

**Demographic Dimensions of the Urbanization
Process in Selected African Countries:
New Prospects and Challenges**

By

**Mohammad Mirzaie, Ph.D, Nader Motie Haghshenas, MA,
Mahmoud Moshfegh, MA & Hossein Javadkhani, MA**

**Tehran University and
Population Studies and Research Center for Asia
and the Pacific
Tehran, IRAN**

**Submitted to
UAPS, 5th African Population Conference,
Arusha, Tanzania,
10-14 December 2007**

Abstract

The aim of this paper to elaborate on demographic dimensions of the urbanization process in Tanzania, Uganda, Kenya and Rwanda. Data is mostly taken from the Human Development Report (HDR), annual report of the UNDP for 2006. Degree and tempo are the most basic demographic dimensions of the urbanization process. Several indices have been presented for measuring the degree of urbanization, each of which allows analysis of one particular aspect of the phenomenon. In general, the tempo of urbanization is measured by comparing the level of urbanization at two different times. So, it implicitly involves the advantages and disadvantages of the indices used to measure the degree of urbanization. At the end of 20th century, most of the African countries have experienced urbanization transition along with the demographic transition. We have tried to show demographic dimensions of urbanization during 1975-2004. The results indicate that there are fluctuations among these countries. Yet, the future of urbanization will remain a challenging and increasingly important issue in the coming decades.

Introduction

The 20th century was the century of rapid world population growth. At least 2 billion additional inhabitants and perhaps close to 3 billion more people can be expected to be added to the world over the next five decades. Today world population stands at 6.4 billion, and is growing at a rate of 1.2 percent per year. Clearly, the enormous growth of world population that began in middle of the 20th century is not yet over and potential for huge population increases remains high. (United Nations, 2006).

According to the medium variant projection, world population will reach 9.1 billion by mid-century. Nearly all of the world's future population growth will be taking place in the less developed regions. The population of the currently more developed regions taken as a whole is projected to remain near its present size of some 1.2 billion inhabitants. (Chamie, 2005).

In terms of annual rates of growth, the world's most rapidly growing region is Africa. During the last half century, the population of Africa more than tripled, increasing from 221 million to 784 million. Vigorous growth is expected to continue, with the African continent projected to be close to 2 billion inhabitants by mid-century.

Growth of urbanization in the forthcoming years is a phenomenon expected to concern mainly the developing world. In 2000, an estimated 47 percent of the global population resided in urban areas and the urban population was growing three times faster than the population as a whole. Urban dwellers are expected to outnumber the rural population beginning in 2008 and by 2030 to make up 60 percent of world population. In more developed countries, the urban population is projected to rise from about 76 percent of total population in 2000 to 84 percent by 2030. In less developed countries, the urban proportion rises more steeply from 40 percent currently to 54 percent in 2030, which will narrow the gap in urbanization levels between these countries. (O'Neill & Balk, 2001).

In the end of 20 century, most of the African countries have experienced urbanization transition along with the demographic transition. While dealing with the consequences of Africa's rapid rate of urbanization is a major

challenge in itself, the accompaniment of this profound spatial, social and economic change with the increasing levels of poverty in the continent's urban centres makes the task even more formidable. Africa has to face up to the daunting task of ensuring that the continent's urban population, which is growing at an average rate of 4 per cent per annum, obtains decent means of livelihood, gets access to shelter and services, and enjoys a basic level of security. While doing so, however, it has also to contend with the constricting effects of high levels of poverty.

A majority of African cities have to cope with a situation of having close to 30 per cent of the population – mostly women – living on income levels below subsistence, an average of 70 per cent of residents living in slum settlements, and a dominant mode of livelihood located in non-formal sectors. This situation not only impairs the coping capacities and dynamism of Africa's urban residents, but it also undermines the ability of service delivery systems to provide for the needs of the population. (UN-Habitat, 2005 b).

Aim of Study

The main aim of this study is to explore degree and tempo of urbanization in Tanzania, Uganda, Kenya and Rwanda during 1975 -2004. More specifically, the study is designed to find the trends and similarity or dissimilarity pattern of the urbanization in these countries which are neighbors at the same geographical areas and compare with continent level.

Method and Materials

Data used in this analysis are mostly taken from the Human Development Report (HDR), annual report of the UNDP for 2006. Our analysis is based on four of the African countries which are geographically neighbors. These countries have sorted by Human Poverty Index (HPI) ranking and included Tanzania, Uganda, Kenya and Rwanda. Degree and tempo are the most basic demographic dimensions of the urbanization process. Several indices have been presented for measuring the degree of urbanization, each of which allows analysis of one particular aspect of the phenomenon. The concept of

tempo of urbanization refers to change in the degree of urbanization during a period of time. When the degree of urbanization is measured in terms of the percent urban, the tempo can be measured either as the absolute change in percentage points or as the rate of change in the percent of population urban between two dates. To measure the tempo of urbanization as an absolute annual change in percentage points, we calculate:

$$TA = \frac{1}{n} (PU^{t+n} - PU^t)$$

Where TA is the tempo of urbanization, n is the number of years, and PU is the percent of population urban at the years t and $t+n$. (Goldstein, 1975).

Finding

General Picture: Historical contexts

Most migrants never cross national borders. The largest migration flows within countries have been from rural to urban areas. A major movement of population from rural to urban areas began during the late 19th century, when Europe and North America were industrializing, and when faster and better communication made it easier for people to move. Cities had become more attractive to rural migrants because economic development and trade were centered in urban areas and cities offered better job opportunities, amenities, and public services than villages and rural areas. In the coming decades, the world's rapid urbanization will be one of the greatest challenges to ensuring human welfare and a viable global environment.

Table 1 shows demographic dimensions of urbanization process in the world and other regions during 1975-2004. Degree and tempo are the most basic demographic dimensions of the urbanization process. As indicated in this table, the percent of population urban has raised in the world and development regions during 1975-2004. These regions also vary in terms of tempo effect of Urbanization (TA). TA varied markedly, from 0.19 in the Central and Eastern Europe to 0.74 in the East Asia and the pacific region between 1975-2004.

Table 1: Demographic dimensions of urbanization process in the world and other regions during 1975-2004

Regions	Population Growth Rate 1975-2004	% Urban (PU)		Annual Change of % points (TA) 1975-2004
		1975	2004	
World	1.6	37.2	48.3	0.38
More developed Regions	0.8	66.8	75.4	0.29
Developing Regions	1.9	26.5	42.2	0.54
East Asia and the Pacific	1.4	20.4	41.9	0.74
South Asia	2.1	24	39.8	0.54
Sub-Saharan Africa	2.7	21.2	34.3	0.45
Central and Eastern Europe	0.3	57.3	62.9	0.19
Latin America and the Caribbean	1.9	61.2	76.8	0.53

Source: HDR, UNDP, (2006).

As shown in figure 1, the linkage between TA and PGR in World regions were relatively converged, except for Sub-Saharan Africa and the East Asia and the Pacific regions. The highest population growth rate belonged to the Sub-Saharan Africa (% 2.7). The type of relation between TA and Population growth rate (PGR) differ significantly in the Sub-Saharan Africa in comparison with the East Asia and the Pacific region.

Figure1: Annual Change of (%) points PGR and TA in the World and development regions,1975-2004

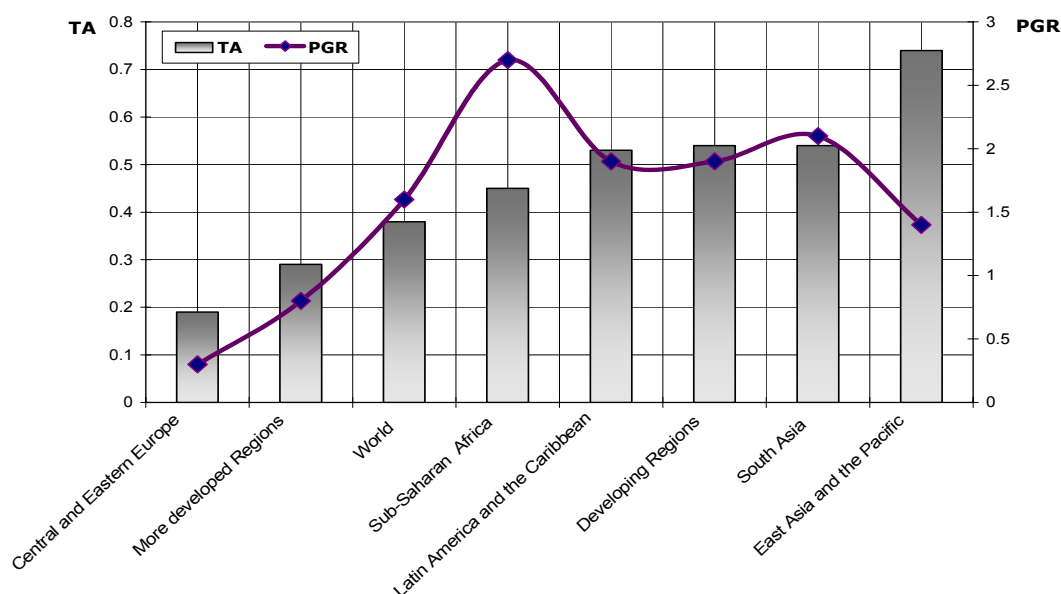


Table 2 shows demographic indicators in Kenya, Uganda, Tanzania and Rwanda at the threshold of the 21st century. As indicated in this table, these countries varied significantly in terms of population size, annual growth rate, population density and population sex ratio. Annual growth rate for these countries varies from 2.4 percent in Rwanda to 3.3 percent in Uganda. These countries have experienced remarkable changes in terms of Sex ratio. The excess of females had become quite noticeable in 2005. The last two columns of table 2 have indication of a young population for all of these countries.

Table 2: Demographic Indicators in Kenya, Uganda, Tanzania and Rwanda at the threshold of the 21st Century

Country	Population (in Millions)	Annual Growth Rate (%) 1975-2004	Population Density (per square KM)*	Sex Ratio *	Population Under Age 15 (% of Total)	Population Age 65+ (% of Total)
Kenya	33.5	3.1	61	99.3	42.9	2.8
Uganda	27.8	3.3	120	100	50.4	2.5
Tanzania	37.6	2.9	41	98.9	42.9	3.2
Rwanda	8.9	2.4	351	92.9	44.1	2.4

Sources: HDR, UNDP (2006), * Data are taken from UN Projection (2006).

Table 3 shows socioeconomic and Health Indices in Kenya, Uganda, Tanzania and Rwanda at the threshold of the 21st century. As indicated in this table, these countries varied not significantly in terms of Human poverty Index (HPI) and Human Development Indices. IMR for these countries varies from 78 per 1000 in Tanzania to 112.4 per 1000 in Rwanda and GDP per capita in Tanzania is much lower than other three countries.

Table 3: Socioeconomic and Health Indices in Kenya, Uganda, Tanzania and Rwanda at the threshold of the 21st Century

Country	GDP Per Capita (PPP US\$)	IMR *	HPI-1 Value (%)	Human Development Indices			
				LE Index	EDU Index	GDP Index	HDI
Kenya	1,140	79	35.5	0.37	0.69	0.41	0.491
Uganda	1,478	80	36	0.39	0.67	0.45	0.502
Tanzania	674	78	36.3	0.35	0.62	0.32	0.430
Rwanda	1,263	112.4	37.3	0.32	0.61	0.42	0.450

Sources: HDR, UNDP (2006), * Data is taken from UN Projection (2006).

Table 4: Degree and Tempo effect of urbanization in Kenya, Uganda, Tanzania and Rwanda, 1975-1990 and 1990-2004

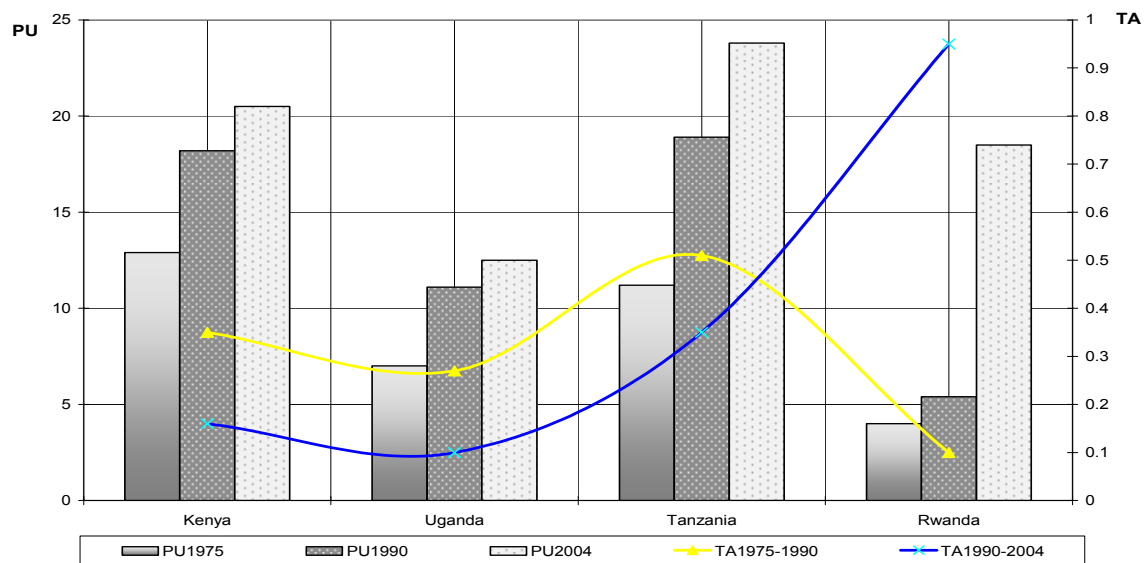
Country	% Urban (PU)			Annual Change of % points (TA) 1975-1990	Annual Change of % points (TA) 1990-2004
	1975	1990*	2004		
Kenya	12.9	18.2	20.5	0.35	0.16
Uganda	7	11.1	12.5	0.27	0.1
Tanzania	11.2	18.9	23.8	0.51	0.35
Rwanda	4	5.4	18.5	0.1	0.95

Source: HDR, UNDP (2006), * Data is taken from UN Projection (2006).

Table 4 shows Degree and Tempo effect of urbanization in Kenya, Uganda, Tanzania and Rwanda during 1975-2004. As indicated in this table, the percent of urban population has raised in these African countries, which is consistent with the world and continent trends. These countries also vary in

terms of tempo effect of Urbanization. TA varied markedly, from 0.51 in Tanzania to 0.1 in Rwanda between 1975-1990 and from 0.95 in Rwanda to 0.1 in Uganda between 1990-2004. As a matter of fact, Rwanda experienced a high rate of TA in second period, and the trend of rise in urbanization in this country varies with those of the other three countries. (Figure 2).

Figure 2: Degree and Tempo effect of urbanization in Kenya, Uganda, Tanzania and Rwanda during 1975-2004



Future Scenario

In the coming decades, the world's rapid urbanization will be one of the greatest challenges to ensuring human welfare and a viable global environment. According to current estimates, cities occupy 4 percent or less of the world's terrestrial surface, yet they bare home to almost half the global population, consume close to three-quarters of the world's natural resources, and generate three- quarters of its pollution and wastes.

Table 5: Future trends of degree of urbanization (% Urban) in Kenya, Uganda, Tanzania and Rwanda in 2004, 2015 and 2030

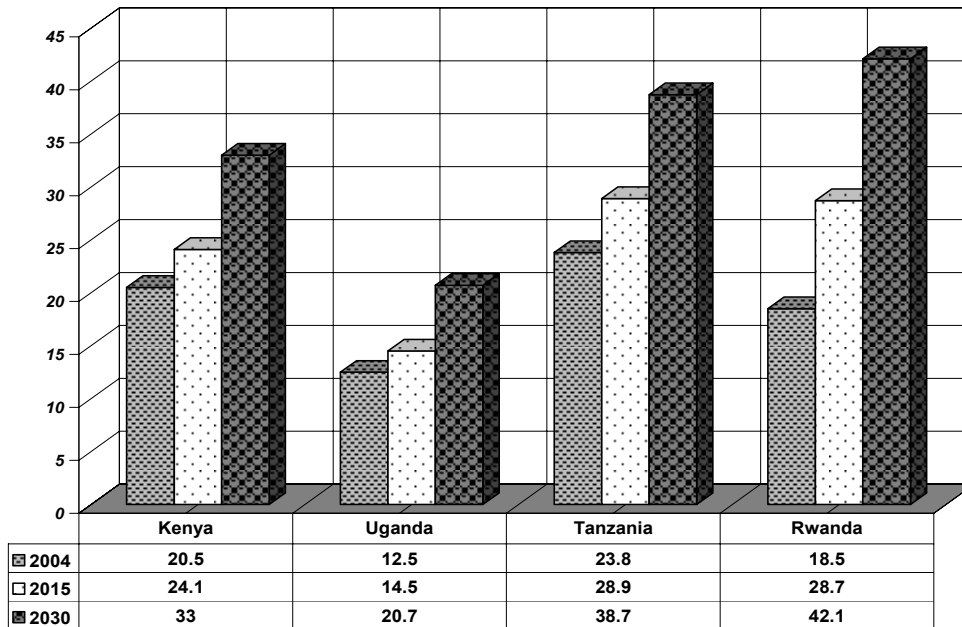
Country \ Year	2004	2015	2030*
Kenya	20.5	24.1	33.0
Uganda	12.5	14.5	20.7
Tanzania	23.8	28.9	38.7
Rwanda	18.5	28.7	42.1

Sources: Data for 2004 and 2015, HDR, UNDP (2006), *Data for 2030, UN Projection (2006).

Moreover, the UN estimates that virtually all net global population and economic growth over the next 30 years will occur in cities, leading to a doubling of current populations. This growth will require unprecedented investment in new infrastructure and create undreamed challenges for political and social institutions.

Table 5 shows future trends of degree of urbanization in Kenya, Uganda, Tanzania and Rwanda in 2004, 2015 and 2030. As indicated in this table, the percent of urban population will increase in the end of projection periods which will follow from the world and continent trends. These upward trends will show commensurate changes in the majority of African countries. According to these projections Uganda lags behind the other three countries in terms of the rate of urbanization (Figure3).

Figure 3: Future trends of degree of urbanization (% Urban) in Kenya, Uganda, Tanzania and Rwanda in 2004, 2015 and 2030



Summary and Conclusions

This paper explained demographic dimensions of the urbanization process in Tanzania, Uganda, Kenya and Rwanda. Degree and tempo were the most basic demographic dimensions of the urbanization process. Several indices have been presented for measuring the degree of urbanization, each of which allows analysis of one particular aspect of the phenomenon. In general, the tempo of urbanization was measured by comparing the level of urbanization at two different times. So, it implicitly involves the advantages and disadvantages of the indices used to measure the degree of urbanization. Data was mostly taken from the Human Development Report (HDR), annual report of the UNDP for 2006. We have tried to show demographic dimensions of urbanization during 1975-2004. In the end of 20th century, most of the African countries have experienced the onset of the urbanization transition along with the demographic transition. The results indicate that these countries have not found commensurate changes in terms of TA during two periods of 1975-1990 and 1990-2004 .Rwanda

started its urbanization transition later than other three countries. In the light of the foregoing analysis, it is important to declare that levels, trends and tempo of urbanization have been different in these countries. The growth of urbanization in the African countries especially in these four countries which have located in Sub-Saharan Africa should not be taken as an index of development, because it has not been the result of economic development. In fact, it is as a consequence of uneven development between urban and rural areas, particularly the rural population's lack of access to sufficient income and services. Our finding revealed that the percent of urban population in these four countries will follow the global trends, and will increase continuously up to 2030.

Concluding Remarks

Many of the stresses of rapid population growth are exacerbated by poverty and inequality. Continued Rapid population growth poses bigger threat to poverty-reduction in most (but not all) countries. This growth will require unprecedented investment in new infrastructure and create undreamed challenges for political and social institutions.

In order to pursue a smooth urban growth in coming decades the following recommendations are put forward:

We have an optimistic view and believe in achievement of sustainable development in these countries and the Africa continent as well. This needs to a unique mechanism including Monitoring system, Action system and Evaluation system.

Collaborative efforts of the international organizations, Civil society, local government, policymakers and stakeholders have a significant role in reduction of urban poverty, orientation of new settlements for preclusion of appearance of slum dwellers, enforced medical care system, empowering poor people which are necessary for reducing inequalities and eradication of poverty both within and between African countries.

Equality goes hand in hand with investments in education, economic opportunity and reproductive health, and taken together, these are a powerful force for lifting millions out of poverty.

More work needs to be done in improving structures and procedures for local governance through deploying emerging tools, methods and techniques, in improving fiscal management and developing capacities. Its relative neglect in international circles could be disastrous.

Yet, the future unfolding picture of urbanization requires a fundamental review and will remain a challenging but increasingly important task in the coming decades.

Bibliography /References

- 1- Ashford, (L), et al. (2001), "New population Policies: Advancing Women's Health and rights", Population Bulletin, Population Reference Bureau;
- 2- Bloom,(D.E.),et al.,(2002),"Demographic Change and Economic Growth: The Importance of Age Structure", Santa Monica, California: RAND Corporation;
- 3- Chamie,(J),(2005),"Scenarios for the Development of World Population" In GENUS Journal, Proceeding of the International Conference, Rome,26-28 May,2005,PP.69-89.
- 4- Gelbard,(A),et al. (1999), "World population Beyond Six Billion", Population Bulletin, Population Reference Bureau, pp: 27-30;
- 5- Goldstein, (S), et al., (1975), "The Measurement of Urbanization and Projection of Urban population", IUSSP, Working Paper, No2, pp: 20-42;
- 6- Jones, (G), (2002), "Urbanization trends in Asia : The conceptual and definitional challenges;
- 7- Kasarda J.D. and Crenshaw, M (1997)," Third World Urbanization: Dimensions, Theories, and Determinants, Annual Review of Sociology, Vol. 17. (1991), pp. 467-501;

- 8- Lutz (w), et al., (2004). "The End of World Population Growth in the 21st Century", Earthscan press, London;
- 9- Motie Haghshenas ,(N),(2003), A Summary of Demographic and Human Development Indices for Muslim Majority countries at the threshold of the 21st Century; Population Studies and Research Center for Asia and the Pacific, Tehran, Iran ;
- 10- O'Neill (B) & Balk(D),(2001),"World Population Futures", In Population Bulletin; Population Reference Bureau, Washington;
- 11- Renaud,(B). (1981),"National Urbanization Policies in Developing countries", New York: Oxford University Press;
- 12- Rondinelli, D. A. (1980),"Balanced urbanization, regional Integration and development planning in Asia" , Ekistics, 284:331-39;
- 13- Shen, J. (2006),"Estimating Urbanization Levels in Chinese Provinces in 1982–2000" ,International Statistical Review, Department of Geography and Resource;
- 14- UNFPA-CIESIN Workshop on Population,(2005), "Urban Population, Poverty and Sustainable Development: Emerging Issues for UNFPA", Columbia University;
- 15- UN-Habitat,(2005a),"Urbanization Challenges in Sub-Saharan Africa";
- 16- UN-Habitat, (2005b), "African Ministers' Conference on Housing and Urban development (2005), Urban governance in Africa: experiences and challenges. Durban, South Africa, 31 January–4 February 2005;
- 17- United Nations Population Division, (2006), "World Population Prospects: New York: United Nations. Available on-line at: <http://www.un.org/esa/population/publications/wpp2000>. PDF;
- 18- UNDP, (2003)," Human Development Report ", NewYork;
- 19- UNDP, (2006)," Human Development Report ", NewYork.
