

Planning and designing flexible use of public spaces for improved livelihoods in urban areas

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Introduction

Cities are engines of development and poverty fighters for they attract a lot of investment that stimulates development unlike rural areas. However, very often urban development policies appear to be based on concepts and visions that are far from reality as they ignore and disregard the conditions of the majority of the citizens (Tannerfeldt & Ljung, 2006). With increasing urban poverty and economic down-turn, embracing innovative approaches to urban management becomes necessary. The image of an all inclusive city is aptly captured as "...a place of cooperation where people work together to create collectively a dynamic economy from a diversity of operations, skills, resources, knowledge, personal drive, leadership and political will. This civic ethos naturally works best when organized efficiently with a combination of spatial and resource planning together with a respect for the component parts and contributors to the economic processes – primary and supportive, creative and enabling, producer and consumer" (Michael Mutter in Payne, 2002 : v). There is an economic argument in support of this: that all households are contributors to the city economy whether or not formally employed. The lowest income worker is the gold dust of the city economy. To capture the effect of their contribution, and to sustain and nurture it requires the certainty of security and options for growth. To ensure a process whereby each household is protected, remains healthy, eats sufficiently, and is not exploited and is able to progress, the lowest business person must be enabled to develop as part of the city's own dynamic progress. For people to fully participate in this economic dynamic they need to be assured of their place in society and their physical spatial existence. They thus need a degree of security for this space, some form of tenure security.

Urban public space is defined as the physical space and social relations that determine the use of that space within the non-private realm of cities (Brown, 2006). Urban public space plays an important role in the livelihoods of the urban poor. This importance remains largely ignored in development policies for low-income cities (Brown and Lloyd-Jones, 2000 cited in Brown, 2006:17). The use of public space for personal and commercial purposes is common in cities of developing countries with the street being an asset as it provides space for commercial activities.

This paper argues for a flexible and organized use of urban public spaces to achieve more secure livelihoods for those operating microenterprises within such spaces. It is informed by the 'New Urbanism' movement, which argues that Cities and towns should be shaped by physically defined and universally accessible public spaces and community institutions.

Large proportions of the urban poor derive all or part of their income from small or informal enterprises which may be classified into four main groups: retailing and wholesale; craft, manufacturing and production; services; and transport and construction (Rakodi and Lloyds-Jones, 2002). Their interaction with urban space is not well documented. Many small

businesses draw most of their customers from other poor households, but those which successfully attract a middle or high income clientele make a significant cash contribution to the low-income economy (Islam and Khan, 1988). Location thus tends to be of major importance to small scale operators. Brown, (2002) states that the access to the concentration of people and their assets and services are important to the urban poor. Spatial planners need to recognize the asset base of the poor in cities and how this can be strengthened.

Accessing livelihood opportunities in urban areas means being well located in terms of physical proximity to opportunities or access to appropriate public transport, physical capital in the form of place to live as well as access to appropriate workspace. This asset framework sets the basic criteria for urban planners to address the needs of poor communities. Knowledge of livelihood opportunities is another key factor, and more often than not, this depends on social linkages and is gained by word of mouth. This aspect of social capital for the urban poor is crucial in safeguarding against vulnerability. Spatial planning policy can be profoundly destructive of social capital as, for example, urban authorities are notorious for clearing small scale businesses from controlled public land such as road reserves. This is one of the reasons urban policy should welcome the flexible use of public open spaces as this increases the economic and social well being of the urban poor in developing countries.

Public space has social and economic importance as a place for trade and communal activities, or as a channel for movement in cities. It is also politically important, as the control exercised over public space demonstrates state or municipal authority, reflected on restrictions on its use. For the urban poor, public space is a crucial resource as their private space is more restricted and fragmented than that of higher income groups (Lloyds-Jones, 1993). Public space is an essential form of social infrastructure for the urban poor but is ignored if there is a narrow policy focus on urban land-use.

For many small and informal enterprises, access to public space is critical and they may pay considerable amounts for the privilege. The City Council of Nairobi, for example, charges informal traders Ksh 20.00 (US \$ 0.25) per day for the use of a space approximately 3 sq feet, yet services such as waste management are not provided. Payment of the daily charges for the space does not, however, guarantee security of tenure as incidents of eviction by urban authorities are not uncommon.

Urban spatial planning contributes to the development process through the regulation of land use and development. Yet traditional approaches to land use control and regulation, including master planning, single-use zoning and decentralization, have often exacerbated urban sprawl and disadvantaged the urban poor. The lack of benefits include unrealistic development standards which force people to invest outside the formal land economy, the clearance of unauthorized development and increased segregation of poor communities.

Land uses and the organization of space can have a significant effect on livelihood opportunities for the poor. Areas with mixed use and mixed tenure provide a rich environment in which a variety of livelihood activities can flourish, particularly areas nearest to the city center. In contrast, single use areas provide more limited opportunities for income generation. However, where the planning regime is sufficiently flexible, single-use neighborhoods can change over time to accommodate the informal economy. Within mixed use areas there are also key locations with particular potential. Some, such as street intersections, have significant opportunities for trading and commerce or even agriculture.

The Kenya Economic Survey of 2008, indicates that in the year 2007 the informal sector created 426.9 thousand new jobs compared to 420.4 thousand jobs in the previous year. It was estimated that 7, 475.6 thousand people were employed in the sector during the same

period, with Nairobi having 1, 806.0 thousand employees in the informal sector; almost a quarter of the informal jobs in the year 2007 (CBS, 2008). The economic gains from the informal trading activities largely contribute to the overall Growth Domestic Product (GDP) of the country. According to Mitullah (2006), the informal sector comprises one half to three quarters of non-agricultural employment in the developing countries.

Study methodology

This study was carried out in the city of Nairobi, which is under the jurisdiction of the Nairobi City Council. The study targeted various traders operating informal sector activities within road reserves, road users (pedestrians/motorists) and adjacent property owners who are directly or indirectly affected by these informal sector activities.

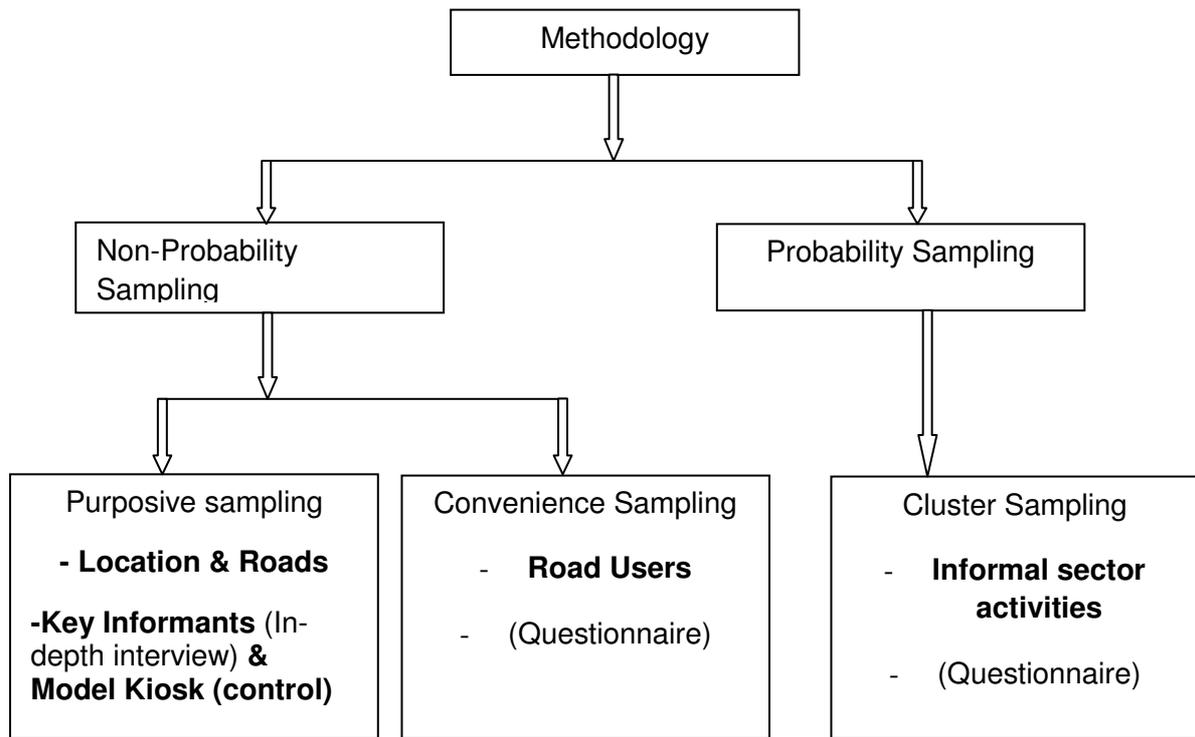
The first step in the sampling and data collection process was reconnaissance, which involved a visit to a number of roads within the city where informal business activities are carried out in order for the study team to familiarise themselves with the areas as well as identify the informal activities carried out. In order to capture the diversity of informal business activities carried out in the city, six roads were purposively sampled on the basis of the intensity and types of the informal business ventures located within road reserves. These roads are: Landhies, Jogoo, Outering, Argwings Kodhek, Ngong and Wanyee roads. A representative sample that captured the diversity of the identified activities was selected by making a sampling frame in which all the informal sector activities happening within road reserves were listed and then categorised into 7 broad groups: industrial, transportation, food, services, urban agriculture, pollution and residential. These activities were then allocated a value according to the intensity of the occurrence of that particular activity along the given road on a scale of 1-5 where:

1=low, 3=moderate, 5= high

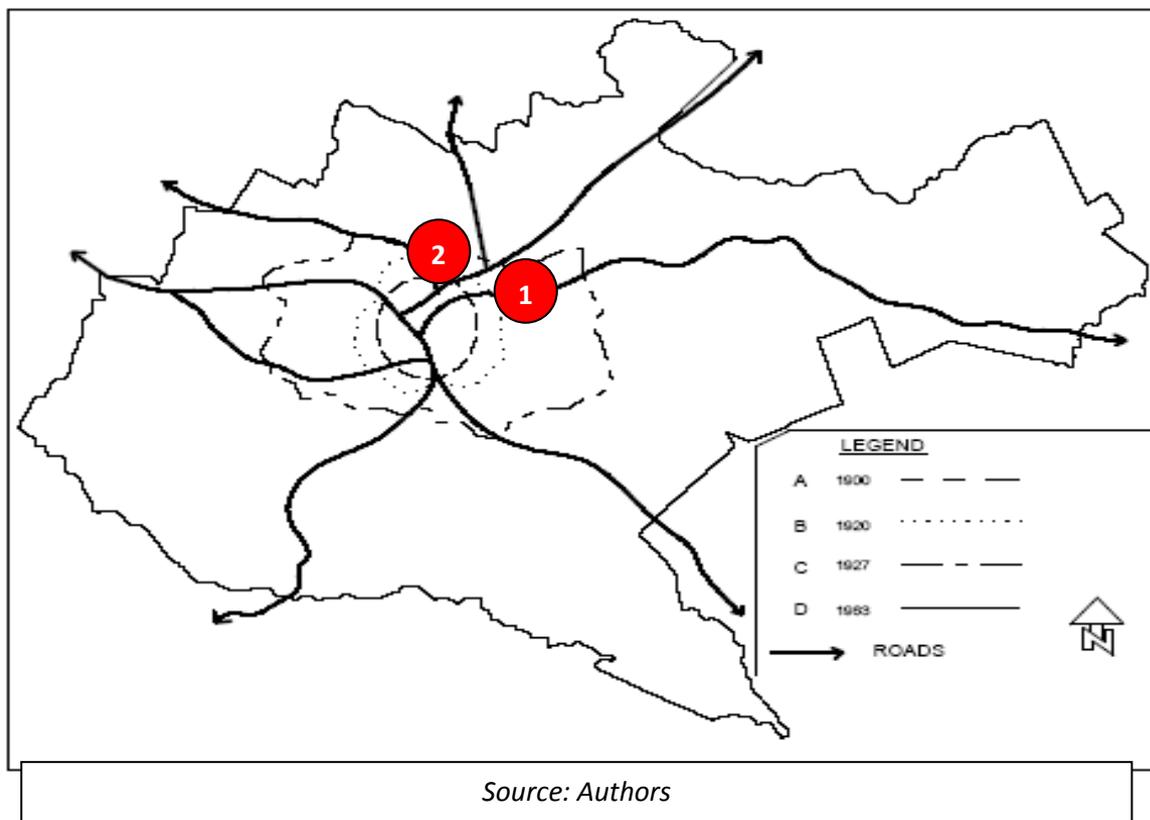
From the values allocated to every activity on each road, two roads were picked where the operators of these activities were subjected to the study if the activity scored 3 or 5 points. An activity occurring only once on a particular road scored 1 point, but was still picked to represent that particular activity.

At most two questionnaires were administered for every selected activity happening within the road reserves and two road users not directly involved in the activities were subjected to the research to get their views on the existence of the informal sector activities within the road reserves. Thus a total of 174 informants were selected to which the questionnaires were administered. In addition, 5 Key Informants including officials of City Council of Nairobi were purposively identified for in-depth interviews. Besides administration of questionnaires and interviews, photographs were taken and observations made.

Graphical presentation of study methodology



Map 1: Location of Study Sites - 1-City Stadium Market; 2- Wakulima Market



Study Findings

The study captured the views of the road users (pedestrians and motorists) on whether the informal businesses should be allowed to operate within the road reserves. The majority (76%) of the respondents were of the opinion that informal business sector should be allowed to operate within the road reserves; only 24% of the respondents were against the informal sector business operating within road reserves as they argued that the informal sector businesses hinder road expansion, restrict visibility for motorists, block pedestrian walkways, are a source of insecurity and are illegal.

Various reasons were given for the presence of businesses on road reserves. The businesses are a source of income and employment. The unused spaces within road reserves are accessible and available, and that there is lack of alternative land for the activities. There is also a market and the goods sold are considered cheap. However, of the reasons given by the informants, source of income and employment is the most important as 40% of the informants cited it.

The research findings reveal that the majority (68%) of the informal sector businesses located within road reserves support between 3-6 dependants. This illustrates the importance of the informal sector businesses as a source of livelihoods for the city households. The study also found that informal sector businesses operating within road reserves have economic benefits including creation of employment as a significant proportion of 53% of the respondents were employees.

The study further found that people of all education levels are involved in the informal sector businesses with a significant proportion (40%) of those interviewed having secondary education while holders of primary or vocational education constituted 22% each. Only 1% accounted for those with no formal education. It is interesting to note that 14% of those sampled/interviewed had tertiary education implying that the profitability of the informal sector businesses attracts people with all educational backgrounds.

The trends of the informal sector businesses within road reserves reveal growth. In the past three years the number of informal sector business operators has increased four times more than the situation was 10 years ago. Interviewed operators have been in the business for different periods and can be summarised as: 1-3 years accounted for 42%, 4-6 years constituted 23%, 7-9 years formed 12% and over 9 years accounted for 10%. Informal sector businesses are profitable. Data analysis indicates that the average earnings per day range from Ksh 500.00 (US\$ 6.00) to Ksh 2000.00 (US\$ 24.00) and above. This profitability justifies their rapid increase and also the participation of people from all educational backgrounds.

The majority of businesses do not require high initial capital outlay as findings indicate a significant proportion (35%) of the businesses used less than Ksh20,000.00 for initial investments. This also explains why the informal sector business have attracted many operators because many of them require little capital.

The study also sought to establish if street business operators are licensed and found that the majority (89%) of those interviewed had trading licences, and only 11% did not have permission for operation. The high proportion of licensed operators illustrates subtle acceptance of street trading by the city authorities although the payment does not guarantee security of tenure as some of the operators cited harassment and evictions from their areas of operation.

Although the City Council of Nairobi collects revenue from street traders it does not provide basic services such as water and waste disposal. The majority of the informal sector

businesses use private providers to access such services and at times they make their own provision. This has resulted in a number of problems including environmental degradation. In the absence of solid waste disposal by the city council, the informal sector businesses use four methods of waste disposal as coping strategies namely sanitary facilities in adjoining properties at a fee, burning of solid waste (which contributes to air pollution and is harmful to city residents), open-trench dumping and the disposal of waste water into the nearby storm water drainage system. Such practices create problems such as frequent blockages of the drainage.

Operation of informal sector businesses is not without challenges. The challenges include: Lack of customers, high competition, insecurity, high licence fees, and harassment by police and city council askaris and low wages for employees. The operators however suggested the following desired improvements to be made in their areas of operation: Provision of utilities, financial assistance, reduction of city council of Nairobi licence fees, creation of sufficient parking facilities, increase minimum wage for employees, improve the relationship of traders with the city council, improve police patrols and improvement of the structures among others.

After our analysis of the current situation, we came up with the following proposals:

Site analysis and proposals

City Stadium Project

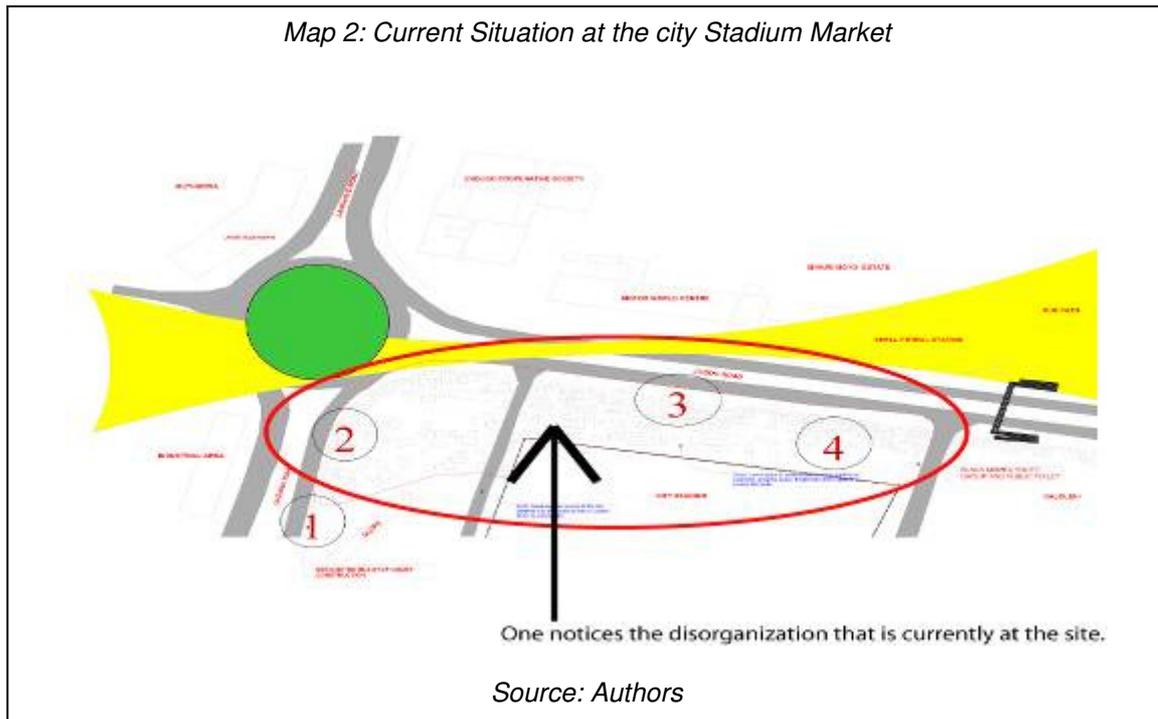
Site Description

The city stadium informal market is located along Jogoo road around the city stadium on the eastern side of Nairobi. The surrounding major land uses include the City Stadium and Kaloleni residential estate. There is projected expansion of both the City Stadium and Jogoo road by the city authorities. This will lead to higher demand for space such as parking and increased trading activities. Goods sold in the market include second hand sports shoes, clothes and groceries. These goods are, however, haphazardly located within the market (road reserve) as depicted in plate 1. Some of the traders are not easily accessible because the space is not well organized. The current status of the market is thus wanting with regard to aesthetic appeal, safety, security and orderliness thus calling for intervention. The market serves customers from the neighbouring residential estates and the wider city population and currently accommodates about 250 traders.

Plate 1: Photo showing Existing Situation at the City Stadium Market



Source: Field work



Design Proposal

The main design concept is the use of clusters. Clusters enhance a sense of community which is a strong element in the African culture. These clusters create a strong public realm which is enhanced by the close interaction of customers and sellers. The designed stalls form a courtyard which will be open on one side that is, the internal side of the cluster which will enable pedestrians and buyers to enter into the cluster and engage many traders. This will lead to sustainability of the market as traders will have equitable access to customers.

At the core of each cluster, there is an eatery which will act as a central point in the cluster. Within this middle block, water points will be located and the eateries will have out door open eating places spread around the block. The use of umbrella sheds is recommended. The overall organization of the market will entail the use of thematic clusters (clusters dealing with specified range of goods).

The design and nature of stalls

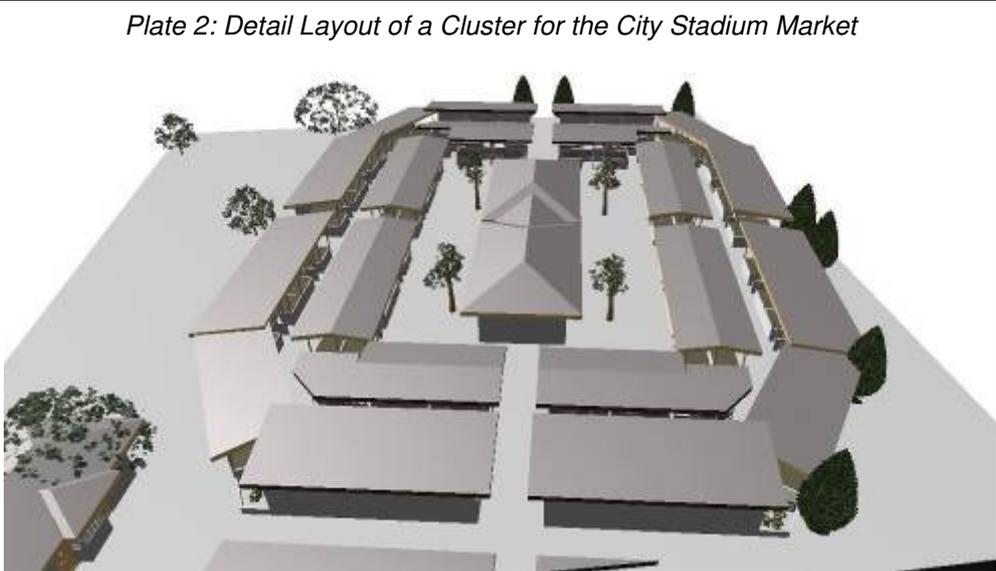
The material for the stalls will be timber and wood. Columns will be erected to a height of 2.5Metres while the height of the stall from the ground to the display level will be 0.9Metres. There are two levels of stalls in the market; bigger stalls designed for selling clothes and other products demanding large space allocations and smaller stalls selling products that demand smaller space requirements. The bigger stalls measure 3x3 metres while the smaller stalls measure 3x1.5 metres. All the small stalls will be enclosed within the larger stalls as indicated in the design plans. The clusters are provided with essential services such as water, eateries, toilets, lighting, fire safety, greenery and solid waste collection. Since the space already has a primary use (road reserve) the proposal recommends movable stalls. The proposed design layout will accommodate about 450 traders.

Map 3: Proposed Layout for City Stadium Market



Source: Authors

Plate 2: Detail Layout of a Cluster for the City Stadium Market



Source: Authors

Wakulima Market

Location:

The market is the sole wholesale farmers market in the city. Wakulima market was inaugurated on 14th January 1967 as a wholesale market in the city. It is located along Haile Selassie Avenue in Muthurwa area and adjacent to the recently constructed Muthurwa Hawkers' Market.

- ***Land Ownership:*** The market is owned by the City Council of Nairobi (CCN) and serves as a public purpose facility.
- ***Market Description:*** The market covers an area of 6 acres and specialises in trade of fresh farm products. Currently the market buildings occupy about a third of the land and accommodates a thousand traders. The traders occupying the sheltered space are mainly retailers and have fixed trading space.
- ***Space use:*** The current use of available space is not efficient as it only accommodates a thousand traders all of them on ground level yet it has potential to hold up to four thousand traders. The wholesalers and retailers are mixed up.
- ***Infrastructural Facilities:*** The market has 3 blocks, toilet facilities and water points but lacks a waste collection point. There are 92 parking lots within the market which aren't sufficient for the parking demand.
- ***Activity Systems:*** The main market users include Wholesalers (and semi-wholesalers), Retailers, Petty traders and assemblers, Transporters and transportation agents and Food hawkers.

Map 4: Proposed Floor Layout of Wakulima Market

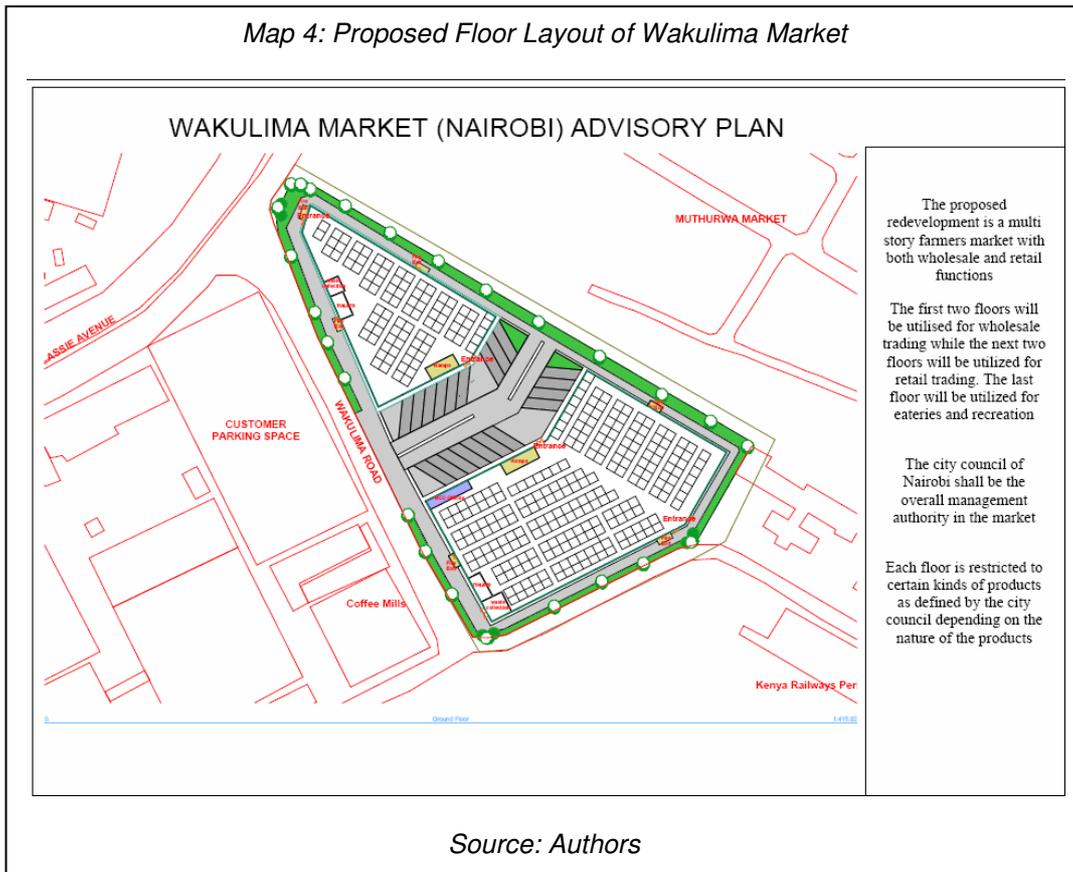
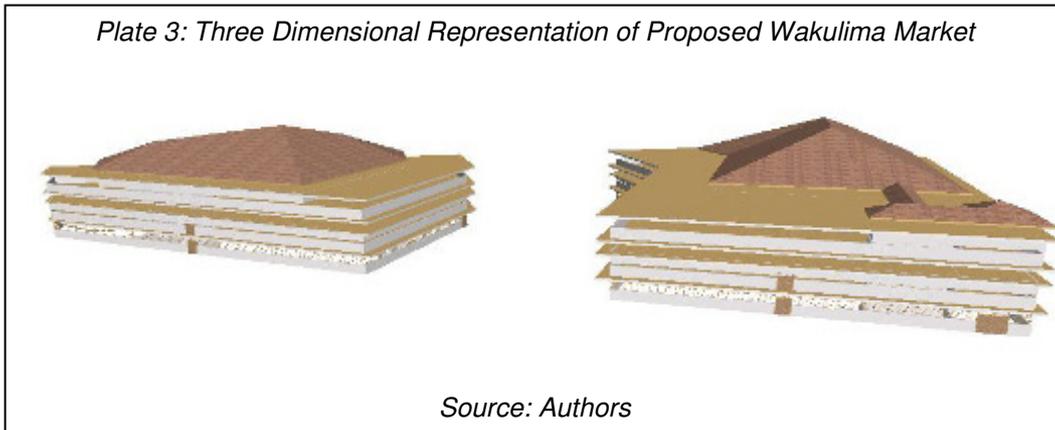


Plate 3: Three Dimensional Representation of Proposed Wakulima Market



The proposed market achieves a number of things that are lacking in the current situation. The proposed design accommodates more traders (over 4000) and the space is better organized and more efficiently used. All infrastructural facilities such as waste collection point, adequate parking, toilets and disaster management systems such as fire exits and hydrants are provided. Finally the proposal takes into account universal design which allows handicap accessibility through the use of ramps, elevators and signage.

Conclusion

The planning and design proposals discussed in this paper should help in changing the face of urban public spaces used for informal micro-enterprises in urban Kenya. The designs achieve aesthetic appeal and high degree of organization and utilization of the spaces. The urban innovation project group of the University of Nairobi that is involved in this research has already disseminated reports on innovative planning ideas discussed in this paper to the City Council of Nairobi and Ruiru municipality with the latter adopting and implementing the ideas.

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