Journal of Emerging Trends in Engineering and Applied Sciences (JETEAS) 5(2): 83-91
© Scholarlink Research Institute Journals, 2014 (ISSN: 2141-7016)
jeteas.scholarlinkresearch.org, jeteas.scholarlinkresearch.com

A Study on the Effectiveness of Urban Development Control Instruments and Practices in Eldoret Municipality, Kenya

Job K. Ngetich, Grephas P. Opata and Leonard S. Mulongo

School of Environmental Studies, University of Eldoret,
P.O BOX 1125-30100, Eldoret, Kenya.

Corresponding Author: Job K. Ngetich

Abstract

The challenge facing the world today is how to create sustainable cities. The number of people living in urban centres continues to grow at approximately twice the rate of that in the rural areas. It is expected that the global city population increased to 2.76 billion in 1995 and projected to be 5.34 billion in the year 2025, thus exerting greater pressure on the natural environment than ever before. Kenya is rapidly urbanizing with 20.4% of her population residing in urban areas in 2005, and by 2030 the proportion of Kenyan population living in urban areas is estimated to reach 60% or 38.2 million people (Kenya, 2007). It is projected that Eldoret town will be home to 584,782 people in 2030. This rapid urbanization will therefore need to be guided by effective urban development control instruments and practices. The broad objective of the study was to identify and document urban development control instruments, determine their efficacy and the implications on the urban environment. A total of 188 respondents were randomly selected for interview, from a list of applicants who submitted their building plans for development permission from 2005 to 2010 in Eldoret Municipal Council (EMC). It emerged that both statutory and non-statutory instruments including spatial plans inform urban development control system in EMC. The predicted urban development trends revealed that between 2005 to 2010, 4941 buildings had covered an urban space of 98.8 hectares, and by 2030, 400 hectares of natural environment will be built up in EMC area, resulting in deleterious environmental impacts and hence the need for sound urban development control interventions. The analysis revealed that 38% of the applicants who were granted development permission for building plans from 2005 to 2010 had failed to comply with building regulations. Urban development control related environmental problems of increase surface runoff, and/or flooding, garbage disposal and pollution were found to be the most critical in various urban neighbourhood zones in EMC. The study aims at making policy recommendations for better planning and development control of urban areas and Cities.

Keywords: urbanization, urban development control, instruments, compliance

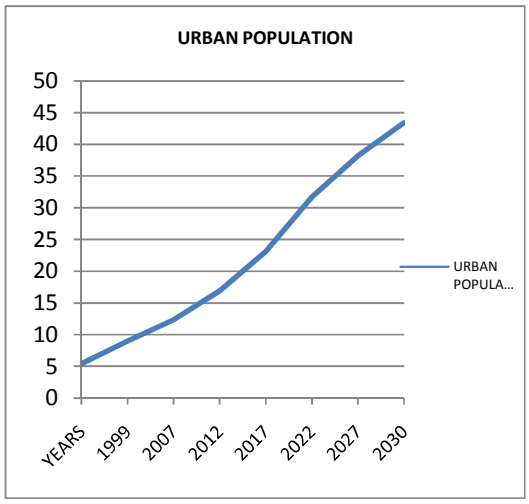
INTRODUCTION

Development control is a process of achieving goals and objectives depicted in spatial plans. It entails the government regulating land use and new buildings. It ensures that developers do not deviate from approved building plans in the course of implementation (construction) on the plot earmarked for such (Philip, 2007, Ogundele, 2011). Subsequent development requires planning permission, which will be granted or refused with reference to development plan as a material consideration (htt://en.wikipedia, 2011).Development control harmonizes various urban land uses in order to secure convenience. It also encourages optimal utilisation of resources in order to achieve greatest improvement and to promote separation of incompatible uses, as well as enhancing visually pleasant landscape. The power to control development by government is derived from the police power, power of eminent domain, and the power of taxation. The elements of public interest which are protected in the urban planning include; health and safety, convenience, efficiency and energy conservation, environmental quality, social equity and social choice, and amenity (Faludi, 1973; Chapin et al, 1979).The current urban spatial structure in Kenya owes its genesis to the application of laws and other instruments that were domestic in Europe but domiciled in their colonial territories. The land planning Act Cap 303 and the Town Planning Act Cap 134 all of 1948 provided legitimacy for urban development control until they were repealed by the enactment of the Physical Planning Act (PPA) of cap 286 in 1996. The objective of the PPA was to address the shortcomings and gaps which were inherent in the colonial statutes including inability to control developments outside the scheduled and gazetted areas. It is currently evident that the law has failed to provide an orderly and sustainable urban development, as many urban areas continue to experience a myriad of problems including; squatter settlements and informal sector developments, congestions and overcrowding, pollution, inadequate provision of social amenities and disasters such as collapsing buildings. The study therefore was set to explore the efficacy of urban development control instruments and practices as they are applied in

Eldoret Municipality, Kenya. Statement of the problem

Urbanization and urban development is important as it provides the best opportunity for accelerated development. Cities around the world are places of opportunity and serve as engines of growth (UN Habitat, 2001; Kessides, 2006; AAK, 2011). It is acknowledged that urban areas are melting pots of ideas, innovation, creativity, knowledge transfer, trade and industrialization. Population factor is a key component of urbanization. The world's urban population is growing at a phenomenal rate. Between 1950 and 1990 the world urban population more than trebled from 730 million to 2.3 billion. It is projected that by 2020 the world's urban population will rise to almost 1.5 billion and a staggering 93% of this increase will occur in the developing world (Rakodi, 2001 and Davis N, 1993). By the year 2030, 80% of urban dwellers will live in towns and cities of the developing world (Leautier, 2006; ISOCARP, 2010).

Africa, though currently lagging behind other regions, in terms of numbers will be home to a staggering 1.2 billion urban dwellers by 2050. It is estimated that more than 34% of Kenya's population live in urban areas and by 2030 this number is projected to reach 63%.In the case of Eldoret town, its population has been increasing rapidly from 8,193 in 1948, to 197, 144, in 1999, and 289,380 in 2009.It is projected that at the growth rate of 3.35% that by the year 2030, Eldoret town will be home to over 584,782 people, and hence the need for effective instruments of urban development control. Figure 1.1 shows projected urban population in Kenya.



Source; Kenya Vision 2030 (2007)
Figure 1.1 Projected Urban Populations in Kenya

Urbanization in Kenya is occurring in a disorderly fashion.There is no planned framework defining the desirable national urban structure and form to be promoted. Urban areas are therefore sprouting haphazardly on the national landscape. At the local level, urban areas are expanding spontaneously without regulation and guidance. What is happening in the country's urban sector can be summarized as chaotic or rogue urbanization; the kind of urbanization that can only stifle development. If cities are not well managed, unsustainable pattern of consumption of resources within them can result in serious environmental degradation affecting large areas beyond their borders (UN Habitat, 1997).

Urban form directly impacts the habitat, ecosystems and water quality, leading to loss of many endangered species of both flora and fauna. Urban form also gives rise to the emission of greenhouse gases that are driving adverse climate change, affecting water quality and impacting negatively on human health. This underscores the need to develop practices that reduce negative environmental impacts in the urban areas (AAK, 2011).

Article 42 of the constitution of Kenya 2010, on the chapter on Land and Environment, states that every person has a right to a clean and healthy environment including the right to have the environment protected for the benefit of present and future generations (Kenya 2010a). This can be realized through urban development control. If there is no development control, a right to a clean and healthy environment as recognized and protected under the constitution is derogated. The failure to ensure proper development control processes in Kenya has led to the rise in disasters such as collapsing of buildings and its attendant losses, as outlined below;

- In May 1996, 35 people were killed when a Nairobi supermarket collapsed during a heavy downpour. Authorities had chosen to look the other way for years rather than condemn the aged and dangerous building (AAK, 2011b).
- The Planning Department at the City Council of Nairobi was extremely damaged in an overnight fire in March 2004. Efforts to extinguish the fire were hampered by the absence of fire hydrants in the vicinity. A survey later revealed that there were no fire hydrants anywhere in the city's central business district.
- In January 2006, 15 workers were killed in downtown Nairobi's Nyama Kima area when a two storey building under construction collapsed. The tragedy was attributed to under designed concrete columns and failure to allow appropriate curing (AAK, 2011).
- In 2011, a building which was under construction in Luanda, Vihiga County also collapsed. The collapse of the building was attributed to the revival of construction of a

building which had stalled and exposed for many years.

- On 1st April 2012, the entire 6th floor of Kimanthi house, Nairobi was burnt, yet the Fire station of the City council is just about 100 metres away. It was later realized the fire fighting machinery had no capacity to extinguish fires beyond the third floors of the building (Daily Nation,2012a).
- On 4th, April 2012, nine people were killed in Mathare 4A when boulders flatten tin shacks after a heavy downpour. The authorities had ignored to advise residence not to settle in risky and dangerous Mathare Valley (Daily Nation, 2012b).
- In May 2012 a building under construction collapsed in Bungoma town, causing losses.
- In June 2012, A building collapsed in Mlolongo in the outskirts of Nairobi where 8 people were rescued and one person was confirmed dead (Daily Nation of 11th June, 2012)
- On September 17th 2012, two men died after they were buried alive while working on the foundation of a building. They were among the foremen who were laying the foundation of a building next to the Village Market in Nairobi. The four were said to have continued to work on the site despite the warnings that the ground was weak (Daily Nation, 2012).
- On 16th January 2013 seven people were killed and scores were missing after a five storey building under construction collapsed in Kisumu .It was mentioned that the building collapsed due to poor workmanship and use of substandard building materials.(Daily Nation of 17th January,2013).

According to statistics released by Board of Registered Architects and Quantity Surveyors and Architectural Association of Kenya in July 2011, Kenya developers lost KSH. 1.4 Billion, as a result of collapsed buildings since 2001. A blame game has ensured between local authorities, the Architectural Association of Kenya fraternity and the contractors over the collapsing buildings (Daily Nation, 2012).

The issue on urban development control as put it by Ngugi (2007) is that in Kenya, the Physical Planning Act Cap 286 prohibits any form of development within an area of local authority without a development permit having been granted. Contravening section 30 (1) of the act constitute an offence liable to fine not exceeding Kenya shillings hundred thousand or an imprisonment not exceeding five years or both, but this punishment has never been meted. One result of this poor enforcement of planning regulations is that most low income urban residents continue to encroach and squat in un-upgraded areas.

In the city of Nairobi, it is believed that 80% of the buildings are constructed without approval, despite the existence of many planning and development instruments, and their institutions (Daily Nation, 2009). In Dares- salaam in Tanzania, 35% of the houses are on authorized plots (Racodi, 1992).

In Nairobi, the conundrum of urban development control and land ownership was brought into sharp focus in the Syokimau demolition case,where many buildings were demolished in various neighborhoods of Syokimau, Kyangombe and Manyatta areas in 2011. The demolitions were necessitated by the fact that the land in question was within the jurisdictional area occupied by the Jomo Kenyatta International Airport and thereby posing a security risk. There were queries on how the developers acquired the security of tenure of the land owned by Jomo Kenyatta International Airport and even sought for planning permission which was granted, only for the buildings to be demolished later without compensation. A study on the effectiveness of urban development control instruments and practices in EMC would lead to generation of findings important for policy information, for better planning and development of Kenya's urban environments.

AIM AND OBJECTIVES OF THE STUDY

The study was intended to establish the effectiveness of urban development control instruments and practices as they are implemented in Eldoret Municipality, indicating their strengths and weaknesses and to point towards better urban planning and development. The specific objectives include:-

1. To identify and, document the existing urban development control instruments and practices in Eldoret Municipality
2. To examine the effectiveness of urban development control instruments and practices in the study area
3. To establish the spatial development trends associated with urban development control instruments and practices, and their implications on the urban environment
4. To make policy recommendations for better improvement of urban development control instruments and practices

THE STUDY AREA

The study area is Eldoret Municipality in Kenya which is located at a distance of 300 Km to the North Western part of Kenya, from Nairobi. Figure 1.2 shows the location of Eldoret town in Kenya.

Source: Republic of Kenya,2007

Figure 1.2: Location of Eldoret Town in the Map of Kenya

RESEARCH METHODOLOGY

The data was collected using simple random sampling procedure from households who had sought development planning permission from 2006 to 2010.The respondents were drawn from four urban neighbourhood zones of Elgon View, Kimumu, Langas and Mile Nne, in EMC area. Table 1.1 shows the target population, sample size and the actual number of respondents interviewed in the selected Urban neighbourhood Zones in EMC.

Table 1.1 Selected Respondents Interviewed in EMC

Urban zone	Population(N)	Proposed(n)	Actual, interviewed	%
Elgon view	199	60	33	55
Kimumu	170	58	44	76
Langas	51	51	38	74
Mile Nne peri-urban	232	70	66	94
∑ n	652	239	181	76

Source: Field Data, 2012

When determining the sample size, a method suggested by O'Leary (2005) and Kothari (1987) was adopted, this states that, if your sample is to do statistical analysis which is sometimes used to support more qualitative data analysis, one generally needs a minimum of about 30 respondents. In the study, for every urban zone selected, the sample size of 30% of the number of applicants or proponents who submitted building plans from 2005 to 2010 was identified.

To enhance in-depth understanding of the effectiveness of urban development control instruments and practices in Eldoret Municipality;22 private and practicing designers were purposively sampled and interviewed including; Architects, Quantity surveyors, Engineers, Physical planners and Environmental planners, most of who operate from private offices in the CBD.

LIMITATIONS OF THE STUDY

A number of challenges were experienced in the course of carrying out the study. Locating the target respondents using a map was not easy. Some respondents could not be traced as some had sold out their properties and relocated elsewhere especially after the post-election violence of 2007/2008. To solve this problem the next householder in the neighbourhood list was identified and interviewed. There was a lot of suspicion from respondents on the motive of the research. Others thought the researcher was acting on behalf of EMC and that they were worried that their structures were going to be demolished, and as such measurements of the plot coverage of buildings were not taken as earlier indicated in the proposal.

The acquisition of data from Eldoret International Airport was not possible. The study would have like to benefit from planning and development control standards including maps for the Airport and the surrounding areas. The data could not be divulged because the spatial data for the Airport is considered as classified for security reasons.

RESULTS AND DISCUSSION

At the time of study, Eldoret Municipality was identified as a key institution of urban development control that coordinates other development control stakeholders through Cap 265 and, which has been amended by the urban Areas and Cities Act 2011 together with the EMC By-laws 2008. The NEMA has a development control jurisdiction as enacted in the Environment Management and Coordination Act; 1999 which emphasizes on the need to protect the urban environment through urban development control tools of Environmental Impact Assessment and Environment Audits together with Waste and Water Regulation 2006, Excessive Noise and Vibration Regulation of 2009 and land use guidelines. The Physical Planning Act Cap 286 and its regulations are used to prohibit and control all manner of developments in the interest of orderly urban development and to ensure that new developments are concordant with approved spatial development plans. The Lands Act 2012 has repealed the Government Lands Act Cap 280, the Registration of Title Acts (cap 281) and the Registered Land Act (cap 300). The Land Acts have special development control conditions which plot owners and proponents have to meet before development permission is granted. The Kenya Civil Aviation Authority have regulations which touch on urban development control including restriction of storey buildings to a height of not more than 15m and within a radius of about 9Km^2; and prohibition of land use activities which are likely to attract birds and generate Air

Pollution which could interfere with the Airport operations. The Public Health Act Cap 242 is a development control tool that is used to ensure that buildings have proper drainages, ventilations, sitting, heights and appropriate construction materials. The Roads Act 2007 which created KURA has a development control function, involving restriction of developments which are likely to affect access of urban roads and the associated infrastructure. The newly created National Building Authority mandate is mandated to approve all buildings designs, inspect all buildings, issue occupation, and maintenance certificates. To augment, urban development control instruments are non-statutory instruments which include circulars from Ministries, Departments, the EMC and resolutions of committee meetings and political decisions.

The implementation of urban development control instruments entails the applicant, developer or the proponents making a formal application for development permission to EMC, which then receives the application and circulates the same to other development control institutions such as the Service providers, Lands Office, Roads Authority, Physical planning, NEMA amongst other institutions for comments. The comments received for development application informs whether to approve or reject the application. There is a leeway for the applicant to appeal to the Physical Planning Liaison Committees and later to the High Court, in case permission to carry out development is denied.

The second objective was to examine the effectiveness of urban development control instruments and practices in EMC. A Multi-criteria evaluation technique was used to determine compliance and effectiveness levels of urban development control instruments, expressed in percentages. Fifteen variables were used to gauge whether the applicants or the proponents carried out their developments as per the stipulated regulations and instruments and therefore their effectiveness. The parameters that were taken into consideration were; time taken to process application; rating of performance of urban development control institution; challenges faced by applicants; complaint against illegal development; variation between approved plans and constructed buildings; Presence of illegal structures; compliance with setback and building lines; whether standards are to be changed; existence and status of approval of other structures; Status of approval of perimeter fence; number of times building was inspected; awareness zoning standards; rating of neighbourhood zone quality; and environment problems in plot and neighbouhood zone.

The analysis of variables of compliance and effectiveness of urban development control instruments yielded an absolute figure of compliance rate of 62%. It can therefore be noted that urban development control instruments and practices in EMC are fairly effective. There is need for all the stakeholders to address themselves to the issue of non-compliance level, which accounts for about 38%. The reasons given for non-compliance by respondents and FGD's include; high cost of designs, processing and approval, inordinate delays, bureaucratic ambience, lack of awareness of urban development control instruments, insecure land tenure, nature and type of development whether semi-permanent or permanent developments, precedents and impunity as it relates to others are also doing it.

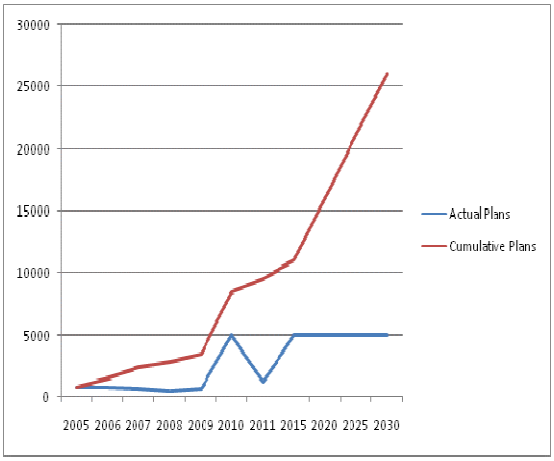
One salient feature of the implemental of urban development control instruments is conflict resolution which is done at the Municipal and the National Physical Planning Liaison Committee level. Conflict resolution through Municipal Physical planning Liaison Committee was found to be ineffective as only 17% of meetings were conducted during the study period and hence the need to review the Act in order to allow for such meetings to be held as soon as when the matters arise. The reasons for not conducting regular Municipal Physical Planning Liaison committee meetings were cited as lack of agendas or issues, lack of quorum, limited planning activities to generate planning issues to be tabled before the committee members, limited financial allocations to be spent on committees. A practice which is unique to EMC is that a Municipal Court which is a branch of the Judiciary has been set up at EMC's premises in order to deal with urban development control defaulters, with fines which range from 80,000-100,000 Kenya shillings being meted out. This has deterred defaulters, resulting in improved compliance with urban development control instruments.

The challenges which confront almost all development control institutions in executing their mandates resolved around; political interference, niggardly available resources for urban development control, conflicting roles and duplication of efforts, lack of data or records, archaic laws, low fines or charges for defaulters, release of offenders by courts, lack of prosecutorial powers and lack of spatial plans for development control resulting in discretionary decision making.

The third objective was to establish the spatial development trends associated with urban development control instruments and practices and their implications on the urban environment.

The elements of urban development control that contribute towards making the town the way it is are; land subdivision, change of user, extension of user, extension of lease and building plans. Buildings have

major impacts on the urban environments as compared with other elements of urban development control. The land subdivisions which were received from EMC for approval increase from 7 to 65 subdivisions from 2005 to 2011 respectively. The number of subdivisions received is relatively smaller as many subdivisions are passed in the Lands and Survey offices without an input from EMC, indicating lack of cooperation and coordination over development control on the ground. The number of change of user applications increased from 12 change of user to 18 in 2008 and fluctuated to 14, 38 and 24 subdivisions in 2009, 2010 and 2011 respectively. Very few applications of extension of user were recorded, as a paltry 29 extension of users were processed between 2005 and 2011. It was established that the leases of many plots in Eldoret Municipality are expiring and hence the need for renewal. There was also fluctuation in the number of leases processed from 2005 whereby only 10 applications were received, 24 in 2006 and 23 applicants were recorded in 2007. The highest number received was 57 in 2009 and decline was noted from 34 applicants to 31 each in the years 2010 and 2011.



Source: Projected from Field Data, 2012

Figure.1.3: Projected Trends in Urban development of Eldoret Municipality from 2005-2030

The statistics of the number of building plans processed dropped from 742 in 2005 to 423 building plans in 2008 and increased from 661 and to 1134 in 2011. The drastic decline in the number of building plans in 2007 to 2008 is attributed to the post-election violence which erupted in 2007/2008, following disputed elections. The aftermath of which, is believed to have scared away potential investors. Based on the time series analysis, it is estimated that on average between 700 and 1000 buildings will be built on the urban space every year such that by year 2030, over 20,000 developments of whatever nature will be spread all over EMC area. It is also projected that approximately 400 hectares of land will be transformed into built environment by the year 2030, resulting in numerous environmental problems including, loss of biodiversity, increased surface runoff, traffic congestion, pollution arising from solid waste disposal and pressure on infrastructure facilities and services, which will need to be mitigated through effective urban development control instruments and practices. Table 1.2 and Figure 1.4 present urban environmental issues in Eldoret Municipality.

Table 1.2 Urban Environmental Problems in Eldoret Municipality

	Neigbourhood Zone				Total
Environmental Problem	**Elgon view**	**Kimumu**	**Langas**	**Maili Nne**	
Surface runoff /flood	3	7	5	7	22(13%)
Overcrowding	0	0	0	3	3(2%)
Garbage disposal	15	21	30	48	114(65%)
Sewage disposal	5	8	3	2	18(10%)
De-vegetation	1	1	0	0	2(1%)
Air pollution	6	0	0	2	8(5%)
Noise pollution	0	0	1	1	2(1%)
Water shortage	0	4	0	1	5(3%)
Total	30	41	39	64	174(100 %)

Source: Field Data, 2012

Source: Field Data, 2012

Figure 1.4: Air Pollution caused by industrial activities in Eldoret Town

CONCLUSIONS AND RECOMMENDATIONS

The study identified numerous challenges and constraints which militate against effective urban development control including; high cost of design, processing and approval, inordinate delays, bureaucratic ambience or paper chasing, too many actors and instruments, conflicting institutions and duplication of efforts, discretionary decision making, lack of premises for development control decisions, political interference and vested interests, increased planning disputes; paucity of data on plot ownership, limited resources and personnel for development control. To attenuate the challenges of urban development control system, a one stop approval process in Eldoret Municipality is proposed. All urban development control stakeholders should be

brought together in order to operate under one roof. An all inclusive co-management type of development model suggested is as shown in Figure 1.4.An urban development control Agency should be created with the sole purpose of coordinating and harmonizing all urban development control activities and initiatives.

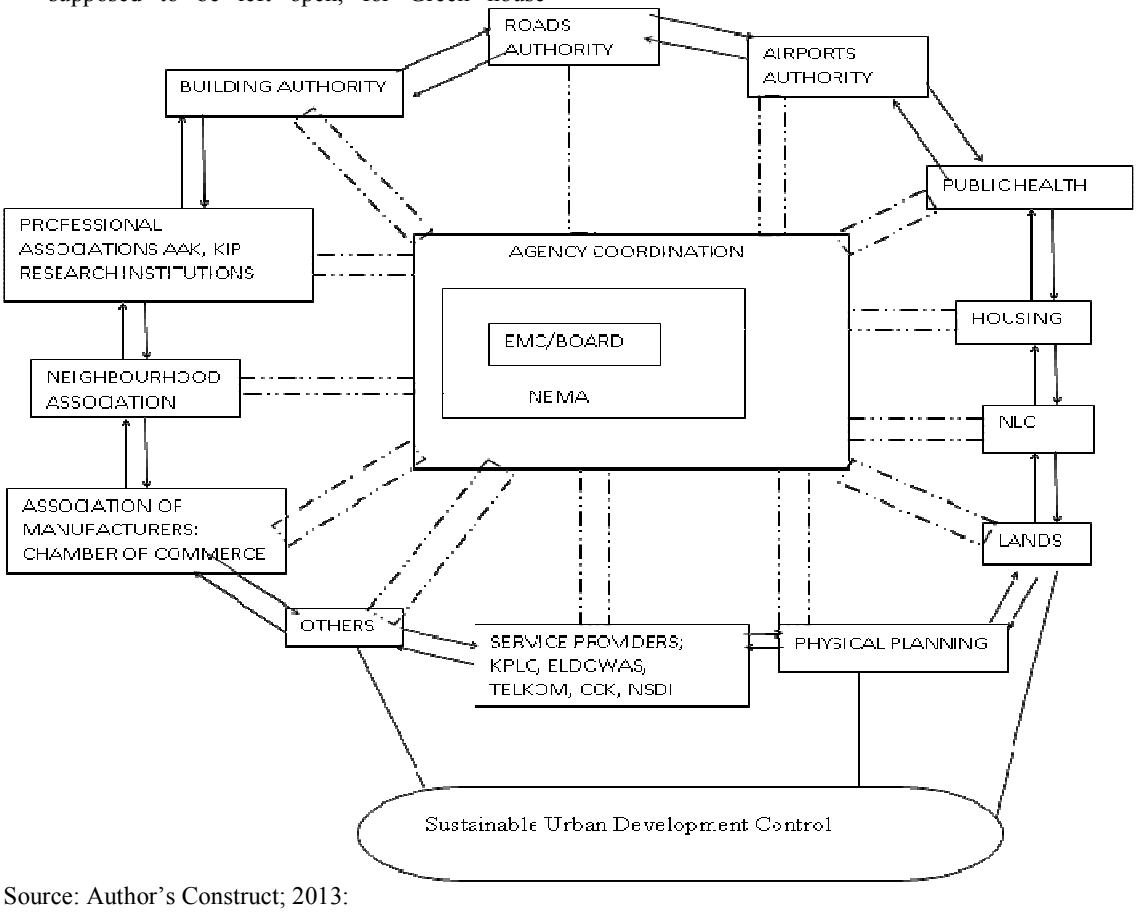
For the model to operate effectively; there will be need to harmonize all instruments and standards of development control including, Kenya Civil Aviation regulations, Public Health, Physical planning Act, Cap 286, KURA regulations, Urban Areas and Cities Act 2011 and EMC By- Laws 2008. The model which is replicable elsewhere brings on board, EMC /or the Municipal Board, Public Health, Physical Planning, National Land Commission(NLC),County Government, County Land Boards, Kenya Urban Roads Authority (KURA),Kenya Civil Aviation Authority, National Environmental Management Authority (NEMA) ,the Neighbourhood Associations/ or Area Development committees, and the National Building Authority. Numerous forms and schedules for applications and approval processes and for fees charged should be harmonized. Other recommendations for sustainable urban development control are;

a) Department of Urban Development Control and Environment should be created, in order to bring out both planning and environmental issues together. The offices of the Director of Environment of EMC,NEMA ,the Municipal Town planner and that of County Physical planner should merged and be made to operate under one office and in an open plan policy.
b) Involvement of Neighbourhood Associations and development committees to take charge of urban development control in their urban zones with consultations with the proposed urban development control coordinating agency should be encouraged in order to give an external check and maintain a well planned environment at the neighbourhood level.
c) Review the existing standards of development control that are inconsistent with the needs and aspirations of the residents. Urban development control instruments outlaws urban agriculture and associated development. The study revealed that majority of the respondents had development structures in form of Dairy shed, and Poultry/Chicken structure, Green houses and the like in their plots which had not been accorded approval. The instruments that are not adhered to by majority of urban population underscore the need for review and development of endogenous and home grown standards.
d) Status report of urban development control of urban zones or neighbourhoods should be prepared at least after every two years. Recommendations of the report on status of development control should be implemented by the Neighbourhood Associations in consultations with the proposed urban Coordination Agency. By so doing the areas where some developers may have defaulted or erected discordant structures can be removed/or rectified at that level.
e) Computerization of spatial urban data should be done to facilitate an establishment of a planning portal for paperless application and approval of urban development control applications. This will result in reduction of bureaucracy and merry-go-round, high cost of processing applications, elimination of inordinate delays, influence of human factors and sometimes disappearance of plans and records.
f) Environmental considerations should be included in all stages of building development. The current forms of building inspection focus more on the form and architecture of developments and ignore environmental components. In every stage of development, space should be provided for the proponent to indicate how surface water runoff and wastes should be disposed. It should show environmental improvement and restoration measures including tree planting at a plot level. Trees serve as carbon sinks and enhances micro-climate. Other environmental variables that should be considered in various developmental stages should include whether there are illegal structures and how they should be removed, and the number of people who should live in the plot in relation to infrastructure availability.
g) Too many requirements that developers or proponents are to meet prior to development permission being granted should be scaled down. The requirements by EMC that for one to get an approval, all rates due must be cleared is too stringent and is contributing to non-compliance of urban development control instruments by developers. EMC could improve on its rate payments by introducing a system whereby the ratepayers can pay rates on monthly basis as a component in water and sewerage bills rather than using development control process as a trap for rate payment and clearance.

The requirement by NEMA that all development control institutions must submit comments for EIA and Environmental Audits with a period of 21 days, failure to which the application is considered approved needs to be reviewed. There is need to investigate and find out why a particular institutions do not respond and where possible be facilitated to make informed decisions about the proposed development. NEMA should instead note that if the relevant authorities do not submit comments within 21 days, the proponents should consider the proposal refused. In this way the integrity of the environment will be safeguarded.

h) Lack of capacity in urban development control is a cross-cutting issue in all development control institutions. There is need for increased resource allocation specifically for expenses to be incurred on surveillance, involving transport operating expenses for site visits and inspections. Personnel manning urban development control systems should be increased in terms of the relevant professional skills. As a strategy for performance improvement among staff involved in Urban Development control involving, twinning or networking among, Towns and Cities should be encouraged as a synergy will be created for better urban planning and development control.

i) The study established that there are a number of new developments within Eldoret Municipality which are not recognized by the Municipal laws as developments requiring to be controlled. A survey showed that some households have utilized the remaining part of the plot which is supposed to be left open, for Green house development. Besides changing the micro-climate of the place at the plot level, green houses involve the use of agro-chemicals which are deleterious to the environment. Similarly it was also established that the change in technological advancement in communication involving installation of cellular masts in storey buildings in the CBD, the hills and other higher grounds in Eldoret Municipality, contributes towards changing the once beautiful scenery and the form and character of buildings leading to other technological impacts on the environment. Other developments requiring regulation include; Simu ya Jamii, M-Pesa, Tents for shelter structures, Container structures for alternative Postal services and businesses, as well as new type of Kiosks for Shoe polish and the like. It is therefore recommended that a clause should be inserted in the statutes and the by-laws that all new and emerging developments are subject to development control.



Source: Author's Construct; 2013:

Figure 1.4: Recommended Co-management type of institutional framework of Development Control for Eldoret Municipality

REFERENCES

Architectural Association of Kenya (2011b): The Role of Built Environment Practitioners in the Implementation of the Constitution, AAK, Nairobi.

Carol R and Davis (edits), (1992): Managing Fast Growing Cities, New Approaches to Urban Planning and Management in the Developing world. Longman Scientific & Technical Publishers, New York.

Chapin Stuart F. And Kaiser Edward J. (1979): Urban Land Use Planning, Urbana, University of Illinois Press.

Daily Nation of 11th, June 2012. Nation Media group, Nairobi.

Daily Nation of 17th January, 2013, Nation Media Group, Nairobi

Faludi Andreas (1973):A Reader in Planning Theory, Pergamon Press, Oxford Htt://en.wikipedia org/wiki 1/20/2011 10: AM Urban Development Control in the United Kingdom.

ISOCARP (2010): Congress Papers introductory reports short outlines of papers ISOCARP Hague. 46thCongress ,Nairobi.

Kessides C (2006): The Urban Transition in Sub-Saharan Africa. Implications for Economic Growth, and Poverty Reduction, World Bank, Washington DC.

Kothari CR (1987): Research Methodology, Methods and Techniques. New Delhi, Wiley Eastern Ltd.

Leautier F (2006): Cities in a Globalizing World, The World Bank,Washington D C.

Njuguna N.G (2007): Environmental Planning and Management. Towards Better Environmental Law, Management. Evaluation and Impact Assessment, ARTS Press, Nairobi.

O'leary Zina (2005): The Essential Guide to doing Research. New Delhi. Vistaar Publications.

Ogundele F.O (2011):'Challenges and Prospects of Physical Development Control; A Case Study of Festac Town,Lagos Nigeria' in African Journal of Political Science and International Relations Vol 5(4),pp 174-178 www.academicjournals.org/ajpsir.

Philip E (2007): Urban Planning and Development Control Regulations; Case study Kerala, ITPI Journal 4, 13-16 www.Itp:org.in

Rakodi C (1992): Some issues in Urban Development and Planning in Tanzania, Zanzibar and Zimbabwe in Smith D.P. (ed). Urban and Regional change in Southern Africa Routledge London and New York.

Republic of Kenya (1996): Physical Planning Act Cap 286 of the Laws of Kenya, Government Printer, Nairobi.

Republic of Kenya (2010 a): Constitution of Kenya 2010; Government Printer

Republic of Kenya (2007): Kenya Vision 2030, Government of Kenya. Ministry of Planning and National Development, Nairobi.

UN Habitat (2001): Cities in Globalizing World.Global Report on Human Settlements, Earthscan, Publications Limited London.

UN Habitat, (1997): Regional Development Planning and Management of Urbanization; Experience from Developing Countries. UN Habitat, Nairobi