



# Uncontrolled Urban Development in Medium Sized Towns in Sub-Saharan Africa

Jocelyne J. Malakwen, Leonard S. Mulongo and Peter Omboto

## ARTICLE INFO

### Article history:

Received: 25 December 2017;

Received in revised form:

30 March 2018;

Accepted: 10 April 2018;

### Keywords

Squalor Settlements,  
Medium Sized Towns,  
Settlements,  
Remedies,  
Planning.

## ABSTRACT

Various studies have made strides to discuss causes of uncontrolled urban development; this paper goes ahead to discuss the causes and remedies to the same issue based on sub-Saharan countries. Squalor settlements are becoming a threat to growth of cities and development of towns worldwide. The scenario is likely to worsen by the year 2030 as many people migrate to most of these cities and if appropriate actions will not be taken. It was based on a study undertaken in Eldoret town; Kenya strives to discuss uncontrolled urban development and its mitigations. In this case Mann's Urban Model was adopted, which emphasizes the need for a systematic growth of urban centers in a more concentric and planned manner. It was a case study, focusing on two informal settlements: Langas and Munyaka selected purposely. The two settlements were selected for study due to; the high density and consolidation and they are settlements outlying on the urban periphery with lack of appropriate infrastructure, poor maintenance regimes, overcrowding, uncontrolled and conflicting land uses. Arising from the study, most causes were found to be tailored to economic, social, political and environmental. Increased movement from rural areas to urban has doubled the demand for housing and basic amenities overwhelming the service provider. The situation is coupled with institutional weaknesses and lack of capacity in the municipality to control urban development. This paper recommends that, liaison and co-ordination between different government agencies and stakeholders is necessary for expertise, exchange of ideas and machinery during planning.

© 2018 Elixir All rights reserved.

## Introduction

The rapid rate of uncontrolled urban development is becoming a major challenge facing policy makers in the urban areas. Increase in population demands has led to high demand for housing hence scramble for space. In Africa, various studies have shown that Urbanization in many African countries is a blessing in disguise in that, rapid urban growth has brought with it a host of problems, including unemployment and underemployment, a burgeoning informal sector, deteriorating infrastructure and service delivery capacity, overcrowding, environmental degradation, and an acute housing shortage. The rapid expansion in urban population has occurred without the needed expansion in basic services and productive employment opportunities. The problem is compounded by weak urban government structures with very limited capacity to stimulate economic growth, mobilize resources and provide the most basic services resulting to uncontrolled urban development.

The rapid rate of uncontrolled and unplanned urban development have brought with it complex urban problems, like traffic congestion, limited controlled access to land ,rapid growth of slums ,blockage of sewers accompanying health hazards and rural problems such as qualitative and quantitative depopulation of rural areas (Oinobkun,1973).The uncontrolled urban development is covering areas without proper planning which creates chaos in their spatial order, with future problems in management of urban areas. The rapid and uncontrolled development of cities creates pressure

on the provision of infrastructure services such as road network, telecommunication, electricity, piped water, waste disposal and sewer network. The lack of adequate responses to this need for services leads to poor living conditions. There is need for planners to develop new and alternative tools and models to become more effective in their work.

The use of alternative tools and models can assist planners to direct growth in urban areas and deliver the required provision of infrastructure, housing and other services. Although urbanization is the driving force for modernization, economic growth and development, there is increasing concern about the effects of expanding cities, principally on human health, livelihoods, infrastructure and the environment. Due to the increasing rate of urbanization, especially in developing countries, illegal structures as a form of shelter are common place. In their quest to have a source of shelter, these unplanned and illegal structures tend to increase and thus lead to the springing up of slums. The implications of rapid urbanization and demographic trends for employment, food security, water supply, shelter and sanitation, especially the disposal of wastes (solid and liquid) that the cities produce are staggering (UNCED, 1992).

In East Africa, urbanization is a poverty-driven economic survival strategy. With urban populations growing significantly faster than the urban economies, between one-third and two thirds of the people in East African cities now experience at least one shelter deprivation. The growth, proliferation and persistence of urban slums in East Africa are

caused and sustained by: lack of urban land and planning policy; unrealistic construction standards and regulations; private sector housing mostly catering for high and middle-income groups; lack of strategic positioning by governments and local authorities; lack of public infrastructure; and the politicizing of informal settlements and social housing in party lines, current in election years and forgotten as soon as the ballot count is completed.(UN Habitat, 2007)

The local government in Kenya is unable to cope with the current dynamics and urbanization challenges despite the reforms which have been carried out in the sector. The haphazard urban growth and spontaneous settlements is enormous which indicates poor control system .Lack of physical development plans to be implemented by local governments has enhanced reactive rather than pro-active development .The situation has been intensified by the desire to invest from different interested stakeholders. The rate of uncontrolled urban development has outstripped the local authorities' management capacity, financial resources, infrastructural provision and even information on urbanization process itself.

### Literature Review

The major challenge today, however, is not simply to train public administrators and technical personnel to carry out such functions, but to link them to what is the reality within the greater part of towns. Hence, in facing this changing urban reality, government will have to adopt a new role, a new approach that matches today's urbanization process. Such a new role should facilitate local improvement and development activities and will require that Government adopts an enabling framework of policies and strategies targeted at supporting land use, initiatives of communities and the private sector, rather than maintaining their conventional role of settlement planning and attempted control through sets of bylaws, which has proven ineffective in the face of the challenges.

**Controlled development as described by Baross (1990)** are processes to be followed in site development, he states that the process has four major phases, these are: Planning (P), Servicing (S), Building (B) and Occupation. The traditional sequence of a controlled urban development follows these steps (P-S-B-O).On the contrary, **uncontrolled development** for this study basically refers to developing without control, without municipal approval and thus without building license. In uncontrolled urban development the sequence is (O-B-S-P) occupation of the area ,then the people will built their housing (self help or owner built),after building their housing they request for basic services may be through the municipality or the local government or through organizations .Then generally the planning phase follows because problems arrive in the occupied area that does not follow patterns of planning .In this last stage come the regulatory part or formalization in the municipality.(Baross 1990)

**Uncontrolled urban development domesticates** informal settlements (often referred to as shanty towns or slums).They are common features of developing countries and are typically the product of an urgent need for shelter by the urban poor. As such they are characterized by a dense proliferation of small, make-shift shelters built from diverse materials, degradation of the local ecosystem and by severe social problems. They occur when the current land administration and planning fails to address the needs of the urban community. These areas are characterized by rapid,

unstructured and unplanned development. While there is significant regional diversity in terms of their manifestation, these settlements are mainly characterized by informal or insecure land tenure, inadequate access to basic services, both social and physical infrastructure and housing finance. They may, however, also be found on legally owned land but which has not been developed in accordance with physical planning standards.

### Urban Economic Development

Economic activity located in urban areas is the driving force of urban growth and the jobs created the main attraction for rural migrants. Buoyancy in urban economies was taken for granted, especially in the years after independence, when expansion of the public sector and the pursuit of import substitution industrialization policies gave a boost to urban le rooms, and employment opportunities. Indeed, the economic preeminence of the largest cities was typically seen as a problem and measures (however ineffective) taken to divert investment elsewhere, either to rural development or to secondary cities and urban centers in rural areas.

Urban planning emerges as a response to the need of being ahead to the process of urbanization with the goal of improving the general conditions of habitability of the cities. In urban planning the universe of work is the city in question and planning establishes a link to the development .Considering these, planning envisioned a better social and economic development of an urban nucleus, it establishes the road to development based on the physical, geographical and economic characteristics of the city (Adams, 1994). The main intention of urban planning is to create a habitable city, relatively free of conflicts between the residents and the economic activities. The needs of the citizens are fully met without damage of the environment and natural resources. Urban planning shows the interaction between all the sectors in urban area; including other aspects inside it .It is also linked with the planning of land use in the city fringe and close areas.

### Urban development in Africa

Today the global slum population is estimated at 837 million persons, accounting for one-third of the urban population in Asia, over one-half in Africa and approximately one-quarter in Latin America, (World Bank 2002). These figures are projected to double over the next 25 years, leading to one of the greatest challenges a country's development will face: a growing majority of the population, who are marginalized slum dwellers.

Africa is in a historic period of demographic change. In the early 1990s, two-thirds of all Africans lived in rural areas. Around 2030, Africa will enter its urban age with 759.4 million people or half of its total population living in cities. It is projected that by 2050 there will be more than 1.2 billion African city dwellers. Among the fastest growth will be the East Africa region, which will double its population in less than nine years from 50.6 million in 2007 to a projected 106.7 million by 2017.At this rate it means that by 2050 there will be more people living in African cities than the combined urban and rural populations of the Western hemisphere. (UN Habitat, 2007).

Urban planning for the rapidly expanding African cities and towns is acutely inadequate and often leads to failure because the plans prepared omit the speed and nature of growth in both urban and peri-urban areas. Besides, some towns and cities still lack physical development plans to guide and control developments. As a result, the structure,

form, quality and supply for urban housing, social and physical infrastructures and urban livelihoods are largely deficient of expectations for the people. The outcome is inevitable and identical among most cities across Africa namely, continent-wide massive self-help urbanization dominated by uncontrolled informal and often illegal spatial developments and mushrooming numbers of poor urban dwellers without access to adequate housing or basic services like water, sanitation, electricity and roads.

Slum interventions have had mixed results due to the persistence of exclusion of target groups; failure to recognize low-income households' housing down-raiding and gentrification; frequent persistence of non-participatory approaches; lack of focus on the well-being of target households; inadequate partnerships, networking and coordination; upgrading non replicability; and top-down and unsustainable approaches. Effective strategies aimed at improving shelter conditions, especially for lower-income groups, cannot be divorced from overall poverty alleviation and social and political inclusion.

### **Major Causes of Urbanization in Africa**

Urbanization, simply defined, is the shift from a rural to an urban society and involves an Increase in the number of people in urban areas during a particular year. Urbanization is the outcome of social, economic and political developments that lead to urban concentration and growth of large cities and changes in land Use. The natural increase is fuelled by improved medical care, better sanitation and improved food supplies, which reduce death rates quality education which cause populations to grow.

In many developing countries, it is rural poverty that drives people from the rural areas into the city in search of employment, food, shelter and education. In Africa, most people move into the urban areas because they are 'pushed' out by factors such as poverty, environmental degradation, religious strife, political persecution, food insecurity and lack of basic infrastructure and services in the rural areas or because they are 'pulled' into the urban areas by the advantages and opportunities of the city including education, electricity, water etc.

Even though in many African countries the urban areas offer few jobs for the youth, they are often attracted there by the amenities of urban life (Tarver, 1996). There is lack of proper plans put in place to provide for the ever increasing population. This expands on the "rudimentary system of building by-laws" and growth of squalor settlements. Vague, obsolete, and highly ineffective by/ laws are confined to this.

### **Housing, Land and Planning**

Public sector housing policies focused initially on the provision of complete house units, typically for public sector employees as well as low-income groups. To some extent this approach has been superseded by sites and services, but neither has succeeded in matching supply with demand, let alone need, for a variety of reasons, including inadequate land administration systems, lags in infrastructure provision programmes, lack of capital, shortages of building materials, and limited capacity in the construction sector. As a result, most additions to the housing stock have been made by the private sector, with quantitatively by far the largest contribution coming from individual households and small landlords. Almost invariably, at least one aspect of this housing is illegal - lack of formal land tenure failure to obtain development permission, failure to satisfy building regulations, or disregard of rent control. It is financed, built,

and exchanged outside the formal systems for mortgage lending, construction, and sale.

Where pressures on land are greatest and infrastructure most deficient, the quality of accommodation can be appalling, but much of the housing produced is adequate to satisfy basic needs for shelter. Thus infrastructure improvements and provision of education and health services are much more important than improvements to the dwelling in improving the quality of the residential environment. Whereas regularization and upgrading programmes were accepted reluctantly by politicians and officials in the 1970s, there are signs of a new realism as the financial and administrative weakness of public agencies has become increasingly clear, and the potential of more participatory community-based approaches to infrastructure installation and operation is demonstrated in residential areas, often with donor and NGO assistance. The need to regularize informal tenure arrangements sufficiently for them to be used to generate revenue may assist in this process (Durand-Lasserve, 1993). However, it should be recognized that regularization of unplanned areas is no substitute for a rapid land subdivision and strategic infrastructure investment programme linked to a land-use planning process.

### **The Role and Importance of Spatial Structure in Urban Planning**

Spatial structure is a concept used to interpret, design and make human settlement. It results from interplay between formally planned and spontaneous dimensions of settlement making. The term structure refers to the creation of the public environment that realm which is shared by inhabitants as compared as opposed to private realms of individual's households and businesses. The act of planning is to arrange the elements of the structure into a system of references that supports the processes of living and which establishes a spatial logic eliciting responses from many actors who contribute to the settlement making. Settlement plans should be able to accommodate uncertainty and change rather than simply to accommodate the initial development programme that necessitates the plan.

### **Infrastructure and Services in African Cities**

One of the most visible and disturbing characteristics of the poorer cities is the decline of their infrastructural base. As urban populations grow, and as available resources decline, public infrastructure is being degraded to a point where cities are seriously losing their capacity to operate as productive entities. In many African cities, refuse is uncollected and piles of decaying waste are allowed to rot in the streets; schools are overcrowded; some urban roads deteriorate into quagmires in the rainy season, and are pitted with dangerous potholes during the dry season; private telephones are an impossible dream; public transport systems are becoming seriously overloaded; and more and more people are obliged to live in unserviced plots. Not only is little new infrastructure constructed, but existing infrastructure is poorly maintained. (Stern, 1991, p. 7)

Stren's analysis refers to African cities in general. The situation he describes is characteristic of large parts of some of the cities described in this volume, especially Nairobi, Lagos, and Kinshasa, and is becoming increasingly widespread in lower-income areas of the others (see also Ngom, 1989, on Dakar; El Sammani et al., 1989, on Khartoum). The situation is even worse in many smaller cities and poorer countries (Onibokun, 1989).

Stren and White's research in the 1980s showed that most water and electricity supply agencies in African cities were either central government parastatals or attached to central government ministries. In most cases, supply has failed to keep pace with urban growth. Where local government continues to be responsible, experience varies, from Zimbabwe on the one hand, where the supply of water has generally kept pace with urban population growth, to Kenyan local authorities on the other. However, problems should be attributed not only to local government failings, but also to central government policies and inaction. In some francophone countries, the water supply function is contracted out to private companies. The Côte d'Ivoire's experience is that such an arrangement can be efficient if the company concerned is given adequate autonomy with respect to operation and pricing, although there can be difficulties in ensuring supply to low-income areas (Stern, 1989b). An intermediate arrangement, of a national (Ghana) or municipal (some Zambian local authorities) public sector company, is becoming more wide spread, as countries attempt to improve efficiency without outright privatization.

Waste management arrangements in most cities are also far from satisfactory. Whereas anglophone countries rely on a public service, elsewhere solid waste collection may be subcontracted, to a single company as in Abidjan, or to local entrepreneurs (Stern, 1989b). Whatever the arrangement, effectiveness is inhibited by inappropriate collection arrangements and shortages of foreign exchange to import equipment, and equity is reduced by the lack of finance to subsidize services in low-income areas where necessary.

The failure of land subdivision and servicing programmes to keep pace with urban growth, which has led to widespread illegal and informal development, and not only of low-income areas, has hindered the extension not only of water, electricity, and solid waste collection services but also of adequate sanitation arrangements and road networks to large areas of Africa's cities. In the absence of collective sanitation arrangements, households are forced to devise individual solutions suited to their incomes and physical circumstances. Reliance on pit latrine sanitation can give rise to groundwater pollution and problems occur as density rises, while the use of septic tanks needs to be backed up by private or public sludge removal services and suitably located disposal sites. Where waterborne sewage disposal to conventional treatment works is available, it is costly, limited in coverage, and poorly operated, because revenue and foreign exchange shortages have made it increasingly difficult to obtain spare parts and maintain systems. As densities increase, unacceptable levels of sharing occur, or residents cannot get access to any toilet facility and are forced to "use the bush" ("free range" in Accra). Both have adverse health and environmental implications.

In the early years after independence, public transport was typically a public monopoly, whether a parastatal bus company or a local government function. Invariably it was inadequate, owing to shortages of foreign exchange for parts and new buses and poor management. Increasingly, the public monopoly has been supplemented or replaced (legally or illegally) by private operators, a trend that increased its momentum with economic liberalization. Although the availability of public transport has generally improved as a result, the failure of the public sector to provide an adequate road network results in patchy coverage and high operating costs, while its inability to regulate the private sector has

resulted in poor safety standards and sometimes violent competition to ply particular routes.

Privatization may occur through a variety of mechanisms, including sale of public assets, deregulation and liberalization, contracting out, public-private or public-NGO partnerships, transfer to NGOs, and government support for private providers (Rondinelli and Kasarda, 1993). Lessons from the Asian experience for African cities demonstrate the need to take care in designing the mechanisms for private/NGO involvement, to devise a workable regulatory framework, and to select only those services for which privatization is appropriate (for example, transport, housing, refuse collection, and perhaps aspects of health care) (Davey, 1993). Institutional reforms related to service provision are under way in African cities.

### **Urban growth in Kenya**

Kenya's major cities are even growing faster with a typical yearly increase of 10%. This implies that Kenya may in the year 2010 have 52 million inhabitants of which 5 million would live in Nairobi. These alarming figures revealing the rate of urbanisation, provides reasons for concern. Without proper planning, the negative effects of the current and future urbanization processes will have consequences of unacceptable urban environment with the majority of its population living in inhuman living conditions. The kind of challenges facing the Municipal Authorities today therefore, as far as planning and controlling the growth of cities is concerned, are excessively great. Controlling this growth and turning these cities into habitable environments is a challenge to which planning is yet to develop an effective response. Besides, global problems and issues challenge planning, a discipline which is mostly developed at the local level. These are problems which local intervention cannot possibly cope. (G.linden, 1995)

Slum households in slum areas in Kenya, in 2003, was estimated at 55%, while slum settlements in non-slum areas was represented by 10%, and only about 25% representing non-slum households in non-slum areas (UN-HABITAT, 2007). Rapid urban growth in Kenya is also causing serious strain on existing urban infrastructure services such as hospitals, schools, road network, housing and other amenities. Such problems frustrate development efforts in urban environments. Like in other countries, Kenya's slums are growing at an unprecedented rate as more and more people move to the cities and towns in search of employment and other opportunities urban areas offer.

In their desire to invest, developers continue to initiate many development projects in the urban areas but the planners have been unable to cope with the high demand for land use. A cursory look at the spatial developments in the major urban centers of Nairobi, Mombassa, Kisumu, Nakuru and Eldoret demonstrate the fact that developers are ahead of planners which leads to unplanned structures, mushrooming of slums and unco-ordinated developments. (Ombura 2002)

Economic Recovery Strategy places priority on, among others: Rationalizing central-local financial relations; The Kenya government has proposed for the establishment of a Revenue Allocation system in the Revised Constitution (draft), to increase revenue sharing between the central government and sub-national governments; Additional revenues are already being channeled through the Constituency Development Fund, the Constituency HIV/AIDS Funds and the Constituency Bursary Funds. Restructuring local authorities based on viability; various

studies have revealed that some local authorities are not economically sustainable and specific recommendations made to merge such affected and rationalize their structures and staffing. The local government framework in Kenya is discussed at two levels:

### Research Methods

This research was carried out in Eldoret municipality focusing on informal settlements. Eldoret has grown to become the fifth largest town in Kenya after Nairobi, Mombasa, Kisumu, and Nakuru. The town lies in the Uasin Gishu plateau, 65km North of the equator and at an average altitude of 2,085 metres above the sea level. The town's urbanized area sprawls along an east-west axis due to escarpment that forms the edge of the Uasin Gishu Plateau and has set the limit of the built-up area in the North, and the stony, steep Sosiani River valley, which bisects the existing urban area, has been a hindrance to expansion in the South.

The town is the main urban centre in the North-Rift region. It is the headquarters of the three newly created districts. The Municipality is divided into five locations: Kibulgeny, Kapyemit, Pioneer, Chepkoilel and Kapsoiya. The Eldoret Municipal Council covers 147 sq. km as shown by the (fig1) with a population of 300,000 people (Central Bureau Statistics: 1999 census). The annual population rate is at 3.35%, thus projecting the current population at about 500,000.

Two settlements Langas and Munyaka where purposely selected for this study, they have characteristic patterns of uncontrolled urban development. The research used a case study approach conducted through the cross sectional survey, based on secondary visits and interviews. The first step was a desk research, It involved collecting and reviewing of a wide range of published data of planning in Kenya, urban growth (controlled and uncontrolled). This was an explanatory nature which provided an orientation and familiarity with the subject in question. This was conducted in the Moi University library as well as the use of electronic sources. Secondary data was acquired from the EMC, Department of land and settlements, ELDOWAS, Ministry of physical planning, officially published policy documents and articles, important reports/documents were copied. The study benefited from first information raised by residents during the stakeholders meeting organized by consultants on Digital mapping of Eldoret town and strategic plan for the vision 2030.

A historical perspective was necessary to capture and fully appreciate the processes. Hence, two settlements were selected for study due to; the high density and consolidation and they are settlements outlying on the urban periphery with lack of appropriate infrastructure, poor maintenance regimes, overcrowding, uncontrolled and conflicting land uses, and lack of readily accessible drinking water, unsanitary living conditions, rapid growth and illegal subdivisions; among others. 23 key informants were selected using purposive sampling while 200 respondents from the two settlements were selected using random sampling. Langas has not been systematically subdivided hence the area was subdivided into six blocks defined on the basis of physical boundaries and distinguishing characteristics. 10-20 households were selected from each block depending on the size with an intention to achieve a sample size of approximately 100 responses from the settlement. Munyaka has a formal layout and so was possible to randomly select 50 plots from the two blocks bisected by the main road.

## Research Results

### Socio- economic characteristic of the participants

#### a) Migration to the two settlements

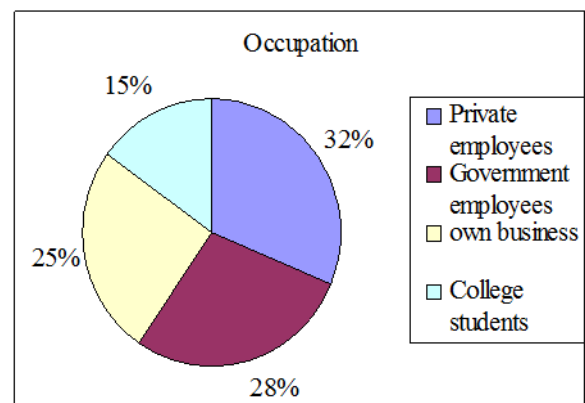
The a Migration to the two settlements

Factor	Zone/Estate	
	Langas	Munyaka
Resident	23 (23%)	32 (33%)
Immigrants	65 (84%)	64 (67%)

The research observed that the highest percentage of people who have settled in the two settlements migrated here from different places. The area attracted low-income housing developers leading to further sub-division of land below the required standards.

### Occupation

At the present time the means age of respondents from Langas and Munyaka are active population either occupied with an economic activity or studying. The following graph shows the type occupation indicated by the respondents from the two selected settlements



The type occupation indicated by the respondents from the two selected settlements Figure:

#### (i) Type of occupation

The private sector is the major employer followed by the government and business owners. According to the analysis of the interviewed population some are students who depend on their parents or sponsors for support. They chose to reside in the area because of its proximity to learning institutions and availability of affordable housing.

### Income

The study further inquired into incomes of the participants in order to find out the relation between incomes and provision of basic services. The monthly incomes for respondents ranged between 1000/- per month to about 20,000/- per month. Some are students learning in institutions though a small percentage belongs to middle class.

(See Table. 1)

**Table:1. Income of the respondents**

Monthly income in K.shs	Zone/ Estate		Total
	Langas	Munyaka	
1,000-5,000	12 13.6%	34 35.4%	46
6,000-10000	29 33%	18 18.8%	47
11,000-15,000	14 15.9%	23 24%	37
16,000-20,000	27 30.7 %	9 9.4%	36
above 20,000	6 6.8%	12 12.5%	18
Total	88	96	184

Many respondents earn income paid by employers, while other sources of employment included small businesses such hawking, juakali, sell of agricultural produce and others were desperate obtaining help from relatives and well-wishers. Shown by the graph below;



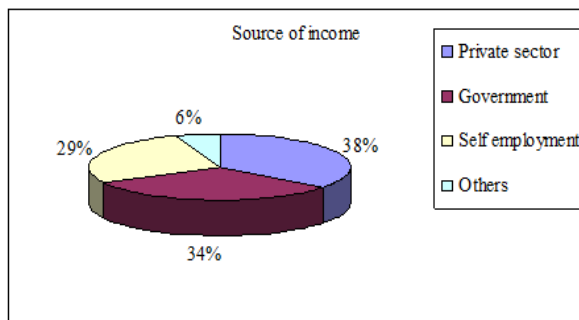


Figure 1. Source of income

### Infrastructure

The essential infrastructural services found in Langas and Munyaka comprised of water, sewage and electricity system although a significant number of the population still uses pit latrines.

### Major Causes of Uncontrolled Urban Development

The household questionnaires and interviews were used to analyse the factors causing uncontrolled development and the following issues emerged;

#### Need for housing

The economic opportunities in Eldoret town have attracted many people from different parts of the country who have come searching for Economic opportunities. There has been a high migration rate to the urban area over the last decade as indicated by the CBS; population reports that Eldoret's population increased by 76.4% between 1989 and 1999. The most important problem faced by people searching for improved living conditions is the access to housing. When population increases this is the principal factor for uncontrolled urban development.

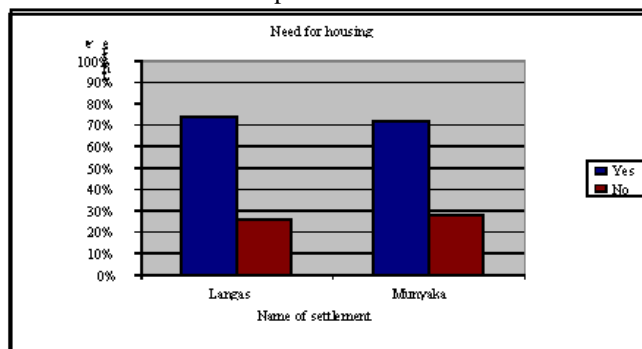


Figure 2. Need for housing as important reason.

The graph (fig 2) above, show need for cheap housing as an important reason why respondents choose to settle in the current settlement. According to the fieldwork data in the sampled areas it could be observed that more than 72% of the questionnaire results from both uncontrolled areas referred this factor as one of the most important with small variation. The need of housing is imperative consequently the dispersion of urban activities took place. Considering the results, this factor percentage is high in comparison with

other factors, the hypothesis to explain this factor is that the need for housing makes agricultural land attractive for urbanization purposes and therefore there is uncontrolled urban development.

In order to test the hypothesis both variables were crossed. The results shows in chi-square analysis that NAME of settlement NEED of housing variables are associated and the phi analysis shows that the relationship is strong. (Table showing the chi-square test)

Name	Langas	Need of housing		Total
		No	Yes	
	Munyaka	5	91	96
Total		39	145	184

The calculated  $\chi^2=30.52$ , p-value= 0.000

There is a significant relationship between the type of estate and the need for housing.

### Strategic location

Another factor that becomes important is the proximity of the research areas to the town. Many inhabitants work and study in those places, most of those in controlled area work in various offices located in the town centre, while others operate businesses in the town. The distance from the town attributes to the occupation of the area. Both Langas and Munyaka informal settlements are within a radius of 5Km to the CBD and this allows the accessibility to their working and study place. The growth and increase in the number of learning institutions situated in the town has attracted many students into the town who then look for their own accommodation. The table (2) represents the results from respondents on the proximity of their residential area to the work place and learning institutions for those who are students.

The 61.4% of the respondents from langas and 66.7% from Munyaka, work in Eldoret town, while 80.2% from Langas and 84.4% from Munyaka agree that the residential area has close proximity to place of study. The population has converted the area to a 'dormitory town'. From observation there is increase in service demand and economic opportunities for the growing population hence growth of centers and estates along the highway. This gives an evident idea on how this factor has influenced uncontrolled urban development. Current research on transport shows that many residents from this area prefer to walk to the CBD to save on cost.

### Urban services

Urban sprawl is associated with a rapidly deteriorating quality of life, with particularly adverse impacts on the urban poor who have the poorest access to the existing facilities. Mostly affected are housing, water supply, sewerage, and transport. Access to infrastructure has been dependent on income levels rather than population density, with higher standards of provision in high-income areas than in high-density, low-income areas.

### Strategic location to public utilities\* Zone/ Estate Cross tabulation

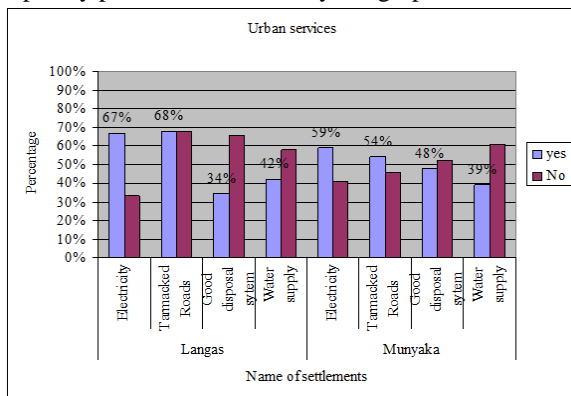
Table. 2 Strategic locations to public utilities

It is near to		Zone/estate		Total	$\chi^2$	df	Sig.level
		Langas	Munyaka				
health centre	Yes	64 (72%)	51 (53.1%)	115	7.53	1	P=0.000
	No	24 (28%)	45 (46.9%)	69			
work place	Yes	54 (61.4%)	64 (66.7%)	118	0.545	1	P=0.000 no relation
	No	34 (38.6%)	32 (33.3%)	66			
learning institution	Yes	78 (88.6%)	77 (80.2%)	155	2.49	1	P=0.000 no relation
	No	10 (11.4%)	19 (19.8%)	29			

**Table 3. Affordable land to develop.**

Factor		Zone/estate		Total	$\chi^2$	df	Sig.level
		Langas	Munyaka				
Affordable land to develop	Yes	60 (31.8%)	64(33.3%)	124	0.04	1	0.000
	No	28(61.2%)	32(66.6%)	60			
Total		88	96				

Need of such services is related with affordability. Respondents agreed with this factor, electricity and tarmacked roads being fairly provided while other services were poorly provided as shown by the graph 3

**Figure 3. Provision of urban services.**

Those who completely lacked the services mentioned the reason as lack of enough finances to pay for the services or connection fee paid to install such services. In some parts the services are completely missing. State intervention in service provision remains low though the land owners pay land rates and taxes. Availability of the services also raises the value of land. People tend to buy plots which are for agricultural use because they are cheap and develop it. Those in uncontrolled area have the poorest access to the existing urban services. The serviced area face problems such as vandalism of the already installed pipes, telephone lines and sewer lines.

#### Low price plot

One of the most recurrent factor resulting questionnaires is was the low price of plots. The plots intended to agricultural use were cheaper and therefore are attractive to the population that needs to settle. Considering that land surrounding the town is mainly agricultural area, this factor becomes significant. The freehold category of ownership covers more than half of the municipality, because the municipal boundary extensions have incorporated privately owned (freehold) agricultural land into the municipality. From observation some of the privately owned land in the extended area, is still used for agricultural purposes but increasingly it is being converted to residential and commercial uses. Affordable pots to develop variable is related to both settlements, land buying depends on buyers willingness. (See table 4.1e)

In order to test the hypothesis a cross tabulation analysis was done, the results of chi-square shows that Name of settlement and Low price plot variables are associated (sign.0.053) although weak (phi value).Low price plot variable is related to both types of occupation but with more incidences in Munyaka .In the uncontrolled area there is inadequacy in provision of basic services and public utilities. A research on land delivery process in Eldoret shows that land- buying groups comprising a membership of any size is formed , in some case once land has been identified .Each

member contributes shares according to his or her financial ability and ,upon purchase of the farm ,it is subdivided on the basis of shareholder's contribution. Its flexibility allows low-income people to benefit from these groups. During subdivision of the farm officially planning standards are not met adequately.

#### Analysis and Discussion

The main objective of the researcher was to establish the effect of uncontrolled urban development on infrastructural provision. The research also sought to establish the major causes of uncontrolled urban development and the challenges facing the institutions concerned with urban infrastructural development. Data analysis and interpretation of interview and questionnaire responses from households revealed the major findings. From the data collected and analyzed, it was found that the factors that leads to uncontrolled urban development were ;high demand for housing, influence on political will, strategic location, Land price ,migration ,institutional weaknesses , availability of urban services, safe place to live in and family relationship.

Considering the concepts reviewed in the literature review about the process of urban occupation of cities in developing countries. The urban development in Eldoret town occurred in two ways which were PBSO and OBSP. The result from household questionnaires in the selected settlements shows that;

Many people migrated to Eldoret town from various places in order to settle and find employment and other economic opportunities. The town has a rich Agricultural hinterland that offers opportunities of economic activities in merchandise trade, distribution and service sectors. The factor fall under the following aspects:-

#### Economic aspect

The major factors have a common relation to the economic aspect in general they are explanatory factors. The minor factors are only relevant to a specific settlement.

- Low income people look for cheaper plots which are easier to find in uncontrolled development areas. They tend to occupy new areas without legal permission from the relevant authorities permission which results into increase of new uncontrolled areas.
- The long process of permission in order to have a legal construction in new areas is one of the major causes. Moreover the process costs a lot of money which is unaffordable to plot owners
- Plots located in places with facility services and close to the main road directly influence the price of the plot. The plots equipped with urban services are sold at higher prices.
- Proximity of settlement to the town and learning institutions reduces the cost of commuting. Many inhabitants' work and study work in various offices located in the town centre, while others operate businesses in the town.

#### Institutional aspects

Influence by the 'political will' and lack of capacity by the municipality are causes uncontrolled urban development, they could be generalized as institutional aspects.

These are:

- i) The local authorities have the legal norms and power to guide and control urban development but the process is influenced by the political leaders who have power over the decision making and distribution of resources in their area of jurisdiction. There is also an inherent conflict of various legislations that deal with planning and land administration. Local Government Act empowers the municipality to plan, acquire land and carry out subdivision plans while the Physical Planning Act takes away this authority
- ii) The election process of the local authorities done after every five years interferes with the planning issues. A new mayor sworn in to the office may not solve the problems which existed hence aggravating the situation.
- iii) The lack of capacity and knowledge of municipal officials in order to solve this problem. The composition of the municipal councils is poor because the election of councilors depends on popularity contest rather than any professional skill.
- iv) Lack of coordination between different stakeholders concerned with development also contributes to uncontrolled urban development. Poor liaison and laxity prevailing opens way for uncontrolled urban. Corruption is a prevailing issue evidenced by the approval of inappropriate plans.

### Conclusion

Urban planning emerges as a response to the need of being ahead to the process of urbanization with the goal of improving the general conditions of habitability of the medium sized towns. As people flock cities looking for economic opportunities affordability of settlement plots, housing should be considered in planning. Coordination among stakeholders in charge of urban areas is a key issue lacking in major medium sized towns. This opens ways for uncontrolled development and further demolition of established houses. The three aspects; Economic, Institutional and political aspects should be evaluated and be included during planning to reduce the occurrence of uncontrolled urban development

### References

- Adams,D.( 1994 ) *Urban Planning and the Development Process*, Biddles Ltd Guilford and Kings Lyon, England
- Angotti, T. (1993) *Metropolis 2000: Planning, Poverty and Politics*. London, Routledge
- Beall, J. (2005) 'Decentralising Government and Centralising Gender in Southern Africa: Lessons from the South African Experience'. Occasional paper 8, United Nations research Institute for Social Development.
- Baross, P. (1991) *Action Planning, Institute for housing and urban development studies*, Rotterdam, NL
- Baross.P.(1990) *Sequencing Land Development; The price implication of illegal and legal settlement growth*, In Baross and J.V.Van der Linden, eds.1990, The Transformation of land supply in Third World Countries: Avery, New Castle upon Tyne England.CBS, 2000, op.cit, p51: Population Census Reports.
- Devas, N. Grant, U. (2003) 'Local Government Decision-making –Citizen Participation and Local Accountability:Some Evidence from Kenya and Uganda', Public administration and Development, Vol. 23, No.4.
- Fuller, F. Kealder: (2005) *Promoting Participatory Democracy and Public Participation Through Decentralization at Sub-national Levels*,Government Printer.

- G. Linden, Rationale and Evolution of Planning Thought (Draft paper), Faculty of Environmental Sciences, University of Amsterdam, The Netherlands 1995.
- Government of Kenya Printers (GoK) Sessional Paper No. 10 1965
- Gilbert,A. and Gugler,J.(1981) *Cities,Poverty and Development: urbanization in the third world*, Bookcraft Itda Midsomer Norton Avon Great Britain.
- Human Development Report (2004), UNDP (<http://hdr.undp.org/reports.global.2004>)
- Healey,P.(1974) *Planning and change*. Pergamon press Oxford
- King, D. (1992) *Local Government Economics in theory and Practice*. London Routledge
- Kothari, C.R. (1985) *Research Methodology*, Wiley, Eastern Limited: New Delhi
- Kerlinger, F. N. (1973) *Foundation of Behavioural Research*, 2<sup>nd</sup> Edt. India. Surject Publication.
- Lamba,D.(1994) *The forgotten half Environmental Health in Nairobi's poverty areas in environment and urbanization*, Vol.No.1, April 1994,pp164-173
- Mackay, J. (2004) *Development of Local Government: A Study Participation of Intergretal Development Planning, Process of the City of Cape Town*. Municipal council of Eldoret (2006/2007) ,Strategic Plan .Nicelyn Technologies printers; Barng'etuny Plaza.
- Ngwenya, T. (2005) *Towards Democratic Governance and Public Participation in South Africa. Assessing mechanisms and processes of participation in the context of decentralization West view press INC ,USA*
- Ombura C.O (2002) *Towards an environmental planning Approach in urban industrial siting and operations in Kenya*.Eldoret Kenya
- Onibokun.A.(1973)*Urban Growth and Management in Nigeria*, In Stren, and R. White (eds),Africa cities in crisis: Managing rapid urban growth; West view Press INC, USA
- Republic of Kenya (1970) *National Development Plan 1970 – 1974 Nairobi*: Government Printer.
- Republic of Kenya (1979) *Human settlements in Kenya: A strategy for urban and Rural Development Physical Planning Department Nairobi*: Colour Print Ltd
- Republic of Kenya (1983) *Uasin Gishu Development Plan 1984 – 1988,Ministry of Financing and Planning Nairobi*: Government Printer.
- Republic of Kenya (1984) *National Development Plan 1984– 1988 Nairobi*: Government Printer.
- Republic of Kenya (1984) *District Focus for Rural Development Strategy Nairobi*: Government Printer.
- Republic of Kenya (1987) *Physical Planning Handbook Department of Physical Planning, Ministry of Lands, Housing and Physical Planning Nairobi*:Government Printer.
- Republic of Kenya (1989) *National Development Plan 1989 – 1993 Nairobi*: Government Printer
- Republic of Kenya (1989) *Uasin Gishu Development Plan 1989 – 1993, Nairobi*: Government Printer.
- Republic of Kenya (1991) *Handbook and Land use Planning, Administration and Development Procedures Ministry of Lands and Housing*: Ardhi House Nairobi: Government Printer.
- Republic of Kenya (1993), *Kenya Municipal Road Management Study Roads Condition Survey For Municipality of Eldoret*, Ministry of Local Government, Urban



- Development Department Nairobi: Wilbur Smith Associates in Associations with Otieno, Odongo and Partners. Republic of Kenya (1994) *National Development Plan 1994 – 1996* Nairobi: Government Printer.
- Roseland, M. (2000) *Sustainable Community Development Integrating Environmental, Economic and Social Objective towards Sustainable Community*. Canada Pergamon.
- Rees, W (1992) *Ecological Footprints and Appropriate Carrying Capacity: What urban Economics Leave Out*, in *Environment and Urbanization* 4(2): pp. 121-129
- Rees, W and W. Waackernagel (1994) *Ecological Footprints and Appropriate Carrying Capacity: In Investing in Natural Capacity: The Ecological Economics Approach to Sustainability*, Washington D.C
- Stren, R.E. (1989) *Institutional Arrangement Strengthening Local Governments in Sub-Saharan African, Policy Seminar report* No. 21 of the World Bank, Washington, D.C
- Stren, E. R. 1993. *Urban management in development assistance. An elusive concept* *Cities* 10(2): 125-138.
- Stren, E.R. and R.R Whites (eds) 1991. *African cities in crisis ,managing Rapid Urban Growth African Modernization and Development Series*, westview press, Boulder, San Fransisco, and London.
- Syagga P.M.(1995). *Housing and Environmental problems in Third World Cities in Africa* ,a paper presented at an International Conference on Urban Habitat :*The Environment of Tomorrow* IHE-Deft, February 15-17.
- The Local Government System in Kenya (<http://www.clgf.index.profile.com2004>)
- UN-Habitat (2002) *Local Democracy and Decentralization in East and Southern Africa: Experiences from Uganda, Kenya, Botswana, Tanzania and Ethiopia*, Nairobi: UN- Habitat
- United Nations (UN, 2002) *Press Release*, POP/815, 21 March, p 1.
- United Nations (1990) *Human DEVELOPMENT Report*: Oxford University Press
- United Nations (1991) *World Urbanization Prospects*, New York
- United Nations Environment Programme (UNEP) (1994) ‘*Air Pollution in the World’s Mega-cities*’ in *Environment* 36, No. 2:4
- World Bank (1990) *„The Urban Edge*, Vol.14 Washington D.C; World Bank, *Annual Review of Urban Development in the Third World*.
- World Resource Institute ‘*Population and Human Well-Being: Urban growth*, (<http://www.wri.org>), 25th July 2001.