of „intrahousehold contracts"e (discussed above), where childcare responsibilities are smoothly transferred if social networks across the extended family line are strong. It is under these family circumstances that the real effect of female migration on children can be positive, suggest Kahn et al. (2007). In addition, other studies seem to imply that both the gender of the co-located (i.e. leaves in same household) adult responsible for looking after the child and the role of the extended family shape their outcomes. Madhavan et al. (2011) in a study in Mpumalanga province of South Africa agree with this assertion, and find that non-migrating children living with their mothers are likely to be better cared for, as mothers are by and large known to spend comparatively more resources on children.

In a study by Dietz (2010), attitudes of male migrant parents leaving children in the Western Cape province of South Africa were documented. The expected behaviour for single male labour migrants with children not migrating, in particular, is displayed in frequent visits home, contacting relatives while away, and sending or bringing sufficient remittances. This further indicates the unmet need for a regularly present child carer. Other migrant fathers note that they attempt to compensate for their absence (and inability to express their affections and fatherhood to their children) by sending slightly more remittances and visiting home at least once a month. Furthermore, a smaller proportion specifies that the primary reason for their labour is to generate an income
ultimately to be spent on the basic social needs of children such as food and clothes. Concerning their children"s daily care, the migrants depended on their mothers i.e. maternal grandparents, to look after children left behind (Dietz, 2010). Admittedly they acknowledged that such arrangements may not necessarily produce favourable outcomes for their children.

## Health outcomes for children left behind

Explicit attention in the South Africa research has been given to the effects of migration on child schooling outcomes as described above, but not much is known about the health outcomes of children left behind. Some studies (including Kautzky, 2009; Hall, 2010), note that health-related decision-making for children left behind is primarily the responsibility of the child"s mother, grandmother or siblings, that is, individuals readily accessible in migrated households. In his early work, Collinson (2006) conducted a survival analysis (i.e. a study involving the assessment of mortality outcomes, specifically infant and child mortality rates) of children born to female temporary migrants compared with children of non-migrant women. His principal finding is that children of migrant mothers receive additional health insurance, positively impacting on their survival and well-being. This advantage likely relates to the higher education and earnings attained of migrating mothers, although it should be appreciated that the consequences for children associated with migrants are attributable to a wide array of individual and household circumstances therefore generalisations are not easy to make. In line with this, Collinson (2006) suggests that as women increasingly obtain tertiary education, there is a survival advantage to their children, who are also more likely to migrate. Similarly Kautzky (2009) finds that there are greater child mortality risks associated with settled Mozambicans (former refugees) and unmarried mothers compared to bonafide South Africans mothers in marital unions.

Positive outcomes of migration on the health of remaining children have been captured elsewhere. Macours and Vakis (2010) find evidence that maternal migration has a positive impact on early cognitive development of children in Nicaragua, a discovery indicative of changes in income and maternal empowerment from migration. Babatunde and Martinetti (2010) confirm that in Nigeria, remittance income has a positive and
significant effect on calorie consumption and these improvements are encapsulated in dietary quality, micronutrient intake and child nutritional status. Moreover, several other studies note the increasing importance of remittances for children"s basic needs and a positive impact on infant survival in the longer term (Kanaiaupuni and Donato, 1999; Acosta et al., 2007; Rossi, 2008; Civilize and Frenk, 2009).

### 2.4 Summary

Although the discussion of literature was based on unique themes, in principal, it was inter-related. The discussion of the New Economics for Labour Migration theory for example, provided a conceptual basis to analyse temporary labour migration and the associated relationship of the migrant to the sending household in terms of remittances, visitations and other forms of communication, as well as the consequences of labour migration on the household in terms of consumption, household, composition and movement of members (particularly children). The description and discussion of temporary labour migration as a distinctive form of migration is highlighted in this study and in the broader South African literature on migration. The review of the existing literature on the relationship of the migrant to the household and the associated impacts of the migration episode on the sending household (including the economic impacts, mobility, and care arrangements for children left behind) provided a background for the current study and an index from which to analyse and compare the findings from this study with existing empirical evidence.

## CHAPTER THREE: DATA AND METHODOLOGY

This study is based on a quantitative analysis of secondary data collected through the Agincourt Health and Demographic Surveillance System in 2007. The methodology chapter is divided into a number of sub-sections: a brief description of the study setting; a summary of the study design; a synopsis of the processes involved in data collection; a discussion of the unit and level of analysis for this study; a detailed description of the various data handling techniques employed in cleaning, storing and the analysing data; a critical evaluation of methodological considerations associated with the use of demographic surveillance (DS) data, the secondary analysis of existing data, and the use of quantitative surveys and cross-sectional study designs; and lastly an outline of the ethical issues pertinent to this study.

### 3.1 Study setting

The data on which this study is based are drawn from the 2007 survey at the Agincourt Health and Demographic Surveillance System (AHDSS) - a designated survey site of the Medical Research Council/Wits Rural Public Health and Health Transitions Unit, a centre within the University Of Witwatersrand School Of Public Health. The site (Agincourt) acquired its DSS status in 1992 and occupies an area formerly categorized under apartheid as a homeland or Bantustan. The study site is located in the magisterial district of Bushbuckridge, in Mpumalanga province. Agincourt HDSS covers some $475 \mathrm{~km}^{2}$ of land that is further subdivided into 31 administrative villages. Agincourt is situated approximately 500 km northeast of Johannesburg and borders the Drakensburg and commercial forestry plantations to the west, the Kruger National Park to the east, Hazyview to the south, and the Hoedspruit farming valley to the north - reflecting its rural context. (See Figures 3.1 to 3.3 below.)

Figure 3.1 Location of Mpumalanga province in South Africa.


Source: MRC/Wits Agincourt Unit, 2009

Figure 3.2 Location of Bushbuckridge within Mpumalanga province


Source: MRC/Wits Agincourt Unit, 2009

Figure 3.3 Agincourt study site and surrounding area


Source: MRC/Wits Agincourt Unit, 2009

### 3.2 Study design

The Agincourt HDSS operates on an open or dynamic cohort system. Individuals enter and exit the system at any given time. Movements of individuals are monitored and updated annually; hence a computation of consequent changes (such as associated additional migrations, ties with sending household, remittances sent etc.) is possible. More specifically, data collected for individual events may form the basis for calculation of out-migration and in-migration rates for the entire study base (Collinson, 2006) (Fig 3.4).

Figure 3.4 Study design - prospective surveillance of vital events


Source: MRC/Wits Agincourt Unit, 2009

The objective of the AHDSS, when initiated in 1992, was to monitor health and demographic change in the geographically defined area of Agincourt through a system of demographic surveillance. It also set out to generate information through continuous registration of vital and migratory events at a household level to establish and maintain a population change research laboratory. This was in order to create and strengthen research capability and gain a better understanding of the dynamics of health, population and social transitions in South Africa (Kahn et al., 2003). Vital events registered by the ADHSS include but are not limited to; birth, death, marriage, new household member, out-migration, in-migration, and internal movements (migration within the AHDSS surveillance villages). When individuals enter the DSS i.e. through birth and in-migration only, they are assigned a permanent unique identity code that remains with them regardless of their movements within the surveillance system. These person identifiers are six characters long and are composed of the village and household identity code, and allow for longitudinal analysis of the individuals.

However, in order to analyse the extent of migration and its impacts on the sending household and effectively achieve the outcomes of interest described in the introduction chapter, this study is based on an analysis of one year"s data, 2007, which contains a questionnaire module dedicated to temporary migration specifically. This module, as will be detailed below, contains a wide range of questions allowing one to identify the reasons for migrations, the profile of migrants and their ties with the households of origin, and the impact of the migration episode on the sending household.

### 3.3 Data collection

In the survey, data are collected on an annual basis by visiting each household within the Demographic Surveillance System. As suggested above, each household is recognized by a unique identifying code within its village, and each individual is recognised by a unique identifier within his/her household. Data for vital demographic events are then recorded on their appropriate form at the household level. Modules or forms consist of several questions that are critical in adequately characterising an outcome of interest.

The household interviews are carried out by village-based enumerators i.e. local Shangaan-speaking residents trained to be fieldworkers for the study site (Madhavan et al., 2011). Fieldworkers must have at least 12 years of formal education. Furthermore, fieldworkers undergo rigorous training workshops to enable them to correctly register data on the surveillance modules, conduct interviews and manage data in the field. Upon completing training, fieldworkers are allocated a specific enumeration zone composed of a number of homesteads to survey. Field supervisors are assigned to monitor the collection process as carried out by enumerators/fieldworkers for quality assurance purposes (Kautzky, 2009).

During the census update rounds, a trained fieldworker visits a household unit and interviews the most knowledgeable respondent available. Individual-level information is checked and updated on all household members. Any vital events that have occurred during the intercensal period (typically a full calendar year, spanning from the previous year"s observation date to the current) are recorded (Kautzky, 2009). Where applicable, certain questions are reserved for specific household members. For example, the question on number of months an individual is absent from the household to establish migration status is more likely to be accurately answered, in the absence of the migrant, by the household head or an individual deputising for him/her (Collinson, 2006).

Mechanisms to ensure data quality in the AHDSS have been set up at several points. The most pertinent of these is fieldwork supervision: team leaders accompanied fieldworkers to various study zones for the purpose of monitoring data collection. At a post-data collection level, data quality assurance techniques include conducting thorough cross-
checks of completed survey instruments both in the field and at the data collation field office in Agincourt, and a validity post-survey test for a selected proportion of surveyed households. According to Kahn et al. (2007), 2\% of surveillance households are subject to this routine exercise. Completed questionnaires found with irregularities are returned to the fieldworker for correction.

### 3.4 Unit and level of analysis

The AHDSS defines the household as "the social unit that usually eats together, plus the temporary migrants who are linked to the household" (Clark et al., 2007: 2). Moreover, it monitors internal mobility within its designation, i.e. in and out migration, plus temporary migration. The 2007 module on temporary migration includes detailed information on all temporary migrants and the consequences of their migration. Notably, because the reason for migration is captured, labour migrants can be identified as a subset of this group in the data, that is, household members who are away for more than six months of the year to work or to seek work (but whose return is assumed by the household respondent) (Williams et al., 2011).

Data and information detailing the socio-demographic characteristics of individuals migrating for employment purposes were used to generate a demographic profile of labour migrants in this study. Information on the interaction between migrants and their sending households, and the extent thereof, was used to establish the type and frequency of connections/links that exist between migrants and remaining household members (in terms of remittances, visitation, and communication). Lastly, data concerning the socioeconomic implications of migration were useful in examining the impact of labour migration on the sending household; specifically the household"s spending patterns, the composition of households, and the movement of its members (particularly children). Information was also collected on which individuals were in charge of the children of migrant workers, and who was responsible for the children"s living arrangements, health and medical care, and daily meal provision. The detailed questions asked in the two-page temporary migration form (Question 1-29), from the 2007 questionnaire, are attached as Appendix A to this dissertation for further reference.

The analytical framework (i.e. data collection and management methods) applied in the AHDSS is compatible with analysis at two units of analysis, i.e. individual and household. Depending on the questions to be answered in this study, the unit of analysis and level of analysis vary from labour migrants to the children left behind in labour migrant households. (This will be clarified further in the presentation of the results.)

As noted above, detailed cross-sectional data of this kind on migration are rare, thus the AHDSS 2007 forms a useful basis for this study on the impacts of temporary labour migration on sending households.

### 3.5 Data handling and analysis

A hierarchy of handling and analysing data exists in the Agincourt HDSS. This data management is performed at several points by both low and high ranking personnel including enumerators, fieldwork officers and the set of researchers responsible for the study. As noted, verification of data follows a well-ordered scheme of supervision. Data management typically operates at four levels of the Agincourt HDSS organizational structure: 1) Each field supervisor applies a systematic guide as a basis for examining all completed surveys for possible errors when the data is prepared for capture into a statistical package; 2) There is a network system that records incoming data to a database on a server; 3) The system activates its automatic built-in validation resource to detect missing values, invalid codes, inconsistencies, incorrect place names etc. and 4) Errors undetected in the previous procedures are subject to cross-examination manually by the field data manager and returned to the field supervisor if they are serious (MRC/Wits Agincourt Unit, 2009).

For the purposes of data security and flexibility, data are stored in password-protected files in the Microsoft Structured Query Language (SQL) and are transferred into Microsoft Access format for generic data analysis (Clark et al., 2007). In order to overcome the analytical problems of organising and storing data, synonymous with managing longitudinal information and micro-datasets, the Agincourt HDSS data are captured in a relational database model- data here are presented in tables with rows and
columns; additional tables may have defined relationships with each other (van de Walle, 2006).

Additional data cleaning, processing and analysis for this study was undertaken by the author (Armstrong Dzomba) using the statistical program STATA version 12.0 (StataCorp LP, College Station, Texas, USA). The master dataset comprised of all temporary migration cases occurring from Agincourt in 2007. Because the population of interest is labour migrants, cases featuring migrants who migrate for purposes other than labour were disregarded after an analysis of the types of migration was conducted. The question used to classify labour migrants was worded as follows (Q10): „What are the most and second most important reasons for the person being away? ${ }^{\text {ce }}$ Those for whom the specific responses of,,1. Looking for work"e and ,2. Employed" were provided were treated as labour migrants.

The analysis in this study is based on descriptive statistics designed to examine the characteristics of labour migrants and assess the impact of labour migration on the sending household. In order to accomplish this, the study briefly examines the extent of labour migration relative to other forms of migration from Agincourt and then generates a demographic profile of the labour migrants from the study area in 2007. The study produces findings specifically on: 1) labour migrants and labour migration characteristics; 2) links between migrants and sending households, 3) migrant economic impacts on households; 4) migrant impacts on household composition; 5) effects on children left behind and lastly; 6) analysis of migrants based on whether children were left behind in households. All the data in the analysis was disaggregated by gender. The investigation largely depends on descriptive statistics (such as sums, means, frequencies, ranges, and cross-tabulations). While regression analysis may be useful and desirable for establishing (causal) statistical relationships, it is beyond the scope of this Masters dissertation.

### 3.6 Methodological issues

This subsection highlights the strengths and weaknesses associated with the data and methodology employed in this study. It is important to outline these here as it may be
useful in making the reader aware of the limitations of the study (for instance, of the extent to which results from this study may be applicable to other locations). This exercise will also allow one to provide a rationale for choosing particular methodologies, and an explanation of the implications of the methods used for the findings in this study.

### 3.6.1 Health and Demographic Surveillance System (HDSS) data

The use of health and demographic data is advantageous for numerous reasons, such as production of detailed individual and household data and high response rates. However, there are three main limitations that are relevant to this study outlined below.

1) Generalisability of findings is fundamentally restricted to localized similar areas instead of broader areas. Whilst findings may be practically applicable to wider settings, inferences are analytically limited to smaller contexts owing to the small geographic focus of the study site from which data are collected, and the site "s specific features. Having said this, it is worth acknowledging the assertion in Collinson and Adazu (2006) that the Agincourt study setting is strongly representative of the vast expanse of rural communities making up a significantly large share of Sub-Saharan Africa, suggesting a wider application of its results.
2) Longitudinal studies from which cross sectional data for this analysis were drawn, potentially succumb to the Hawthorne effect in the long run: i.e. the population of interest may modify behaviour to suit idealized expectations of the observers (McCarney et al., 2007; Fox et al., 2008).
3) It is a difficult undertaking to monitor and update information on a mobile study population. Undercounting of the actual extent of temporary migratory movements in the AHDSS may occur due to slack data collection on the part of fieldworkers. However, attempts were made in the data collection and management process to reduce this problem. As outlined in the data collection sub-section above, the organizational flow directing procedures suggests a strong leadership and assertive management system, the kind that would lessen the extent of this error.

### 3.6.2 Quantitative surveys

A survey research design encompasses the collection of statistical and qualitative information from a sample of individuals through their responses to questions. Scientists and students regard it an efficient method for systematically collecting response data from a diverse set of individuals in a geographically defined area. It is in part for this reason that many researchers are dependent on this methodology for data collection.

Response data from surveys are especially valuable if they satisfy three fundamental principles: versatility, efficiency, and generalisability (van de Walle, 2006). Surveys are convenient for quantitative studies in that many variables and observations can be measured without increasing the amount of critical resources i.e. time or research funds, reflecting their flexibility and efficiency. Whilst marginal variations may occur with the level of complexity of the survey design, it is possible for data to be collected rapidly from a large sample population at relatively low cost (Boslaugh, 2006). The agenda for social research is that results with the most accurate sample generalisability are produced. Survey research designs are often the only means available to produce an accurate reflection of the propensities and characteristics of a large population. The supremacy of survey research is reiterated in Dale et al. (1988: 20) who write that ,if research is to achieve the maximum in terms of explanation and understanding, it is unlikely to depend solely upon any one method...however if used appropriately, there is no reason why...the variables used in a survey cannot reflect accurately the [social] experience of life ${ }^{\text {ec. }}$ Whilst one may acknowledge limitations inherent in survey methodologies, their importance in determining and analysing social circumstances coupled with their efficacy for extrapolation of findings to a broader context must be recognised.

Still, quantitative surveys are subject to criticism on two main levels, that is, ideological and technique based. The most prevalent conceptual shortcoming for survey designs, particularly of a cross-sectional nature, is that they are fundamentally restrictive i.e. surveys make establish association rather than causality since surveys cannot determine temporal order. De Vaus (1979) as quoted in Kautzky (2009), outlines other survey design disadvantages more elaborately. He finds that: surveys have a narrow conception of social phenomena, i.e their approach is isolative and lacks appreciation of the study
context and its complexity; they have a rigidly ,,deterministic" hypothesis that attitudes exhibited by human beings are mediated by external forces; they are inherently „sterile" and attempt to codify meaningful social activities into numeric values; and largely thrive on manipulating data. Other extremely negative notions hold that use of quantitative surveys is an attempt to accomplish a „methodological impossibility" i.e. quantifying social processes (Eaton, 2004).

Perhaps the strongest criticism of survey designs for data collection is that in their technical approach they may „completely ${ }^{\text {ec }}$ disregard the broader social context in which specific demographic events of interests operate. Accordingly theoretical literature from psychology maintains that human actions, attitudes and perceptions are overly simplified and assumptions about the homogeneity of individuals disregard their inherent differences (Fox et al., 2008). Furthermore, they affirm that human action cannot be understood solely as reaction to a particular event or circumstance. Kautzky (2009) suggests that ignoring that individuals do not act as agents in isolation and that behaviour is affected by interaction, undermines the influence of the household and the broader environment. In addition, this could „obscure" the very relationships which are responsible for cases observed and omit fundamental variables that would measure the nature and patterns of power produced from these relationships (Graham, 1983).

A criticism of this study may be that it attempts to understand the impact of labour migration without wholly accounting for the broad range of activities operating at an individual and household level. The activities I refer to include changes in household composition, spending patterns, and outcomes for children left behind, and they may be pertinent in understanding the impact of migration. While this is a criticism that could be levelled at all quantitative analyses of survey data, the ADHSS method of data collection attenuates some of these concerns. For instance, the questions in the temporary migration module were specifically designed to establish temporal order so as to correctly capture events that occurred as a direct result of household migration. For example, Question 24a of the ADHSS 2007 temporary migration module asks "As a result of this moving, is/are there children who move with the migrant?" (see Appendix A).

### 3.6.3 Secondary analysis of existing data

The core methodology adopted in this study is secondary data analysis. Secondary analysis can be defined as research involving a detailed analysis of existing datasets or statistical information (that were not collected by the researcher him/herself) obtained from a specific geographical area, presenting computations, interpretations and inferences. Determining which data are suitable for the research questions to be answered by a study presents a common challenge among researchers. The following section documents the major advantages and disadvantages of analysing secondary data collected through the Agincourt DHSS.

Secondary analysis of existing data is desirable for both scientists and students for several reasons. Firstly, it allows for access to large, rich datasets for analysis. Demographic surveillance surveys uniquely collect information on a wide array of demographic and other variables, including data on mobility (van de Walle, 2006). This is beneficial to the aforementioned users as the opportunity cost (i.e. primary research is resource intensive, in terms of time, money and the physiological cost of collecting data in the fieldwork) is high. Despite the possibility that the dataset must be bought, its cost will be significantly lower than original costs for data collection (Eaton, 2004). Secondly and tied to this advantage is the consideration of pragmatism: secondary data analysis is a domain for researchers with strong quantitative skills, preferring to perform computations using statistical packages rather than engaging in the „intensive" qualitative research processes (Boslaugh, 2006). The breadth of secondary data makes it desirable for analysis in research. Unless heavily funded, individuals lack the necessary capacity to collect large and representative data on a once-off basis, let alone repeatedly over successive periods. Only institutions in receipt of reliable funding are well equipped for continuation of data collection on a massive scale. As Hyman (1972: 29) states, secondary data collection ,expands the types and number of observations to cover more adequately a wider ranges of social conditions, measurement procedures, and variables than can usually be studied by primary survey thereby generating a more comprehensive and definitive empirical study of the problems the investigator formulated ${ }^{\text {ec. }}$

An intrinsic advantage of using secondary data is that data collection is directed by individuals with professional concern for and experience in the research theme, more so
than would often be the case for smaller primary projects. For instance, data collection for many demographic surveillance systems is often conceptualized and directed by wellexperienced researchers and the actual fieldwork surveys are completed by trained staff specialists that may have worked on a particular survey for many years. These kinds of studies produce high quality and up-to-date data and information distinctive from other less regular surveys. Thirdly, demographic surveillance surveys are very precise in capturing and monitoring all movements that occur within surveillance sites as it exhaustively records „episodes" of „exit" and „entrance" of every member. Generally, the more localised [sub-district-level data, (Agincourt)] are merited for permitting more refined categorization of migration, for instance, made possible by the frequent household updates and a more inclusive household definition (Collinson et al., 2007). The AHDSS, unlike the October Household Survey (OHS) and Labour Force Survey (LFS), comprises a household relations coding system in which the relationships of household members are established. It therefore allows one to identify, describe and monitor households, including the links between parents and children and spouses and how they are impacted by migration.

Having said this, there is the possibility of misinterpreting the analytical assumptions motivating different questions, definitions used, question format and the primary conceptual design for the study in secondary analysis of existing studies (Boslaugh, 2006). In the case of this study, this researcher neither participated in the original study`s research design nor the data collection process, and the questions were not collected to answer the specific research questions of interest here. Generally, there exists a possibility for misapplying information or data on the part of the researcher as useful and desirable data and information are not readily available to consistently suit specific designs who analyses using these data (Collinson, 2006). Therefore this researcher conducted data analysis having done a thorough examination of the metadata, i.e. the detailed information made available by the ADHSS team on the procedures for the dataset and its set of observations. This researcher spent a substantial portion of time in studying material produced on the study design, core research themes for the Agincourt HDSS, as well as the data collection process. The MRC/Wits Rural Public Health and Health Transitions Research Unit and Agincourt HDSS website and published handbooks
makes this technical information available to the public and prospective users of their datasets. Where clarity was needed, this researcher corresponded with Agincourt Field Data Officers directly.

### 3.6.4 Cross-sectional design

Cross-sectional designs involve studies intended to determine the extent or frequency of a specific occurrence, such as exposure to a specific disease, incidence of unemployment, etc, at a given point in time. In practice, individuals in the sample population are contacted at a particular point in time and relevant information is obtained from them. Cross-sectional surveys are an integral method for descriptive analyses in particular when used to measure and categorise population attributes and propensities in relation to a specific event. Kahn et al. (2007) suggest that cross-sectional design is effective compared to other designs in fulfilling representativeness and generalisability especially when external validity is investigated.

The common dissatisfaction with cross-sectional designs is their perceived inability to determine causal relationships. This stands in sharp contrast with the panel designs that draws from longitudinal data by tracing progression of a variable of interest over a number of years so as to infer causality. Analysis of this study was based on the 2007 wave (cross-section) of data collected from the ADHSS. As discussed above, the phrasing of the actual questions in the migration module used for this analysis reduces such concerns, as it was designed explicitly to establish temporal order and causality.

### 3.7 Ethical considerations

Ethical clearance was granted at two levels: firstly, for the data, through the University of Witwatersrand"s Committee for Research on Human Subjects (Medical), which reviewed and commissioned the Agincourt HDSS research protocol (no. M 960720); and secondly, for this study, through the University of KwaZulu-Natal (Research Ethics and Higher Degrees Committee, February 2013). Approval for this analysis constitutes a routine procedure for checking adherence to research ethics by Honours, Masters and PhD students.

### 3.7.1 Community consent

The strong links maintained to date between the community and the research team from AHDSS reveals the strength of verbal consent coupled with trust the latter has earned over the past 11 years of their existence in Agincourt. As routine, civic and traditional leaders are informed at the launch of every year"s census to validate the long-term agreements enjoyed. Appreciating the importance of this, Collinson et al. (2006) note that relationships by nature require time to build and demand constant nurturing to maintain. The basis of the agreement from the outset was premised on clauses pertaining to mutual benefits, i.e. that census results will be shared with the local community and that the perpetual project will contribute to tangible improvements in the area (Collinson, 2006). Perhaps this accounts for the very high response rate of households over the past census rounds, and the high level of community collaboration in pre-test, report back and engagement sessions.

### 3.7.2 Informed consent

Informants were made aware of their entitlement to the right of refusal to be interviewed by fieldworkers; this came after individuals were briefed on the purpose of the research and its perceived value. As noted, enumerators were almost always accepted in all the households in the surveillance site (MRC/Wits Agincourt Unit, 2009).

### 3.7.3 Anonymity

While the dataset used in this analysis had numeric person and household identifiers, it retained the anonymity of respondents thus abiding by the ethical practise that the identity of the individuals in the study should be concealed (Kautzky, 2009). This is to say that the privacy and confidentiality of all adults, children and their households has been maintained at all levels including collection of data, handling and analysis as well as reporting.

## CHAPTER FOUR: DESCRIPTIVE ANALYSIS OF MIGRATION IN AGINCOURT

In this chapter, I present and discuss findings from an analysis of the data collected through the Agincourt Health and Population Unit (AHPU) Health and Demographic Information System for temporary migration. As noted in the previous chapter, these data were collected between 02 August 2007 and 15 February 2008 in Agincourt, a subdistrict of Bushbuckridge in Mpumalanga, South Africa. In addition, this chapter will highlight linkages between the findings presented here and existing empirical evidence from past studies on household migration.

I first assess the coverage of labour migration relative to other migration types recorded in Agincourt. After this, I present a summary of labour migrant descriptive statistics stratified mainly by the gender of the migrant. The subsequent four sections largely present findings on: 1) migrant links with sending households; 2) economic impact of migration on households (particularly the importance and use of remittances); 3) household compositional changes; and 4) effects on children linked to migrants. These results form part of evidence vital for achieving the study"s objectives, i.e. investigating:

1. The nature and extent of the relationship between the migrant and the household in terms of remittances, visitations and other forms of communication;
2. The consequences of labour migration on a) household spending patterns, and $b$ ) household composition and movement of its members, particularly children.

### 4.1 Extent of labour migration and labour migrant characteristics

### 4.1.1 Definition of labour migrants

In the Agincourt Health and Demographic Surveillance System (AHDSS), labour migrants are defined as individuals absent from their usual place of residence within the site for more than six months of a year for the purpose of finding work or working (Collinson et al., 2007). Moreover, they remain connected to the rural household and their membership is counted there.

From the data collected on reasons for migration, it is found that $94.91 \%$ of the migratory movements taking place in Agincourt are explicitly connected to labour outcomes. This can be identified from the figures in parentheses in Table 1 in the final column, which shows the percentage of all migrants who had migrated for that reason. Labour migrants are composed of those employed (89.01\%), and those looking for employment (5.90\%). This finding corroborates an earlier study on Agincourt in which temporary migration was almost equivalent to labour migration in that the most important motive was moving for employment (Collinson, 2006).

Table 1 The extent of labour migration versus other forms of migration, by gender (both row and column percentages displayed)

| Motive for migration | \% Female | \% Male | Total |
| :--- | :---: | :---: | :--- |
| Looking for work | 26.50 | 73.50 | 100.00 |
|  | $(5.79)$ | $(5.93)$ | $(5.90)$ |
| Employed | 25.13 | 74.87 | 100.00 |
|  | $(82.91)$ | $(91.27)$ | $(89.01)$ |
| School/studies | 37.89 | 62.01 | 100.00 |
|  | $(1.74)$ | $(1.05)$ | $(1.24)$ |
| Training to be Sangoma | 40.00 | 60.00 | 100.00 |
|  | $(0.07)$ | $(0.04)$ | $(0.05)$ |
| Live with another spouse/partner | 88.46 | 11.54 | 100.00 |
|  | $(4.09)$ | $(0.20)$ | $(1.25)$ |
| Visit family | 58.82 | 100.00 |  |
|  | $(0.71)$ | $(0.18)$ | $(0.33)$ |
| Visit friends | 50.00 | 50.00 | 100.00 |
|  | $(0.07)$ | $(0.01)$ | $(0.02)$ |
| Hospital/clinic | 0.00 | 100.00 | 100.00 |
|  | $(0.00)$ | $(0.03)$ | $(0.02)$ |
| Getting healed at a Sangoma/faith | 0.00 | 100.00 | 100.00 |
| healer | $(0.00)$ | $(0.01)$ | $(0.01)$ |
| Escaping from unfavourable | 0.00 | 100.00 | 100.00 |
| situations | $(0.00)$ | $(0.01)$ | $(0.01)$ |
| Prison | 16.67 | 83.33 | 100.00 |
|  | $(0.04)$ | $(0.07)$ | $(0.06)$ |
| Other | 58.90 | 41.10 | 100.00 |
|  | $(4.58)$ | $(1.18)$ | $(2.10)$ |
|  | 26.98 | 73.02 | 100.00 |
|  | $(100.00)$ | $(100.00)$ | $(100.00)$ |
| Total (N) | 2815 | 7617 | 10342 |

Source: Own calculations from AHDSS.
Notes: Column percentages are in parentheses.
Up to 2138 out of 12570 migrants had missing data on the main reason for their absence during observation dates.

Further, as has been identified in other studies (Dodson, 2000; Crush 2005; Williams et al., 2011), males are more likely to be labour migrants than females: $88.7 \%$ of females in Agincourt were labour migrants compared to $97.2 \%$ of males, as is evident from the figures in parentheses in the first two data columns of Table 1 for male and female migrants. Women are more likely than men to migrate for other unspecified reasons. Although the question only offered a finite number of possible types of moves, previous work in this field suggests that gendered motivations for migration are diverse. Dodson (2010) for instance finds that women"s mobility may be influenced by a wide range of social and reproductive factors apart from economic incentives, like uniting with husbands in the destination. Results from Table 1 further show that female migrants have a higher probability ( $4.09 \%$ ) of joining their spouses at the destination relative to male migrants $(0.20 \%)$. This is consistent with other evidence that women have a much higher propensity to engage in migration for purposes of marriage and other reproductive motivations (See Crush et al. 2005; Chilimampunga, 2006; South African Department of Social Development, 2010).

Table 1 also presents the share of each category of migration that is male versus female, identified in the row percentages. The results show that overall, $73.02 \%$ of migrants are men, compared to $26.98 \%$ who are women. Similarly, women represented a quarter of the labour migrant population specifically ( $25.22 \%$ ) as compared to men who represented about three quarters (74.78\%) (results based on the addition of the employed and those looking for work).

### 4.1.2 Descriptive statistics for labour migration

In this section and the sections that follow, the sample is restricted to the population of interest, i.e. labour migrants. The personal, household and labour characteristics are described below. These are disaggregated by the gender of the labour migrant.

Table 2 Characteristics of labour migrants, by gender

|  | Female | Male |
| :--- | :--- | :--- |
| Mean age (in years) | 35.83 | 36.15 |
| Mean number of years as migrant | 4.93 | 5.67 |
| Province of destination(percentages) |  |  |
| --Eastern Cape | 0.16 | 0.23 |
| --Free State | 0.16 | 0.68 |
| --Gauteng | 33.48 | 45.56 |
| --KwaZulu-Natal | 0.08 | 0.41 |
| --Mpumalanga | 54.87 | 40.72 |
| --Northern Cape | 0.00 | 0.07 |
| --Limpopo | 8.97 | 6.50 |
| --Northwest | 1.48 | 4.94 |
| --Western Cape | 0.28 | 0.35 |
| Total | $\mathbf{1 0 0 . 0 0} \mathbf{( 2 ~ 4 9 7 )}$ | $\mathbf{1 0 0 . 0 0} \mathbf{( 7 4 0 4 )}$ |

Source: Own calculations from AHDSS.

Table 2 shows that female labour migrants have a slightly lower mean age (35.83) and fewer years as a migrant (4.93) than men ( 36.15 and 5.67 years respectively). Labour migrants searching for employment had a significantly lower mean age, 29.86 years, in comparison to employed migrants who are on average 36.48 years (results not shown here), reflecting the widespread problem of youth unemployment in South Africa. Migrants, both male and female, were most likely to be resident in two provinces, Gauteng and Mpumalanga. The highest proportion of men ( $45.56 \%$ ) migrated to Gauteng, while the highest proportion of women (54.87\%) migrated within Mpumalanga. The proportion of men migrating to Gauteng is significantly higher probably because of the mining jobs available to men, which have traditionally not been thought suitable for women. Also, women may prefer to migrate within the province to be closer to their households of origin, particularly if there are children left behind (Collinson et al., 2009). Small proportions of migrants from Agincourt were employed or sought employment in Northwest and Limpopo provinces. The other provincial destinations of KwaZulu-Natal, Free State, Western Cape, Northern Cape and Eastern Cape housed less than $10 \%$ of migrants, both male and female, from Agincourt.

Table 3 Age categories for labour migrants, by gender (number and percentage of total)

| Age category | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| $15-19$ | $8(0.40)$ | $14(0.24)$ | $22(0.22)$ |
| $20-24$ | $195(9.75)$ | $622(10.54)$ | $817(8.25)$ |
| $25-29$ | $423(21.15)$ | $1379(23.37)$ | $1802(18.20)$ |
| $30-34$ | $412(20.60)$ | $1166(19.76)$ | $1578(15.93)$ |
| $35-39$ | $818(32.76)$ | $2298(31.04)$ | $3116(31.47)$ |
| $40-44$ | $234(11.70)$ | $664(11.25)$ | $988(9.07)$ |
| $45-49$ | $189(9.45)$ | $428(7.25)$ | $617(6.25)$ |
| $50-54$ | $115(5.75)$ | $340(5.76)$ | $455(5.75)$ |
| $55-59$ | $73(3.65)$ | $291(4.93)$ | $364(3.78)$ |
| $60-65$ | $25(1.25)$ | $153(2.59)$ | $178(1.80)$ |
| $66+$ | $5(0.25)$ | $49(0.83)$ | $54(1.08)$ |
| Total | $\mathbf{2 4 9 7}(\mathbf{1 0 0 . 0 0})$ | $\mathbf{7 4 0 4 ( 1 0 0 . 0 0 )}$ | $\mathbf{9 9 0 1 ( 1 0 0 . 0 0 )}$ |

Source: Own calculations from AHDSS.
Notes: Percentages are in parentheses
The majority of labour migrants lie between the ages of 25-39 years for both men and women ( $65.6 \%$ ) and 74.51 respectively. The results in Table 3 also indicate that very few migrants (both men and women) are under the age of $20(0.22 \%)$ or over the age of 60 ( $2.88 \%$ ). Male and female migrants are almost equally represented proportionally until the age of 54. The most marked difference noted across the genders is for the ages 55-86 years in that males are show a higher representation. About $8.35 \%$ of male migrants are in this age range compared to $5.42 \%$ for female migrants. These results suggest that there is some chance that men have a higher propensity to migrate than women after the age of 55 (i.e. given that on average men compared to women migrate 5.67 and 4.93 years as shown in Table 2 above). However, this is most probably to do with men being migrants for longer.

Table 4 Household characteristics of labour migrants, by gender (percentages)

| Relationship to head | Female | Male |
| :--- | :--- | :--- |
| Household head | 27.04 | 43.89 |
| Daughter/son of household head | 43.76 | 42.60 |
| Spouse of household head | 10.04 | 0.47 |
| Other | 19.16 | 13.03 |
| Total (N) | $\mathbf{2 4 5 9 ( 1 0 0 . 0 0 )}$ | $\mathbf{7 4 0 4 ( 1 0 0 . 0 0 )}$ |
| No. of migrants from each sending household |  |  |
| Sole migrant | 33.56 | 41.46 |
| One other in household | 32.52 | 29.24 |
| Two others in household | 19.46 | 16.63 |
| Three others in household | 7.41 | 7.81 |
| Four others and above | 7.05 | 4.86 |
| Total (N) | $\mathbf{2 4 9 7}(\mathbf{1 0 0 . 0 0 )}$ | $\mathbf{7 4 0 4}(\mathbf{1 0 0 . 0 0 )}$ |

Source: Own calculations of data from the AHDSS.
Note: Response data on the relationship type of 38 labour migrants was missing.

Findings in Table 4 show that male labour migrants are more likely to be reported as household heads by their household of origin than female migrants - 43.89\% as compared to $27.04 \%$ respectively. Similar proportions of male and female labour migrants are reported to be the sons and daughters of the household head. However, Table 4 shows a difference between migrant males and females in their marital status to the household head. Nearly $10.04 \%$ of female migrants were spouses to the household head yet only $0.47 \%$ of the male migrants were spouses of the household head. This finding might relate in part to the importance of migration in determining household headship status for spouses. The very little literature on this question has noted that in households, women are less likely to become household heads in spite of economic participation through labour migration and that men largely retain the main decision maker status in the household (Mtshali, 2002).

Also shown in Table 4 is that male labour migrants are more likely to come from households in which they are the sole migrant $-41.46 \%$ compared to $33.56 \%$ for females. A corresponding observation is that female migrants were more associated with the migration of at least one other individual in the sending household (66.44\%) than male migrants (58.54\%). This variation may be due to more women migrants joining their spouses in the destination area (see Table 1). Among all households, on average,
2.16 people were lost to labour migration (not shown here). One movement of a labour migrant could prompt up to 13 more similar moves in sending households.

Table 5 Labour characteristics of employed migrants, by gender (percentages)

|  | Female | Male |
| :--- | :--- | :--- |
| By sector of employment |  |  |
| Percent working in formal sector | 27.62 | 49.30 |
| Percent working in informal sector | 51.23 | 44.37 |
| Data missing | 21.15 | 6.33 |
| Total (N) | $\mathbf{2 4 9 7 ( 1 0 0 . 0 0 )}$ | $\mathbf{7 4 0 4 ( 1 0 0 . 0 0 )}$ |
| By skills category |  |  |
| Skilled | 6.35 | 11.90 |
| Semi-skilled | 32.21 | 37.00 |
| Unskilled | 61.44 | 51.10 |
| Total (N) | $\mathbf{2 3 3 4 ( 1 0 0 . 0 0 )}$ | $\mathbf{6 9 5 2 ( 1 0 0 . 0 0 )}$ |

Source: Own calculations from AHDSS
Note: Response data for 531 migrants was missing.
Table 5 shows that almost half of all male labour migrants are formally employed $49.30 \%$ - contrasted with $27.62 \%$ of all female migrants. Females have a relatively larger representation among migrants working in informal occupations: $51.23 \%$ of female migrants compared to $44.37 \%$ of male migrants had employment in the informal sector ${ }^{4}$.

A large proportion of male and female migrants are employed in unskilled work. A larger proportion of female than male migrants are in this category $-61.44 \%$ as compared to $51.10 \%$ of male migrants. On aggregate, $56.27 \%$ of all employed migrants in the study were unskilled. The second most important skills category for employed migrants is semi-skilled labour, which encompasses $37.00 \%$ of males and $32.21 \%$ of female migrants. This means that men are more likely to be employed in semi-skilled work than women. The least concentrated occupation for both male and female migrants is skilled labour, which constitutes about 9.13\% of all employed migrants (not presented here). Another important finding shown in Table 5 is that male migrants are almost twice as likely to be in skilled work (11.90\%) than female migrants (6.35\%).

[^3]Table 6 Percentage of the employed in each broad occupation category, by gender

|  |  | Female | Male |
| :--- | :--- | :--- | :--- |
| Skilled <br> (SASCO 1-3) | Senior administrators, managers, professionals | 2.25 | 1.90 |
|  | Skilled workers and teachers, police work, <br> soldiers, firemen, health workers (formal), <br> NGO workers | 4.10 | 10.00 |
|  | Construction, mining, skilled agricultural and <br> fishing workers, security workers, petrol <br> attendants, clerical office workers | 20.54 | 33.09 |
|  | Small business owners and assistants, service <br> workers, shop and market sales workers, <br> sewing, hairdressing, baking, brewing, craft <br> and other related trades workers | 11.67 | 3.91 |
| Unskilled <br> (SASCO 9) | Elementary occupations, domestic work etc. | 61.44 | 51.10 |
| Total (N) |  | $\mathbf{2 3 3 4}$ <br> $\mathbf{( 1 0 0 . 0 0 )}$ | $\mathbf{6 9 5 2}$ <br> $\mathbf{( 1 0 0 . 0 0 )}$ |

Source: Own calculations from AHDSS.
Notes: Data on the type of employment for 531 labour migrants was missing.
Identification and compilation of migrant labour into three broad sectors was based on guidelines from the South African Standard Classification of Occupations (SASCO).

Table 6 breaks down the skill types further into different types of occupations. A greater proportion of females reported employment in skilled and white collar employment (senior administrators, managers and professionals) - $2.25 \%$ compared to $1.90 \%$ for males. Men are more likely to be in the second category of skilled occupations which includes teachers, policemen, firemen, etc. Table 6 also shows that men (33.09\%) are more likely to be in the first category of semi-skilled work compared to women (20.54\%). Types of occupations in this category include construction, mining, agricultural and fishing work. However, a larger proportion of women (11.67\%) were likely to be in the second category of occupations for semi-skilled work compared to men (3.91\%). This category includes jobs such as small business owners and assistants, service workers, shop and market sales workers, sewing, hairdressing, baking, brewing, craft etc. While more than half of both male and female migrants are likely to be in the unskilled labour category, female migrants had the highest proportion (61.44\%) in
relation to male migrants ( $51.10 \%$ ). Occupations under this category include cleaning, domestic work and other manual jobs. These statistics mirror national estimates for South Africa (see Posel, 2004 and Collinson, 2006).

### 4.2 Migrants' links with sending household

This section presents data on the links that migrants have with their households of origin in the forms of visits, communication, and sending of remittances.

Table 7 Pattern of return to the dwelling by household head status, number and percentage of total

| Return pattern | Household head | Non-household head | Total |
| :--- | :--- | :--- | :--- |
| Christmas only | $124(3.24)$ | $332(5.52)$ | $456(4.63)$ |
| Christmas and Easter only | $183(4.77)$ | $458(7.62)$ | $641(6.51)$ |
| Month-ends | $1578(41.17)$ | $1872(31.13)$ | $3450(35.04)$ |
| Month-ends plus holidays | $250(6.52)$ | $293(4.87)$ | $543(5.51)$ |
| Most weekends | $267(6.97)$ | $217(3.61)$ | $484(4.92)$ |
| One long period/holiday | $257(6.70)$ | $362(6.02)$ | $619(6.29)$ |
| Two holidays | $60(1.57)$ | $103(1.71)$ | $163(1.66)$ |
| School holidays | $4(0.10)$ | $19(0.32)$ | $23(0.23)$ |
| Irregularly | $1110(28.96)$ | $2357(39.20)$ | $3467(35.21)$ |
| Total | $\mathbf{3 8 3 3 ( 1 0 0 . 0 0 )}$ | $\mathbf{6 0 1 3 ( 1 0 0 . 0 0 )}$ | $\mathbf{9 8 4 6 ( 1 0 0 . 0 0 )}$ |

Source: Own calculations from AHDSS.
Notes: Percentages are in parentheses.
Up to 55 migrants had missing data on return pattern and relationship status.
Table 7 shows that both household heads and non-household heads were very likely to return home monthly although for household head the value was significantly higher, i.e. $41.17 \%$ compared to $31.13 \%$. Migrants who are household heads were significantly less likely to return home after a long lag as compared to non-household heads. Nonhousehold heads represent a much larger share of those returning home irregularly and at Christmas and Easter only. In line with results above, there is a general hypothesis that household heads largely direct activities in the household hence their physical presence therein is important in facilitating this. This assumption is in agreement with Rossiecs (2008) findings that migrant family members who simultaneously are in charge of the household are in possession of the crucial ,allocative power", thus demanding their regular presence.

Table 8 Return pattern of migrants by gender, number and percentage of total

| Pattern return | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| Christmas only | $72(5.21)$ | $384(2.90)$ | $456(4.63)$ |
| Christmas and Easter only | $156(6.29)$ | $485(6.59)$ | $641(6.51)$ |
| Month-ends | $971(39.14)$ | $2479(33.66)$ | $3450(35.04)$ |
| Month-ends plus a holiday | $142(5.72)$ | $401(5.44)$ | $543(5.51)$ |
| Most weekends | $165(6.65)$ | $319(4.33)$ | $484(4.92)$ |
| One long period/holiday | $131(5.28)$ | $488(6.63)$ | $619(6.29)$ |
| Two holidays/period | $46(1.85)$ | $117(1.59)$ | $163(1.66)$ |
| School holidays | $13(0.52)$ | $10(0.14)$ | $23(0.23)$ |
| An irregular pattern | $724(29.06)$ | $2536(34.43)$ | $3257(33.08)$ |
| Other | $64(2.58)$ | $146(1.98)$ | $210(2.13)$ |
| Total | $\mathbf{2 4 8 1 ( 1 0 0 . 0 0 )}$ | $\mathbf{7 3 6 5 ( 1 0 0 . 0 0 )}$ | $\mathbf{9 8 4 6}(\mathbf{1 0 0 . 0 0})$ |

Source: Own calculations from AHDSS.
Notes: Percentages are in parentheses.
Response data of 55 migrants were missing.
As further shown in Table 8, most migrants either came home at month-end (35.04\%) or irregularly ( $33.08 \%$ ). There are some differences by the gender of the migrants. Findings here suggest that men are more likely to return home irregularly (34.43\%) compared to women (29.06\%), and women are more likely to return home on most weekends (6.65\%) and at month-ends ( $39.14 \%$ ) compared to men ( $4.33 \%$ and $33.66 \%$ respectively). This might have to do with women migrating more often within the province, while men are more likely to migrate to other provinces (particularly Gauteng). It may also be that women come home more regularly if children are left in the household.

Table 9 Return pattern and communication mode of labour migrants, number and percentage of total

|  | Once a year | Twice a year | Monthly | Most weekends | At <br> most, <br> two <br> long <br> periods | Irregular | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Face to face at home | $\begin{aligned} & \hline 170 \\ & (34.44) \end{aligned}$ | $\begin{aligned} & \hline 1389 \\ & (34.09) \end{aligned}$ | $\begin{aligned} & \hline 178 \\ & (32.96) \end{aligned}$ | $\begin{array}{\|l\|} \hline 296 \\ (61.28) \end{array}$ | $\begin{aligned} & 230 \\ & (28.82) \end{aligned}$ | $\begin{array}{\|l\|} \hline 1209 \\ (34.97) \\ \hline \end{array}$ | $\begin{aligned} & \hline 3472 \\ & (35.40) \end{aligned}$ |
| Face to face at work | $\begin{aligned} & \hline 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 2 \\ & (0.05) \end{aligned}$ | $\begin{aligned} & 2 \\ & (0.37) \end{aligned}$ | $\begin{array}{\|l\|} \hline 1 \\ (0.21) \end{array}$ | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 11 \\ & (0.32) \end{aligned}$ | $\begin{aligned} & 16 \\ & (0.16) \end{aligned}$ |
| Spoke by Telephone | $\begin{aligned} & \hline 282 \\ & (62.11) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 2658 \\ & (65.23) \\ & \hline \end{aligned}$ | $\begin{aligned} & \hline 360 \\ & (66.67) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 182 \\ (37.68) \\ \hline \end{array}$ | $\begin{aligned} & \hline 557 \\ & (69.80) \\ & \hline \end{aligned}$ | $\begin{array}{\|l\|} \hline 2216 \\ (64.10) \\ \hline \end{array}$ | $\begin{aligned} & \hline 6255 \\ & (63.78) \\ & \hline \end{aligned}$ |
| Verbal message | $\begin{aligned} & \hline 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 4 \\ & (0.10) \\ & \hline \end{aligned}$ | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{array}{\|l\|} \hline 3 \\ (0.62) \end{array}$ | $\begin{aligned} & 1 \\ & (0.13) \end{aligned}$ | $\begin{array}{\|l\|} \hline 10 \\ (0.29) \\ \hline \end{array}$ | $\begin{aligned} & 18 \\ & (0.18) \end{aligned}$ |
| Written message | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & (0.02) \end{aligned}$ | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{array}{\|l\|} \hline 0 \\ (0.00) \end{array}$ | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & (0.03) \end{aligned}$ | $\begin{aligned} & 2 \\ & (0.02) \end{aligned}$ |
| Other | $\begin{aligned} & \hline 2 \\ & (0.44) \end{aligned}$ | $\begin{aligned} & \hline 21 \\ & (0.52) \end{aligned}$ | $\begin{aligned} & 0 \\ & (0.00) \end{aligned}$ | $\begin{aligned} & \hline 1 \\ & (0.21) \end{aligned}$ | $\begin{aligned} & 10 \\ & (1.25) \end{aligned}$ | $\begin{aligned} & \hline 10 \\ & (0.29) \end{aligned}$ | $\begin{aligned} & 44 \\ & (0.45) \end{aligned}$ |
| Total (N) (\%) | 454 <br> (100.00) | $\begin{aligned} & 4075 \\ & (100.00) \end{aligned}$ | $\begin{aligned} & 540 \\ & (100.00) \end{aligned}$ | 483 <br> (100.00) | $\begin{aligned} & 798 \\ & (100.00) \end{aligned}$ | $\begin{aligned} & 3457 \\ & (\mathbf{1 0 0 . 0 0 )} \end{aligned}$ | $\begin{aligned} & 9807 \\ & (100.00) \end{aligned}$ |

Source: Own calculations of data from AHDSS.
Notes: Percentages are in parentheses.
Return pattern recoded for easier reading and interpretation - questions considered were phrased initially as 1) ,What type of pattern best describes the time the migrant returned home in the last 12 months? and 2) „What mode was used for the previous communication? ${ }^{\text {ee }}$

In Table 9, the majority of migrants ( $63.78 \%$ ), regardless of their frequency of returning home, indicated strong usage of the telephone for communication with family left in the household. The one exception is migrants returning most frequently, i.e. weekly. They relied significantly on face-to-face exchanges at home for communication (61.28\%) as would be expected. This shows that to a certain extent, return pattern of migrants affects the way migrants communicate with their households. Regardless of migrants" length of absence, hardly any migrants make use of written messages (possibly short message service SMS) or letters for communication.

There is evidence affirming that information and communications technology is increasingly becoming the norm in communication and has shown strong potential in replacing customarily recognized modes. Consistent with findings presented here, Brown and Grinter (2011) find the prevalent use of cell phone technology among migrant
parents in Jamaica to deliver parental authority over children and to facilitate parent-tochild access, as well as communication with other individuals in the household. As suggested above, in terms of the AHDSS data on the mode of communication used by migrants for the duration of their episode of absence, it was not possible to determine whether „written letters" were inclusive of the short message service (SMS) application offered mobile phone technology

Table 10 Methods of communication with sending household by gender, percentage of total

| Method of communication | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| Spoke face to face at home | 38.38 | 34.42 | 35.42 |
| Spoke face to face at work | 0.16 | 0.16 | 0.16 |
| Spoke by telephone | 60.89 | 64.74 | 63.77 |
| Verbal message | 0.16 | 0.19 | 0.18 |
| Written message/letter | 0.04 | 0.01 | 0.02 |
| Other | 0.36 | 0.47 | 0.45 |
| Total (N) | $\mathbf{2 4 7 8 ( 1 0 0 . 0 0 )}$ | $\mathbf{7 3 7 3 ( 1 0 0 . 0 0 )}$ | $\mathbf{9 8 5 1 ( 1 0 0 . 0 0 )}$ |

Source: Own calculations of data from AHDSS.
Notes: Column total percentages are in parentheses.
These calculations exclude men and women (40) who are labour migrants but have missing data regarding their communication behaviour.

Results in Table 10 show that the majority of the migrants depend on two main modes of communication with their families left behind, namely speaking over the telephone (63.77\%) and face to face communication on home visits (35.42\%). There is no significant difference by gender in the use of letters, verbal messages, and speaking face to face at work as a method of communication of migrants with their households. Women migrants are more associated with face to face interactions at home (38.38\%) compared to men ( $34.42 \%$ ), while there is a greater reliance of men on telephones for communication ( $64.74 \%$ ) as compared to women ( $60.89 \%$ ). Drawing from the previous tables, this is related to women being more likely to visit their households regularly than men.

The economic behaviour of migrants in this sample is gender-specific and reflects evidence from past literature. Table 11 illustrates that women have a slightly higher propensity to remit something to the sending household compared to men: $61.99 \%$ of women compared to $58.41 \%$ of men were likely to send back either cash or in-kind goods
to their homes. This finding is not confirmed in some past studies, such as (Dodson et al., 2010). In total, nearly two in every three migrants sent remittances to their households.

Table 11 Propensity to remit by gender of migrant, number and percentage of total

| Does the migrant send anything back to the <br> household? | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- | :--- |
|  | $\overline{\mathrm{N}}$ | $\overline{(\%)}$ | N | $\overline{(\%)}$ |
| Yes | 1548 | 61.99 | 4325 | $\frac{58.41}{}$ |
| No | 949 | 38.01 | 3079 | 41.59 |
| Total | 2497 | 100.00 | 7404 | 100.00 |

Source: Own calculation from AHDSS.
Tables 12-15 detail statistics for the 5873 migrants who did remit something to their households. Women are significantly more likely than men to remit clothing ( $12.14 \%$ of female remitters compared to $8.25 \%$ of male remitters). Of those who remit, women are typically more associated with sending food remittances as compared to men ( $37.27 \%$ as compared to $20.99 \%$ ). Food is the most common in-kind remittance among those remitting. The percentages of men and women remitting cash are slightly different ( $91.40 \%$ for males compared to $84.11 \%$ for females). This might reflect the different kinds of jobs men and women hold (men"s jobs may be more strongly cash-based) as well as the fact that women may reside closer to their sending households, facilitating the transport/delivery of food and clothes ${ }^{5}$.

Table 12 Percentages of remitting migrants sending cash by gender

| Does the migrant usually send back money | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | N | $(\%)$ | N | $(\%)$ |
| Yes | 1302 | 84.11 | 3953 | 91.40 |
| No | 246 | 15.89 | 372 | 8.60 |
| Total | 1548 | 100.00 | 4325 | 100.00 |

Source: Own calculations from AHDSS.

[^4]Table 13 Percentages of remitting migrants sending clothes by gender

| Does the migrant usually send back clothes? | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | N | $(\%)$ | N | $(\%)$ |
| Yes | 188 | 12.14 | 357 | 8.25 |
| No | 1360 | 87.86 | 3968 | 91.75 |
| Total | 1548 | 100.00 | 4325 | 100.00 |

Source: Own calculations from AHDSS.
Table 14 Percentages of remitting migrants sending food by gender

| Does the migrant usually send back food? | Female |  |  | Male |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | N | $(\%)$ | N | $(\%)$ |  |
| Yes | 577 | 37.27 | 908 | 20.99 |  |
| No | 971 | 62.73 | 3417 | 79.01 |  |
| Total | 1548 | 100.00 | 4325 | 100.00 |  |

Source: Own calculations from ADHSS.

### 4.3 Migrant economic impacts on households

## Table 15 Mean remittances among those who remit, by gender

|  | Female |  |  | Male |  |  |
| :--- | :--- | :--- | :---: | :--- | :--- | :--- |
|  | Mean | Standard <br> deviation | Total <br> $(\mathrm{N})$ | Mean | Standard <br> deviation | Total <br> $(\mathrm{N})$ |
| Mean monthly amount/value <br> of cash \& goods sent (Rands) | 507.10 | 533.22 | 1286 | 661.50 | 746.45 | 3693 |
| Mean annual amount/value of <br> cash \& goods sent (Rands) | 5886.56 | 5620.48 | 1203 | 7728.77 | 7591.13 | 3416 |

Source: Own calculations from AHDSS.

Table 15 illustrates that the recorded monthly average cash and value of in-kind goods sent home by migrants originating from Agincourt was about R661 for male and R507 for female migrants. Over 2006, male migrants remitted close to R7 600 worth of goods and cash while female migrants sent on average about R5 600 This much lower value among female migrants is likely to reflect that employed women are more likely to be in low-paying jobs (see Posel (2004) and Williams et al. (2011)). The fact that a greater percentage of female migrants compared to male migrants were in the informal sector (shown earlier) corroborates this.

Table 16 Mean remittances by number of migrants in household, employment status and skills category among those remitting

| By number of migrants in the household | Total <br> (N) | Mean | Min | Max |
| :--- | :--- | :--- | :--- | :--- |
| Monthly amount/value of cash \& goods sent if <br> sole migrant in household (Rands) | 2325 | 674.55 | 250 | 17000 |
| Monthly amount/value of cash \& goods sent if more <br> than one migrant in household (Rands) | 2640 | 575.32 | 200 | 15600 |
| Annual amount/value of cash \& goods sent if sole <br> migrant in household | 2148 | 8087.70 | 1000 | 120000 |
| Annual amount/value of cash \& goods sent if more <br> than one migrant in household | 2456 | 6518.10 | 1450 | 150000 |
| By employment status |  |  |  |  |
| Annual amount/value of cash \& goods sent if working | 4582 | 7251.62 | 14000 | 150000 |
| If looking for work | 22 | 6995.46 | 700 | 24800 |
| By skills category for those working |  |  |  |  |
| Annual amount/value of cash \& goods sent home if <br> skilled | 800 | 7894.29 | 2400 | 72000 |
| Semi-skilled | 1988 | 8130.28 | 1500 | 150000 |
| Unskilled | 1880 | 6000.19 | 1200 | 115000 |

Source: Own calculations from AHDSS

As shown in Table 16, sole migrants sent back cash and in kind goods worth substantially more than when there is more than one migrant in the same household. The monthly remittance for sole migrants is R674.55 while that for those in households with more than one migrant it is R575.32. Remittance sending patterns by the number of migrants in the household are corroborated when remittances sent were observed on a yearly basis - sole migrants were more likely to send cash and in-kind remittances of a greater value than when more than one migrant left the household. This is likely to reflect that if there is more than one migrant, the need to remit is lessened for each migrant in the household.

There was a small difference in the mean annual cash and in-kind remittances sent by employed (R7 251) and work-seeing migrants (R6 995), yet the maximum remitted cash/value of goods varied widely (R150 000 and R24 800 respectively) ${ }^{6}$. Semi-skilled migrants remitted the highest cash and value of in-kind remittances ahead of both skilled and unskilled migrants although the difference between skilled and semi-skilled workers is small. Given the size of these remittances, they are likely to help cushion households from poverty as they increase total household income. Given that cash and in-kind

[^5]remittances to households range between R500 and R700 on average a month (see Table 16), they may be very useful in securing a household"s total income above the R636 per month poverty line in South Africa (Adato et al., 2013).

Table 17 Household use of remittances by gender of migrant, number and percentages

| Use of cash remittances | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| House | $47(1.88 \%)$ | $160(2.16 \%)$ | $207(2.09 \%)$ |
| Cattle | $34(1.36 \%)$ | $60(0.81 \%)$ | $94(0.95 \%)$ |
| Food | $1281(51.30 \%)$ | $3836(51.81 \%)$ | $5117(51.86 \%)$ |
| Clothes | $190(7.61 \%)$ | $631(8.52 \%)$ | $821(8.21 \%)$ |
| Business/trade | $20(0.80 \%)$ | $67(0.90 \%)$ | $87(0.88 \%)$ |
| Electricity | $829(33.20 \%)$ | $2764(37.33 \%)$ | $3593(36.29 \%)$ |
| Communication | $170(6.81 \%)$ | $635(8.58 \%)$ | $805(8.13 \%)$ |
| Transport | $105(4.21 \%)$ | $414(5.59 \%)$ | $519(5.21 \%)$ |
| Healthcare | $178(7.13 \%)$ | $641(8.66 \%)$ | $819(8.27 \%)$ |
| School | $244(9.77 \%)$ | $690(9.32 \%)$ | $934(9.43 \%)$ |
| Other | $18(0.72 \%)$ | $61(0.82 \%)$ | $79(0.80 \%)$ |

Source: Own calculation of data from AHDSS.
Note: Column percentages do not add up to $100 \%$ as use of remittances is reported in more than one category often more than one.

Table 17 shows what households ,,usually" spend the cash remittances on, providing some further insight into how migration impacts on the sending household. The most common uses for cash remittances were spending on food (51.86\%) and on electricity ( $36.29 \%$ ). Other expenses payable from cash remittances consist of clothes (8.21\%), communication (8.13\%), healthcare (8.27\%) and school (9.43\%). Other than the slightly greater propensity of spending on electricity and communication if the migrant was male, there is no significant difference for household use of remittances by gender of the migrant. This appears at odds with Rossies (2008) work which hypothesises that household decisions concerning the use of remittances vary depending on which household member has migrated and which household member directs resource allocation. Note, however, that the data available to this researcher included neither the person left in charge of the household nor the gender of whom would likely affect spending.

It is important to understand the role of remittances in sending households and their relevant communities at large. Findings concerning this may be very useful for public policy seeking to enrich affected livelihoods through strategies for maximizing the impact of remittances in regions dependent on remittances as a means of supplementing
income (Dooner, 2004). What is clear from this analysis is that remittances in this area are largely used for basic necessities like food and electricity and are therefore likely to play a pivotal role in reducing food insecurity and poverty in rural households.

### 4.4 Migrant impact on household composition

Table 18 Household compositional changes by gender of migrant, number and percentages

| As a result of person migrating is/are <br> there | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| Children who move to another place? | $46(1.84 \%)$ | $94(1.27 \%)$ | $140(1.41 \%)$ |
| Children who move with the migrant? | $190(7.61 \%)$ | $285(3.85 \%)$ | $475(4.80 \%)$ |
| A child-carer moving into the household? | $17(0.68 \%)$ | $27(0.36 \%)$ | $44(0.44 \%)$ |
| A partner visiting him/her in the work <br> place? | $10(0.40 \%)$ | $258(3.48 \%)$ | $268(2.71 \%)$ |
| A partner accompanying him/her on <br> return? | $20(0.80 \%)$ | $137(1.85 \%)$ | $157(1.59 \%)$ |
| Other moves in and out of the household? | $13(0.52 \%)$ | $38(0.51 \%)$ | $51(0.52 \%)$ |

Source: Own calculations from AHDSS.

Table 18 displays the percentage of migrant episodes related to a compositional change, by gender of the migrant. A significantly higher proportion of female (7.61\%) compared to male migrants $(3.85 \%)$ migrate with their children. In other words, there is more likely to be an increased outflow of both parent and child migration when the migrant is a woman than when a man. This finding in particular is consistent with traditional social notions that childcare is an exclusively a female domain, thus women would be more likely to be expected to travel with their children to their places of work.

Findings in previous studies for developing countries suggest that women were largely hindered from migrating by their customary role as care-givers. However, this has begun to change. Child co-migration among female migrants is on the increase as ideal amenities for sound early childhood development, such as education, health and housing often have wider coverage in migrant destinations (Madhavan et al., 2011).

The results from Table 18 further indicate that male labour migration was associated more than female migration with visitations by partners at the migrantes work place. Hence, about $3.48 \%$ of all men in contrast to $0.40 \%$ of all women migrating were linked with these subsequent partner movements. In other words, male migration to a limited
extent is connected to temporal movements and outflow of key household members to the destination.

Whilst most migrations are largely associated with the outflow of members through comigration or temporary absence as members visit migrants in the destination, migrants also return home with partners. Findings here suggest that men have a higher propensity than women to return from the destination with a partner. About $1.85 \%$ of male migrants indicated co-return migration to the household with a partner compared to $0.80 \%$ of female migrants.

More generally, what is interesting from Table 18 is that overall migration does not result in many household compositional changes in addition to the migrant him/herself leaving. Male and female migration was associated with a similar percentage of compositional changes (albeit different in nature) - $11.32 \%$ versus $11.85 \%$. Nevertheless, gender emerges as a significant variable in predicting the type of compositional change.

Table 19 Percentages of children left behind by gender of migrant, number and percentage

|  | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| Left children behind | $1261(50.50 \%)$ | $2774(37.47 \%)$ | $4035(40.75 \%)$ |
| Did not leave <br> children | $1236(49.50 \%)$ | $4630(62.53 \%$ | $5865(59.25 \%)$ |
| Total | $\mathbf{2 4 9 7 ( \mathbf { 1 0 0 . 0 0 } )}$ | $\mathbf{7 4 0 4 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{9 9 0 1 ( \mathbf { 1 0 0 . 0 0 \% } \% )}$ |
| Average no. of <br> children left | 3.53 | 1.54 |  |

Source: Own calculations from AHDSS.
Of course, even though additional compositional changes as a result of migration might not have been so common, the migrant him/herself leaving will have a substantial impact on those left behind. In particular the Agincourt HDSS interrogates the issue of children being left behind in the sending household. In total, a large number of children under 18 years of age - 8722 (not shown in Table 19) were left behind by migrant parents in 2007 in Agincourt. This estimate is evidence that a large number of children are in fact affected by labour migration. On the question of the prevalence of parental labour migration, this study found that 4035 migrants (or $40.75 \%$ of all migrants) reported leaving children in sending households and among these women were more likely to leave their children $50.50 \%$ compared to men $37.47 \%$ (See Table 19). The pooled mean number of children
left across both sexes is 2.16 children. However, there is a significant difference in the average number of children left per migrant between women (3.53) and men (1.54).

Literature from other countries echoes the same findings shown here. For example, Macours and Vakis (2010) found that a large percentage (68\%) of migrant men and women left at least one child in Ecuador. Other studies show that male migrants are more likely to leave children than female migrants (Save the Children, 2006; Kautzky, 2009). In South Africa, a greater proportion of female migrants leave children behind and children are much more likely to be living initially with their mothers than their fathers. Posel and Devey (2006), for example, find that in 2002, only 32.5\% of all African children aged 15 years and below were reported as living with their fathers, compared to almost $68 \%$ living with their mothers.

### 4.5 Effects on children left behind

In this section of results, the unit of analysis is the child left behind in the sending household. The total sample size is 8722 children, a figure that fluctuates somewhat depending on the number of children with missing response data.

Table 20 Residence of children left behind by gender of migrant, number and percentages

|  | Female | Male | Total |
| :--- | :--- | :--- | :--- |
| Same household | $2159(98.09)$ | $6459(99.05)$ | $8618(98.81 \%)$ |
| Relative | $36(1.64 \%)$ | $43(0.66 \%)$ | $79(0.91 \%)$ |
| Neighbour | $2(0.10 \%)$ | $3(0.05 \%)$ | $5(0.06 \%)$ |
| Boarding school | $3(0.17 \%)$ | $8(0.13 \%)$ | $11(0.13 \%)$ |
| Total | $\mathbf{2 2 0 0 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{6 5 1 3 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{8 7 1 3 ( 1 0 0 . 0 0 \% )}$ |

Source: Own calculations from AHDSS.
Notes: In the AHDSS temporary migration modules, the respondent is asked where the child of the migrant stays in his/her absence. 9 children had missing data on their residential arrangements.

Table 20 shows that almost all children linked with migrants (male and female) were left in the household, i.e. about $99 \%$. In comparison to children connected to male migrants, female migrants have a slightly higher likelihood of leaving their children with a relative ( $1.64 \%$ compared to $0.66 \%$ ). Only about $0.13 \%$ of all children are reported to have been left at a boarding school and even fewer ( $0.06 \%$ ) with a neighbour.

Table 21 Residence of children staying with a relative, number and percentages

|  | Number | Percent |
| :--- | :--- | :--- |
| Grandmother | 43 | $62.23 \%$ |
| Sibling | 2 | $2.94 \%$ |
| Uncle/aunt | 8 | $11.76 \%$ |
| Father | 2 | $2.94 \%$ |
| Mother | 13 | $19.13 \%$ |
| Total | $\mathbf{6 8}$ | $\mathbf{1 0 0 . 0 0 \%}$ |

Source: Own calculations from AHDSS.
Note: 53 children in the sample had missing data on the relative they lived with.

Most of the children were left in their households (98.81\%). Nevertheless, of those left in the care of specific relatives outside the household, they were more likely to be cared for by a female relative. In total, children reported to be staying with their mothers and grandmothers alone accounted for $81.36 \%$ of all children left with a relative outside their household, and $62.23 \%$ were left with their grandmothers. Findings thus show a gender selection among those assuming responsibility over children left behind. A very small proportion of children were cared for by their fathers (2.94\%) and siblings (2.94\%) outside the household.

Table 22 Relationship to household head for household members left in charge of food arrangements for children left behind, number \& percentages

| Relation | Count | Percent |
| :---: | :---: | :---: |
| W=Wife | 4544 | 49.81\% |
| W1=First wife | 277 | 2.49\% |
| W2=Second wife | 120 | 1.32\% |
| W3=Third wife | 10 | 0.11\% |
| $\mathrm{T}=$ Household head (Tatane) | 1326 | 14.53\% |
| D=Daughter | 861 | 9.44\% |
| SW=Son"s wife | 599 | 6.57\% |
| $\mathrm{S}=$ Son | 302 | 3.31\% |
| M=Mother | 144 | 1.58\% |
| $\mathrm{Z}=$ Sister | 131 | 1.44\% |
| BW=Brother"s wife | 116 | 1.27\% |
| DD=Daughter"s daughter | 78 | 0.85\% |
| WD=Wife"s daughter | 22 | 0.24\% |
| $\mathrm{B}=$ Brother | 20 | 0.22\% |
| SD=Sister ${ }^{\text {s }}$ daughter | 16 | 0.18\% |
| HW=Husband ${ }^{\text {'s }}$ wife | 16 | 0.18\% |
| ZS=Sister ${ }^{\text {'s }}$ s son | 14 | 0.15\% |
| FW=Father 's wife | 11 | 0.12\% |
| $\mathrm{R}=$ Related indirectly by marriage | 10 | 0.11\% |
| SW1=Son"s first wife | 9 | 0.10\% |
| DSW=Daughter"s son"s wife | 9 | 0.10\% |
| DS=Daughter"s son | 8 | 0.09\% |
| WS=Wife"s son | 8 | 0.09\% |
| SSW=Son"s son"s wife | 7 | 0.08\% |
| BW1 = Brother"s first wife | 7 | 0.08\% |
| BSW=Brother"s son"s wife | 7 | 0.08\% |
| HM=Husband ${ }^{\text {s }}$ s mother | 6 | 0.07\% |
| ZSW=Sister"s son"s wife | 6 | 0.07\% |
| WZ=Wife"s sister | 5 | 0.05\% |
| U=Uncle | 5 | 0.05\% |
| $\mathrm{H}=$ Husband | 3 | 0.03\% |
| $\mathrm{BD}=$ Brother ${ }^{\text {s }}$ daughter | 2 | 0.02\% |
| SS=Son"S son | 2 | 0.02\% |
| WB=Wife"s brother | 2 | 0.02\% |
| WSD=Wife"s son"s daughter | 2 | 0.02\% |
| WSW=Wife"s son"s wife | 2 | 0.02\% |
| SWD=Son"s wife"s daughter | 2 | 0.02\% |
| HSW=Husband's sister"s wife | 1 | 0.01\% |
| HS=Husband" ${ }^{\text {c }}$ sister | 1 | 0.01\% |
| Total | 8697 | 100.00\% |

Source: Own calculations from AHDSS.
Given that almost $99 \%$ of children remain in the sending household, it is interesting to see who is responsible for their care. The AHDSS module on temporary migration asks specifically who is responsible for the child"s meals and who decides to take the child for
treatment if he/she is ill. As shown in Table 22, wives of migrant household heads were the primary food providers for children left in the household $-53.73 \%$. Moreover, this estimate includes up to the third wife. In other words, one in every two children left were more likely to depend on their maternal mothers and stepmothers for daily food requirements. In any case, the result is expected given that the majority of migrants in this study are men.

Household heads represented the second most important food providers $-14.53 \%$. The percentage of children whose daily meal provision came from siblings was $12.75 \%$ (i.e. $9.44 \%$ daughters and $3.31 \%$ sons of the household head). Close to $7 \%$ of children left by a migrant parent in the same household had their food catered for by the household head"s son"s wife - possibly capturing an aunt relationship. In this study, less than $1 \%$ of children were found to be given their daily meals by fathers -typically husbands of migrant mothers.

Table 23 Relationship to household head for household members left in charge of healthcare for children left behind, numbers and percentages

| Relation | Count | Percent |
| :---: | :---: | :---: |
| W=Wife | 4597 | 53.04\% |
| $\mathrm{W} 1=\mathrm{W} 2$ | 236 | 2.72\% |
| W2=Second wife | 124 | 1.43\% |
| W3=Third wife | 10 | 0.12\% |
| T=Household head | 1413 | 16.30\% |
| $\mathrm{D}=$ Daughter | 752 | 8.68\% |
| SW=Son's wife | 574 | 6.62\% |
| $\mathrm{S}=$ Son | 311 | 3.59\% |
| Mother | 156 | 1.80\% |
| BW=Brother ${ }^{\text {cs }}$ wife | 118 | 1.36\% |
| $\mathrm{Z}=$ Sister | 113 | 1.30\% |
| $\mathrm{DD}=$ Daughter ${ }^{\text {cs }}$ daughter | 66 | 0.76\% |
| $\mathrm{B}=$ Brother | 20 | 0.23\% |
| $\mathrm{ZD}=$ Sister ${ }^{\text {cs }}$ daughter | 16 | 0.18\% |
| WD=Wife ${ }^{\text {es }}$ daughter | 16 | 0.18\% |
| HW=Husband's wife | 16 | 0.18\% |
| $\mathrm{SD}=$ Son ${ }^{\text {cs }}$ daughter | 11 | 0.13\% |
| FW=Father's wife | 11 | 0.13\% |
| SW1=Son ${ }^{\text {cs }}$ first wife | 9 | 0.10\% |
| DSW=Daughter ${ }^{\text {cs }}$ s son ${ }^{\text {cs }}$ wife | 9 | 0.10\% |
| WS $=$ Wife"s sister | 8 | 0.09\% |
| SSW=Son"s son"s wife | 7 | 0.08\% |
| BW1 = Brother's first wife | 7 | 0.08\% |
| BSW=Brother 's sister's wife | 7 | 0.08\% |
| ZSW=Sister ${ }^{\text {cs }}$ s son's wife | 6 | 0.07\% |
| WZ=Wife"s sister | 6 | 0.07\% |
| $\mathrm{R}=$ Related indirectly by marriage | 6 | 0.07\% |
| HM=Husband ${ }^{\text {es }}$ mother | 6 | 0.07\% |
| U=Uncle | 5 | 0.06\% |
| DS=Daughter ${ }^{\text {cs }}$ s son | 3 | 0.03\% |
| H=Husband | 3 | 0.03\% |
| WSW=Wife"s son's wife | 3 | 0.03\% |
| WSD=Wife ${ }^{\text {es }}$ s son ${ }^{\text {es }}$ daughter | 2 | 0.02\% |
| WB=Wife"s brother | 2 | 0.02\% |
| $\mathrm{SS}=$ Son $^{\text {cs }}$ s son | 2 | 0.02\% |
| DH=Daughter's husband | 1 | 0.01\% |
| HS=Husband ${ }^{\text {es }}$ sister | 1 | 0.01\% |
| HSW=Husband ${ }^{\text {cs }}$ s son ${ }^{\text {cs }}$ wife | 1 | 0.01\% |
| MBW=Mother"s brother"s wife | 1 | 0.01\% |
| Total | 8651 | 100.00\% |

Source: Own calculations from AHDSS.
Simlar to the findings on food needs, Table 23 indicates that wives of household heads, were most likely to take charge of the healthcare needs of children remaining in the household (53.04\%). In about $4 \%$ of the cases, where unions were polygamous,
subsequent wives of the household heads assumed this role. The household heads (16.30\%), their daughters ( $8.68 \%$ ), sons ( $3.59 \%$ ) and sons"e wives ( $6.62 \%$ ) were also key healthcare decision-makers in determining the healthcare arrangements for children left behind by migrants. The order of importance of household members in the daily food provision for children left behind is replicated here for healthcare arrangements. It is important to recall that in the observed results, individuals involved in both the nutritional and healthcare outcomes for children left behind are co-resident at the same household.

### 4.6 Results based on whether children were left behind

This section explores some of the attributes of the sampled migrant parents, and in particular, determines whether there are differences by gender. In total, 4035 migrants left their children in the sending household for the duration of their absence from the household in 2007, i.e. $40.75 \%$ of the labour migrant population. Leaving children behind was more common among women (50.50\%) than men (37.47\%) as shown in Table 19 above.

Table 24 Province of destination for migrants leaving children behind

| Province of destination | Gender |  | Total |
| :--- | :--- | :--- | :--- |
|  | Female | Male |  |
| Eastern Cape | $1(0.08 \%)$ | $3(0.11 \%)$ | $4(0.10 \%)$ |
| Free State | $2(0.16 \%)$ | $23(0.11 \%)$ | $25(0.62 \%)$ |
| Gauteng | $323(25.61 \%)$ | $975(35.15 \%)$ | $1298(32.17 \%)$ |
| KwaZulu-Natal | $0(0.00 \%)$ | $12(0.43 \%)$ | $12(0.30 \%)$ |
| Mpumalanga | $781(61.93 \%)$ | $1356(48.88 \%)$ | $2137(52.96 \%)$ |
| Northern Cape | $0(0.00 \%)$ | $2(0.07 \%)$ | $2(0.05 \%)$ |
| Limpopo | $130(10.31 \%)$ | $223(8.04 \%)$ | $353(8.75 \%)$ |
| Northwest | $19(1.51 \%)$ | $156(5.62 \%)$ | $175(4.34 \%)$ |
| Western Cape | $4(0.08 \%)$ | $12(0.22 \%)$ | $16(0.17 \%)$ |
| Missing | $4(0.32 \%)$ | $18(0.65 \%)$ | $22(0.65 \%)$ |
| Total | $\mathbf{1 2 6 1 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{2 7 7 4 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{4 0 3 5 ( 1 0 0 . 0 0 \% )}$ |

Source: Own calculations from the AHDSS.

Slightly more than $50 \%$ of all the migrants with children remaining in the migrated households only migrated to destination areas within the province of Mpumalanga (the province housing this study`s site, Agincourt). An anticipated finding is that a higher proportion of mothers, $61.93 \%$, than fathers, $48.88 \%$, are likely to migrate within Mpumalanga, suggesting mothers have a higher propensity to migrate to destinations
close to their households. About a third of all migrants leaving children behind travelled to Gauteng (a lower percentage than for all migrants,45.03\%). Parental migrants on the other hand were less likely to travel to remote destinations (i.e. in relation to Agincourt, Mpumalanga), such as Western Cape, Free State, Eastern Cape etc.

Table 25 Number of years as migrant for those leaving children behind by gender

| Numbers of years as migrant | Gender |  | Total |
| :--- | :--- | :--- | :--- |
|  | Female | Male |  |
| $0-1$ | $307(26.88 \%)$ | $588(23.93 \%)$ | $895(24.87 \%)$ |
| $2-3$ | $367(32.14 \%)$ | $426(17.34 \%)$ | $793(22.03 \%)$ |
| $4-6$ | $208(18.21 \%)$ | $390(15.87 \%)$ | $598(16.62 \%)$ |
| $7-10$ | $141(12.35 \%)$ | $422(17.18 \%)$ | $563(15.64 \%)$ |
| $11-19$ | $90(7.88 \%)$ | $345(14.04 \%)$ | $435(12.09 \%)$ |
| $>20$ | $29(2.54 \%)$ | $286(11.64 \%)$ | $315(8.75 \%)$ |
| Total | $\mathbf{1 1 4 2 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{2 ~ 4 5 7 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{3 5 9 5 ( 1 0 0 . 0 0 \%})$ |

Source: Own calculations from AHDSS.
Note: There were 436 male and female migrants with missing data on their migration experience.

In 2007, close to $50 \%$ of all migrants leaving children behind had less than three years of migration experience. Of these, more than half had at most one year"s experience as a migrant. There is a marked difference by gender of the migrant leaving children behind. Mothers represent the highest proportion of migrants with up to six years of migrant experience; however, this trend is reversed beyond seven years of migrant experience. Fathers contributed the largest share of migrants with more than seven years of migrant experience ( $42.86 \%$ ) compared to mothers ( $22.77 \%$ ). This may suggest that female labour migrants represent the most recent entrants into labour migration; with up to $77.23 \%$ of this cohort having less than seven years of exposure to labour migration. Thus, women may delay labour migration until small children are older. This result may also reflect the fact that migration was traditionally dominated by men.

Table 26 Common mode of communication for migrants leaving children behind by gender

| Main method of communication <br> with household during absence | Gender |  | Total |
| :--- | :--- | :--- | :--- |
|  | Female | Male |  |
| Spoke in person at home | $465(36.93 \%)$ | $774(27.98 \%)$ | $1239(30.78 \%)$ |
| Spoke in person at work | $1(0.08 \%)$ | $7(0.25 \%)$ | $8(0.20 \%)$ |
| Spoke by telephone | $789(62.67 \%)$ | $1978(71.51 \%)$ | $2767(68.75 \%)$ |
| Verbal message | $2(0.16 \%)$ | $2(0.07 \%)$ | $4(0.10 \%)$ |
| Written message/letter | $1(0.08 \%)$ | $1(0.04 \%)$ | $2(0.05 \%)$ |
| Other | $1(0.08 \%)$ | $4(0.14 \%)$ | $5(0.12 \%)$ |
| Total | $\mathbf{1 2 5 9 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{2 7 6 6 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{4 0 2 5 ( 1 0 0 . 0 0 \% )}$ |

Source: Own calculations from AHDSS.
Note: 10 migrants both male and female had missing data on modes of communication used.

The majority of migrant parents depended on telephone communication as the principal method for communicating with co-resident household members remaining behind (including children). However, a much lower percentage of mothers ( $62.67 \%$ ), compared to fathers ( $71.51 \%$ ) communicate this way. Migrant mothers had a higher propensity ( $36.93 \%$ ) for physically talking to family members at home as a means of communication compared to fathers (27.98\%). There was no significant difference in the likelihood of either male or female parent migrants conveying messages to household members through written letters, verbal messages or speaking in person at work.

Table 27 Pattern of return to the dwelling for migrants with children remaining in the household, by gender

| Return pattern | Gender |  | Total |
| :--- | :--- | :--- | :--- |
|  | Female | Male |  |
| Christmas only | $12(0.96 \%)$ | $55(1.99 \%)$ | $67.07(3.87 \%)$ |
| Christmas and Easter only | $43(4.15 \%)$ | $159(3.96 \%)$ |  |
| Month-ends | $575(46.96 \%)$ | $1257(45.12 \%)$ | $1862(46.34 \%)$ |
| Month-ends plus holidays | $72(7.03 \%)$ | $199(7.19 \%)$ | $287(7.14 \%)$ |
| Most weekends | $47(4.55 \%)$ | $172(6.34 \%)$ | $229(5.70 \%)$ |
| One long period/holiday | $18(1.44 \%)$ | $37(1.34 \%)$ | $55(1.37 \%)$ |
| School holidays | $6(0.48 \%)$ | $2(0.07 \%)$ | $8(0.20 \%)$ |
| Irregularly | $302(28.19 \%)$ | $733(28.81 \%)$ | $1055(27.92 \%)$ |
| Other | $75(6.14 \%)$ | $140(5.09 \%)$ | $230(5.70 \%)$ |
| Total | $\mathbf{1 1 5 0 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{2 7 0 2 ( 1 0 0 . 0 0 \% )}$ | $\mathbf{3 8 5 2 ( 1 0 0 . 0 0 \% )}$ |

Source: Own calculations from AHDSS
Note: 193 migrants did not have data on their return home arrangements, thus the column total does not add up to 4035 .

The frequency of migrant parents ${ }^{\text {ce }}$ return to households of origin is an indication of the commitment of migrants to their sending households and is a vital aspect of care for
children in particular. The most common interval for returning home for all migrants leaving children behind was month-ends. In the tabulated results above, a slightly greater percentage of migrant mothers ( $46.96 \%$ ) compared to fathers ( $45.12 \%$ ) were likely to return home on a monthly basis. Typically, month-ends are very significant time periods in which a number of social events such as kin visitations occur. This pattern can be explained in part by the fact that activities are planned around times when working individuals receive their monthly salaries hence the propensity to visit home is associated with cash endowments. The receipt of a salary might also lead the migrant to return home to transfer remittances in cash or in-kind in person.

### 4.7 Economic outcomes for households with children left behind

The predictability of migrants sending remittances over the long term is important for households to secure access to future income, anticipate expenses and make investments in services such as health and education. The results below describe the economic implications for households in which migrants leave children behind, based on the remitting behaviour of migrant parents.

Table 28 Propensity to remit for migrants leaving children in the household, by gender (number and percentages)

| Does the migrant send anything <br> back to the household? | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | N | $\%$ | N | $\%$ |
| Yes | 970 | $\frac{76.92}{}$ | $\frac{2461}{}$ | 88.92 |
| No | 291 | 23.08 | 313 | 11.08 |
| Total | $\mathbf{1 2 6 1}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{2 7 7 4}$ | $\mathbf{1 0 0 . 0 0}$ |
| S |  |  |  |  |

Source: Own calculations from AHDSS.

Table 29 Parent migrants who remit, sending cash to the household, by gender (number and percentages)

| Does the migrant usually send <br> back money? | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | N | $\%$ | N | $\%$ |
| Yes | 836 | 86.19 | 2344 | 95.25 |
| No | 134 | 13.81 | 117 | 4.75 |
| Total | $\mathbf{9 7 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{2 3 6 5}$ | $\mathbf{1 0 0 . 0 0}$ |

Source: Own calculations from AHDSS.
Note: Response data for 825 parent migrants was missing.

Table 30 Parent migrants who remit, sending clothes to the household, by gender (number and percentages)

| Does the migrant usually send <br> back clothes? | Female |  | Male |  |
| :--- | :--- | :--- | :--- | :--- |
|  | N | $\%$ | N | $\%$ |
| Yes | 122 | 12.58 | 243 | 9.87 |
| No | 848 | 87.42 | 2218 | 90.13 |
| Total | $\mathbf{9 7 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{2 4 5}$ | $\mathbf{1 0 0 . 0 0}$ |

Source: Own calculations from AHDSS
Note: Response data for 825 parent migrants was missing

Table 31 Parent migrants who remit, sending food to the household, by gender (number and percentages)

| Does the migrant usually send <br> back food? | Female |  |  | Male |  |
| :--- | :--- | :--- | :--- | :--- | :---: |
|  | $N$ | $\%$ | $N$ | $\%$ |  |
| Yes | 355 | 36.60 | 484 | 19.67 |  |
| No | 615 | 63.40 | 1977 | 80.33 |  |
| Total | $\mathbf{9 7 0}$ | $\mathbf{1 0 0 . 0 0}$ | $\mathbf{2 4 6 1}$ | $\mathbf{1 0 0 . 0 0}$ |  |

Source: Own calculations from AHDSS.
Note: Response data for 825 parent migrants was missing.

An overwhelming majority of parent migrants with children remaining in the same household were likely to send back cash remittances to the dwelling, with males more likely to do so $(95.25 \%)$ than females $(86.19 \%)$. More than one in every 10 parents migrating was likely to remit clothes back to the household. Results on this question showed a difference between the proportion of mothers (12.58\%) and fathers (9.87\%) sending clothes home. Nearly a quarter of the total population with children cared for in their usual household sent back food packages. It is important to note that mothers of children left in the household were almost twice as likely to send food (36.60\%) compared to migrant fathers (19.67\%). While the gendered pattern in the type of remittances sent reflects the findings for the full migrant population (parent and nonparents), what is interesting to note is that migrant parents are much more likely to remit either cash or goods than non-parent migrants. That is, $76.92 \%$ and $88.92 \%$ among parents (Table 28) compared to $61.99 \%$ and $58.41 \%$ among non-parents (Table 11), for men and women respectively, suggesting stronger ties to the household and concern for children"s well being

Table 32 Mean household remittances (in Rands) for remitting migrant parents by gender

|  | Female |  |  |  |  |  |  |  |  | Male |  |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
|  | Total <br> $(\mathrm{N})$ | Mean | Standard <br> deviation | Min | Max | Total <br> $(\mathrm{N})$ | Mean | Standard <br> deviation | Min | Max |  |  |  |  |  |
| Month | 1283 | 507.19 | 533.19 | 200 | 10000 | 3682 | 661.84 | 747.34 | 250 | 17000 |  |  |  |  |  |
| Annual | 1099 | 5890.44 | 5627.33 | 700 | 72000 | 3405 | 7729.28 | 7597.03 | 1450 | 150000 |  |  |  |  |  |

Source: Own calculations from AHDSS,

On the question of the average monthly cash remittances sent to households with children left behind by gender of migrant, this study found that male migrant parents remitted significantly more, R661.84 monthly ( $\mathrm{SD}=747.34$ ), compared to female migrant parents, R507.19 ( $\mathrm{SD}=533.19$ ). However there is a negligible difference in the mean remittances of parent migrants and the full sample of migrants, a further gender difference can be seen when the maximum, remitted cash to households is estimated i.e. R5 890 (Table 32) and R5 886 (Table 15). A notable difference by gender is also noted when the maximum remitted cash to households is estimated. Male migrant parents remit cash or goods up to R17 000 monthly while their female counterparts have an upper limit of R10 000. Typically, migrant fathers leaving children behind made substantially higher annual remittances of close to R 7730 ( $\mathrm{SD}=7$ 597.03) compared to those for migrant mothers of R5 890.44 ( $\mathrm{SD}=5627.33$ ). Again, as for the full migrant population, this is likely to reflect that women tend to hold lower paying jobs on average. It is important to note that while about $40 \%$ of migrants leave children behind, not all in fact remit to the household, thus accounting for the difference in the total sample size in Table 15 and 32.

Table 33 Household use of cash remittances by gender of migrant leaving children behind

| Allocation of cash remittance | Gender |  | Total |
| :--- | :--- | :--- | :--- |
|  | Female | Male |  |
| House | $25(1.98 \%)$ | $112(4.04 \%)$ | $137(3.40 \%)$ |
| Cattle | $19(1.51 \%)$ | $23(0.83 \%)$ | $42(1.04 \%)$ |
| Food | $822(65.19 \%)$ | $2 \_280(82.19 \%$ | $3102(76.88 \%)$ |
| Clothes | $126(9.99 \%)$ | $422(15.21 \%)$ | $548(13.58 \%)$ |
| Business/trade | $13(1.03 \%)$ | $44(1.59 \%)$ | $57(1.41 \%)$ |
| Electricity | $527(41.79 \%)$ | $1819(65.57 \%)$ | $2346(58.14 \%)$ |
| Communication | $111(8.80 \%)$ | $445(16.04 \%)$ | $556(13.78 \%)$ |
| Transport | $64(5.08 \%)$ | $286(10.31 \%)$ | $350(8.67 \%)$ |
| Healthcare | $119(9.44 \%)$ | $447(16.11 \%)$ | $556(14.03 \%)$ |
| School | $185(14.67 \%)$ | $553(19.94 \%)$ | $738(18.29 \%)$ |
| Other | $11(0.87 \%)$ | $37(1.33 \%)$ | $48(1.19 \%)$ |

Source: Own calculations from AHDSS.
Note: Columns add up to over $100 \%$ because reported use of remittances in households was not limited to one expense.

In more than $75 \%$ of the households where children are left behind, cash remittances are used for the purchase of food (see Table 33). According to the gendered analysis, households in which male parents leave children were more likely to allocate remittances to securing food $(82.19 \%)$ than when the migrant was a female parent ( $65.19 \%$ ). The explanation for this finding may be that the person in charge at home is typically a woman in the case of the husband migrating, and gender research elsewhere (Rossi, 2008) indicates that when women are in charge of spending, more is likely to be spent on basic necessities and items benefitting children. Generally, the preferred use of remittances in households where children of migrant parents are left behind is similar to that in the total population of sending households (i.e. spending on food and electricity); however the percentages for both here are much higher, suggesting households with children use increased remittances that also tend to cover a greater variety of expenses. Table 33 shows significant differences in the use of cash sent back for school (18.29\%), healthcare ( $14.03 \%$ ), clothes ( $13.78 \%$ ) and communication (13.58\%) compared to the total sample to migrants, for which values were much lower i.e. School (9.43\%), healthcare ( $8.21 \%$ ), clothes $(8.27 \%$ ) and communication ( $9.43 \%$ ) (see Table 17).

This likely reflects the differential needs of households with children, for example, households without children will not require money spent on schools, and my require less
money spent on clothes since there is no growing out of clothes in adults. Notably, households" disbursement of cash remittances on education, healthcare and clothing by gender of the migrant parent leaving children behind indicated differences. Remittances sent by migrant fathers as compared to mothers leaving children behind were more likely to be used on schooling. This is likely to reflect the decision-making interests of the parent or caregiver left behind in the household (a female in most cases where the migrant was a male).

### 4.7 Summary

The extent of labour migration and its impact in the sending households is ascertained in four main subdivisions or themes. The first four themes treat the migrant as the unit of analysis. Lastly the unit of analysis became the child(ren) left behind by labour migrants.

## Labour migration and labour migrant descriptive statistics

The descriptive analysis of temporary migration finds labour migration as the most dominant type of movement in a wide range of moves in Agincourt. Focusing on labour migrants, the study then produced a summary of descriptive statistics of migrants stratified mainly by gender. Highlights from this show that males form the majority of labour migrants, they have longer experience as migrants, have a slightly higher mean age, a greater propensity to be employed in the formal sector, and to migrate to Gauteng as compared to female labour migrants. In contrast, female migrants tended to be a little younger, more likely to be employed in the informal sector, be a migrant for less time, and more likely to migrate within Mpumalanga than their male counterparts.

## Migrant links with household

The continuity of family links between labour migrants and household members remaining in the household was exemplified by three main processes. About two thirds of migrants, both male and female indicated that for communication they relied primarily on telephoning their non-migrating families. Additionally, results revealed a significant reliance of migrants on home face to face communication. In this section, the pattern of return to the dwelling for migrants was likely to predict the method of communication used to access family left behind. For example, migrants returning home most weekends
were most likely to use speaking face to face with family left behind for communication. The data also showed strong economic ties to sending households, with the majority of both male and female migrants remitting either cash or in-kind goods. Women were more likely than men to send clothing and food and men were more likely to remit cash.

## Economic impacts of migrants

Cash remittance income received by households was largely allocated to securing basic household necessities, i.e. food and electricity. The results in this section did not show any significant difference in the household"s preferred use of remittances if migrants were male or female. However, preferences in the use of remittances and the propensity to remit appeared to be determined by whether children were left behind in the sending household. Notably, migrant parents were much more likely to remit either cash or goods than non-parent migrants, and to spend the funds on a larger variety of basic necessities (including clothes, healthcare and education).

## Impact on household composition

Contrary to expectations, this study did not find major additional household compositional shifts due to migration among sending households: less than $12 \%$ of migration episodes resulted in a further change. However, there were some minor differences when results were compared across gender. Women migrated slightly more with their children than men, and men were more likely to have a partner visit them in their workplace or bring back a partner from the destination to the sending household.

## Outcomes for children left behind

There were 8722 children linked to labour migrants in the Agincourt sample population and directly affected by the latter's movement. About $99 \%$ of children, instead of comigrating, remained behind in the household. Only a little more than $1 \%$, were moved elsewhere to a live with a relative or neighbour or were sent to a boarding school as a consequence of the migrant's absence. Notably, of the children left with a relative, there is strong evidence for gender selection for the individual assuming care responsibilities. Previous studies indicate that women are reliable more than men in directing child care provisions for children left behind by the migrant. About $50 \%$ of female migrants left
behind at least one child, while $37 \%$ of male migrants left at least one child behind, likely to reflect that children were more likely to live with their mothers initially.

## CHAPTER FIVE: DISCUSSION OF RESEARCH FINDINGS

This study set out to examine the nature and extent of temporary labour migration and assess its impact in sending households in a rural area in South Africa. As outlined in the first chapter, this study seeks to contribute to migration research in South Africa by ascertaining what impact the movement of household members has on aspects of the household, such as the economic well-being and mobility of its members. Currently, a wide gap exists in the demographic literature, particularly relating to factors affecting child mobility and how this may be affected by parental migration in households. Trying to fill this gap was one of the objectives of this study. Using a cross-sectional design, this study examines the consequences of migration on sending households, and relies largely on descriptive summary statistics for a detailed description of labour migrants, their links with sending households, their impact on these households and outcomes for children of migrants remaining in the household. Data in this analysis was generated from the Agincourt HDSS; a study site housing a sample population of about 83000 individuals from 14000 households spread over 25 villages in Mpumalanga, South Africa.

### 5.1 Extent of labour migration and labour migrant attributes

In 2007, nearly all the temporary migrations occurring from Agincourt to destinations either within the province of Mpumalanga or in distant provincial locations within South Africa were associated with labour. $94.91 \%$ of the migrant population was absent for more than six months of the year for work purposes, while the other (just less than) $5 \%$ of migrants moved for educational, spiritual, medical and other reasons. Almost threequarters of the total temporary labour migration sample were male while female labour migrants only represented a quarter of this population.

The results of this analysis indicate that temporary migration is almost synonymous with labour migration and that labour migration is a domain for men more than for women. Prior studies have noted the existence of this pattern in the recent past in Agincourt particularly. A high prevalence of male labour migration has been reported in Collinson (2006): in a migrant population of close to 12000,9000 were men and nearly 3000
were women. Based on longitudinal data for the period 2002 to 2007, more than $70 \%$ of temporary labour migrants from Agincourt were male and less than $30 \%$ were female (Kautzky, 2009). Prior to this period, a dramatic increase in female labour migration had being registered for South Africa and male labour migration remained static (see Posel and Casale, 2006, and others). Despite an increased prevalence of female labour migration at the expense of male labour migration, the dominance of males in labour migration is still apparent. The historical development of the migrant labour system in South Africa as documented in Bundy (1979) and Collinson (2006) explain this observed distribution of labour migration by gender. The neoclassical theory argues that reasons underlying migration are hierarchical and that anticipation of positive economic outcomes strongly influences migration. From this premise, a high prevalence of men in labour migration perhaps displays their heightened role in household economic decision making compared to women and the greater returns for men in the labour market.

Another significant finding is that the number of additional migrants from the household was substantially influenced by the gender of the migrant. The current study found that the majority of men $(41.56 \%)$ were more likely to be sole migrants while a much greater percentage of women ( $66.44 \%$ ) were associated with other migrations from the same household. Moreover, female parent labour migration is associated with greater child mobility: in $9.45 \%$ of households, children co-migrated with the mother or relocated to the household of a relative/neighbour or boarding school, whereas, in only $5.12 \%$ of households, children either co-migrated with the father or relocated. This combination of findings provides some support for the conceptual underpinning that female migration potentially threatens household stability and the integrity of the family as a social unit. However, it is important to note that with these data it is not possible to determine whether the children or the household members would have been better off if they had not moved.

The province of destination for temporary labour migrants was determined both by the gender of the migrant and the distance from the sending region, i.e. Agincourt, Mpumalanga. The most popular province for females (54.87\%) to migrate to was Mpumalanga while men (45.56\%) were most likely to migrate to Gauteng. These
gendered patterns of migration are predictable given the geographical spread of economic and industrial hubs of activity in South Africa and traditional migrations flows of labour.

This gender sorting by destination resonates with the concept of proximal preference among labour migrants: migrants by and large seek to travel the shortest possible distance to maximise their employment prospects on available jobs. Another proposition is that the migrants" perceived functional attributes of a destination are important (for instance a ready availability of employment opportunities). This may be important in accounting for the observed gendered distribution of migrants, i.e. the importance of Gauteng and Mpumalanga Province as respective destinations for males and females. Gauteng is a desirable destination especially for male migrants in Agincourt: the availability of formal or informal, skilled, semi-skilled and unskilled employment is a significantly compelling characteristic of Johannesburg and Pretoria - the province"s largest conurbations. This supplies reason to assume that a wide array of jobs, such as construction work, mining, security, domestic work, cleaning, driving and transportation, informal selling and civil service employment are easily obtainable - since the aforementioned cities are South Africa"s core industrial and economic hubs. Thus, in spite of its distance from Agincourt (about 500 km ), Gauteng remains a favourable destination for male labour migrants mainly because of its actual and perceived value for increased skilled and semi-skilled employment opportunities.

Meanwhile, the overrepresentation of women in the stream of migrants travelling within Mpumalanga, i.e. the surrounds of Agincourt, may find a similar explanation - working within Mpumalanga may be a very sensible decision for women leaving children behind. This finding mirrors the New Economics of Labour Migration"s (NELM) theoretical claim that temporary labour migration reflects the economic and social reality of individuals. In the study, women with non-migrating children were more likely to migrate and work within Mpumalanga province than the total population of migrants in Agincourt in 2007. In Mpumalanga, there is an abundance of semi-skilled and unskilled employment, i.e. a set of occupations including sewing, hairdressing, baking, brewing, waiter/bar staff, informal selling, craft and related trades, domestic work and elementary occupations and others - occupations associated more with women than men. Notably,
the nature of this work, i.e. somewhat less skill-intensive, casual and flexible in terms of time and its localised availability may suit the convenience of rural parental labour migrants and in particular mothers leaving children behind.

This study used the South African Standard Classification of Occupations (SASCO) as a guideline for categorisation of labour migrants into relevant broad industry categories. Consistent with the analysis above which suggests that men work in industrial centres, occupation results showed that $11.90 \%$ of men as compared to $6.35 \%$ of women were working in skilled jobs, and two thirds of women were in unskilled occupations compared to half of all men. There were slight differences in the proportion of male and female migrants that were in semi-skilled occupations. The concentration of men and women in unskilled work is corroborated by prior studies which found that migrants reporting positive labour outcomes in destination areas were less likely to have formal training for a particular trade hence they occupied low-skilled/paying jobs (Rasool, 2009) ${ }^{7}$.

### 5.2 Links of migrants with the sending household

Information from the AHDSS data on ties between migrants and co-residing household members are available at three main levels. These are the frequency of migrant return, mode of communication used, as well as the propensity to remit cash or in-kind goods.

Migrant visitation patterns were differentiated according to whether the migrant was the household head or not. Migrants who were non-household heads were more likely to return home after longer intervals away, while household heads were more likely to return home at month-ends. Nearly a tenth of all migrant non-household heads limited their return home to twice a year, i.e. on selected public holidays such as Christmas and Easter breaks. A large proportion of labour migrants did not have a systematic schedule of returning home however, and migrants identified as non-household heads were twice more likely to return home irregularly ( $24.88 \%$ ) than household heads ( $11.62 \%$ ). Frequency of return also differed by gender of the migrant - men were more likely to return home irregularly compared to women. In addition, women had a higher likelihood

[^6]to return home on most weekends and at month-ends. These findings accord, albeit indirectly, with earlier observations on the length of stay in destinations for migrants (see Collinson, 2006 and Makiwane et al., 2013), i.e. that household characteristics and the individual's role therein shape patterns of stay in the destination. Another possible explanation for frequency of return for female labour migrants is that women were substantially more likely to work in Mpumalanga (i.e. closer to Agincourt) than men, making it easier to visit their homes more frequently.

Migrant and sending household ties were also evident in the communication methods used. This varied by the gender of migrants and more intricately by their pattern of return home. The vast majority of migrants in general relied on the telephone (63.77\%) and speaking face to face upon visits home ( $35.42 \%$ ) for communication with family members remaining in the household. A more gender-specific analysis revealed that women were slightly more associated with face to face interactions at home (38.38\%) compared to men ( $34.42 \%$ ). Men tended to use telephones more for communication ( $64.74 \%$ of men compared to $60.89 \%$ of women).

The results presented above are significant in at least one major respect. Firstly, the greater reliance of women on face to face communication may be attributable to the fact that they would have left children in the household. Based on further analysis on whether migrants have left children in households, results on the mode of communication used indicated that more mothers leaving children behind (36.93\%) compared to fathers $(27.98 \%)$ spoke in person at home. It is possible, therefore, that the majority of women visiting their households on most weekends (6.65\%) largely did so to maintain access to their children on a frequent basis. In relation to this, Hamel (2009) notes that telecommunication has not per se replaced older forms of communication but has vastly diversified communication options available for regular and irregular migrants in maintaining family relations. Despite the widespread use of telephone exchanges as a mode of communication for migrants in general, about a third still communicate physically, i.e. face to face at home with household members.

As noted above, the return pattern of migrants had an impact on the way in which migrants communicated with their households. Migrants returning home at regular
intervals, i.e. weekly, relied heavily on face to face exchanges for communication $(61.28 \%)$ and were, as expected, less likely to use telephones (37.68\%). Instead, those making infrequent returns home were the most likely to use telephones for communicating with their households - for example migrants returning once a year ( $62.11 \%$ ), twice a year ( $65.23 \%$ ), at most after two long periods ( $69.80 \%$ ) and irregularly (64.10\%). These findings further support Adepoju"s (2004) argument that communications technology is steadily extending its coverage and has strong potential to replace common modes. Results highlighted above confirm the increased importance of telecommunication in maintaining communication with the sending household.

When analysed by household status, gender, return pattern or whether children were left behind, no significant variation in the propensity for migrants to communicate physically at work, through verbal messages, written messages/letters was observed. It can therefore be hypothesised that these channels of communication are gradually becoming out-dated and unpopular. This reflects current communication trends nationally and in other developing countries, where communication via telephones and social media networking are fast becoming the most prominent portals for communication, rivalling physical communication. Furthermore, the current finding would be expected in South Africa as nearly nine in every 10 individuals own a mobile phone (Stats SA, 2012).

Remittances sent home are another important means to identify close ties with the sending households. As displayed in Table 11, nearly $60 \%$ of all the migrants were likely to send cash or physical items from the destination back to the household. Women ( $61.99 \%$ ) showed a marginally higher propensity to remit than men (58.41\%). These findings seem to be consistent with earlier theoretical literature suggesting that women are significantly more likely to remit cash or in-kind goods to their households. Taylor et al. (1996), Posel (2001), Skeldon (2002), and Deshingkar (2004), commenting on similar findings based on the theory of New Economics of Labour Migration, found that migrants are mutually indebted and obligated to make regular remittances to support family left behind. Deshingkar (2004) in particular, noted that remittance sending behaviour is likely to be greater among women because of the customary expectation that women have a stronger bond and are more committed to the household than men. This is
supported by evidence in this study that parents were more likely to remit than nonparents, demonstrating their duty for providence in the household.

### 5.3 Migrant economic impacts on household

The discussion on the economic impacts of labour migration also found gendered differences. There is theoretical justification for assuming that on aggregate, the migration of male and female labour migrants impacts the household economic outcomes differently.

This analysis revealed that the mean monthly cash or worth of goods remitted to households by migrants varied by gender. Men sent back to their dwellings cash or goods worth about R660 per month on average and women sent lower monthly remittances of about R507. Moreover, this pattern of remittance sending was replicated in the analysis of mean annual remittances by migrants. The implications of the observed patterns of remittance sending are particularly important in South Africa where female labour migration is on the increase, yet no unified understanding of the economic impacts on sending households exists. The gendered nature of remittance sending and the factors determining these differences are documented only in a few past studies, such as in Posel (2001). She found that while women are likely to be more reliable in sending remittances to their homes than men, they probably send a smaller amount because they earn much less in unskilled and semi-skilled occupations (as also shown in this study) in comparison to men. The results of this study validate the finding for South Africa in Posel (2001) that women possibly remit back a larger share of their income to the household as compared to men, though cumulatively however, women"s contribution to household may remain slightly lower, outweighed by men`s greater earnings. Thus, the fact that a much lower proportion of women (27.62\%) than men (49.30\%) from Agincourt were employed in the formal sector in 2007 can help to account for the lower remittances sent by female labour migrants.

Significant differences in the mean cash and value of in-kind remittances sent back to households in 2007 were observed between households sending sole migrants and those with two or more labour migrants. Sole migrants were likely to send cash and in-kind goods of a greater value than labour migrants from multi-migrant households. For
example, annually, households with sole migrants receive close to R8 000 on average compared to R6 500 for households with more than one migrant. The current findings seem to suggest that remittances were negatively correlated with the number of labour migrants in the household. The amount of cash and goods remitted to households as a function of the number of migrants in the household may have something to do with individuals being more committed to sending money home knowing that they may be the sole income channel for their households compared to when there is more than one migrant from the same household. Alternatively, low remittance from the first migrant may necessitate additional migration episodes from the same household.

Another important finding was that the average cash and value of goods sent to households annually varied substantially by the migrantes employment status as well as by the migrant"s skills category. Employed temporary migrants remitted on average cash/goods amounting to R7 252 compared to those reported as „looking for employment ${ }^{\text {ce }}$ where the value was R6 995. Skilled migrants remitted cash and goods worth close to R7 900, semi-skilled R8 130, and unskilled about R6 000 on average (with a maximum of R115 000 per annum). Generally, an explanation for these results builds on empirical evidence highlighting that the amounts of cash or kind remittances sent by migrants are a function of their employment status (Faini, 2006, Kraler and Bigler, 2006). Faini (2006) reported that highly-skilled migrants might remit less compared to lowskilled migrants and further suggest that this is because skilled migrants are more likely to invest towards permanent relocation at the destination (perhaps this is motivated by their favourable labour outcomes). The results of this study in part displays the patterns observed in previous research as semi-skilled workers remit slightly more than skilled workers. Regardless, the mean amounts remitted to households both monthly and annually are essential in subsidizing total income received by rural households. Given a per person poverty line ranging between R500and R600 in South Africa (Rogan et al., 2013), in rural areas where households typically rely on pensions, farming and small business wages, remittances offer additional income opportunities, thereby reducing the poverty risk in sending households.

Cash remittances were predominantly used for the purchase of food $(51.37 \%$ of households) and electricity ( $36.29 \%$ of households). However, households also allocated cash remittances to schooling ( $9.43 \%$ ), healthcare ( $8.27 \%$ ), clothes ( $8.21 \%$ ) and communication ( $8.13 \%$ ). Remittances appeared unlikely to be dispensed on productive investment, for example a business trade or real estate. Examining the household use of remittances in South Africa, a range of authors noted in the literature review (Dinkelman et al. (2007); Kahn et al. (2003); Collinson (2006); Case (2006); and Banerjee and Duflo (2006)) reported that expenses met with remittance income in receiving households mainly furnish basic consumption needs. One conclusion that can be drawn from this is that until rural households achieve different levels of welfare, the observed spending patterns will remain unchanged, and the use of remittances for longer-term investment purposes will be unlikely.

### 5.4 Migrant impact on household composition

Contrary to expectations, this study did not find a very large degree of domestic movements in the family composition of migrant households. Only about $4.80 \%$ of the total migrant population in 2007 was associated with an outflow of children from the household through child co-migration. However, when analysed by the gender of the migrant, variations were noted. Female labour migrants (7.61\%) were twice more likely to leave with children from the household than male labour migrants (3.85\%). In contrast, about $3.48 \%$ of all men as compared to $0.40 \%$ of women were associated with visitations at the work place by a spouse. Men were twice more likely than women to return home with a partner. In as much as these variations may exist by gender, they amounted in total to a very limited inflow and outflow of members. Something important to note is that even though only about $11 \%$ of migration episodes involved another compositional change in the household, the migrant him/herself leaving is itself a large change and may have various impacts (for example; resource availability, vulnerability to poverty etc.) on the household not measured in the temporary migration module of the ADHSS.

It is difficult to explain these results but it may be related to the formation of African rural households based on matrimonial exogamy - a marriage system creating extensive households characterised by vertically and horizontally extended family living. Members
of the extended family - intergenerational relatives included, live, eat and effectively belong to the same household per se so that migration of an individual may not necessarily result in any inter-household movement, for instance, of a child-carer moving in or a child moving out. Therefore this household member structure effectively negates newer migration flows into and out of the household, as potential migrants may already have their membership accounted for in the same household. This is confirmed by the results in this analysis showing that a large number of children left in the household were left in the care of co-resident extended family members, i.e. grandmothers, aunts and uncles. However, in a nuclear family setting, an inflow of relatives or other external members to offset migration of an individual would have been expected.

### 5.5 Consequences of migration on children left behind

In 2007, about 8722 children were left behind by migrant parents in Agincourt. As shown in Table 20, $50.5 \%$ of female migrants and $37.5 \%$ of male migrants left behind at least one child in the household. Almost the entire sample of children left behind remained in the same household. Thus, the study confirms that $98.81 \%$ of children did not move elsewhere when their parent(s) left the household. The remaining few children, a little over $1 \%$ were moved elsewhere for residence during the course of the parents" absence. In other words, a very small proportion of children that were left were likely to be relocated to a relative`s household, a neighbour"s residence or boarding school.

The noted pattern in residence provision for children left behind in 2007 may be explained in the same way as in the analysis for ties maintained by labour migrants and households - that maintaining the structural integrity of the household appears to be an important consideration when migrants make child-care related decisions. Individuals present in households usually take care of children left behind by migrants. Evidence from the current study also showed heightened child care responsibilities for grandmothers $-62.23 \%$, mothers $-19.13 \%$, and uncles/aunts $-11.76 \%$. It is interesting to note that most of the children in the study were taken care of by a female relative. Mothers and grandmothers alone provided care for $81.37 \%$ of children left behind. The finding for gender selection among those assuming parental responsibility of migrants` children (especially grandmothers) corroborates evidence in past studies (Ngwane, 2003;

Cortes, 2007; Morrison et al., 2007; Kautzky, 2009). As noted in these sources, leaving children behind, particularly in the care of female non-migrating household members, speaks to the new economics of labour migration thesis - that migration is a household strategy and members act out appropriate roles for its success.

For the $98.81 \%$ of children cared for in the same household who did not move elsewhere, decision-making regarding the meals and healthcare was mostly provided by children"s mothers, grandmothers, siblings, uncles/aunts or fathers. About one in two children had their mothers making decisions concerning their food and healthcare needs. Children alternatively relied on household heads and grandparents for food and health-related requirements. However a small proportion of children were likely to have their food prepared or medical needs catered for by their siblings, uncles/aunts and fathers. The study findings indicate that prime-aged and elderly household members (children`s mothers and grandparents) are heavily involved in the welfare, i.e. nutritional and medical decision-making, of children relative to other household members such as their uncles/aunts, siblings and fathers. It may be that mothers and grandparents spend most of the time at home and are less mobile, thus better suited to examine and direct daily meal provision and medical treatment for children left behind. This is reinforced by the fact that nearly three-quarters of migrants leaving Agincourt are male.

### 5.6 Individual and household level outcomes if children were left behind

The study found that mothers leaving children behind were more likely to have been migrants for fewer number of years compared to migrant fathers. Men as compared to women with children remaining at home were more likely to have more than seven years of migration experience while women were more likely to have less than seven years. The reasons for this may be that women are more recent entrants into labour migration than men, and that women do not want to be away from their children for extended periods.

A greater proportion of parent migrants (90\%) remit cash and in-kind goods to their sending household, as compared to the total population of migrants ( $60 \%$ ). Analysis in this study considered a gendered comparison and noted that both male and female parents
had a higher propensity to remit cash if children were left behind compared to the full sample of migrants. In addition, migrants leaving children at home remitted cash/goods valued slightly higher than all migrants (i.e. if no distinction based on having children remaining in the household is made). Results from the study also show an increased incidence of using remittances for schooling in households accommodating children left behind $-20 \%$ of households. This is substantially less than the $10 \%$ of households in the whole sample that reported use of remittances for schooling. This finding affirms the neoclassical migration theory that poverty influences migration from underdeveloped source regions to destinations with plenty of economic opportunities. More so, the assumption is that income generated through labour migration is to be invested in the schooling of children thereby increasing children`s future labour outcomes, and reducing future risk of poverty.

Dwellings with children left behind showed higher remittance expenditure on items important for the general well-being of children and necessary for early childhood development. As such, three in four households were likely to spend remittances on food. Close to $14 \%$ of these would purchase clothes and another $14 \%$ would use this money for communication. Expectedly, more households - 14.03\% - allocated remittance income to healthcare and as noted above, in nearly $20 \%$ of homes housing children left due to migration, remittances were used for child schooling. In reviewing the literature, an explanation for the use of remittances for the welfare of children is that social circumstances operating at the household level are important in predicting the impacts of migration. In the current case, the presence of children linked to the migrant is significantly associated with the observed patterns of food, clothes, healthcare and schooling consumption.

Interaction between parent migrants and children at home mostly occurred at two levels. Firstly, a third of all parents leaving children spoke with their families when they visited back home as a means of communication. Secondly, about $70 \%$ of these migrant parents reported using telephones for contacting their relatives remaining in the household. The present findings seem to be consistent with other research examining the significance of communications technology among mobile populations and their kin. Brown and Grinter
(2011) for instance drew from the account of left-behind Jamaican children and migrant parents to assess the role and uptake of communications technology. They found very high usage of mobile phones by migrant parents; this was mainly for conveying information to co-located guardians and children and facilitating parent-child access and remittance sending. In what is known presently as „remote parentinge, it is usual for migrant parents to frequently call or use instant messaging on mobile phones to check on their children and generally be kept updated on recent developments in their households.

## CHAPTER SIX: CONCLUSION AND RECOMMENDATIONS

### 6.1 Summary of findings

Using data from the temporary migration module of the 2007 HDSS in Agincourt, a rural area in South Africa, Mpumalanga: this study set out to do a number of things. These were: to determine the extent of labour migration in comparison to other forms of migration in the sending household; to examine the relationship of the migrant to the household in terms of remittances, visitations and other forms of communication; and most importantly, to determine the consequences of labour migration in terms of a) household spending patterns, and b) household composition and movement of its members, particularly children. Such a study is unique mainly because it uses data (even if only cross-sectional) that collects information on migrants not usually collected in South Africa"s national surveys. Notably, the questions yielding these data specifically interrogate changes/practices in the household as a result of migration, mitigating causality concerns.

The formal analysis and investigation of the above-mentioned outcomes of interest largely relied on descriptive statistics (such as sums, means, ranges, and crosstabulations). On the question of the extent of labour migration, descriptive results show that nine in 10 of all migratory movements occurring in Agincourt were associated with labour migration. The rest of the respondents were found to have moved for reasons connected to schooling, visiting friends or relatives, escaping from unfavourable situations or an array of other possible reasons. The distribution of labour migrants by age, employment status, duration in migration, destination, skills category etc. was differentiated by gender. Results in this analysis highlighted that men were more likely to be labour migrants in relation to women, and were more likely to be absorbed into labour migration at a younger age as compared to women. On average, migrant men were slightly older than migrant women and were more likely to have experienced a greater number of years as migrants. Female migrants were most likely to move within Mpumalanga, the province within which the study site is located, while male migrants were most likely to migrate to Gauteng. Compared to female migrants, male migrants had
a higher propensity to be employed in the formal sector and were almost twice as likely to be in skilled occupations, reflecting labour market patterns in the population as a whole.

Data on maintaining ties with sending households was collected in three main ways in the survey, i.e. frequency of migrants returning home, contact with relatives remaining in the household, and remittances sent back to the dwelling. While almost the entire sample of the migrants from Agincourt was likely to communicate with their households during the course of their absence from the household, significant variations by gender were noted in the method of communication used by the migrant. About two thirds of all migrants depended primarily on speaking over the telephone with relatives left in the household, however this was a mode more commonly used by men. Women constituted the largest set of migrants interacting with their families face to face when they visit home (regularly). Further descriptive analysis based on whether migrants left children behind found a higher propensity of female than male migrant parents to visit and communicate with their families on a face to face basis on most weekends (and other frequent intervals) when leaving children in the household. Migrants regularly returned home and close to $35 \%$ returned home every month-end. In almost $60 \%$ of the cases in this study, labour migrants sent cash and/or goods to their rural homes. This figure was much higher for the group of migrants leaving behind children in the sending household.

One unanticipated finding was that migration did not result in a large additional number of household movements - the kind that would have an impact on the family composition in migrated households. On aggregate, only $4.80 \%$ of the migrants in 2007 were associated with an outflow of children from the household through child co-migration. However, when analysed by the gender of the migrant, more women compared to men were linked with this behaviour. Less than $2 \%$ of all migrants (largely men) were reported to have been accompanied by a partner on return home. In total, around $11 \%$ of migration episodes were associated with subsequent household composition changes.

This survey also included questions that give some sense of the economic impact of migration on sending households in the study area. The results indicated that economic
implications of migrants sending home remittances were influenced by the gender of the migrant, the skills level of the migrant and the number of additional migrants originating from the same household. Men remitted an average of cash or goods worth about R660 per month, and women sent a somewhat lower monthly average of about R507. Semiskilled migrants on average remitted a larger amount of cash/value of goods compared to skilled and unskilled migrants. The mean cash/value of goods sent home to households sending sole migrants was about R674 monthly compared to R575 if more than one migrant had left the household. Households with children left behind received a higher value of remittances on average compared to the total migrant population. Notably, compared to all households with migrants, households in which children were left were more likely to use remittances for consumption on health, schooling, food, clothes and communication indicating the different needs of children. In all households however, remittances were mostly used on consumption rather than investment per se.

An important finding in this study is that a large number of children are affected by migration. In 2007, 8722 children were left behind in Agincourt, with 50.5\% of women and $37.5 \%$ of men leaving at least one child when they migrate (probably reflecting that most children in South Africa live with their mothers rather than their fathers). Results suggest that migrants were largely reliant on other household members for the welfare of their non-migrating children. There were very few cases of child-carers moving into migrant sending homes or children moving to a relativeses or neighbour"s place or even boarding school. The availability of co-resident female relatives mediated the dependence of migrants on the latter for child-care during their absence. It should be noted that in many rural households in Sub-Saharan Africa, complex care arrangements are usual (i.e. child-care by grandmothers, aunts and siblings), given that the membership of extended family relatives is accounted to a single household. Thus, the tendency of migrant parents to leave children with these relatives builds from this basis. However, this study cannot shed light on whether children are better off being cared for by relatives, grandmothers in particular, than the migrant parent him/herself. Despite the experience grandmothers for instance in supervising and providing care for children, it is possible that children may be compelled to carry out more strenuous household chores at the expense of their education. The elderly may find it difficult to provide other physically demanding aspects
of care, such as fetching water, collecting firewood, cooking etc. The impact on the wellbeing of the children left behind by migrants is an important area of future research in this field, particularly in terms of their education, health and social/emotional well-being.

As noted above, the rate of child mobility is not as high as suggested in past studies. In fact this study indicated that $98.18 \%$ of the children of migrants did not move but remained in the same household. The public provision of services is therefore of massive importance in creating an enabling environment in sending communities. This would include improving food distribution channels, healthcare and educational institutions the set of provisions key to children"s early development. Migrants seem most likely to leave their children in their rural homes when they migrate since it may be desirable for them to do so, perhaps mediated by the ready availability of relatives to care for children in the sending household. This is in spite of the fact that migrants tend to work in destinations where amenities required by children, such as education and healthcare, may be of better quality than sending regions. Typically this discrepancy is one of the reasons driving family migration and the decision to settle permanently in the destination. Further research should thus be more geared towards demonstrating the importance of building the capacity of rural areas in terms of service provision as opposed to merely counteracting migration to urban centres.

### 6.2 Directions for future research

To the best of my knowledge, there are very few local studies that have examined the impact of mobile communications technology on the migration experience. According to the released Census 2011 results, in South Africa, mobile phone ownership increased from less than $32 \%$ in 2001 to nearly $90 \%$ in 2011 (Stats SA, 2012). Such shifts (mobile phone coverage) provide an interesting opening into future research including examining the use of cell phone technology among migrants, the importance it occupies in their lives, their job-finding prospects and its implications on human mobility and maintenance of familial links.

An interesting finding was that a large percentage of migrants leave children behind - far less have children who co-migrate. In this study, it was not possible to know how those children fare (even though we know who cares for them), i.e. whether they are better or
worse off than if they had co-migrated or if their parent had stayed behind. Future studies on the current subject therefore require more extensive longitudinal data on education, health and social/emotional well-being of children, an undertaking beyond the scope of this dissertation. Such studies would additionally lend themselves to more in-depth qualitative analyses of small samples of migrant households.

On the question of the allocation of remittances to a variety of household expenses, ascertaining whether the distribution of this income served the best interests of children merits further analysis. It would also be interesting to know further whether remittances were saved, how much was saved, and the value and use of remittances in relation to other household income sources.

As mentioned in the first chapter of this study, analyses of temporary migration in South Africa focus on a limited range of topics and are overly reliant on cross-sectional data. It is thus suggested here that future research wishing to gain a longitudinal perspective of the impacts of migration on the sending household should rigorously analyse successive rounds of the temporary migration module.

This research on the extent and nature of temporary labour migration and its associated social and economic impacts on the sending household lay a firm foundation for more indepth future studies examining the impact of labour migration on the sending household. New inter-disciplinary studies on labour migration would yield more refined results on certain aspects that are only tentatively addressed in this analysis - this would serve not only in covering gaps in the current knowledge base of this subject but also in forming a strong conceptual basis for social policy applicable to both South Africa and locations in Sub-Saharan Africa similar to the setting of this study.

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## APPENDIX A: TEMPORARY MIGRATION FORM






[^0]:    ${ }^{1}$ To account for this problem that migrants self-select into migration (therefore affecting ability to identify outcomes), researchers suggest an instrumental variable approach to analysing the relationship between migration and any other variable in quantitative analysis (Karamba et al., 2011). However, this technique is highly data intensive.

[^1]:    ${ }^{2}$ In a different study on Nigeria, Guzman et al. (2008) shows evidence of the unequal distribution of remittance spending by gender and household headship within the sending household. Notably, households headed by women exhibited different expenditure patterns than male-headed families: they tended to spend remittances more on education and health than households headed by men.

[^2]:    ${ }^{3}$ Posel (2002) makes a different appraisal by noting that conventional literature pays little attention to the precise intra-household dynamics that give understanding to how decisions are made and resources are distributed in migrant households. In addition, she makes further objections by challenging the stereotypical portrayal of migration as a product of household collaboration, especially in the recent past, as too basic a way for understanding the functions of the household. Within-household decision-making may also be a product of conflict and disagreement.

[^3]:    ${ }^{4}$ Although labour market research in South Africa (Rogan et al., 2013) confirms that women are more likely to be employed in the informal sector than men, a larger proportion of females had missing values on this question compared to males, which may cast some doubt on this finding for this sample population.

[^4]:    ${ }^{5}$ Questions 18 and 19 , detailing the major items bought by migrants in sending households were not postcoded allowing for statistical analysis. From a visual analysis, household items bought appeared to include but not limited to: building materials (cement, doorframes etc.).

[^5]:    ${ }^{6}$ Perhaps these somewhat odd results may reflect the fact that migrants are in fact employed (without exactly settling in on the current occupation) and are largely regarded as looking for work.

[^6]:    ${ }^{7}$ Unfortunately, the data available to me did not contain information on the migrants ${ }^{\text {ec }}$ education or training so I could not explore this further.

