

MIGRATION, URBANISATION AND HEALTH CHALLENGES IN SUB-SAHARAN AFRICA

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There are intricate linkages between migration, urbanisation and health challenges which research and studies in sub-Saharan Africa (SSA) have scarcely underpinned. Rural-urban migration has been partly responsible for urbanisation, to which natural increase of population and reclassification of formerly rural territory also contribute, all of them creating health challenges for migrants from different regions of a country or immigrants from other countries; on the other hand, urban-rural migration, in particular return migration on retirement, on loss of the head of household or due to unemployment or ill-health also poses health challenges for returnees. Successful resolution of health challenges depends on the health infrastructure, provision of health services, capacity of the health personnel to cope and that of both rural and urban localities to meet them. This paper begins by shedding light on the dominant types of internal migration in SSA, and in particular rural-urban migration as reported in previous national censuses; thereafter, it analyses urbanisation in the region, comparing the phenomenon in the four sub-regions of SSA; and finally, it examines health challenges especially in urban areas where communicable diseases are rampant and from which urbanites move back to their rural origins once they reach the terminal stage of ill-health. In the discussion, the paper interrogates the policies being adopted to handle migration-urbanisation-health inter-linkages rather than concentrating on anyone of the three thereby only partially solving the puzzle. The paper is of immense importance for SSA governments in their efforts to meet the Millennium Development Goals (MDGs) which relate to these three phenomena: rural poverty which triggers rural-urban migration, in the process leading to translocation of rural population to urban areas; urbanisation which creates an environment for creating employment opportunities and thus alleviating poverty; and the concentration of health challenges such as the three scourges (HIV/AIDS, TB and malaria) which threaten urban lifestyles. Moreover, it raises issues which should attract multi-disciplinary research on the three issues that are largely discipline-free.

1. INTRODUCTION

In the 20th century, sub-Saharan Africa (SSA) underwent colonialism in the first half before attaining independence in the second half of the century. The first half saw continuation of a colonised region which had been carved out by European powers, notably the British Empire (East and West Africa), followed by the French community (parts of West and Central Africa), Portuguese (Angola and Mozambique) and Germany (Tanzania and Namibia). After the two World Wars (in 1914-1919 and 1938-1945), the metropolitan powers began to rebuild their economies damaged by the wars, relying on African imports produced by African labour; sub-Saharan African (SSA) countries, on the other hand, embarked on their struggle for independence, which bore fruits when Ghana blazed the trail by becoming the first independent country in the region by 1957. During and after colonialism, there had been labour movements from rural to urban centres (rural-urban migration) and to other rural areas with modern-sector enterprises (rural-rural migration) as capitalism changed the dynamics of labour in virtually all newly independent states. Majority of the labour migrants were male

given that colonial policies controlled rural-urban migration and banned the exclusively male migrants from living together with their families in urban areas. Inevitably, women, children and the elderly were left behind in rural areas. By the 1970s and 1980s, women and children began to move to the urban centres either to join their heads of households or to participate themselves in the workforce as the under-developed rural areas offered very little support and income to the rural population. Up to the 1970s, women were migrating in small numbers, though their migration was discouraged and detested then when rural-urban migration was still regarded as a 'male only' affair. Early studies – in the newly independent Ghana (Caldwell, 1969) and Kenya (Ominde, 1968) – attest to predominantly male migration.

The euphoric years immediately after independence saw increasing rural-urban migration to take advantage of vibrant national economies, hopeful of securing employment and earning better wages as well as fulfilling their basic needs and having access to education, health and slightly better housing. Rural-urban migration impacted negatively on rural areas which lost out on the labour force for the agricultural sector as urban centres gained in labour for growing industries, domestic work and so on, further fuelling rural-urban migration. Unfortunatley, not all urban migrants were able to secure jobs, which resulted in migration to urban unemployment and poverty.

Sub-Saharan Africa (SSA) has been a region of rapid population growth (generally above 3 per cent per annum) which has stimulated both internal and international migration and spurred urbanisation, posing diverse health challenges, especially in urban areas. Within virtually all SSA countries, rural-urban migration has partly accounted for urbanisation which, together with high natural increase of population and reclassification of formerly rural territory, account for the phenomenon, placing the fragile urban milieu in a precarious state of health. Indeed SSA's demographic transition lags behind that of all other developing regions, with communicable diseases – HIV/AIDS, malaria and tuberculosis – holding the region hostage in developments in the health sector. Moreover, urban poverty has become yet another problem in the development arena throughout Africa, confirming Todaro's (1969) model of rural-urban migration attributed to expected higher urban than rural income and despite urban unemployment.

Conceptual definitions and some previous work

Definitions of some concepts used in this paper are necessary at the outset. The concepts identified are ‘migration’, ‘urbanisation’ and ‘health challenges’.

Simply defined *migration* is a form of geographic or spatial mobility between one geographical unit and another, generally involving a change of usual residence from a place of origin or place of departure to the place of destination or place of arrival (van de Walle, 1982: 92, quoted in Oucho, 1998: 91). Distinction is often made between internal migration which occurs within national boundaries and international migration in which movement crosses internationally recognised national borders. In SSA, three features of internal migration are relevant: ‘circular migration’ has been the rule of thumb for first generation migrants who often move from and return ‘home’ that they identify with during their sojourns and where they often have ‘location-specific capital’, such as land relatives (Oucho, 1998: 91). Although migration scholars often distinguish between voluntary migration (on the basis individuals’ decisions) and involuntary or forced migration impelled by circumstances beyond migrants’ control, the distinction is rather academic as the two are but a continuum (Oucho, 2009).

In demographic definition, *urbanisation* denotes the concentration of population in localities designated urban on the basis of population size. Population Division of the United Nations adopts a population of 2,000 as the minimum for such a locality, though countries vary in determination of urban population; the size ranges from 2,000 in Eastern Africa to 5,000 in Ghana and 20,000 in Nigeria, which complicates comparison of urban areas in SSA. In Southern Africa, even non-demographic elements are included, such as the proportion of non-agricultural activity and the dominant economic functions of localities. In this paper, urbanisation is used as given in respective countries without specifying the adopted definitions. Important measures of urbanisation include ‘urban population’ or the size of population in an urban area; the ‘proportion urban’, the percentage of urban population as a proportion of the total population; and the ‘rate of urban growth’ which signifies the pace of urbanisation or at which urban localities increase.

‘Health challenges’ compromise various issues that are amorphous, encapsulating health concerns such as health infrastructure, diseases and services, all of which pose problems in

urban areas. These challenges vary from one country to another and even in different urban areas in a given country.

This paper seeks to explore inter-linkages of population change (in particular rural-urban migration), urbanisation and health challenges in sub-Saharan Africa, providing relevant examples where possible. It relies heavily on available literature and datasets mainly of national censuses, surveys and of the Population Division of the United Nations which publishes demographic data as well as reports from time to time.³ After this introductory section, the second section examines how population change has influenced urbanisation in SSA since 1950 to engender major demographic changes; special attention is drawn to the contribution of rural-urban migration and natural increase of population to urbanisation, evidence of growing inter-urban migration, the incidence of rapid urbanisation and urban-rural, including return, migration. The various types of migration have posed different health challenges and poverty in both rural and urban settings. Section three of the paper discusses urban health infrastructure and services, provision and other challenges in the region, identifying the menacing diseases, analysing the health provider/patient ratio as an index of the quality of services and highlighting other major health challenges. The fourth section reviews policies relating to migration-urbanisation-health challenges inter-linkages. The paper concludes by identifying loose ends that need to be fastened in better handling of rural-urban migration, urbanisation and health challenges in SSA.

2. POPULATION CHANGE AND URBANISATION IN SUB-SAHARAN AFRICA

This section discusses population changes and urbanisation that have occurred in SSA. It begins with a brief overview of rural-urban migration and how it impacted on urban environments and moves on to review the literature on how natural increase aids urbanisation. Relevant examples are quoted where necessary on the pace of urbanisation to underline the diversity of the phenomenon in the region. Finally, the section considers the forces that have caused urban-rural migration, among them economic reforms instituted earlier retirement of migrant workers, in turn raising some health challenges, including chronic illnesses among urban migrants who subsequently returned to their rural homes with grossly inadequate health facilities.

³ Invaluable data are contained in biennial reports such as *World Population Prospects* and *World Urbanisation Prospects* and world charts on these provide incisive information.

The typology of internal migration proposed in the early 1990s with typical SSA examples is still valid nearly two decades thereafter; it identified typical examples of rural-rural, rural-urban, urban-rural and urban-urban migration, (Oucho and Gould, 1993: 259). Unfortunately, the classification ignored forced migration, in particular internal displacement of population (IDPs) which has been a menace in the region's independence era.⁴ With the exception of the first type of migration, all other types affect and in turn affected by urbanisation and their urban health outcomes. The *World Development Report 2009* (World Bank, 2009:167) notes that 'a large demographic shift occurred from villages to towns and cities in the 1970s and from towns to cities in the 1990s'; these reflect rural-urban and inter-urban migration respectively. Surprisingly, the last two decades have witnessed migration scholars' increasing interest in international migration, relegating internal migration research and studies in SSA.

2.1 Rural-Urban Migration and Urbanisation

The notion that rural-urban migration is solely responsible for urbanisation in SSA is fallacious. While rural-urban migration has in the past mainly accounted for urbanisation, both high natural increase of population, given the region's high fertility vis-à-vis declining mortality, and a third factor of reclassification of formerly rural territory, have contributed significantly to the fast pace of urbanisation in the region. A IUUSP Seminar on 'New Forms of Urbanisation: Conceptualising and Measuring Human Settlement in the 21st Century', held in Bellagio, Italy in 2002 noted that the natural component of urban growth now prevails over the migratory and reclassification components in Africa, and that while two-thirds of urban growth was due to migration and reclassification in the 1960s, the two amounted only to one-third in the 1990s (IUSSP, 2002). Thus, as the pace of urbanisation accelerated but the lure of urban areas plummeted, natural increase of population has become more dominant than these two. Given the selective nature of migration, there have been some dramatic changes in migrant selectivity and migration differentials. For example, while in the early 1990s sex ratio was extremely high in urban areas, equality of both sexes in attainment of secondary education and above and indeed in access to other opportunities, have equalized the two genders' volume and rates of rural-urban migration; the increasing size of young population has resulted in the dominance of health-averse youth in urban areas; and the educated have

⁴ IDP often refers to internally displaced persons due civil strife or wars, natural hazards and other unpredictable occurrences that force population to move out of its usual habitat to safer areas; in SSA, the tendency is for rural IDPs to move to urban settings where they aggravate health conditions in spontaneous settlements to which they move.

borne a greater brunt of urban unemployment than in decades gone by, condemning them to unhealthy living styles, such as drug abuse, prostitution and criminal behaviour.

Rural-urban migration in the independence era from the 1960s, for some African countries, was characterised as one of mass migration and increased urban population growth rates, albeit slow urbanisation. Although the pace began to increase during colonialism when only men migrated as the labour required in urbanising centres, urbanisation was controlled by the colonial government policies that required migrants eventually to return to their home areas on completion of their employment obligations (Gugler, 1969:135; Louw, 2004). Policies could be as extreme as in South Africa, with the system of *apartheid* or separate development (Legassick, 1972) which ensured that the black South Africans could migrate to white settler towns as cheap labour to develop the white-owned urban centres, leaving the 'African reserves' underdeveloped. To this end, the 'pass laws' were enacted to curb permanent rural-urban migration (Wolpe, 1972:427; 443). The same happened in colonies par excellence, such as Kenya and Zimbabwe where forms of separate development took root. However, in the early stages when colonial governments required labourers for plantations and farms, the wages were too low to attract migrant labour and, in such circumstances, forced labour became the norm. For example, colonial chiefs in the Buganda Kingdom were used to 'induce' people to work for extremely low wages (Gugler, 1969:137). In such situations, rural-urban labour migration was off to a slow start but by mid-century it became a *rite de passage*, a form of initiation to manhood. The anthropologist, Isaac Schapera found that in Botswana, rural-urban migration changed the cultural rites amongst Batswana (Botswana citizen) male as it became an initiation to manhood and was able to provide and support their homesteads (Schapera, 1933). The colonial government policy discouraged the migration of entire households, which meant that women, children and the elderly were left behind as men, mostly young, migrated to urban areas for employment (Gugler, 1969:138). But rural-urban migration was not because of the desire for employment only; the colonial administration imposed taxes which compelled working-age men to leave their rural homes for wages and, therefore, be able to pay taxes for themselves and their relatives.

By the 1970s, the rural-urban migration began to get out of control as it became an inevitable means for coexistence and survival with the migrants' still perceiving that better wages and more opportunities of finding a job existed in urban areas (Byerlee, 1974). Not surprisingly, Caldwell (1968) described rural out-migrants in Ghana bound for cities through village,

household and individual characteristics. He found that most rural migrants tended to start migrating to the nearest town, were young males aged 18-25 years and were, on average, from wealthy families; somewhere fairly educated and some had family links in urban centres (Caldwell, 1968:365). Of course, there were those who had no education or were high school drop-outs who went to seek fame and fortune in urban centres. The pattern at the time was that rural-urban migrants engaged in stepwise migration; they moved to the towns in their neighbourhood first before migrating to the larger urban centres, including those farther away. Information on the virtues of urban living was normally shared through remittances, gifts and periodic rural visits of urban migrants, which underscored better opportunities in urban areas than in the migrants' villages (Ominde, 1968; Adepaju, 1986; Ocho, 1996).

A dose of rural-urban theorising

Since the 1960s, several migration scholars have made significant inroads into the study of rural-urban migration. Theoretical models designed and tested on the causes and impact of rural-urban migration on both locations, capture economic and non-economic factors that determine migration to urban centres (Lewis, 1954; **Fei and Ranis, 1961**; Todaro, 1969). The most popular economic model used to date is Todaro's (1969) human capital model (1969) which hypothesized that rural migrants assessed their decision to migrate by measuring the wage differentials between rural and urban areas as well as the probability of finding a job based on the level of unemployment in the urban centres. This model was later on modified in the Harris and Todaro (1970) two-sector model which considered the impact of the 'politically determined urban wage levels on rural individuals' 'economic behaviour' on the assumption that few labourers engaged in the agricultural sector (1970:126). As a model, it aimed to understand the dialogue that existed between rural-urban migration in relation to wages and labour exchanges between the two.

Gugler (1969), on the other hand, analysed rural-urban migration from a sociological perspective to understand the interaction between economic and non-economic factors in the decision to migrate. DaVanzo (1976) argued that it was hard to quantify what she referred to as 'psychic costs' which took into consideration the loss of links with the community and family members, but suggested that it was an important factor to consider alongside economic costs of migration as it would affect the migrants' ability to integrate into the destination community. That is, if an individual is not mentally prepared to accept leaving his or her community to settle in another one for the benefit of better access to resources,

employment or education opportunities, s/he will not be willing to integrate into the society as s/he would still have a strong affiliation to the community of origin. Migrants deliberately maintain links with their origins.

Unfortunately, the earlier rural-urban migration theories failed to incorporate the role of women in the migration. Some gender specialists have criticised Todaro's (1969) model for limiting itself to the male migrant and ignoring the female migrant; this understandably because it was propounded against the backdrop of rural-urban migration in the colonial setting when rural-urban migrants were exclusively males. For example, when looking at employment opportunities in urban towns, he refers to the urban industrial job, which at the time in Kenya, where the theory evolved, was the male-dominated building sector. As such there was very little reference to economic migration of women. Subsequent studies began to take into consideration the changing economic as well as non-economic role of women in migration and to include them in their theoretical calculations and assumptions.

In the past, rural-urban migration studies tended to separate the migration of men and women as men dominated migration, with women migrating either to join their husbands or as some sort of dependants; indeed, many studies underscored the phenomenon of women left behind. Today, women migrate alone, seeking employment opportunities alongside or in competition with men. In Gulger's (1969) view, some women fled rural areas because they were barren in societies where children were seen as a source of wealth that determined the social position of women within a community. The marriage institution in rural areas, be it a product of tradition or Christianity, thus forced some women in unstable and polygamous marriages to flee. Some women fled prior to marriage, especially those who had some level of education (1969:139). Brockerhoff and Eu (1993) support this argument, contending that married women in rural areas who wanted to migrate were inclined to give birth first, leaving behind their children to help in farm work; when the women migrated, they often migrated together with their children because of the lack of basic amenities (such as education and hospitals) in rural areas (1993:558-9). Migrating to cities with children, however, meant that the migrants had to face up to the hardships experienced in urban centres, which clearly impinged on their accompanying children's progress and development.

Currently, the dynamics and patterns of rural-urban migration have changed drastically. With the changing times and modes of transport and communications, distances between rural and urban centres no longer matter. In the contemporary world, people communicate faster and

more accurately via phone calls, text messages, pictures (e.g. television and photographs), giving the rural out-migrants an idea of the structure and environment of urban centres. In Buhera communities in Harare (Zimbabwe), the trans-local environments provided an opportunity where both rural and urban dwellers met at a local bar (*shebeen*) and where both of them learn about each other and their new environment (Andersson, 2001). Rural dwellers provide updates on the community and development and urban migrants may provide information and job opportunities and lifestyles in the urban centres. The decision to migrate to urban centres was no longer an impromptu one based on the information of one or several people, but was influenced by different information sources, frequent visits to particular urban areas in the past and a host of other factors.

Nevertheless, the pertinent question is, how did rural-urban migration impact on or influence urbanisation? With the rural population in-migrating to urban areas for better employment opportunities and a better life, two things happened: in-migration would either strain the urban economy and slow down its development or build the urban economy due to the surplus labour supply of able bodied people.

Determinants of rural-urban migration

There are multifarious factors determining rural-urban migration in SSA. While identification of determinants as demographic, economic, political, socio-cultural and environmental (Oucho, 1998: 104-107) is useful, it is simplistic as various factors affect migrants at individual, household, community or regional and national levels.

Way back in the 1960s following the wave of independence of SSA countries, rural-urban migration was like opening the floodgates of a movement that colonial administration had regularised, for instance by encouraging ‘male only’ migration given the kind of wage employment opportunities that existed. It has been noted that the modal age group for SSA rural-urban migrants in SSA by the early 1990s was 20-24 years: 40 per cent of all migrants in Burkina Faso (Coulibaly et al., 1980), 34.5 percent in Ghana (Nabila, 1979), 35.2 percent in Mali (Mazur, 1984), 40.9 percent in Kenya (Rempel and Todaro, 1972) and 44 percent for males and 56 percent for females in Lesotho (all quoted in Oucho and Gould, 1993: 268-9). With the proportion of youth increasing in the SSA population, the modal age of rural-urban migration must have fallen to age group 15-19 in recent years; a speculative but highly probable situation.

In view of the dual economic system in most SSA countries, education was meant to prepare its recipients for rural-urban migration in the modern sector mainly in urban areas. Caldwell's seminal study rural-urban migration in Ghana contended that 'what education does, more than anything else, is to promote long-term rural-urban migration' (Caldwell, 1969: 62, quoted in Oucho and Gould, 1993: 271). Lipton (quoted in Oucho and Gould, 1993: 271) observed, however, that movement took the form of 'educated to the big city, illiterate to rural areas', and in a study of Tanzania, Sabot (1976: 37-38, quoted in Oucho and Gould, 1993: 271) found that 'when educated workers are in surplus relative to the number of skilled jobs, urban expected income for the educated declines from the skilled to the unskilled wage.' More than two decades thereafter, both the educated and the illiterate jostle for urban wage employment because of the expected higher income, but face unemployment with the result that no wage differentials exist between them as sustained rural-urban migration streams exist.

Whereas the foregoing are individual factors that propel rural-urban migration, other factors are also in play at national, community and household levels. External factors attributed to regional and world trade dictate terms in-country to influence rural-urban migration. Government policies have had pervasive influence on rural-urban migration, for example where development is concentrated in urban areas at the expense of rural areas that are treated as labour reservoirs; even resource-development nodes (e.g. riverine developments in Niger and Nigeria and mining areas in Ghana, South Africa, Botswana and Zambia) are major destinations of rural out-migrants. Clarke et al.'s (1985) *Population and Development Projects in Africa* makes a compulsory reading on this subject. At community level are community-level variables – for instance, transportation systems, community facilities, institutional factors, agriculture and the challenges of modernization; in Zaire (now Democratic Republic of the Congo or DRC), Striffeler and Mbaya (1986, quoted in Oucho and Gould, 1993: 274) found that out-migrants from Tshopo area who were resident in Kisangani had out-migrated due to the abuse of power by village elders, witchcraft and lack of infrastructure. Sociological and anthropological studies of rural-urban migration in different parts of SSA have made similar findings.

2.2 Natural Increase and Urbanisation

Over the past two decades when rural-urban migration stalled as the lure of urban areas diminished, natural increase has been the main contributor of urban population growth, of course with minimal rural-urban migration. Urban population growth has been due to sustained high natural increase rates in most SSA, as fertility remains high in the face of declining mortality. Conversely, some researchers have been apprehensive of an upsurge of urban infant and child mortality.

In most SSA countries, fertility is upheld in high regard. Culturally, the 'African society is constructed so that high fertility and large surviving families have usually been economically and socially rewarding' (Caldwell and Caldwell, 1987:410). Although most Africans had come into contact with western culture, they had no desire to lower their fertility even as mortality declined. Thus, natural increase of population in urban areas is slower than in rural areas as urban lifestyles, coupled with rampant unemployment and poverty, prevent couples from having many children or realising their full fertility potential. In certain cases, unemployment tends to create idleness and compel individuals to engage in acts or activities that are largely detrimental to their circumstances. Poverty also creates the opportunity for couples to have many children as insurance against both infant/child mortality and parental old-age support; and some women allegedly engage in prostitution as an income-generation activity in the more monetised urban economy. Moreover, despite acquiring formal education, some urbanites lack proper reproductive health education which could safeguard them from the risk of STDs and HIV/AIDS, these reproductive calamities lowering fertility or even causing sub-fertility or infertility of those affected. For example, 'in Botswana there is a deep-seated unwillingness to talk openly about sex, partly due to rules of respect that lie at the heart of family and kinship structures, which limit communication across generation and sexual divides' (Allen and Heald, 2004:1144). This also includes urban migrants who still uphold that tradition, not to mention immigrants and refugees who have limited access to reproductive health services (Ouchou and Ama (2009). However, in Zaire (now Democratic Republic of the Congo – DRC), Romaniuk (1980) found that urban centres had a higher fertility rate than the static rural areas, attributing this to western lifestyles which urban dwellers adopted, in the process embracing promiscuity and its risks of high fertility. Previously, post-natal abstinence and prolonged breast feeding by women helped to control

or curb fertility rates in places like Kinshasa but were disregarded in towns, giving rise to urban population growth (1980:302). Three decades hence, this situation must have changed, resulting in urban fertility decline.⁵

White et al. (2008) hold the view that having children in an urban residence is costly in terms of child care and housing expenses; in urban areas, children cannot be as of much help as they are in rural villages; and urbanites have better access to family planning which regulates the contraceptive users' complete family size (2008: 804).

2.3 Inter-urban Migration

The current stage of SSA's demographic transition has ushered in inter-urban migration which takes place between urban areas of varying sizes, depending on a variety of factors determining the process. This information is captured in all population censuses of countries in the region, though the data are seldom rigorously analysed to reveal inter-urban migration, which is becoming even more important than rural-urban migration. As underpinning inter-urban migration requires further analysis of census data which were not readily available to the authors, this paper falls short of analysing inter-urban migration.

2.4 The Fast Urbanising sub-Saharan Africa

In SSA, it has been characterised by rural-urban migrants bringing with them their families, the husband blazing the trail to settle as other family members remained in rural areas; what has been dubbed 'split migration' (Agesa and Kim, 2001). Unlike urbanisation in the developed world where economic development spurred urbanisation, the phenomenon in SSA has involved population concentration in urban areas without a strong economic base.

Most of the urbanising localities in SSA were carefully selected on grounds of roles they were expected to play on the national, regional or international scenes. In Nigeria, and indeed much of West Africa, coastal ports became the gateway to the rest of the western world for international trade. Ports such as Lagos, still continue to be busy ports that engage in trade relations African and European countries (Gugler and Flanagan, 1978:27). Railways connecting SSA's seaports to the interior facilitated movement of people and good collected

⁵ Sustained instability in DRC since independence in 1960 has constrained generation of dependable demographic data, the best way out being small-scale surveys and estimates from various sources.

from points between the two termini, stimulating urbanisation. In SSA countries, seaports permitted entry inland to tap the labour reservoir from rural areas for the urbanising localities. As mentioned earlier, urban population growth in much of SSA increased dramatically after independence. This is attributable partly to the policies which the newly independent SSA countries adopted to permit freedom of internal migration in which rural-urban migration was the most conspicuous to build national economies, including urban centres. Inadvertently, freedom of rural-urban migration led to increasing urban ward streams which founded and sustained spontaneous or informal settlements, better known as slums or shanty towns: Kibera in Kenya, Sophia town in Johannesburg created by the 'Bantustan' policy of H.F. Verwoerd (Kotze and Hill, 2002:7) and so on.

The independence era brought a different perspective of urbanisation with more people from rural areas migrating to the urban centres in search of fortunes and urban population growing due to natural increase. Urbanisation was spurred by three factors: natural increase, rural-urban migration and inter-urban migration which will be explored in the subsequent sections.

Urbanisation levels and trends

A World Bank study found that urbanisation in SSA is not excessive or unbalanced relative to the experience of other regions; that internal migration, which is not the main source of urban growth, does not account for urban poverty and, if anything, appears favourable on balance for migrant's origins and destinations; that migration benefits both rural and urban households, many of which retain a foothold in both areas to spread risks; and that the absolute rate of urban growth creates a major management task, particularly in the secondary cities which tend to be the most under-serviced, as well as in large cities. Conversely, the study found that in SSA there is a disconnect between urbanisation and economic growth; that cities have clearly not lived up to their productive potential due to blatant neglect and poor management; and that much of the deprivation in cities, and the emerging urban public health problems, relate to institutional failures that perpetuate social exclusion and inequalities between the urban poor and the urban non-poor (Kessides, 2005:1). The issues identified are but a microcosm of a multitude of both positive and adverse migration-urbanisation-health inter-linkages in SSA.

More than a decade ago, Nordberg and Winblad (1994:8) gave a graphic description of urbanisation and the urban environment in SSA as follows:

...in sub-Saharan Africa...cumulative urban growth is calculated at 382% between 1972 and 2000. The environmental problems accompanying this growth have reached crisis proportions....Urban populations do get housed one way or the other but most of this growth takes place in unplanned, under-serviced shantytowns- 'transitional urban settlements'[which are]...by far the fastest growing parts of urban areas [with]...the shantytown population ...likely to double within the next 10 to 12 years.

Table 1 provides incisive perspectives of urbanisation in SSA in terms of urban population size and urban population growth rate up to the mid-century. Western Africa has the largest urban population size, accounting for 45 per cent of SSA's urban population, the proportion projected to drop to 43 percent by mid-century. It is followed by Eastern Africa with one-fourth of SSA's urban population in 2009, projected to reduce to one-third by mid-century. Southern Africa has by far the smallest urban population, accounting for slightly more than one-tenth in 2009 and projected to drop to a mere one-twentieth by mid-century. Eastern Africa has the fastest growing urban population, at 4 percent per annum between 2010 and 2025 and projected to drop to 3 percent by mid-century. Middle Africa comes second, projected to equalise Western Africa in 2020-2025 but to surpass the latter in the two other periods. The urban transition described implies increased inter-urban migration between urban centres of different sizes.

Table 1 Urbanisation in sub-Saharan Africa: urban population growth and growth rates by sub-region, 2009-2050

Sub-region	Total urban population (thousands)			Annual percent growth rate		
	2009	2025	2050	2010-2015	2020-2025	2045-2050
SSA	293,153	408,204	1,003,063	3.6	3.3	2.3
Eastern Africa	74,212 (25.3%)	141,493 (34.7%)	337,493 (33.6%)	4.1	4.0	3.0
Middle Africa	53,378 (18.2%)	96,522 (23.6%)	185,977 (18.5%)	4.0	3.4	2.2
Southern Africa	33,459 (11.4%)	41,307 (10.1)	51,917 (5.2%)	1.4	1.3	0.7
Western Africa	132,105 (45.1%)	228,403 (56.0%)	427,675 (42.6%)	3.7	3.4	2.1

Sources: United Nations, Population Division, Wall Chart of Urban and Rural Areas, 2009
United Nations, Population Division, World Urbanisation Prospects, 2009

Instances of rapid urbanisation, founded on the colonial administration, exist in all sub-regions of SSA except Middle Africa. In most West African countries, some of the modern urban areas existing today are the result of economic developments that took place during the

course of colonialism. Nigeria, Ghana and Guinea Bissau are good examples in West Africa, and so is Cameroun in Middle Africa.

In Eastern Africa, the growth of Nairobi as a regional capital, Dar es Salaam as the second seaport on Indian Ocean and Kampala as Uganda's commercial centre, is attributable to their dominant roles as political, economic and social roles. The same goes for Addis Ababa in Ethiopia. All these examples underline urban primacy in respective countries.

In Southern Africa, urbanisation started early in South Africa and much later in other countries. South African urbanisation dates back to the time of the Dutch East India Company, while Botswana's capital of Gaborone was established only in the early 1960s. Up to 1994 when South Africa abandoned *apartheid* policy in preference of majority (black population) rule, urbanisation was controlled as the African population was confined to Bantustans (Native Reserves), with only a minority of them allowed to live in urban areas on account of their labour at the mercy of the repressive, discriminatory regimes. Once the *apartheid* policy collapsed, mass rural-urban migration took place, resulting in rapid urbanisation and transfer of rural lifestyles to urban environments. Botswana was but a protectorate where the British had only nominal interest, its pace of urbanisation picking up only since diamond mining in 1971. It is no wonder the country has become a middle-income country with rapid urbanisation of urban localities and the so-called 'urban villages', which are fast urbanising localities.

Urban primacy of capital cities

The tendency in SSA is for capital cities to dominate urbanisation as primate cities, though some commercial capitals – among them Lagos and Johannesburg – are by far the largest cities. By 2009, a number of capital cities were 'million cities' (Table 2).

Table 2 Million cities in sub-Saharan Africa, 2009

Country	City	Population (thousands)
D.R. Congo	Kinshasa	8,401
Kenya	Nairobi	3,375
South Africa	Cape Town	3,353
Ethiopia	Addis Ababa	2,863
Senegal	Dakar	2,777
Ghana	Accra	2,269
Nigeria	Abuja	1,857
Madagascar	Antanarivio	1,816
Burkina Faso	Ouagadougou	1,777
Cameroun	Yaoundé	1,739
Mali	Bamako	1,628
Zimbabwe	Harare	1,606
Togo	Loma	1,593
Mozambique	Maputo	1,589
Zambia	Lusaka	1,413
South Africa	Pretoria	1,404
Somalia	Mogadishu	1,353
Congo	Brazzaville	1,292
Niger	Niamey	1,004

Source: United Nations Population Division, World Urbanisation Prospects, 2009 (Wall chart)

Data contained in *Urban Agglomerations 2009* wall chart suggest that only two African cities were among the largest urban agglomerations: Lagos (ranked 21st) with a total population of 10.4 million and Kinshasa (ranked 30th) with 8.4 million. Urban primary is underlined by Nairobi accounting for only 8.5 percent of the national urban population and 38.8 percent of total urban population; Kinshasa with 12.7 percent and 36.8 percent respectively; Addis Ababa with 3.5 percent and 21 percent respectively, Lagos with 6.6 percent and 13.4 percent respectively; and Johannesburg with 7.2 percent and 11.8 percent respectively. One can imagine the magnitude of urban health in these large agglomerations with continuing rural-urban migration and sustained high natural increase of population.

2.5 Urban-Rural Migration in the Face of Vicissitudes

Years have passed by and the environments in urban and rural settings have changed, due to economic, political and social changes in both. Urban centres have expanded in population size but often with limited infrastructure, straining social welfare systems, including the provision of health services in urban areas of virtually all SSA countries. An interesting phenomenon has been occurring in which urbanites chose to engage in urban-rural migration by either returning to their rural homes after years of residence in urban centres or, if urban natives, speculating for new opportunities in other urban areas (continued urban-urban migration). Among the factors causing urban-rural (including return) migration are dissatisfaction with urban lifestyle (for instance prolonged unemployment and urban poverty), retirement or ill-health or death of breadwinners. Some return only to await their death (Gugler, 2002).

Migrant's wages seem adequate in the early stages of urban in-migration but subsequently inadequate as bills and taxes reduce gross incomes, leading to migrants' disillusionment. The situation is aggravated by the increase in food prices and the decline of the economy in some sub-Saharan African countries, for example Kenya (Owuor, 2004:2). In such a situation, migrants' ambition to ascend the socio-economic ladder is stifled. Owuor (2004: 6) cites instances in which urban migrants' wives have chosen to return to rural homes to work on the land while their husbands work in the cities, economic difficulties notwithstanding.

Some rural-urban migrants have lived in urban centres for a long period time, urban residence giving them a sense of 'home' (Gugler, 2002). Yet, as many of these migrants leave their family members (wives; children and parents) in rural areas, they maintain close links with their rural areas (Adepoju, 1986, Ocho, 1996). Maintenance of rural-urban links also demonstrates urban migrant's loyalty to their rural origins where they endeavour to improve their communities (Gugler, 2002:23, 24). In cases where migrants improve rural homesteads through fixing gates for security or sinking wells for their own as well as neighbours' use, they express a sense of belonging and giving back to the community what they consider necessary (Owuor, 2004:3).

2.6 Internal Displacement of Population and Health Challenges

A notorious feature of migration in post-colonial Africa has been internal displacement of population (IDP). Whereas United Nations High Commissioner for Refugees (UNHCR)

handles issues of refugees (forced migrants who cross national borders), internally displaced persons (IDPs) are often in a helpless state as some of them are actually victims of repressive regimes where democracy is simply a catchword that is hardly observed. Virtually all SSA have had a dose of IDPs with ethnicity an undercurrent of forced movements (Oucho, 1997). Whenever natural and man-made calamities occur, the displaced victims often migrate to urban areas, camping in informal settlements without adequate facilities and in the process compromising health conditions. Civic authorities and health workers are so overwhelmed with IDPs that they can hardly hope, with the result that urban health challenges are exacerbated.

3. URBAN HEALTH CHALLENGES

Urban areas are so fragile that any health challenges threaten human life within and beyond urban boundaries. Breakdown in urban health is the result of a host of diseases, among them a host of communicable and infectious diseases that include malaria, resurgence of TB and the scourge of HIV/AIDS.

3.1 The Challenge of Communicable Diseases in Urban Health

Urban areas in SSA are not safe havens for urbanites. Most of them are unhealthy and unsafe, rendering them prone to a host of diseases, some of them with rural origins and others translocated from urban to rural areas. These challenges choke the available infrastructure and overwhelm services rendered to the fast growing urban population. Analysis of the consequences of migration underpins health consequences, based on previous empirical evidence (Oucho, 1998: 110-11).

A host of diseases

Urban centres in SSA, as elsewhere in the developing world, are the seat of a host of diseases, among them communicable and infectious diseases. Nordberg and Winblad (1994) provide a catalogue of diseases that are rampant in SSA's urban areas, particularly the shantytowns or spontaneous or informal settlements. The catalogue includes diarrhoea due to unhygienic conditions; upper respiratory diseases; tuberculosis (TB) given air pollution and poor ventilation in makeshift housing; sexually transmitted diseases (STDs) with its manifestation, HIV/AIDS; a host of infectious diseases, including skin and eye infections and pneumonia; parasitic diseases; malnutrition, especially in low-income areas; and mental illness, notably in the shantytowns to which mentally ill rural-urban migrants often move. Urban health and

demographic surveys have provided incisive testimonies of urban health in SSA. Studies on Kenya's capital city of Nairobi, for instance, have provided extremely useful insights of child survival surveys within several slums (Okello et al., 1990) and a series of health and related issues in the Nairobi Urban and Health Surveillance System by the African Population and Reproductive Health Centre (APRHC).

Persistence of malaria

Four decades ago, a medical geographer identified the spread of malaria in Nigeria as a threat which migration stimulated (Prothero, 1965, quoted in Ouchou, 1998: 111). Rapid urbanisation has major implications for transmission and epidemiology of malaria and other water-borne diseases, notably in sub-Saharan Africa with some of the highest rates of *Plasmodium falciparum* transmission and where hospitals and clinics regularly report up to 15 per cent of admissions due to malaria alone, with peri-urban areas bearing the brunt of the disease (Krafsur, 1977). Other studies of malaria transmission worth recognising were undertaken in Pikine, Senegal (Vercruysse and Jancloes, 1981), Bobo-Dioulasso, Burkina Faso (Robert et al., 1985) and Brazzaville, Congo (Trape et al., 1987) and Dar es Salaam, Tanzania (Dongus et al., 2010).

Against a survey of the situation in developing countries, Tabibzadeh et al. (1989) drew attention to how urban health could be improved. Yet it is a tall order of urban challenges that have defied efforts to achieve MDGs in SSA.

Resurgence of TB

Urban destinations of migrants are often at great risk when in-migrants bring with them diseases which were formerly non-existent in the former. Ouchou's (1998: 111) cites Prothero's (1963) study of TB in Nigeria and a study of schistosomiasis in Tanzania (Ruyssenaars et al. (1973) that provide empirical evidence of importation and the danger posed by these diseases in urban SSA. With the resurgence of TB as an opportunistic disease linked to HIV/AIDS and its quick spread in densely settled urban areas, in particular the slums, the threat to urban health cannot be overemphasized.

The HIV/AIDS scourge

Since the late 1980s, HIV/AIDS has ravaged the population throughout SSA, its severity observed in Southern Africa, followed by Eastern Africa. As rural-urban migration has

sustained high sex ratio (more males per 100 females) in and drawn migrants from a country's different parts as well as from outside respective countries, it has brought together people with a variety of backgrounds, interests and aspirations. Not surprisingly sexually transmitted diseases and HIV/AIDS on account of multiple sexual partners has been the norm, resulting in higher urban prevalence rates than in rural areas. Not surprisingly sexually transmitted diseases and HIV/AIDS on account of multiple sexual partners has been the norm, resulting in higher urban prevalence rates than in rural areas. Yet population mobility increases the spread of the scourge. When patients reach the terminal state, they are generally returned to rural areas, waiting to die. A plethora of studies and a series of Demographic and Health Surveys as well as HIV/AIDS Indicator Surveys all over SSA confirm a predictable trend: high infection rates in urban areas, transportation of the scourge to rural areas to which migrants return from time to time, increasing infection in rural areas and near parity in infection rates between the two settings.

3.2 Health Infrastructure and Services

A study underpinning the relationship between rural-urban migration and child immunization in Nigeria found that the likelihood of full immunisation was higher for children of rural non-migrant mothers than for children of rural-urban migrant mothers, which provides further support for the traditional migration perspectives and makes interesting findings: that individual-level characteristics, such as migrant disruption, migrant selectivity by demographic and socio-economic characteristics, and adaptation (noted in healthcare utilisation), as well as community-level characteristics (region of residence, and proportion of mothers who had hospital delivery) are important in explaining the differentials in full immunisation among the children (Antai, 2010). This study implies poorer child health in rural than urban areas of the country, an atypical situation in SSA where generally child immunization is higher in urban than in rural areas. Recent DHS results have confirmed an upsurge of urban infant and child mortality in urban areas in SSA and eroded the notion that urban areas are safer than rural areas.

4. POLICIES ON MIGRATION-URBANISATION-HEALTH INTER-LINKAGES

4.1 Rural-Urban Migration Policies

Past efforts to stem rural migration through several policies have been largely unsuccessful. In Kenya, the founding President's call to Kenyans in the 1960s through the 1970s to 'go

back to the land' went unheeded. Instead, the country's land settlement programme resulted in the creation of more settlements which urbanised more rapidly than was expected and led to rapid urbanisation in settlement areas (Oucho, 1983). Tanzania's failed socialist experiment of 'villagisation' during *ujamaa* (Maro, 1987; Thomas, 1982; McCall, 1985, quoted in Oucho, 1998: 98) resettled people in specific settlements which urbanised without commensurate amenities and facilities to serve the settlers. In Botswana, the 'regrouping of population policy' (Silitshena, 1982, quoted in Oucho, 1998) established 'urban villages', many of which have urbanised rapidly. Apart from the highly successful Botswana system, all other systems have brought with them numerous problems: Kenya's has intensified ethnic strife, land grabbing and conflict among different antagonists and Tanzania's has sharpened citizens' appetite for greed as they gullibly embrace capitalism in the wake of the failed socialist experiment. Even South Africa's Reconstruction and Development Programme adopted when majority rule began in 1994 had dismal results.

Forced return of urban residents and regimented control of rural-urban migration in Mobutu Sesse Seko's Zaire (after 1997 DRC) failed as the citizens refused to budge. Despite DRC's failure to become a state capable of exploiting its vast resources, it remains one of SSA's poorest countries even as rural-urban migration continues unabated, with a growing band of impoverished, health endangered and helpless urban population.

At the moment there are no explicit migration policies to contain rural-urban and indeed any other types of internal migration in SSA. Implicit policies underscoring agricultural expansion for employment, export products and food security are at the mercy of world trade and inequalities it has sustained between the poor South and the developed North.

4.2 Urbanisation Policies

Urban policies are even more lacking in SSA. Most urban areas have recorded dramatic growth in the independence era, albeit without proper planning, provision of amenities and services for urbanites; urban planning is simply absent in the vast majority of urban areas. A typical feature of post-colonial city in the region is the prominence of slums, which in some cities account for anything up to 60 percent of the population. The various urban land uses – residential, commercial, industrial and recreational – exhibit worrying perspectives: the first is chaotic (hence the proliferation of slums); the second equally chaotic and heavily informal

sector based; the third seldom exists and where it does, is adjacent to residential areas; and the fourth is fast disappearing as other land uses consistently swallow it up.

4.3 Some Inter-linkages

The IUSSP (2007) seminar on Population Growth and Human Welfare in Africa, organised by its Scientific Panel found striking distinctions between SSA's urbanisation and demographic transition. The seminar reported contrasting findings of two papers:

[That] the demographic dividend is indeed concentrated in urban areas that the correlation between urbanisation and demographic transition is truly positive and could help achieve the MDGs...That population growth is positively correlated with urban transition on average, but in sub-Saharan Africa the urban transition is much slower than its population growth.⁶

4.4 Inter-linkages in the Context of MDGs

The 21st century began on a highly positive note by declaring the Millennium Development (MDG) programme which targets several developmental shortcomings in the developing world, SSA included.⁷ To this end some SSA cities have been identified as 'Millennium Cities', focal points to realise MDGs within them as well as within their spheres of influence. That the MDGs are heavily health based underscores their importance in the context of migration-urbanisation-health challenges linkages; and most SSA countries have the necessary data for interpreting and prescribing suitable solutions to them.

This presupposes that comprehensive developments are taking place in the focal cities for possible replication in other cities. Unfortunately, progress has been disappointing even as the terminal date of MDGs (2015) draws near. With well-organised urban planning and well-designed rural-urban links, the MDGs could turn around misfortunes of the past and ensure that all MDGs are on track even if the targets are fully achieved by 2015.

5. CONCLUSION

Analysis of migration, urbanisation and health challenges is a subject of immense importance in sub-Saharan Africa. It forms the basis for understanding issues in vogue such as MDGs,

⁶*Demographic dividend* is defined as a rise in the rate of economic growth due to a rising share of working age people in a population. This usually occurs late in the demographic transition when the fertility rate falls and the youth dependency rate declines.

⁷ The eight goals are: (1) eradicate extreme poverty and hunger; (2) achieve universal primary education; (3) promote gender equality and empower women; (4) reduce child mortality rate; (5) improve maternal health; (6) combat HIV/AIDS, malaria and other diseases; (7) ensure environmental sustainability; and (8) develop a global partnership for development.

climate change and environmental management which lie at the core of national development agenda in virtually all SSA countries. Unfortunately, demographers and other social scientist as well as statisticians in the region have not pieced together the available census data and data from Demographic and Health Surveys (DHS) to provide comprehensive insights of the subject of this paper. Their piecemeal analyse tend to provide incomplete, or even irreconcilable, picture of the inter-linkages of internal migration, urbanisation and the health challenges that are associated with them. The current preoccupation of migration scholars with international migration has tended to relegate internal migration work despite its importance in international migration agenda. It is imperative that future research on inter-linkages of internal migration, urbanisation and health challenges be more multidisciplinary if comprehensive outcomes have to be realised. Indeed this is a potential research area that should attract commissioned or competitive research by a broad spectrum of researchers with diverse backgrounds.

REFERENCES

- Adepoju, A. (1986) *Rural Migration and Development in Nigeria*. Department of Demography and Social Statistics, University of Ife, Ile-Ife, Nigeria.
- African Population and Reproductive Health Centre (APRHC) The Nairobi Urban Health and Demographic Surveillance System; <http://www.aprhc.org>.
- Agesa, J. and Agesa, R.U. (1999) 'Gender Difference in the Increase of Rural to Urban Migration: Evidence from Kenya' *Development Studies*, 35(6), pp.36-58.
- Agesa, R.U. and Kim, S. (2001) 'Rural to urban migration as a household decision: evidence from Kenya', *Review of Development Economics* 5 (1): 60-75.
- Allen, T. and Heald, S. (2004) 'HIV/AIDS Policies in Africa: What has worked in Uganda and what has failed in Botswana', *Journal of International Development*, 16(8), pp.1141-1154.
- Antai, D. (2010) "Migration and child immunization in Nigeria: individual- and community-level contexts", *BMC Public Health*, March, No. 10:116.
- Andersson, J.A. (2001) 'Reinterpreting the Rural-Urban Connection: Migration Practices and Socio-Cultural Dispositions of Buhera Workers in Harare', *Africa*, 71.
- Brockerhoff, M. and Eu, H. (1993) 'Demographic and Socio-Economic Determinants of Female Rural to Urban Migration in Sub-Saharan Africa', *International Migration Review*, Vol.27 (3), pp.557-577.

Byerlee, D. (1974) 'Rural-Urban Migration in Africa: Theory, Policy and Research Implications', *International Migration Review*, 8 (4), pp.543-566.

Caldwell, J.C. (1968) 'Determinants of Rural-Urban Migration in Ghana', *Population Studies*, 22(3), pp.361-377.

Caldwell, J.C. (1969) *African Rural-Urban Migration: The Movement to Ghana's Towns*. Canberra: Australian National University Press.

Caldwell, J.C. and Caldwell, P. (1987) 'The Cultural Context of High Fertility in Sub-Saharan Africa', *Population and Development Review*, 13 (3), pp.409-437.

Da Vanzo, J. (1976), "Differences between Return and Nonreturn Migration: An Econometric Analysis", *International Migration Review*, Vol.10 (1), pp.13-27.

Gugler, J. (1969) 'On the Theory of Rural-Urban Migration: The Case of Sub-Saharan Africa', in Jackson, J.A. (ed.), *Sociological Studies 2: Migration*, Cambridge: Cambridge University Press, pp.134-155.

Gugler, J. (2002), 'The Son of a Hawk Does Not Remain Abroad: The Urban-Rural Connection in Africa', *African Studies Review*, 45 (1), pp.21-41.

Gugler, J. and Flanagan, W.G. (1978) *Urbanisation and Social Change in West Africa*, Cambridge: Cambridge University Press.

Harris, J.R. and Todaro, M.P. (1970) 'Migration, Unemployment and Development: A Two-Sector Analysis', *The American Economic Review*, 60(1), pp.126-142.

International Union for the Scientific Study of Population (IUSSP) (2007) Urbanisation and poverty in Africa: Evidence on linkages between urbanisation, poverty and human well-being in sub-Saharan Africa. Paper presented at the IUSSP Seminar, Scientific Panel on Population Growth and Human Welfare in Africa, 10-11 September 2007, Nairobi, Kenya.

Kessides, Christine (2005) the Urban Transition in Sub-Saharan Africa: Implications for Economic Growth and Poverty Reduction Africa Region, *Africa Region Working Paper Series* No. 97. Washington, D.C.: Urban Development Unit, Transport and Urban Development Department the World Bank, December 2005.

Lewis, J. (2000), *Empire State-Building: War and Welfare in Kenya, 1925-52*, Oxford: Oxford University Press.

Nordberg, E. and Winblad, U. (1994) *Urban Environmental Health and Hygiene in sub-Saharan Africa*, Current African Issues 18. Uppsala: Nordiska Afrikainstitute.

O'Connor, A. (1983), *The African City*, London: Hutchinson University Library for Africa.

Okello, M. et al. (1990) Urban Child Survival and Development-Lunga Lungu, Kaiyaba, Soweto (Nairobi), Nairobi: African Medical Research Foundation (AMREF).

Ominde, S.H. (1968) *Land and Population Movements in Kenya*. London: Heinemann.

Oucho, J. O. (1996) *Urban Migrants and Rural Development in Kenya*. Nairobi: Nairobi University Press.

Oucho, J. O. (1997) 'The Ethnic Factor in Internal Displacement of Populations in Sub-Saharan Africa', *African Journal Political Science* 2 (2), December: 104-117.

Oucho, J. O. (1998) 'Recent Internal Migration Processes in Sub-Saharan Africa: Determinants, Consequences, and Data Adequacy Issues', in R.E. Hillsboro (ed.) *Migration, Urbanization, and Development: New Directions and Issues*. New York: UNFPA and Kluwer Academic Publishers, pp. 89-120.

Oucho, J.O. (2009) 'Voluntary versus Forced Migration in sub-Saharan Africa', Fischer, C. and Vollmer, R. (eds.), Brief 39: Migration and Displacement in sub-Saharan Africa – The Security-Migration Nexus II. Bonn: Bonn International Center for Conversion (BICC), pp. 11-19.

Oucho, J.O. and Ama, N.O. 'Immigrants' and Refugees' Unmet Reproductive Health Demands in Botswana: Perceptions of Public Health Providers', *South African Family Practice Journal* 51 (3), May/June 2009: 237-243.

Oucho, J.O. and Gould, W.T.S. (1993) 'Internal Migration, Urbanization and Population Distribution', in K.A. Foote, K.H. Hill and L.G. Martin (eds.) *Demographic Change in Sub-Saharan Africa*. Washington, D.C.: National Academy Press, pp. 256-29

Owuor, S.O. (2004) Urban Household Ruralising their Livelihoods: The Changing Nature of Urban-Rural Linkages in an East African Town.

Ranis, G. and Fei, J.C.H. (1961), "A Theory of Economic Development", *The American Economic Review*, Vol.51 (4), pp.533-565

Romaniuk, A. (1980) 'Increase in Natural Fertility during the Early Stages of Modernization: Evidence from an African Case Study, Zaire', *Population Studies*, .34 (2), pp.293-310.

Schapera, I. (1933) 'Labour migration from a Bechuanaland Native Reserve', *African Affairs* 32 (CXXIX): 386-397.

Silitshena, R.M.K. (1982) "The regrouping policy in the North-East District of Botswana", in J.I. Clarke and L.A. Kosinski (eds.), *Redistribution of Population in Africa*. London: Heinemann, pp.202-8.

Todaro, M.P. (1969) 'A model of labour migration and urban unemployment in less developed countries', *American Economic Review* 59:138-48.

White, M.J., Muhidin, S. and Andrzejewski, C., Tagoe, E., Knight, R. and Reed, H. (2008) 'Urbanisation and Fertility: An Event History Analysis of Coastal Ghana', *Demography*, Vol.45 (4), pp.803-816.

Wolpe, H.(1972) 'Capitalism and Cheap Labour-power in South Africa: From Segregation to Apartheid', *Economy and Society*, 1 (4), pp.425-456.