

HSRC Research Report

3823

Migration and urbanisation in South Africa

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Report no. 03-04-02 (2006)

Statistics South Africa
2006

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Published by Statistics South Africa, Private Bag X44, Pretoria 001

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Suggested citation:

Kok, P. and Collinson, M. 2006: Migration and urbanization in South Africa. Report 03-04-02, Pretoria: Statistics South Africa.

Stats SA Library Cataloguing-in-Publication (CIP) Data

Migration and Urbanisation in South Africa / Statistics South Africa, Pretoria: Statistics South Africa, 2006. 38p.

ISBN 0-621-36509-2

1. Migration
2. Urbanisation trends
3. Internal migration
4. Urban growth

- I. Statistics South Africa
- II. Census 2001
- III. Pieter Kok

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INTRODUCTION

In policy debates and in the popular press, migration and urbanisation are often viewed in a negative light, almost as if they were undesirable problems that need to be rectified or threats that must be avoided. Looked at from this angle, being sedentary and immobile seems to be regarded as the 'right thing to do'. Often governments in urbanising countries want to slow down or reverse rural-urban migration, not taking into account the fact that migration is often central to households' livelihoods (De Haan 2000: 24). What is not understood is the various forms that migration takes in different settings and that each form may have different outcomes in terms of health or socio-economic status. A case that will be brought out in another Stats SA publication is a consideration of temporary labour migration versus definitive migration, a classification that has unique contours in the southern African situation.

Migration 'is often seen as the consequence of ruptures, of environmental disaster, economic exploitation, or political or civil tensions and violence. And it is often perceived to be a cause of problems, like environmental degradation, health problems, "brain drain", political or social instability, declining law and order, and unravelling social fabric and support systems' (De Haan, 2000: 1). Viewed from these perspectives, it is no wonder that migration tends to be associated only with problems. What may not always be understood and appreciated is the fact that migration and urbanisation are processes that offer hope for the future – at least from the point of view of the individual or household concerned.¹ Recent work on the Agincourt Health and Demographic Surveillance System has shown a positive correlation of household asset ownership in a rural household if there is a temporary migrant linked to the household (Collinson et al, 2005).

Migration and urbanisation are therefore processes surrounded by a great deal of controversy, and in this report an attempt is made to dispel some misconceptions about these two inter-related processes. The aim of the report will be to describe the different forms of migration and relate them to urbanisation, examining causes and consequences of migration and urbanisation and drawing some conclusions from the research for the purposes of policy-making and planning.

While this report does not deal directly with international and cross-border migration, some reference will be made to these processes as well. Urbanisation is affected not only by internal migration but also by migratory moves from across the country's borders.

Contextualisation

Current migration and urbanisation trends need to be placed in a proper historical context. The legacy of apartheid in South Africa will linger on for some decades, and we need to understand that the inequities of the past, through discriminatory migration and urbanisation controls, cannot be driven out with the wave of a magic wand. As shown by Wentzel and Tlabela (2004), 'South Africa has a sad history of racially based government interventions in the movement and settlement patterns of its own people and those from other countries in the region, with grave effects on the well-being of most of its population. The dramatic political

¹ Sometimes migration is also regarded as positive from a broader perspective, as when governments implicitly or explicitly encourage emigration, such as Turkey, the Philippines, Bangladesh and Jamaica (De Haan 2000: 26–27).

changes that took place in the early 1990s did remove the cause of this pain for most but not necessarily the lasting effects. Very poor rural people, trapped in the legacy of the apartheid homeland policy, have probably found it difficult to escape from their situation.' They (2004) indicate that this helps to explain the lack of any significant change in South Africa's migration levels between the periods 1975–80 and 1992–96 found by Kok, O'Donovan, Bouare and Van Zyl (2003). Temporary labour migration, or the capability of a household to send a migrant to find employment, is a critical factor here. Households that can send a temporary migrant, or possess livestock assets, are the households that survive the legacy of the former 'homeland' system (Collinson et al, 2005).

There are a few misconceptions regarding migration and urbanisation on the one hand and economic development and unemployment on the other that need to be refuted. Firstly, based on the extensive study by the Urban Institute of the United States on the economic consequences of high levels of migration into California by predominantly low-skilled, uneducated Mexicans, Gelderblom and Kok (1994: 181–184) show that large-scale in-migration does not necessarily have a negative impact on the receiving area, provided that it has a relatively strong economy (as in the case of South Africa's major cities). In fact, it was proved by the Urban Institute that California's high levels of economic activity could actually be ascribed to its large inflows of migrants (see Gelderblom & Kok, 1994: 184). It is the same in the case of urbanisation in South Africa, where the urban sectors have developed from the influx of labour from the hinterlands to dig the mines and work as industrial labourers, drivers, security guards, etc.

Secondly, and related to the above, is the commonly held misconception that rural-urban migration causes unemployment. What the migration of (unemployed) persons does, at most, is merely to displace unemployment. Rural-urban migration can only cause unemployment if employed rural persons migrate to urban areas and stay there while remaining unemployed. Such a scenario is most unlikely in view of the high unemployment rates in South Africa's rural areas and the relatively lower levels of urban unemployment. The fact that migration and urbanisation can lead to a *displacement* of unemployment should therefore not be confused with a notion that these processes are the *causes* of unemployment. With temporary labour migration this negative association with unemployment is unlikely because migration can be seen as a job-hunting strategy, which is the means of lessening unemployment in the rural population; formerly this was coerced through the labour migrant system but presently it is the most promising job-hunting strategy for young people in rural areas.

Despite what has been said above, it is necessary, thirdly, to also mention another misconception that may be expected to flow from the argument presented above. This relates to the assumption that areas of high rates of unemployment also have higher out-migration rates than areas with low unemployment levels. As was shown by Kok et al, (2003: 59), the 1996 census data show that the (predominantly rural) South African districts with *high* levels of unemployment are in fact significantly associated with *low* out-migration rates. This confirms, amongst other things, the suggestion by Gelderblom (1999) that members of poor households trapped in impoverished areas do not have access to social (and specifically migrant) networks that would have assisted them in escaping from their current circumstances.

Brief overview of the theoretical literature

Migration models or theories can probably be classified into three categories: (1) spatial models, (2) economic theories and models, and (3) social theories or models. This does not

mean that there were no historical, psychological or development models or theories, for example, but these other models/theories have arguably been dwarfed in the migration literature by the three main categories mentioned. The early theories and models of migration attempted merely to describe the characteristics of migration without a concomitant attempt to explain the phenomenon. Ernest-George Ravenstein's (1885, 1889) 'laws of migration' are examples of these approaches.

During the 1940s the spatial models of migration, which had their origins in the so-called gravity models, were introduced by Steward (1941) and Zipf (1946). Other analysts later added more variables in an attempt to improve the original gravity models and together these became known as the so-called spatial interaction models (c.f. Zietsman, 1984). An important problem with most of these models was that they tried to describe migration patterns with no or very little underlying migration theory. As Shaw (1975: 49) stated correctly, 'seeking a theory to fit the model is indeed an awkward strategy'.

Microlevel migration modelling in the context of economic theory became prominent in the 1960s with the human capital model of Larry Sjaastad (1962) and Michael Todaro's (1969) emphasis on *expected* rather than *real* income differentials as explanations for rural-urban migration in the Third World. Very useful reviews of the economic theories and models of migration are given by Massey et al (1993, 1994). As indicated by DaVanzo (1981) and Goodman (1981), these so-called microeconomic models brought to the fore the important issues of uncertainty and imperfect information, and these highlighted the potential importance of psychological factors (notably risk-taking ability) as another set of dimensions in migration processes.

At about the same time Julian Wolpert (1965) introduced the notion of 'place utility' and Everett Lee (1966) formulated his 'general theory of migration'. These contributions, together with the important earlier work of Peter Rossi (1950), paved the way for the social theories and models of migration that came to be developed by Alden Speare (see Speare 1974; Speare, Kobrin & Kingkade, 1982), who built further on Rossi's work to introduce the concept of 'residential satisfaction', and by Gordon De Jong, who developed and later refined the so-called value-expectancy model of migration decision-making (see De Jong & Fawcett, 1981; De Jong, 2000).

In a related report published by Stats SA (Migration and changing settlement patterns) a discussion of the literature that covers the economic and sociological explanations of the links between temporary migrants and rural households is given, and explains the high presence of temporary migration in the former 'homeland' communities of South Africa.

Although no testing of the abovementioned theories and models are envisaged for this report, it is important to note that migration has many dimensions and therefore cannot be properly analysed without taking into account spatial, economic and social factors – to name but a few.

Overview of the report

The main components of the remainder of this chapter are (1) internal migration in South Africa, where appropriate with reference to three periods in the country's history (1975–1980, 1992–1996 and 1996–2001) although the main emphasis here falls on the period 1996–2001, (2) South Africa's urbanisation processes and history, and (3) a summary of the

findings. Wherever possible and appropriate, attention will be given to the policy and planning implications of the observed patterns and trends.

While this report and the one on migration and changing settlement patterns have some common features, the emphasis in this report is on the broad migration and urbanisation processes in South Africa. In contrast, the report on migration and changing settlement patterns deals more extensively with the detailed patterns of migration and urbanisation in this country. These two reports, although different in approach, provide a logical and coherent perspective on the phenomena of internal migration and urbanisation in this part of the world.

INTERNAL MIGRATION IN SOUTH AFRICA OVER TIME

In order to compare migration levels and trends over different time periods it is necessary to adopt a common definition. The problems associated with migration definitions are therefore discussed briefly in the next section. Following this is a description of the levels and volumes of migration, followed by an analysis of the measures and spatial processes of migration in South Africa. A brief discussion of the causes and consequences of internal migration in this country then follows, and some policy and planning implications of the observed internal migration and urbanisation patterns and trends are considered at the end of the report.

Migration definitions and other data issues

There are some basic concepts used in migration studies that need to be briefly clarified here before the definition of migration is discussed in more detail. These relate to migration 'origins' and 'destinations' and 'internal' versus 'international' migration.

Origin and destination

Every residential move has an *origin* (which is the place from where the person moves) and a *destination* (i.e. the place where the specific move ends). The origin and destination of a residential move can be in the same country/area or in different countries/areas.

International versus internal migration

If the migratory move involves the crossing of a national boundary, it is known as *international migration*. The person involved in such a move is simultaneously called an *emigrant* (from the perspective of his/her country of origin) and an *immigrant* (when viewed from the country of destination).

If both the origin and destination of a specific migratory move are in the same country, the move constitutes *internal migration*. If the origin and destination are in the same country, the person who migrates from a particular place is called an *out-migrant* from that area, and at the same time he/she is an *in-migrant* into the area of destination.

Temporary circular migration

The characteristic pattern of labour migration in southern Africa, which arose through policy and cultural adaptation over many generations, laid the foundation for the definition of a temporary circular migrant. A household based in a rural or peri-urban setting can have one or more linked temporary migrants remitting money back from another, usually urban, place of work. Circular migration represents a large proportion of the movement among the black African population. A migration is circular when the usual place of residence (*de jure*)

remains in the rural or peri-urban setting, but a person migrates usually for employment or education purposes, and stays connected to the 'sending' household through communication, regular return visits and with a high likelihood of cash or non-monetary remittance.

Defining migration

As Skeldon (1990) correctly points out, migration analyses should preferably not be restricted by what the available data have to offer, but the reality is that an analysis of census-based migration data inevitably has to fit in with the available data. Other migration survey data may be less restrictive. Therefore, defining 'migration' for a particular study is not a mere pedantic exercise but a crucial component of migration research. Users of the research findings need to know what criteria were used to distinguish migrants from non-migrants.

Although it is important for researchers to develop and apply conceptually sound definitions of migration and not data-driven conceptualisations, this does not always seem to be possible. For example, a key question in migration analysis is: What constitutes the areas (spatial units) to or from which moves can be classified as migration? Standing (1984) points out that the limits often placed on the concept 'area' can be largely arbitrary or become a mere expediency. In his experience these are usually determined by the administrative unit identified in censuses or surveys – to the detriment of scientific inquiry: 'Somewhat remarkably, most demographers and other social scientists have let statisticians and survey administrators determine the areas between which moves are classified as "migration". In principle, this surely cannot be generally acceptable. Indeed, it has been said that areas between which moves count as migration are first defined by bureaucrats and later rationalised by social scientist researchers' (Standing, 1984: 32).

Peter Morrison, while echoing Guy Standing's sentiments, acknowledges the many practical problems experienced by migration researchers, because they hardly ever have the luxury of dealing with large, disaggregate data sets. 'Instead they must content themselves with data that only partly satisfy their conceptual requirements' (Morrison, c.1980: 8). He warns, though, that any statistical limitations of that nature would not only inhibit the development of theory but also distort observation. In fact, the relationship between concept and measurement can become quite perverse if analysts start manipulating the concept to fit the data available. It is necessary to adapt the available data to the conceptual requirements (Morrison, c.1980: 8). In this way theory or 'concepts of the study' remains based on reality. However, with each means of collecting migration data we encounter a limitation in the data-collection instrument that constrains the data that a system can manage. One should therefore interrogate the accuracy and reliability of each instrument and also recognise the conceptual limitations within any study. It is shown in the report on migration and changing settlement patterns that in reality a large proportion of the rural-to-urban migration is of a temporary nature. However, in the 1996 and 2001 censuses this is concealed in the national-level migration data. The census data report migration in terms of origin and destination, with the limitations described above, but are unable to identify temporary circular migration or migration with multiple destinations. Nevertheless, each data set has a critical role to provide empirical evidence on migration, and can be interpreted in the light of these limitations.

The analyses described here are based on the migration community profile data for the different local/metropolitan governments that were provided by Statistics South Africa (Stats

SA) in respect of the 1996 and 2001 censuses.² The 1992–1996 analyses were undertaken for data originally provided by Stats SA from Census 1996 at an enumerator area (EA) level of enumeration and then aggregated by the researchers to the magisterial district level. For the 1996–2001 analyses Stats SA made the Census 2001 data available at various spatial levels (including the ‘magisterial district’ and ‘main place’ levels).

While it seems fair to suggest, as was done by Kok et al (2003), that one should, ideally, define migration formally as *the crossing of the boundary of a predefined spatial unit by persons involved in a change of residence*, this is not always possible. For example, if one wishes to analyse South African census-based migration data over different intercensal periods it should be understood that the 1980 and 1996 migration data were restricted to moves between different places of ‘usual residence’. In the case of Census 2001 Statistics South Africa did away with this restriction and reported migration-origin data without reference to ‘usual residence’ in respect of the place of previous residence.³ Strictly speaking, comparisons between different periods are not justified, but it is believed that the impact of the differences in respect of these *de jure* (1980 and 1996 censuses) and *de facto* (2001 census) migration levels and volumes will be negligible.

The 1980 census data relate to migration over a fixed-period, five-year interval between magisterial districts of usual residence. In the 1996 census migration data were collected for all individuals in respect of the last move that had been made from one magisterial district of usual residence to another. The year of that move was also recorded. As mentioned before, in the case of the 2001 migration data the origin of the last move was not required to have been the ‘place of usual residence’ before the move. The authors therefore decided to use, with a view to ensuring internal consistency, the place of enumeration at the time of Census 2001 instead of the 2001 ‘place of usual residence’. The important point to be made in this regard is therefore that while the 1975–1980 and 1992–1996 migration analyses were done on a *de jure* (place of usual residence) basis, the migration analyses for 1996–2001 were done on a *de facto* (place of enumeration) basis in as far as place of origin is concerned.

The migration data from the 2001 census were based on the place of residence at a fixed previous date (Census Day in 1996). One problem with this approach is that persons who had lived in the same electoral ward at the time of Census 1996 as the one in which they were enumerated at the time of Census 2001 were regarded as non-migrants irrespective of where they might have migrated in the five years in between and then returned. Another problem (especially important from a demographic perspective) is that no migration data are available in respect of children born between the two censuses. This means that children aged 0–4 years at the time of Census 2001 could not be included in most of the migration analyses presented here.

The data structure as it relates to migration also poses a problem regarding the place of destination, i.e. the place of census enumeration or *de facto* household. In Census 2001 there was no way of knowing which households had linked temporary migrants, or which households had *de jure* household members ‘temporarily’ living somewhere else.

² The kind assistance of Mr Piet Alberts and Ms Lana Evtimova of Stats SA in providing the requested data is gratefully acknowledged.

³ Information on the current place of ‘usual residence’ was, however, also made available to make it possible to conduct *de jure* analyses of the *current* distribution of the population.

All censuses are plagued by problems of under-enumeration. These under-enumerations are not spread evenly geographically and their effects thus become more pronounced as one moves down from the national level to lower spatial levels (e.g. down to magisterial district level, as needed to be done here). While the use of weights (provided by Statistics SA) in all the analyses reported here might have reduced the overall impact of such an under-enumeration, they could not overcome any spatially selective under-enumeration problems.

The three periods under scrutiny here are firstly from 6 May 1975 to 5 May 1980, secondly from 1 January 1992 to 10 October 1996 and thirdly from 11 October 1996 to 10 October 2001. While the first and third periods are exactly five years, the second period is somewhat shorter because the census collected migration data only in respect of years (i.e. not years *and* months as is often the case in sample-based migration surveys). Strictly speaking, therefore, comparisons between the three periods should take this slight time difference into account, but the effect is expected to be small and will thus not be accounted for here.

Migration levels and volumes

It was suggested earlier that migration should be defined both theoretically and operationally as *the crossing of the boundary of a predefined spatial unit by persons involved in a change of residence*. In Census 1980 and Census 1996 the spatial unit of analysis for both place of origin of the last move and place of enumeration was the 'magisterial district of usual residence'.

In the case of Census 2001 the issue is, however, somewhat more complex. The migration data were made available in respect of current 'main place' of 'usual' residence or the place of enumeration, while the place of migration origin was *not* required to be the 'usual main place of residence'. (Fortunately, only 1,5% of the population, being enumerated in a place different from where they 'usually lived', was affected⁴). The migration community profile data sets that were requested from Stats SA covered only area of enumeration though, and can therefore be regarded as internally consistent.

The proportion of the population that migrated over a defined time period reflects the level of migration in the district, province or country. Table 1 gives the proportion, for each population group, of migration levels during the period 11 October 1996 to 10 October 2001. The corresponding figures for the periods 6 May 1975 to 5 May 1980 and 1 January 1992 to 10 October 1996 are also given. During all these three five-year periods, only about one in eight (11–13 per cent) of South Africans migrated. The implications of these surprisingly consistent migration levels are described in some detail by Kok et al (2003).

The largest population migration stream by race is the black population with 3 754 379 who were migrants over the period 1996–2001. In the section on urbanisation below, we can see that approximately half the black population is urban and the other half rural. South Africa's white population has consistently been far more migratory than the other three groups. This can probably be ascribed to whites' historically widespread distribution over all nine provinces, possibly giving them access to social (migrant) networks in many parts of the country, and possibly also better access to the economic and other resources needed for longer-distance migration.

⁴ In an attempt to identify any potential bias, additional analyses were undertaken to look for demographic differences. These analyses showed that the effects of these differences are probably negligible.

Table 1: Former migrants by population group (1975-1980, 1992-1996 and 1996-2001)

Population group	Number and percentage migrants (having moved during the five-year period concerned)									
	1980 Population (based on the 5% sample)	1975-1980			1992-1996			1996-2001		
		Migrants (1975- 1980)	Proportion migrants	1996 Population (full census)	Migrants (1992-1996)	Proportion migrants	2001 Population (full census)	Migrants (1996-2001)	Proportion migrants	
Black African*	9 916 560*	894 000*	9%*	31 127 630	2 909 948	9%	35 416 070	3 754 379	11%	
Coloured	2 251 480	228 980	10%	3 600 447	331 321	9%	3 994 570	500 460	13%	
Indian/Asian	706 600	63 720	9%	1 045 595	125 664	12%	1 115 540	150 087	13%	
White	4 041 220	1 023 420	25%	4 434 695	921 514	21%	4 293 597	1 136 722	26%	
Total*	16 915 860*	2 210 120*	13%*	40 208 367	4 288 447	11%	44 819 777	5 541 649	12%	

* The 1980 census excluded the (mainly black African) population of the former Transkei, Bophuthatswana and Venda.

Sources: (a) 1975-1980: The 5 per cent sample of the 1980 population census, as provided by the then Department of Statistics. (Please note: Both current and previous place of residence refer to 'place of usual residence'. 'Magisterial district' is the spatial unit of analysis here).

(b) 1992-1996: The migration community profile from Census 1996, as provided by Statistics South Africa. (Please note: Only persons with a valid *and* a current place of usual South African residence were included here. The migration origin is also the previous place of usual residence. Again the spatial unit of analysis here is 'magisterial district').

(c) 1996-2001: The 10 per cent sample from Census 2001, as provided by Statistics South Africa, was used to calculate the number of migrants per population group. (Please note: There was no requirement here that the last move must have taken place from the previous area of 'usual residence', but the destination was defined as being the current 'place of usual residence'. 'Main place' is the spatial unit of analysis here).

The Agincourt data given in the report on migration and changing settlement patterns show that for every permanent migration there were three temporary migrants in the population of the subdistrict under demographic surveillance. Therefore, for this migration area alone more than a million migrations in the period could have been of a circular temporary type. It is important to highlight this migration stream type since it is a direct legacy of the pre-democratic apartheid system, and it is also strongly tied to transformation and livelihood strategies of the rural and peri-urban population. These are the most impoverished people in the country. Also, as mentioned above, the migration definition tends to obscure the presence of labour migration in *de facto* population data sets. This all the more increases the chance of overlooking the challenges of this component of the population.

One question still remains to be answered fully, though: Has there been an increase in the migration propensity of the South African population in recent years? This question cannot be answered entirely on the basis of the evidence provided in Table 1, because the 1996–2001 figures presented there are not entirely comparable to those for the period 1992–1996. The 1992–1996 figures (as for the period 1975–1980) were based on migration between ‘magisterial districts’, while those for 1996–2001 were based on residential moves between ‘main places’ and were also derived from only a sample of the population. A separate analysis, based on one of the sets of migration community profile data from Census 2001 provided by Stats SA, dealt with moves between magisterial districts by the total population (i.e. not differentiated in terms of population group, age or gender), and showed that 3 544 784 persons (South Africans and foreigners) moved between 1996 and 2001 (7,9%)⁵ as compared to the 3 382 026 who had migrated between 1992 and 1996 (8,9%). When interpreting these figures it should be borne in mind that the latter period was notably shorter than five years, but at the same time it should also be remembered that the 1996–2001 figures exclude children in the age group 0–4 years. These problems make it difficult to draw a more direct comparison between migration levels in the two periods. However, when all the limitations are taken into account, it seems that there probably was no significant difference in overall migration levels between these two periods. Nevertheless, this would not preclude a change in the *proportions* of moves in the different migration categories, such as permanent and temporary.

Measures and spatial patterns of internal migration

One of the key measures of migration is the family of so-called migration rates. Rates can be calculated to express in-migration, out-migration and net migration in terms of population size. For a more detailed description of migration rates see Kok (forthcoming).

Migration causes and consequences

There is clearly a need for a properly nuanced evaluation of the causes and consequences of migration. Census data do not provide a suitable basis for determining the causes of migration. Purpose-made migration surveys and interviews are needed to get an understanding of why people move, and why some people from the same area do not.

⁵ When this figure is compared with the estimated migration volume of 5 541 649 during the period 1996–2001 as derived from the 10% sample of Census 2001, huge differences in the two volumes become evident. These can be explained by the different geographical sizes of the ‘migration-defining’ spatial units (i.e. between ‘main places’ and ‘magisterial districts’).

The causes of migration

The causes of migration are theoretically complex, multilevel in nature, difficult to determine, and not easily generalisable. A number of studies have been undertaken on this topic in different parts of the world, but because of the inherent intricacy of the required research, the theory needed for determining the causes of migration has only come of age during the last two decades or so, following the important contributions of De Jong and Gardner (1981), Massey et al (1993, 1994) and De Jong (2000). Although the glib view is that migration is caused simply by economic factors and considerations, it is clear from the migration literature that the causal and perpetuation factors in migration are both economic and non-economic in nature (see, for example, Kok et al, 2003: 13–28).

Reasons for migration (derived from the Agincourt 1999–2003 study)

Before we can discuss the reasons for migration as identified by the Agincourt Health and Demographic Surveillance System, it may be necessary to take a quick look at the migration research done by Agincourt research. This background information and some cautionary notes are provided in the Appendix.

Migration rates can be obtained from Table 2 by dividing the total number of migrations in each of the migration categories by the total population of 68 500. This gives an in-migration rate for the whole population of 6.5 per 1 000 population per year and an out-migration rate of 7.3 per 1000 per year, but the most impressive rate is temporary migration at 17.7 per 1 000 population per year. Because of internal migration (within-site mobility) 4.4 per 1 000 are counted in both the permanent in-migration rate and out-migration rate. These can be removed from either rate to get the actual rate of (permanent) in-migration into the study site from outside the site perimeter and the out-migration rate from within the study area to a destination beyond the perimeter of the surveillance operation.

Reasons for moving can be analysed by age and sex to see the primary reasons for move in each age-sex combination. Table 2 shows reasons for move (by age and sex) for each migration type to facilitate comparability.

The first column gives the totals of each migration stream and the breakdown by reason as percentages of the total in each migration category. Here it can be seen that the primary reasons for permanent adult migration were the start or end of a marital union, a person moving to stay with a spouse or other family member, or a new dwelling for the whole household. Temporary migration was seldom engaged for these reasons. On the other hand, 'work' was a primary driving force behind temporary migration. Other important reasons for temporary migration were schooling, studying, or looking for work. These were seldom cited reasons for permanent migration. In this way the data on causes of migration support the use of the migration typology because it indicates that the migration flows by reason are reasonably mutually exclusive.

For children of both sexes there were large numbers of all kinds of moves: (a) permanent moves took place to accompany parents or for other family-related reasons, and (b) temporary moves were made to live with another family member, whether for schooling or not.

Table 2: Causes of migration, by migration type, age and sex

Migration type and reason category	Total-both sexes	Age: 0-14 years		Age: 15-34 years		Age: 35-54 years		Age: 55+ years			
		F	M	F	M	F	M	F	M		
In-migration (2002)											
Number of cases	4 473	2 727	1 746	1 009	894	1 370	640	241	164	107	48
Marriage (start/end)	17%	27%	2%	1%	0%	47%	1%	35%	7%	4%	21%
Moving to live with another	12%	10%	16%	15%	16%	9%	19%	1%	4%	0%	0%
New dwelling for household	14%	13%	16%	0%	0%	17%	27%	39%	56%	23%	35%
Work	2%	1%	2%	0%	0%	2%	3%	2%	11%	1%	8%
Looking for work	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Health	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
School/study	0%	0%	0%	0%	0%	1%	1%	0%	0%	0%	0%
Child accompanies parent move	36%	31%	43%	66%	68%	12%	21%	7%	2%	8%	2%
Other/unknown	18%	17%	21%	18%	15%	12%	28%	15%	20%	64%	33%
Out-migration (2002)											
Number of cases	5 152	3 001	2 151	1 129	1 071	1 485	797	269	223	118	60
Marriage (start/end)	17%	27%	2%	1%	0%	49%	2%	28%	9%	9%	18%
Moving to live with another	14%	12%	17%	18%	17%	9%	22%	2%	3%	0%	0%
New dwelling for household	20%	18%	23%	3%	3%	22%	35%	50%	61%	38%	47%
Work	1%	0%	1%	0%	0%	1%	1%	1%	5%	1%	0%
Looking for work	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Health	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
School/study	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Child accompanies parent move	34%	30%	40%	65%	65%	11%	20%	4%	3%	0%	0%
Other/unknown	14%	13%	17%	14%	14%	9%	19%	14%	18%	48%	33%

Table 2 (continued)

Migration type and reason category	Total- both sexes	Total		Age: 0-14 years		Age: 15-34 years		Age: 35-54 years		Age: 55 +years	
		F	M	F	M	F	M	F	M	F	M
Temporary migration (2002)											
Number of cases	12 136	4 139	7 997	699	691	2 144	4 232	1 187	2 608	109	466
Reasons											
Marriage (start/end)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Moving to live with another	6%	15%	2%	5%	5%	18%	2%	15%	1%	12%	5%
New dwelling for household	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Work	67%	51%	75%	0%	1%	50%	73%	81%	95%	83%	92%
Looking for work	6%	4%	6%	0%	0%	7%	10%	2%	3%	1%	2%
Health	0%	0%	0%	0%	0%	0%	0%	0%	0%	2%	1%
School/study	12%	18%	9%	38%	32%	22%	11%	1%	0%	0%	0%
Child accompanies parent move	7%	10%	6%	56%	60%	2%	1%	0%	0%	0%	0%
Other/unknown	2%	1%	2%	1%	1%	2%	3%	1%	1%	2%	1%

Source: Original data based on the Agincourt Demographic Surveillance System

Young adults were the age category most likely to produce a migration of one kind or another. Women aged 15–34 years were very likely to conduct permanent migration for marriage reasons. Culturally, this is usually associated with a dowry or bride wealth transferred from the destination household to the household of origin. Household moves were another important reason for people in this age group. Male and female young adults were both engaged in temporary migration for reasons of employment and schooling. For female temporary migrants a higher percentage of the reasons was for schooling, and for males working was the reason provided at a higher percentage.

For older adult age groups the likelihood of movement was less. Marriage-related reasons were still important for women and increasingly so for men, and work-related temporary migration was relevant for both sexes.

To summarise: with regard to ‘reason for migration’ in Agincourt, employment was the driving force behind temporary migration, while households moving to better situations, and moving for reasons of union formation or dissolution were primary drivers of permanent migration among young women. Children were mobile in all categories (with or without parents).

Motives for migration (derived from the 2001–02 HSRC Migration Survey)

At the national level some work has been done by the HSRC with a view to determining the causes and consequences of migration in South Africa. Kok (2004b) describes a 2001–02 national sample survey that, together with the important census data, provides evidence that almost one-quarter (24%) of the 3 618 respondents in the survey were planning to migrate (permanently) during the next five years, while an additional four percent indicated that they intended to move temporarily. Of course not all these intentions will be converted into actual migration, though, with unanticipated external obstacles or even personality constraints (e.g. low levels of risk-taking ability and efficacy)⁶ preventing many of these planned moves.

The motives for planned ‘permanent’ moves recorded in the survey are analysed by Kok and Aliber (2005) in respect of moves from the Eastern Cape, Northern Cape and Limpopo to the nine major cities in South Africa, while Cross et al (2005) analyse the motives for intentions to migrate to Gauteng. Both these sets of analyses use place-related expectations, weighted by the values attached to the underlying goals, as the primary determinants of migration intentions.

These two studies show that people intend to migrate (‘permanently’): (a) when their expectations for the current area become lower than those in respect of an alternative place of residence, (b) which are often influenced by the information received about the alternative place of abode from relatives and friends living there, (c) if they have reason to believe that these networks at the possible destination will provide assistance and support during and after the move, and (d) when they become sufficiently *dissatisfied* with their lives in the current area of residence. (e) Although most people do not necessarily prefer to move to the

⁶Kok (2004a: Table 6) shows, for example, that efficacy (the ability to ‘get things done’) has a significant ($p \leq 0,1\%$), direct and positive effect on risk-taking ability. Risk-taking ability, in turn, has a significant ($p \leq 1\%$), direct and positive effect on a person’s income, which in turn has a significant ($p \leq 0,1\%$), direct and positive effect on the person’s level of satisfaction with life on the whole. In turn, life satisfaction, has a significant ($p \leq 0,1\%$), direct and negative effect on a person’s intention to move permanently to another area. The ‘meaning’ of this somewhat technical account is that areas with high out-migration rates tend to shed those residents they can least afford to lose, and these migrants tend to leave because they are dissatisfied with their lives.

metropolitan cities, they frequently end up there because of the factors described above. (f) High poverty levels in the (local government) area where people reside are an inhibiting factor in the decision to move away permanently, indicating that a significant proportion of people in very poor areas may be trapped there. (g) People with a higher score on the scale for risk-taking ability are more likely to plan a migratory move than their more risk-averse counterparts, while (h) younger, unmarried adults (especially in the age category 18–29 years) will be more inclined to migrate than their older, married counterparts, and (i) persons who have migrated before are more likely to consider migrating again. Other factors associated with an intention to migrate are: (j) a higher educational attainment, (k) being a black African person, and (l) not currently living in a metropolitan city.

The consequences of migration

As far as the consequences of migration are concerned, the issues involved may perhaps be less complex to determine than for the causes of migration, yet they are also frequently misunderstood. Research into migration consequences should aim to contribute to the debate by studying the following four perspectives as suggested by, amongst others, the Population Information Program (1983):

- (a) *The migrants and non-migrants themselves* (to be determined mainly by means of longitudinal surveys that deal specifically with the impact of migration and urbanisation for the individuals concerned and their families, also covering related issues, such as non-family cohabitation (described by, for example, Katz, 2001))
- (b) *The areas of origin*, covering issues such as ‘brain drain’ (see, for example, Crush, 2000; Ushkalov & Malakha, 2001; Brown, Kaplan & Meyer, 2001). Circular labour migration may have positive economic and health effects on the ‘sending’ household (Collinson, 2005a; Kuhn, 2003), however there can also be negative effects associated with this type of move, including increased exposure to HIV/AIDS and other sexually transmitted diseases (Lurie, 2001; Collinson, 2005b)
- (c) *The areas of destination*, not only looking at economic effects and the impact on infrastructure and service delivery (see, for example, CDE 1997), but also taking cognisance of issues around citizenship, xenophobic sentiments and related discriminatory actions (see for example Reitzes, 1995; Mattes et al, 2000b) and more indirect effects, such as the impact of migration on education (as described by, for example, Potgieter & Bredenkamp, 2002)
- (d) *The subcontinental/national perspective* (e.g. for the entire southern African region and the individual countries concerned), including the implications of the ‘brain gain/circulation’ in the region (described by, for example, Mattes, Crush & Richmond, 2000)

The consequences of migration on population size can at least partly be derived from census data. Censuses provide an excellent opportunity to draw conclusions regarding the effects of migration from at least two spatial perspectives, namely that of the area of origin and the area of destination. In the subsections below these consequences are described briefly, where appropriate in the context of migration from the rural province of Eastern Cape to the South African CitiesNetwork’s nine major cities (Buffalo City, Cape Town, Ekurhuleni, eThekweni, Johannesburg, Mangaung, Msunduzi, Nelson Mandela and Tshwane). The Eastern Cape can perhaps be viewed as a case study for the purpose of highlighting the consequences of migration, also in respect of migration from remote or rural areas to the major urban/metropolitan centres in the country.

Consequences for the area of origin

Kok and Aliber (2005) show the dramatic effects of migration from the Eastern Cape⁷ to *Cape Town* among younger adults (especially those aged about 15–34 years) and their children. More specifically, on average more than 20 000 persons in the age group 20–24 years were part of this particular migration stream in each of the two five-year periods, as compared to the fewer than about 5 000 moving to the other cities over the same two periods.

It may be necessary to state the obvious though: provinces losing migrants might have been worse off if these people had been prevented from moving away. Many of these young people migrate in search of better employment, education and life-style opportunities in the cities. Preventing them from moving would create higher levels of dissatisfaction and therefore an even far greater desire to move. South Africa's sad experience with influx control should be a case in point.

Collinson et al showed a strong correlation between temporary circular migration and socio-economic status as measured by the household's possession of modern assets or consumer durables (Collinson, 2005a). This relationship was supported by household head education-status data, which correlated positively with both circular migration status and ownership of modern assets. In addition, cash or non-monetary transfers was (on the aggregate) a significant income stream for the rural households.

There is a growing literature on the relationship between temporary migration and the HIV/AIDS epidemic (Jochelson et al, 1991; Lurie, 2001; IOM, 2002; IOM & UNAIDS, 2003; IOM & Care International, 2003; IOM & SAMP, 2005). A study of the zero-prevalence of HIV in rural KwaZulu-Natal found a threefold higher risk of HIV infection associated with a recent migration (Abdool Karim et al, 1992). The mechanism underlying this risk is that migrants are more likely than non-migrants to practise unsafe sex with multiple sexual partners (Lurie et al, 1997). However, recent studies show that the link between migration and HIV transmission may be more complex than first suggested, and that both communities of origin and communities of destination are affected by the high levels of migration (Lurie et al, 1997; Dladla et al, 2001). Evidence from the Agincourt Health and Demographic Surveillance System also strongly suggests that increasing numbers of circular labour migrants of prime working age are becoming ill in the urban areas where they work before coming home to be cared for and eventually to die in the rural areas where their families live (Clark et al, 2005).

Consequences for the area of destination

The opposite probably applies to areas that experience a net gain of these permanent migrants. To a large extent their gain is the loss of the areas shedding migrants. In Cross et al (2005) some of the spatial poverty consequences of migration to Gauteng, South Africa's main migration destination, are discussed. This follows on the report on migration to Gauteng by Oosthuizen, Peberdy et al (2004), which shows that, while Gauteng has been successful in attracting many highly educated persons from other provinces, in-migrants tend to be employed in less skills-intensive sectors – notably women migrants in domestic employment.

⁷ It should perhaps be pointed out that, for migration from the 'Eastern Cape' to Buffalo City and Nelson Mandela Metro, migrants from within the destination city concerned are excluded. However, migrants from the *other* city in the Eastern Cape (e.g. Buffalo City) are included in the stream to that city (e.g. Nelson Mandela Metro).

These migrants, being predominantly young adults in their reproductive years, can be expected to contribute significantly to the natural increase in these cities. These migrants also add to the receiving cities' pool of young entrepreneurs with the required personality characteristics to contribute to economic growth in the destination cities (such as the risk-taking and efficacy aptitudes mentioned earlier).

Policy and planning implications

There are various policy options in respect of migration, and a number of potential planning responses are available to governments, be it internationally, nationally or locally. It is safe to say, however, that *no* universally viable policy response has so far been found. As is shown by Kok, Gelderblom and Van Zyl (2006), periodic changes in the views on migration-related problems were reported by the United Nations (2003) for the governments of South Africa and four of its immediate neighbours.

Even though internal migration in a country is sometimes regarded as unacceptable by policy makers or planners, the reality is that people's spatial movements cannot easily be stopped or even redirected (see, for example, Kok, 1986; Kok & Aliber, 2005). Migration also has a direct and important impact on urbanisation, and this impact is usually the one of most concern to those who must plan for meeting future needs for infrastructure, facilities and services. The next session deals with the process of urbanisation.

URBANISATION IN SOUTH AFRICA

The greater propensity among developing countries to intervene in the processes of population redistribution than their industrialised counterparts can probably be ascribed to the perceived detrimental consequences of the rapid urban population growth that is taking place in many of these countries (United Nations 2003: *Highlights*, p. 14).

In this section an attempt will firstly be made to define urbanisation. This will be followed by an attempt to determine the 2001 urbanisation level in South Africa. Then follows an analysis of the components of urban population growth and thereafter a description of historical and possible future urbanisation trends is given. That is followed by a brief look at the policy and planning implications of these patterns and trends.

Defining urbanisation

Urbanisation is probably best defined in terms of the so-called balancing equation in respect of urban population growth, which can be written as follows to describe the process of urbanisation:

$$U_t = U_0 + (B_u - D_u) + (I_u - O_u) + r^8$$

⁸ The so-called balancing equation in demography in terms of which a country's population growth can be described, is as follows (in a somewhat simplified form):

$$P_t = P_0 + (B - D) + (I - E) + e$$

- where:
- P_t = Total population at time t (i.e. at the end of a time interval of length t);
 - P_0 = Total population at the beginning of the time interval;
 - B = Number of births that have taken place during the time interval;
 - D = Number of deaths that occurred during the time interval;
 - I = Immigration volume during the time interval;
 - E = Emigration volume during the time interval, and
 - e = error term (or the so-called element of closure).

where: U_t = Urban population at time t (i.e. at the end of a time interval of length t);
 U_0 = Urban population at the beginning of the time interval;
 B_u = Number of urban births that have taken place during the time interval;
 D_u = Number of urban deaths that occurred during the time interval;
 I_u = Urban in-migration volume during the time interval;
 O_u = Urban out-migration volume during the time interval; and
 r = Population reclassified from 'rural' to 'urban' during the time interval.

Similarly, the $(B_u - D_u)$ in the above equation is the *natural increase* of the urban population during the time interval t , while the $(I_u - O_u)$ is the *urban net migration* over period t .

Urbanisation can therefore be defined formally as the increase⁹ in the urban population of a country or area due to the following components of urban population growth: (a) urban natural increase, (b) urban net migration, and (c) the reclassification of parts of the rural population into the category 'urban' (due to the sprawl of existing urban areas into their rural surroundings or the development of new towns in former rural areas).

The *level* of urbanisation can be given in terms of the following equation:

$$PU = \frac{U}{P}k$$

where: PU = Proportion of the population living in urban areas (i.e. the urbanisation level) at a particular point in time (and for the purposes of the analyses that follow, Census Day in 1996 and 2001, i.e. 10 October, is used);
 U = Urban population;
 P = Total population; and
 k = multiplication factor (usually 100 to obtain a percentage value).

The above equation is deceptively simple. Although the indicator 'level of urbanisation' is frequently used, it should be pointed out that there are serious scholarly debates regarding the appropriateness of such indicators for denoting the urbanisation level. The main problem is not with the equation as such, but lies with the definition of 'urban areas' (as distinct from 'rural areas'). There is a body of academic literature criticising the use of the dichotomy 'urban' versus 'rural', when there are so many areas that cannot unambiguously be defined as belonging to either the one or the other category. There is consequently an influential school of thought that insists on the use of a rural-urban continuum instead of the rural/urban dichotomy. Although this issue will not be discussed here, the reader is referred to Kok (forthcoming) for a summary of the debate in South Africa.

Moreover, as indicated by, amongst others, United Nations (2001), urban and rural parts of countries are becoming increasingly integrated as a result of better transport and communications, rural-urban and return migration, urban economic activities spreading to rural areas (rural industrialisation) and rural economic activities pursued in urban areas (urban agriculture). The distinction between urban and rural areas has thus become quite blurred.

Defining 'urban' and 'rural' is therefore not as simple as may appear at first sight. If the general practice of defining the rural population simply as 'the residual population after the

⁹ Since urban natural increase and urban net migration in a country are virtually always positive, the urban population 'change' is almost invariably an increase.

urban population is distinguished' (Shryock, Siegel & Associates, 1976: 83) emphasises the necessity to have a good definition of what the term 'urban area' entails. Shryock, Siegel and Associates (1976: 83–84) deal extensively with the practices in various countries in the world, and describe a six-category classification previously suggested by the United Nations. In the South African censuses between 1904 and 1946 and again between 1980 and 1996 the only criterion for an area to be classified as 'urban' was that it had to have been governed by some form of (urban) local government.¹⁰ What is important now is that it has, since 2000, become very difficult, if not outright impossible, to define urban areas in terms of their local government status. The criterion of a 'local government area' has thus become almost meaningless in present-day South Africa. Statistics SA have considered the idea of using settlement density as a criterion (Statistics South Africa 2003), but this has proved not to be a solution to the problem, partly because a single criterion cannot sufficiently distinguish between rural and urban areas.¹¹

The best way to define 'urban' and 'rural' is therefore to do so in terms of a number of factors instead of using one single criterion only. Furthermore, the classification is probably done best *after the census* at the census office concerned (when appropriate and up-to-date data have become available). This is probably done best at the enumerator area (EA) level, every time dealing with a particular EA as well as the *majority of directly abutting EAs*. This will ensure that only contiguous EAs are classified in this way, thereby avoiding the classification of isolated EAs. Factors to be considered should preferably include (1) *economic criteria*, e.g. majority of the labour force of the area (e.g. the EA concerned) engaged in non-agricultural pursuits (for urban and vice versa for rural), and (2) *demographic indicators*, e.g. minimum population density, and (3) *urban characteristics*, e.g. residential areas with formally aligned (but not necessarily tarred) streets close to commercial enterprises and educational, health and other services. The latter is clearly difficult to standardise effectively, but while it may be easier to use only the first two criteria (as was done by Graaff 1986) the problem is that these do not deal effectively with higher-density settlements in the former homelands of South Africa that lack the important characteristics to justify their classification as 'urban'. This problem brings us back to the need for a threefold (such as 'rural', 'semi-urban' and 'urban') or fourfold (e.g. Graaff's 1986 'rural', 'semi-urban', 'peri-urban' and 'urban') classification that 'would describe the situation better than a dichotomy' (Shryock, Siegel & Associates, 1976: 84). In the Stats SA report on migration and changing settlement patterns a fivefold settlement classification is used to investigate changes in settlement patterns due to migration.

Determining the 2001 urbanisation level

In the absence of more appropriate data to allow a classification on the basis discussed above, the following procedure has been adopted by the authors to arrive at a suitable urbanisation level for 2001. By inspecting the differences between the 1996 and 2001 enumerator area (EA) types for the total population, and assuming that all 2001 'tribal areas' were rural in nature [as is suggested by Statistics South Africa (2004:Appendix B)], it was possible to

¹⁰ In the censuses of 1951, 1960 and 1970 additional criteria, such as 'urban characteristics', were used to classify a particular area as 'urban'.

¹¹ Merely using the 1996 urban/rural classification for 2001 EAs is probably an attractive option to deal with this problem. It has the important advantage that spatial comparisons over time can be made, but unfortunately the changes in the character of EAs are not taken into account. It is therefore not a good idea to rely on a classification made earlier, even when incorrect earlier classifications have been identified and rectified (as discussed in Statistics South Africa 2003).

determine the 'true' urbanisation levels at the time of the 2001 census. Table 3 gives a summary of the findings.

Table 3: Agreement/disagreement between 1996 and 2001 locality types

Locality type	Agreement/disagreement	Population (2001)	Proportion of subgroup	Proportion of the total population
Rural	Concordant	19 171 375	97,87%	42,77%
	Discordant*	417 892	2,13%	0,93%
	Subtotal	19 589 267	100,00%	43,71%
Urban	Concordant	25 217 571	99,95%	56,26%
	Discordant**	12 939	0,05%	0,03%
	Subtotal	25 230 510	100,00%	56,29%
Total	Concordant	44 388 946	99,04%	99,04%
	Discordant	430 831	0,96%	0,96%
	Total	44 819 777	100,00%	100,00%

* This is probably equivalent to a reclassification from the category 'rural' to 'urban' during the period 1996–2001.

** This can possibly be ascribed to an incorrect classification of a few rural areas as 'urban' for the purposes of the 1996 census.

From Table 3 it can be concluded that South Africa had an overall urbanisation level of 56,26% in 2001 (if the 12 939 persons in the 'urban discordant' category, who represented 0,03% of the total population, are now reclassified as 'rural'). For the individual groups these 12 939 persons were added to the rural population on a pro-rata basis and therefore in effect subtracted from the urban population. The 417 892 persons (0,93%) in the 'rural discordant' category can possibly be explained in terms of a rural-urban reclassification between 1996 and 2001.

The 2001 urbanisation figures as adjusted in terms of the procedure described above are given in Table 4. The table shows that still only a minority (47%) of the African population was urbanised in 2001, while more than 85% of the other groups were living in urban areas. The Indian/Asian population was almost fully urbanised at 97%.

Table 4: Adjusted 2001 urbanisation levels

Population group	Total population	Urban population	Rural population	Proportion urban
Black African	35 433 492	16 820 234	18 613 258	47,47%
Coloured	3 987 419	3 460 376	527 043	86,78%
Indian/Asian	1 113 183	1 085 279	27 904	97,49%
White	4 285 683	3 851 681	434 002	89,87%
Total	44 819 777	25 217 571	19 602 206	56,26%

In the next section we take a brief look at the components of the urban population growth during the period 1996–2001.

Components of urban population growth

In order to determine the components of urban population growth over the five-year period 1996–2001 it is necessary to be able to unambiguously classify the place of residence in both 1996 and 2001. Following a classification of localities (main places) as either rural or urban, the locality types of individuals in 2001 were cross-tabulated with their locations in 1996, assuming the same locality type as in 2001. Not unexpectedly the previous type of locality could not be established in all cases, resulting in about 6 per cent of the population not being classified as either rural or urban in 1996. As can be seen in Table 5 this digression is largely attributable to the fact that we only have information on the current *province* of residence in some cases (54%) and because the current place of usual residence could not be determined at all (38%).

Table 5: Source of uncertainty for the unknown 2001 usual residence locality types

Source of uncertainty	Number	%
Only <i>province</i> of usual residence known	77 138	54%
Current place of usual residence could not be determined	53 705	38%
Current place of usual residence outside South Africa	10 910	8%
Total number with unknown place of usual residence in 2001	141 753	100%

Table 6 shows that our inability to determine the type of previous location for individuals in the age group 0–4 years was the main reason for the 1996 locality type being unknown (79%).

Table 6: Source of uncertainty for the unknown 1996 locality types (at origin)

Source of uncertainty	Number	%
Only the previous <i>province</i> of residence is known	228 454	9%
Previous place not determined	141 498	5%
Previous place outside South Africa	175 251	7%
Previous place of 0–4 year olds not known	2 072 454	79%
Total number with uncertain place of residence in 1996	2 617 657	100%

These unknowns left us with 2 759 410 persons that could not be correctly classified as urban or rural at the time of either the 1996 or 2001 census. Only the 42 million individuals with known locality types in 1996 and 2001 were therefore included in the analyses presented in Table 7.

Table 7: Cross tabulation of locality types before and after migration between 1996 and 2001

Type of residence in 1996	Locality type at place of usual residence in 2001					
	Urban		Rural		Total	
	Number	%	Number	%	Number	%
Urban	23 601 359	56%	677 696	2%	24 279 055	58%
Rural	684 137	2%	17 097 175	41%	17 781 312	42%
Total	24 285 496	58%	17 774 871	42%	42 060 367	100%

It is clear from the percentages in Table 7 that the majority of the population (56%) lived in urban areas at the time of *both* censuses, while a minority (41%) lived in rural areas. A mere two per cent of the rural population in 1996 ended up living in urban areas in 2001 and the same proportion applied to the opposite trend (urban-to-rural changes). These results give one grounds to question the assumption of rapid rural-to-urban net migration by showing that,

between 1996 and 2001, a comparable net exchange of people took place from rural to urban areas and vice versa.

The purpose of this analysis is to determine the contribution of migration vis-à-vis natural increase to urban population growth. The magnitude of this contribution can be estimated by subtracting migration from the net rural and urban growth. In theory this difference should provide the magnitude of the urban population growth that is attributable to natural increase and urban reclassification.¹² It was, however, not possible to undertake these indirect estimates on the basis of the 1996 and 2001 census data alone. The data from the next census will hopefully provide the necessary basis for such calculations.

Historical and expected future urbanisation trends

International trends and prospects

Whereas 39 per cent of Africa's total population lived in urban areas in 2003, by 2030 the continent's urban areas are likely to accommodate the majority (54%) of its people (United Nations 2004). As far as the internal population redistribution in the subregion is concerned, the United Nations (2004) report shows that the rural populations of Botswana, Lesotho and South African are purported to be currently experiencing negative growth, while Botswana, Lesotho and Swaziland experienced rapid urbanisation between 1976 and 2003. Botswana was particularly affected by urbanisation processes, with the level of urbanisation increasing from 13 per cent in 1976 to 50 per cent in 2003.¹³

In contrast to the industrial countries, only 4 per cent of the developing countries regarded the spatial distribution of their populations as satisfactory in 1976 (compared to the 32% of the industrial countries), but this proportion has since increased to 18% in 2003, perhaps as the realisation set in that very little can be done to influence population distribution:

The spatial distribution of population has been remarkably intractable with regard to policy initiatives. Governments in the past have attempted to modify population distribution in a variety of ways, including building new capitals; encouraging growth in small and medium-sized cities rather than in large ones; creating regional development zones; and controlling the movement of people to cities. Most of these attempts have failed to achieve their objectives (United Nations 2003: *Highlights*, p. 14).

Governments of developing countries still tend to be particularly concerned about internal migration into metropolitan areas, though:

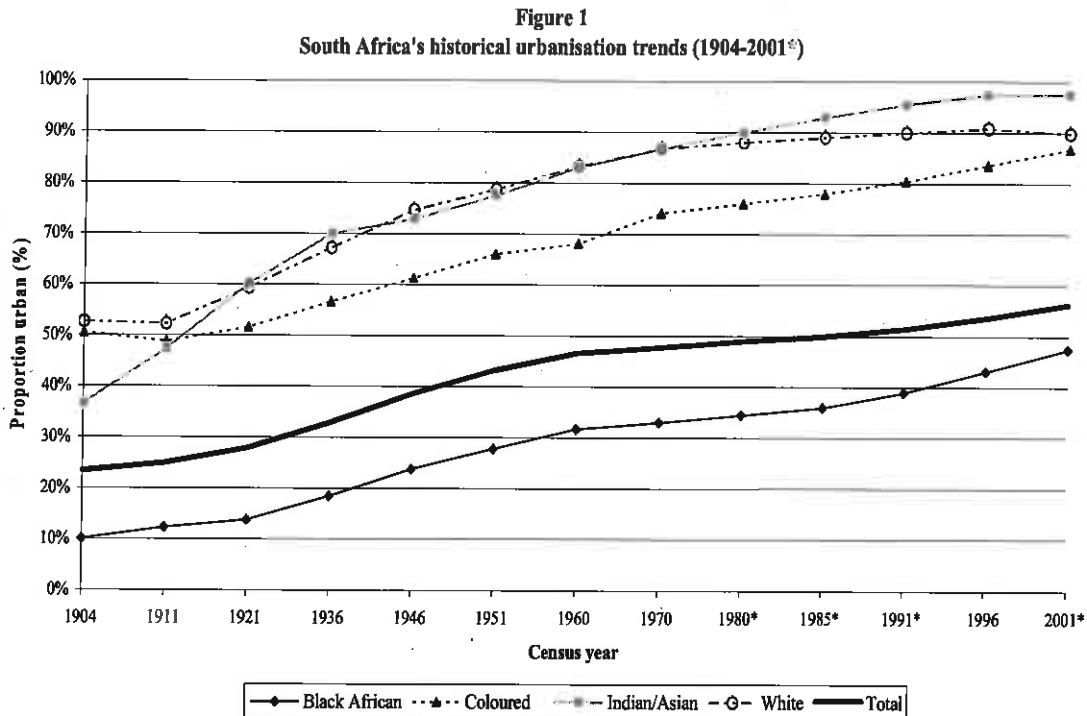
In developed countries, the share of Governments with policies to modify this flow fell from approximately one-half to one-quarter of countries between 1996 and 2003. In contrast, developing countries are now more likely to intervene than in the past. Between 1996 and 2003, the share of developing countries with policies to influence internal migration rose from 53 per cent to almost three-fourths (United Nations 2003: *Highlights*, p. 14).

¹² The effect of urban reclassification of areas has been calculated earlier at 417 892 persons, which represents a negligible proportion of less than one per cent the 2001 population (0,93%).

¹³ The United Nations (2004) indicate that Africa's urban population grew at the very high rate of 4,4% per year between 1950 and 2000, and although this growth should slow down, it is expected to continue growing quite rapidly, at 3,1% per annum, between 2000 and 2030, compared to the 0,9% annual population growth expected in the rural areas of the continent.

Historical trends: Africans and minority groups

Figure 1 shows the historical urbanisation trends for the four main population groups and the total population in South Africa for the censuses between 1904 and 2001. It is clear all groups except black Africans have consistently experienced urbanisation levels above the national figure. Although the urbanisation of black Africans lost momentum between the censuses of 1951 and 1985 (probably due mainly to the effects of the draconic influx control measures applied during the height of apartheid), it has in recent years again been increasing at an accelerated pace.



* The urbanisation figures for 1980, 1985 and 1991 were not derived from the censuses themselves but are interpolations. This was necessary because these censuses excluded those parts of the country that were covered by the former homelands of Transkei, Bophuthatswana and Venda (1980, 1985 and 1991) and also Ciskei (1985 and 1991).

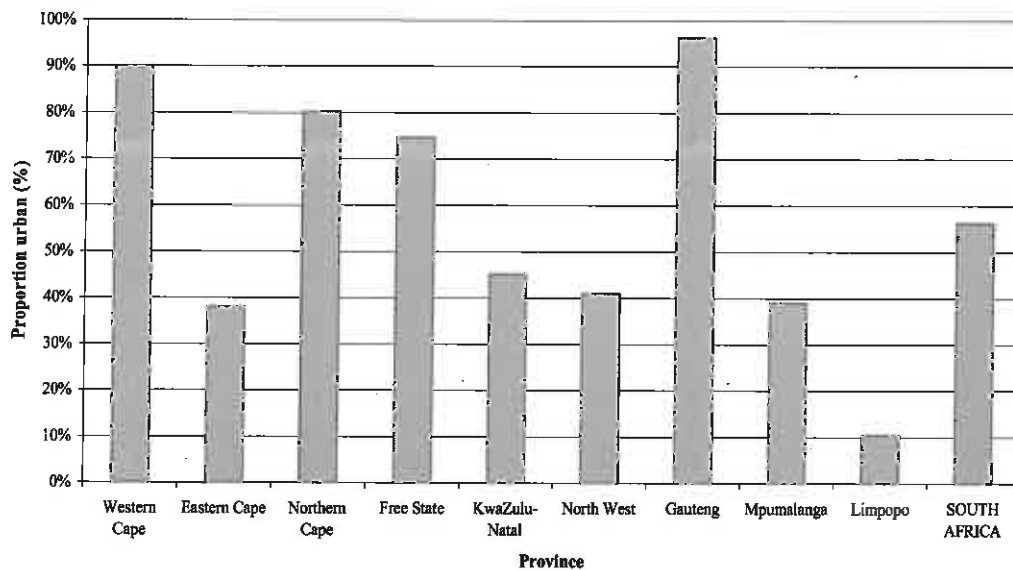
The figures for 2001 are estimates (based on the procedure described earlier).

In Figure 2 the provincial urbanisation levels are shown. Gauteng (96%), Western Cape (90%), Northern Cape (80%) and Free State (75%) all have levels of urbanisation higher than the national figure of 56 per cent. The least urbanised province is Limpopo (10%), followed by the Eastern Cape (38%), Mpumalanga (39%), North West (41%) and KwaZulu-Natal (45%).

Expected and possible future trends, including a possible urban-rural population turnaround

What are the likely future urbanisation trends in South Africa? As is clear from Figure 1, the urbanisation levels of the Indian/Asian and white population groups have tapered off as they approach saturation level. That of the coloured population is expected to taper off soon as well. As far as the black African population is concerned, it can probably be expected that the increase in its urbanisation level will continue for the foreseeable future.

Figure 2
Urbanisation levels per province and for South Africa (2001)



What are the chances of a future urban-rural turnaround, where people move to rural parts of the country in large numbers? As pointed out by Kok (1990), the (short-lived?) urban-rural turnaround experienced in most industrial countries 'seems to have been selective of the more affluent population in the countries where it has been observed' (p. 123). He then went on to analyse his migration data for whites (which he regarded as a suitable group for investigating the possibility of a similar trend in this country) and concluded that 'the prospects of a significant urban-rural turnaround among white South Africans are very slim' (p. 124). No evidence that has since been produced suggests anything different.

Rural depopulation in South Africa: A realistic possibility?

A recent United Nations (2004) report suggests that the rural populations of Botswana, Lesotho and South Africa can be expected to be experiencing negative growth by now (see also Kok, Gelderblom & Van Zyl, 2006). But how realistic is this assumption? In the report on migration and changing settlement patterns it is shown that, based mainly on an analysis of migration there is limited evidence of this purported new phenomenon. Does this also apply nationally? This question has to remain unanswered for now because it has not been possible to do the required calculations on the data from the 1996 and 2001 censuses alone.

Some evidence is, however, provided from the Agincourt Health and Demographic Surveillance System, covering three periods of three years each, namely 1995–1997, 1998–2000 and 2001–2003, to examine trends of change in the key elements of population dynamics. These are given in Table 8. The average population given is the sum of years contributed by members of the population over the three calendar years reported, divided by three (to get the average). The rates are also reported over three-year periods. The population dynamics are recorded using the following variables: (i) the rate of natural increase, i.e. the crude birth rate minus the crude death rate, (ii) the rate of net migration, in this case the in-migration rate minus the out-migration rate, and (iii) the rate of population growth, i.e. the rate of natural increase plus the rate of net migration. The final variable included is (iv) the rate of temporary migration. This is the average, over the three-year period, of the proportion

of temporary migrants in the population at the time of each census round. Since they remain on the household roster, this extra dimension of the population dynamics is available due to the *de jure* household definition in the Health and Demographic Surveillance System.

Table 8: Population dynamics in the Agincourt subdistrict, 1995–2003

Agincourt	1995–97	1998–2000	2001–03
Average population	66 265	68 044	68 509
Rate of natural increase	20,2	19,0	12,6
Rate of net migration	-9,2	-10,6	-11,4
Rate of population growth	10,9	8,4	1,3

NB. Rates are per 1 000 persons-years

Table 8 shows that after 1995 the natural increase in the population of the Agincourt subdistrict tended to decline, primarily due to a reduction in fertility and also to a mortality increase associated with the emergence of HIV/AIDS (Garenne et al, 2006). The migration flows became increasingly negative over the period. By 2001–2002, population growth had become negative, by excess of net out-migration and natural increase, though became again positive in 2003. The population of the HDSS went to a maximum of approximately 69 100 persons in year 2001 and has since been slowly declining (Collinson et al, 2006). The slowdown in momentum of population growth is primarily driven by fertility decline and rising mortality in some age groups (Garenne et al, 2006). While out-migration is gaining over in-migration in time, the key migration phenomenon to note is the high and increasing levels of temporary migration. Less population growth and more temporary mobility suggests that there is indeed a worrying population decline in rural areas, but much less pronounced than would be evident if the permanent and temporary migration flows were classified together as ‘rural-to-urban’ migration. Without classifying migration types, the rates of urbanisation would look much higher than they really are.

Planning issues

In this subsection we look at some international practices and then we briefly outline policy issues in South Africa.

As pointed out by United Nations (2003), in contrast to the industrial countries, only 4% of the developing countries regarded the spatial distribution of their populations as satisfactory in 1976 (compared to the 32% of the industrial countries), but this proportion has since increased to 18% in 2003, perhaps as the realisation set in that very little can be done to influence population distribution. In the United Nations’ (2003) report on population policies, it is pointed out that ‘the spatial distribution of population has been remarkably intractable with regard to policy initiatives’ (*Highlights*, p. 14). According to this report, the proportion of governments of industrial countries that attempted to modify this flow fell from approximately one-half to one-quarter of countries between 1996 and 2003.

Governments of developing countries, on the other hand, still tend to be particularly concerned about internal migration into metropolitan areas, and developing countries now appear to be more likely to intervene than in the past: ‘Between 1996 and 2003, the share of developing countries with policies to influence internal migration rose from 53 per cent to almost three-fourths’ (United Nations 2003: *Highlights*, p. 14). The increased desire among countries in the developing world to intervene can probably be ascribed to the perceived

negative consequences of rapid urban population growth they are experiencing (United Nations 2003: *Highlights*, p. 14).

There are several planning issues to be considered. The first set of options would be to try and modify the migration processes in the country, which might include attempts to curb the flow of migrants to the cities by adopting migration-control measures to prevent such migratory moves. A second option would be to encourage growth in small and medium-sized towns to divert migration away from the larger cities. A third option could be to build new regional capitals. However, as the United Nations' (2003) report correctly points out, and as the past apartheid experience in this country proved, 'most of these attempts have failed to achieve their objectives' (*Highlights*, p. 14).

A more pragmatic approach may be to try and accommodate the spontaneous urbanisation processes in the country (c.f. Kok & Aliber, 2005). Such an approach will have to involve the Departments of Housing, Health, Transport, Social Development, Education, Provincial and Local Government, the National Treasury and many others.

SUMMARY AND CONCLUSIONS

The aim of this report was to describe the different forms of migration and relate them to urbanisation, by examining the levels, causes and consequences of migration and urbanisation. These exercises made it possible to draw some conclusions for the purposes of policy making and planning.

We have shown that migration is reasonably constant at around 12 per cent of the population in each five-year period investigated, namely, 1975–1980, 1992–1996 and 1996–2001. However, a large proportion of these moves were temporary migrations. The ratio of permanent to temporary migrations in 2002 in the Agincourt subdistrict population was 1 to 2, i.e. two-thirds (67%) of migratory moves in the rural South African northeast were temporary or circular in nature. Data from the Agincourt Demographic Surveillance System have enabled us to see the reasons for migration by age and sex in a rural subdistrict population and the most evident message was that permanent and temporary migration types can be identified as mutually exclusive population flows. The national census data in 2001 mixed these two types of migration together and the population group for which it is crucial to discriminate these migration types is the black African population.

Urbanisation levels and patterns were investigated in this report. There is a steady increase in the proportion of urbanisation over time by race, with the black African population being the least urbanised subpopulation, although this rate is shifting steadily upwards. In the report some challenges around the use of census data to inform urbanisation trends were explored, in particular the classification of enumerator areas into 'rural' and 'urban' types, which tends to oversimplify the contours of settlement patterns in these areas. Moreover, changes of the definitions used in census-data collection over time to some extent limit the accurate portrayal of trends.

The findings on migration and urbanisation presented in this report should be examined in the context of the urban transition on the continent. It was mentioned above that most countries in the developing world have declared their dissatisfaction with the spatial distribution of their populations. This attitude towards population movements is the result of a common view by which migration in the developing world is seen as a major factor contributing to

urban unemployment, the uncontrolled expansion of urban areas and consequent urban poverty.

Despite being the continent with the lowest level of urbanisation, sub-Saharan Africa's urban population is growing at a higher rate than any other region in the world. The scale of urban transition is unprecedented, as well as the rates of urban population growth (Montgomery, Stren et al, 2003). The urban population in Africa was 15% in 1950, 32% in 1990, and is projected to 54–60% by 2030 (United Nations, 1998; UNEP, 2005). However, this rapid growth of urban areas is occurring in the context of generally declining economic performance (World Bank, 2000). This fact, combined with poor planning and governance, increases the visibility of urban poverty whereby a significant proportion of urban populations live below the poverty line in over-crowded slums and sprawling townships. This is the case in most African countries. Indeed, it is estimated that about 72% of all urban residents in sub-Saharan Africa live in informal settlements [UN-Habitat (United Nations Human Settlement Programme) 2003].

In the African setting migration is often employed to maximise family and household livelihoods by diversifying sources of household income and risks (Stark and Bloom, 1985; Adepoju, 1995). The South African data have shown that much of the rural-to-urban migration is temporary, in other words the migrants stay in touch with their rural household and usually remit money or consumables back to the rural household and are likely to return and live in the rural area upon retirement or retrenchment. The benefits of temporary migration as a strategy have been widely documented as providing opportunities for improved living conditions not only for migrants but also for families and origin communities (Mendoza, 1982; Goldscheider, 1984; Lockwood, 1990; Collinson, Tollman et al, 2005). In South Africa, the historical impact of segregationist policies like influx control, pass laws and the 'homelands' were the cornerstones of the labour migration system, which set the stage for high levels of temporary migration. These levels remain intractably high (Posel and Casale, 2002; Collinson, Tollman et al, 2005). An important contributory factor may be the relatively low levels of income per capita at a national level, compared with the economies that underpinned the urban transition in more developed countries in the previous century (Montgomery, Stren et al, 2003). Socio-cultural links with rural areas may also be a key part of the explanation, for example, migrants retain special links with their home areas that go way beyond economic benefits (De Bruijn, Van Dijk et al, 2001).

The temporary nature of rural-to-urban migration in South Africa may add insight into the persistence of the overcrowding and poor conditions in urban townships. Migrants from rural or peri-urban areas may employ a calculated strategy to maximise the benefits to their household of origin, rather than their own benefit or the residential units in the urban setting. This may result in the need for low-budget rental accommodation, for example backyard shacks, or rooms in the dwelling of a family member. In Nairobi attempts to move squatter residents to better and more expensive housing had very limited success because many of them prefer to live in relatively cheap housing that is only found in informal settlements in order to make enough savings to allow them to build decent housing in their home communities, pay for school fees and other expenses for their family (Johnston, 1974).

Aside from rural-to-urban migration another key component of urban growth is natural increase (births minus deaths) within the urban population. For this report we were unable to compute the relative contributions towards urban growth of the three components: urban 'natural increase', 'reclassification of areas' and 'rural-to-urban migration'. This requires one

more round of the South African census and it will be important to conduct this work. Other work done in developing world settings has estimated that the average contribution of the components of urban growth has shown that 'natural increase' contributed around 60% of urban growth (United Nations 1980; Chen, Valente et al, 1998). The data presented in this report on the Agincourt subdistrict shows a declining trend in natural increase in this rural subdistrict population, primarily due to a reduction in fertility rates. This may imply that the rates of urban natural increase are also declining in urban South Africa, which would influence the contribution of natural increase to urban growth, but the statistics required to investigate this are not yet available.

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APPENDIX

MIGRATION RESEARCH UNDERTAKEN AT THE AGINCOURT HDSS

Methods used in the Agincourt Health and Demographic Surveillance System

This is the first of several sections in this report and the one on migration and changing settlement patterns that use data from the Agincourt Health and Demographic Surveillance System. The aim of the section is to categorise migration in a rural subdistrict population and look at the reasons for migration in each migration type.

The Medical Research Council/Wits University Agincourt Unit in Rural Public Health and Health Transitions Research, based in Bushbuck Ridge, conducts health and demographic surveillance on a rural subdistrict population in the former homeland district of Bushbuck Ridge some 500 kilometres north-east of Johannesburg. A baseline census in the twenty villages of the Agincourt subdistrict was conducted in 1992. Since then, an annual field operation has been conducted to collect information on all births, deaths and in- and out-migrations in the surveillance population. The annual update involves visiting every household, where a fieldworker verifies existing records, adds new individual and household data, and records the demographic events that have occurred since the preceding year's census update. A verbal autopsy is conducted for every death. (Kahn et al, 1999; Tollman, 1999; Tollman et al, 1999). In 2001 the population under surveillance was 68 500. Migration and household definitions are used daily in demographic surveillance data collection. The following are the key migration and household definitions:

Definition of a permanent migrant

The Agincourt definition of a permanent migrant is a person who enters or leaves a household with a permanent intention of entering or leaving. This definition follows the classic definition that migrants are people who experience a change in residence (Bilsborrow, 1993). This includes people who leave the index household and establish a household or join a household elsewhere. A key feature is that the destination household becomes the new home base for the migrant.

Definition of a temporary migrant

A temporary migrant is a household member who is away most of the time, but retains a significant link to their base household. A six-month-per-year cut-off point was chosen to differentiate 'temporary migrants' from 'local residents'. Thus, people who are referred to as temporary migrants were absent from the household for more than six months of the year preceding observation, but who considered the index household to be their home base.

Definition of a household

The definition of a household in the Agincourt Health and Demographic Surveillance System is a group who reside and eat together, plus the linked temporary migrants who would eat with them on return. This is a *de jure* household definition because it is more closely related to links of responsibility within the household, as opposed to a *de facto* household definition which more closely matches the co-residential household, as used in the national census. One implication of the Agincourt definition in data collection is that when a field worker encounters a permanent out-migrant, this person becomes removed from the household roster, whereas a temporary migrant is retained on the household roster.

Migration typology

The migration categories used in this section are as follows:

1. In-migration into a rural household
2. Out-migration from a rural household
3. Temporary migration out of a rural village

This typology discriminates 'permanent' migration (in and out) from 'temporary' migration. The Health and Demographic Surveillance System enables this classification due to the *de jure* household definition, and the frequent and regular monitoring of migration events. Households in the study population are regularly visited, movements in and out are monitored, and the household respondent reports whether or not the move has a permanent intention. Intention of return is an effective means of discerning these categories, since permanent intention is rarely the case for the circular, oscillating migrants who are a highly prevalent feature of Southern Africa demography (Wilson, 2001). There are grey areas, where a 'permanent' migrant returns to the original household (for example after a divorce), or a 'temporary' migrant deserts and never returns (for example a desertion scenario), but these are changes from the original intention and can be managed in a health and demographic surveillance system. Despite some blurring at the edges it is critical for migration scholars to differentiate a complex phenomenon like migration in some way, and the data on migration reasons given below lend support to this classification.

The data presented in Table 2 are shown according to the categories listed above. A caution to note when interpreting the data is that a large portion of the permanent migrations occurred within the study site and therefore had both a household of origin *and* a household of destination under demographic surveillance. In this way two migrations were recorded for each move, both the out-migration and in-migration, one at each pole of the move. There were approximately 3 000 such moves internal to the site in 2002 (4,4 per 1 000 persons per year). A mathematical implication is that there would be an over-count of 3 000 if one summed up all the moves shown in Table 2, and these 'duplicated' moves (i.e. the 3 000) should be subtracted from the total. The benefit of leaving the internal migrants in the table is that each migration stream is complete and the rates can be calculated according to the categories listed above.

'Reason for move' is recorded for each permanent migration captured in the Health and Demographic Surveillance System. Generally, 'reason for move' of temporary migrants is not recorded, but a special module was conducted in 2002 in which temporary migrants' 'reason for move' was obtained. For this analysis the permanent migration categories were also restricted to that year, i.e. 2002, to enable a more direct comparison and give a reasonable 'snap-shot' of the movement types by reason. For both permanent and temporary migrations 'reason for move' was captured using a pre-defined 'reason' code, with the option of 'other', where the reason was recorded in text if a respondent's explanation did not match one of the pre-coded categories. Reasons were re-coded from the pre-defined categories and specified text, to establish nine comparable categories of 'reason for move' across all migration types.

The nine 'reason for move' categories were as follows:

1. 'Union formation or dissolution'. This is where the migration occurs as the formation of a new social union between two people, either as formal marriage or as 'living-together', or the breakdown of such a union.

2. 'To live with another'. This is when a person leaves the original *de jure* household and moves into another *de jure* household with the reported reason that there is a family link between the two households. Multiple underlying reasons prevail in this type of move, but the characteristic is that the locus of residence for a person changes to another household in the family network. The 'reason for move' category 'school/study' is excluded here, although it is actually a subset of this migration type, to show migration for education as a discrete stream (see Reason 7 below).
3. 'New dwelling for the household' is where a whole household leaves a dwelling place and relocates to another dwelling place.
4. 'Work' is where the migration is expressly for the purpose of employment.
5. 'Looking for work' is where the migration is in search of an opportunity for employment.
6. 'Health' is where some form of healing is expressed as a goal of the migration. Primarily, it involves access to services, both modern and traditional.
7. 'School/study' is a special case of living with somebody else, where educational reasons were expressed by the respondent, or a child of school-going age moved to 'live with another' in the family network.
8. 'Child accompanies adult' is a category for children who move in the company of an adult, who in turn is moving for one of the reasons given above. If the child moves without accompanying an adult, for example 'to live with another' then it is not recorded in this category.
9. 'Other unknown' is where data is missing or inconclusive in the HDSS records, or when a person is in prison, since this was not frequent enough to warrant a category of its own.

For 'permanent' in- and out-migration the number of moves are given, pooled for the 1999–2003 period, with the distribution of 'reason for move' given within age/sex groups. For temporary migration the data are given for one year only, namely 2002. Pooling the data on temporary migration and presenting it by age and sex is complicated, because a person may be a temporary migrant for the whole observation period and thus change age categories in the process. The problem is somewhat resolved by taking only the temporary migrant subpopulation in one year, but care should be taken to multiply the numbers by five if one wants to compare the scale of the different migration streams in this population. Permanent migration is easier to handle as an event in time.