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MINISTRY OF TRANSPORT, INFRASTRUCTURE, HOUSING AND URBAN DEVELOPMENT

KENYA INFORMAL SETTLEMENT IMPROVEMENT PROGRAM

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO. INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2

CONTRACT NO. MTIHUD/KISIP/CS/006D/2018-2019

**SOCIO-ECONOMIC SURVEY REPORT
EMBAKASI INFORMAL SETTLEMENT**



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Striving for a sustainable environment

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Executive Summary

The preparation of the socio-economic survey report for Embakasi informal settlement has been undertaken as part of planning, surveying and preparation of resettlement action plans for selected informal settlements in Nairobi, Mombasa and Nakuru counties. The Ministry of Land, Housing and Urban Development in February 2019, commissioned this assignment. It was commissioned under Kenya Informal Settlement Improvement Project (KISIP), which was initiated by the Kenya Government in partnership with development partners (World Bank, SIDA, and AFD) in 2011 to better respond to informal settlement phenomenon in the country.

The objective of KISIP is to improve living conditions in informal settlements in selected municipalities in Kenya. The project has the following components:

1. Strengthening institutions and programme management;
2. Enhancing tenure security: strengthen settlement planning and tenure security in urban informal settlements;
3. Infrastructure and service delivery; and
4. Planning for urban growth: support planning and development option.

Planning, surveying and preparation of resettlement action plans for these informal settlements in Nairobi, Mombasa and Nakuru counties falls within component two of KISIP. The planning and surveying of the informal settlements is aimed at enhancing tenure security for those settled on the land. This socio economic survey report has been prepared after analytically analyzing the existing situation of Embakasi informal settlement with the aim of identifying the settlement challenges and opportunities. The survey entailed getting the views from the settlement residents such as land tenure systems, existing situation of structures and social amenities, economic activities, the challenges faced within the settlement, development needs and settlement vision.

Embakasi informal settlement is in Embakasi Constituency in Nairobi County. It is located near Embakasi Road to the north of the Jomo Kenyatta International Airport. The settlement is linked through North Airport Road/Eastern bypass with Mombasa Road and Outer ring road. The Nairobi City County owns the land where Embakasi informal settlement is located. The settlement is approximately 2.43ha in size. The transport network of the settlement is well established. The main access road to the settlement is a 9m wide road that goes round the settlement. There is a network of roads within the settlement including 9m, 6m, 4.5m, 3m roads and 1.5m wide paths between the structures. Part of settlement is connected to a sewer line while the other parts use septic tanks. The sewer line runs along the 9m road abutting the settlement to the west.

In undertaking this assignment, we are guided by the Constitution of Kenya 2010, Kenya Vision 2030, County Government Act 2012, Physical Planning Act, 1996, Urban Areas & Cities Act, 2011 and other enabling legislations. Public participation as provided for in these instruments informed this exercise; therefore, stakeholders were fully involved in the entire project phases.

The major issues that arose from the socio economic analysis and bio – physical assessment are as follows:

- Informality of the settlement;
- Insecure land tenure;
- High population density;
- Poorly developed physical infrastructure in the settlement: roads, water, sanitation;
- Poor solid waste management; and
- Location near Jomo Kenyatta International Airport as an infrastructure and transportation node represents opportunities for the growth of the settlement.

Acronyms and Abbreviations

AFD	French International Development Agency
CAD	Computer Aided Design
CBD	Central Business District
CIDP	County Integrated Development Program
CLT	Community Land Trust
DEM	Digital Elevation Model
EA	Environmental Assessment
ECD	Early Childhood Education
EIA	Environmental Impact Assessment
EMCA	Environment Management and Coordination Act
GCI	Galvanized Corrugated Iron
GIS	Geographical Information System
GPS	Geographical Positioning System
ILO	International Labour Organisation
KENSUP	Kenya Slum Upgrading Program
KISIP	Kenya Informal Settlements Improvement Programme,
KMP	Kenya Municipal Program
LPDP	Local Physical Development Plan
MSSG	Multi-Stakeholder Support Group
MSUP	Mombasa Slum Upgrading Program
MTIH&UD	Ministry of Transport, Infrastructure, Housing and Urban Development
NamMSP	Nairobi Metropolitan Services Project
NGO	Non-Governmental Organisation
NLC	National Land Commission
NSUPP	National Slum Upgrading and Prevention Policy
PDP	Part Development Plan
RIM	Registry Index Map
SAP	Structural Adjustment Programme
SEC	Settlement Executive Committee
SIDA	Swedish International Development Agency
SRTM	Shuttle RADAR Topographic Mission
UN	United Nations
UTM	Universal Transverse Mercator
WB	World Bank
WRA	Water Resource Authority

Tables of Contents

Executive Summary	i
Acronyms and Abbreviations.....	iii
Tables of Contents.....	iv
List of Figures	viii
List of Plates	ix
List of Tables.....	x
CHAPTER 1. BACKGROUND OF THE ASSIGNMENT.....	1
1.1. Project Overview.....	1
1.2. Objectives of Socio-Economic Survey	3
1.3. Scope and Coverage	3
1.4. History of Embakasi Informal Settlement.....	3
CHAPTER 2. LITERATURE REVIEW.....	4
1. Introduction.....	4
2. Global context.....	4
3. Local context.....	5
4. Tenure Security Options	7
2.4.1. Introduction.....	7
2.4.2. Options for Tenure Security.....	7
2.4.3. Brief description of the different types of recognised forms of tenure security	8
2.4.4. Other Tenure Types from documented, unregistered Rights	8
2.4.5. Land Registration and Tenure Options for Embakasi this Assignment:.....	9
CHAPTER 3. CONSTITUTIONAL, POLICY AND LEGISLATIVE CONTEXT	10
3.1 The Constitution of Kenya	10
3.1.1 Bill of Rights.....	10
3.1.2 Public Participation.....	11
3.1.3 Access to land and land management	11
3.1.4 Planning Functions of the National Government.....	12
3.1.5 Planning Functions of the County Government.....	12
3.2 Policy Framework	12
3.2.1 Vision 2030.....	12

3.2.2	Sessional Paper No. 3 of 2009 on National Land Policy	12
3.2.3	Sessional Paper No. 3 on National Housing Policy for Kenya.....	13
3.2.4	National Land Use Policy 2016.....	14
3.2.5	The National Spatial Plan 2015-2045	14
3.2.6	The National Slum Upgrading and Prevention Policy (NSUPP).....	15
3.2.7	National Environmental Policy 2012.....	15
3.3	National Legal and Institutional Framework	16
3.3.1	Legislation on Planning	16
3.3.2	Legislations on Land Management.....	17
3.3.3	Legislations on Environmental Management	19
3.4	Nairobi City County Relevant Policies and Legislations.....	19
3.4.1	City County Integrated Development Plan 2018-2022.....	19
3.4.2	Nairobi City County Urban housing renewal and regeneration policy.....	20
3.5	World Bank’s Safeguard Policies	20
3.6	Institutional framework	21
3.6.1	Ministry of Environment, & Forests	21
3.6.2	Ministry of Water and Irrigation.....	22
3.6.3	Ministry of Lands and Physical Planning	22
CHAPTER 4.	APPROACH AND METHODOLOGY	24
4.1	Introduction	24
4.2	Data Sources.....	24
4.3	Preparatory Stage	24
4.4	Community Engagement and Sensitization	25
4.5	Preparation of the Base Map	26
4.6	Socio-economic survey	28
4.7	Stakeholder Participation	29
CHAPTER 5.	SITUATIONAL ANALYSIS.....	32
5.1	Location size and extent of Nairobi County.....	32

5.2	Climate	33
5.3	Population size and density	33
5.4	Education, literacy, and infrastructure	34
5.4.1	Pre-school education.....	34
5.4.2	Primary education	34
5.4.3	Secondary Education	34
5.4.4	Tertiary education	34
5.4.5	Technical, vocational education and training	34
5.5	Water and sanitation.....	34
5.6	Road, railway network and airports	35
5.7	Energy access	36
5.8	Housing typology	36
5.9	Incidences of landlessness.....	37
5.10	Economic situation.....	37
5.11	Environmental threat and degradation	38
5.12	Solid waste management.....	38

CHAPTER 6. SOCIO-ECONOMIC PROFILE OF EMBAKASI INFORMAL SETTLEMENT 39

6.1	Introduction	39
6.2	Mode of plot acquisition	40
6.3	Length of residence within the settlement.....	41
6.4	Plot sizes.....	42
6.5	Structure ownership according to gender.....	43
6.6	Marital status of the beneficiaries	44
6.7	Education level of beneficiaries	44
6.8	Occupation and income	45
6.9	Transport and communication of beneficiaries	47
6.10	Sources of Energy	50

6.11	Housing	51
6.12	Access to water and sanitation by beneficiaries.....	52
6.13	Health seeking behaviour of beneficiaries	52
6.14	Existing land uses.....	54
6.15	Prioritisation of community needs	58
6.16	Key Emerging Issues and Recommendation.....	59
CHAPTER 7.	ENVIRONMENTAL SCREENING	61
7.1	Objectives of Screening	61
7.2	Environmental issues identified during settlement community Participation.....	61
7.2.1	Poor disposal of solid waste.....	61
7.2.2	Inadequate Clean Water Supply.....	61
7.2.3	Poor liquid waste management in Settlement.....	61
7.2.4	Poor storm water management.....	62
7.2.5	Potential Fire Hazards and disasters	62
7.2.6	Air Pollution.....	62
7.2.7	Vegetation cover, open spaces and aesthetics.....	63
CHAPTER 8.	CONCLUSION	64
REFERENCES		66
ANNEX.....		67
Draft List of beneficiaries, Embakasi informal settlement	67	
Base Map, Embakasi informal settlement.....	80	
Minutes of validation of LPDP, socio-economic survey report and the list of beneficiaries ...	81	
Socio-Economic survey tool	94	

List of Figures

Figure 5-1 Embakasi settlement within the Nairobi City County context.....	33
Figure 5-2 Map showing extent of Embakasi informal settlement.....	36
Figure 6-1 Population projection, Embakasi informal settlement	39
Figure 6-2 Mode of structure acquisition, Embakasi informal settlement.....	40
Figure 6-3 Proof of ownership, Embakasi informal settlement.....	41
Figure 6-4 Length of stay among beneficiaries in Embakasi informal settlement	41
Figure 6-5 Reasons for settling in the settlement.....	42
Figure 6-6 Plot sizes in Embakasi informal settlement	43
Figure 6-7 Gender of beneficiaries	43
Figure 6-8 Marital status of the beneficiaries	44
Figure 6-9 Education level of beneficiaries	45
Figure 6-10 Occupation profile for beneficiaries in Embakasi informal settlement	46
Figure 6-11 Income profile for beneficiaries in Embakasi informal settlement.....	46
Figure 6-12 Comparison between male and female income levels	47
Figure 6-13 Mode of transport among beneficiaries in Embakasi informal settlement	48
Figure 6-14 Existing road network within Embakasi settlement.....	49
Figure 6-15 Mode of communication among beneficiaries in Embakasi informal settlement....	50
Figure 6-16 Cooking energy, Embakasi settlement	50
Figure 6-17 Structure characteristics, Embakasi informal settlement	51
Figure 6-18 Health seeking behavior, Embakasi informal settlement	53
Figure 6-19 Diseases reported by households, Embakasi informal settlement	54
Figure 6-20 Land use budget, Embakasi informal settlement	54
Figure 6-21 Source of water for beneficiaries in Embakasi informal settlement	55
Figure 6-22 Access to bathroom facility.....	55
Figure 6-23 Access to toilet facility.....	56
Figure 6-24 Solid waste disposal mechanisms in Embakasi informal settlement	57
Figure 6-25 Prioritisation of community needs, Embakasi informal settlement	59

List of Plates

Plate 4-1 Sample notice issued to beneficiaries ahead of a community sensitization meeting	26
Plate 4-2 Project Sociologist addressing research assistants during their training	28
Plate 4-3 The SEC members verifying the settlement plan for the consultant	30
Plate 6-1 An example of earth roads within Embakasi formal settlement.....	48
Plate 6-2 Housing typologies in Embakasi informal settlement.....	52
Plate 6-3 A case of sewerage connection in the settlement	56
Plate 6-4 Incidence of dumping in the settlement.....	58

List of Tables

Table 4-1 Nature of plots in Embakasi informal settlement	29
Table 4-2 Nature of structures in Embakasi informal settlement	29
Table 6-1 Key emerging issues in Embakasi informal settlement.....	59

CHAPTER 1. BACKGROUND OF THE ASSIGNMENT

1.1. Project Overview

Kenya's high population is ranked 27th in the world and is estimated to be growing at an annual average rate of 2.7%, with the proportion of urban population to the total population estimated at 12 million representing approximately 31.8% of the population. This rapid urbanization coupled with poor urban planning and constrained provision of critical social services and facilities, e.g. sanitation, water supply, infrastructure and housing, has resulted in the proliferation of slums and informal settlements in Kenya's cities and most urban centers. These informal settlements are located on unplanned sites that are mostly unalienated government land unsuitable for housing, in which poor residents live in shack structures and exposed to tenure insecurity, polluted hazardous environments and poor sanitation.

Realising the need to plan and upgrade informal settlements in undertaking its constitutional duty, the Government of Kenya, supported by Development Partners, prepared the Kenya Informal Settlements Improvement Project (KISIP) as part of the national strategy to address inequality and disparities in livelihoods and quality of life within Kenya's urban areas. The latter systematically and increasingly becoming the main population centres of the country. The Strategy comprises of three multi-sectoral programmes namely;

- i. The Kenya Informal Settlements Improvement Project (KISIP)
- ii. The Kenya Slum Upgrading Program (K-SUP) and,
- iii. The Nairobi Metropolitan Services Improvement Project (NaMSIP).

Under these programmes it is expected that millions of people will have access to improved shelter and livelihood. The aim of KISIP is to facilitate the improvement of living conditions in the informal settlements through security of tenure and municipal infrastructure development. The project will contribute to the achievement of overall Government goals for Vision 2030, through priority interventions in the following areas: institutional strengthening; improving security of land tenure and investing in infrastructure in informal settlements based on plans developed in consultation with communities; and support to proactive planning to better anticipate population growth and help develop options to dampen formation of new slums. These priority areas have been designed with four components, these are:

- i. **Institutional strengthening/development and program management** - This component assists in strengthening the capacity of the Ministry of Housing, the Ministry of Lands and the participating counties, and also finances program management activities (including preparation of a baseline platform and systems for monitoring and evaluation).

- ii. **Enhancing tenure security** – this supports scale-up and process systematization of ongoing efforts to regularize tenure in urban slums and includes financing for the following types of activities: community organization and mobilization, identification and demarcation of settlement boundaries, preparation of Part Development Plans, and issuance of letters of offer/allotment to individuals/groups.
- iii. **Investing in settlement restructuring and infrastructure**– supports implementation of settlement upgrading plans developed at the community level, investment in settlement level infrastructure and, where necessary, extension of trunk infrastructure to settlements.
- iv. **Planning for growth:** Supporting delivery of affordable housing and serviced land – supports proactive planning to dampen the growth of new slums and mechanisms for delivery of land and housing that can enhance affordability for middle and low-income households.

The Program' activity covers 14 counties each of which benefits from activities targeting slum improvement. KISIP's second component on enhancing tenure security means that planning and surveying of informal settlements creates a basis for titling of land in the selected informal settlements. Enhancing security of tenure of land in the informal settlements is critical in promoting the social wellbeing of the vulnerable inhabitants. Communities in informal settlements have in the past been disenfranchised through illegal alienation and forceful eviction. Tenure regularization will make it possible for the occupiers of the land in informal settlements to make long-term commitment including permanent investment. In addition, it will be possible for County Governments and development partners to allocate resources for infrastructure and services investment in the informal settlements. Settlement upgrading plans and surveying will determine and provide for infrastructure and services needed in each informal settlement, thus provide a sound basis for systematic investment in the settlement.

The preparation of the planning, surveying and preparation of RAP for Embakasi informal settlement is part of component 2 of Kenya Informal Settlements Improvement Project (KISIP) which deals with enhancing tenure security in urban informal settlements. This report is part of the planning, surveying and preparation of resettlement action plans for these informal settlements in Nairobi, Mombasa and Nakuru Counties.

This assignment was initially awarded by KISIP in 2015 to Voyants Solutions Private Limited and Otieno Odongo & Partners Consulting Engineers Ltd, and was executed up to preparation and adoption of a Local Physical Development Plan (LPDP) by the City County of Nairobi in 2017. The consultancy was, however, suspended before completing the surveying of the informal settlement. KISIP contracted LER Consult Limited in 2019 to undertake the remaining aspects of this consultancy, which included approval of Embakasi village informal settlement LPDP, updating of list of beneficiaries; updating of socio-economic report, surveying of plots; preparation of survey plans based on the approved LPDP and preparation of RAP.

1.2. Objectives of Socio-Economic Survey

Socio-economic survey in the settlement was conducted on 15th April 2019. It included 100% census of the beneficiaries in Embakasi informal settlement. The main objective of the survey was to collect high quality and timely data on demographic, social and economic characteristics of the structure owners and their tenant's households. Specific objectives of the socio-economic survey were to:

- i. Enumerate and collect basic socio-economic information of the beneficiaries.
- ii. To collect relevant planning data to inform proper planning of the settlement
- iii. Register and establish a list of legitimate beneficiaries before the project's onset that counters spurious claims from those moving into the project area solely in anticipation of benefits,
- iv. Providing a baseline for monitoring and evaluation

A standard questionnaire (annex 3) was used to collect basic beneficiaries' census information including household members by age, sex, relationship to head of household, education and occupation and housing conditions. The census also documented housing conditions, health conditions economic activities.

1.3. Scope and Coverage

100% census of the population in Embakasi informal settlement was involved in the socio-economic survey. All the residents of the village including structure owners and tenants and their structures were enumerated during the census. The census was undertaken in 111 plots. The beneficiaries compose of 126 male and 91 female beneficiaries. It has a population of 6,743 people. It is composed of 1625 households with a mean household size of four (4).

1.4. History of Embakasi Informal Settlement

Embakasi village informal settlement began in 1956 as a market centre. The area experienced population upsurge as more people moved in the area for trading purposes. In the year 1990, the area transformed and businesses, kiosks and residential houses started emerging. The residents later decided to approach Nairobi City County (City Council of Nairobi) to obtain development permission to construct permanent houses in 1996 where permission was granted.

After 1999 population census, the settlement boundary was demarcated and a Part Development Plan was prepared for the area in 2010. The plan was used to allocate the parcels to individual who had hitherto occupied the space.

CHAPTER 2. LITERATURE REVIEW

1. Introduction

This section notes the global and local contexts of informal settlements and the security of tenure options available for Embakasi informal settlement

2. Global context

Informal Settlements and urban informality is a serious and common problem in developing countries. These settlements are not marginal actors in the urban real estate market. They play an important role greatly affecting the housing supply and demand market.

A major theme emanating from the United Nations Habitat 111 conference in Ecuador, 2016, was that sustainable urbanization is now globally acknowledged as one of the major transformative drivers of the 21st century. In 2015, it was estimated that approximately 54% of the world's population lived in cities, and it is expected that some 70% of the world's population will be residing in urban areas by 2050 (UN, 2016). Economic change, population growth, and social and cultural activities are all increasingly being concentrated in towns and cities as people seek urban lifestyle with commensurate levels of services, infrastructure, amenity and liveability.

The concept of sustainable urbanization has been defined as practices of urbanization that comply with the principles of sustainable development. There is a consensus that like sustainable development, sustainable urbanization can be assessed from a number of dimensions, namely, the state of economic, social, environmental and resource sustainability of a town or city (Shen, *et al*, 2012). In this context, urbanization, cities and sustainable development are strongly intertwined, with a sustainable city viewed as aiming to achieve economic, environmental and socio-cultural objectives that comprise formal and informal rules and set within a governance framework (Romero-Lankao *et al.*, 2016).

One of the major consequences of urbanization that is most prominent in developing countries is the persistence and rise in informal settlements including slums. Their permanency and scale of growth in the urban landscape of developing countries reflects their emergence as a universal city phenomenon which may be tolerated, accepted or their residents designated for eviction by government. Urbanisation processes in these countries has left the poor with few options but to seek temporary and inadequate shelter in urban informal settlements. Apart from these obvious negative attributes, the Peruvian economist Hernando de Soto goes even further in claiming that when people do not own their land or property, their overall development is fundamentally hampered. This is because private property ownership is the foundation on which entrepreneurial capitalism flourishes. The widespread absence of tenure security for poor urban residents is one of the fundamental levers of their unfortunate situation (World Bank. 2014).

Africa is the fastest urbanising continent in the world. In 1980, only 28 percent of the African population lived in cities. This population has risen to about 37 percent. The annual urban growth rate in Africa is about 4.87 percent, twice that of Latin America and Asia. Cities and towns in Africa are also growing at twice the 2.5 percent growth rate of the rural population in Africa (UN-Habitat, 2016). This is attributed to high migration to cities and towns, coupled with high population growth rates. In Egypt, for instance, informal settlements emerged in and around big cities since the sixties of the twentieth century, due to natural growth and the flux of rural-urban migration. Alexandria- as the second biggest city in Egypt after Cairo- is witnessing a rapid population increase, therefore monitoring informal settlements locations, expansion and growth is important for possible urban development in Africa.

Within the developing regions, Sub-Saharan Africa had the largest proportion of the urban population resident in informal settlements in 2015, 71.9 %, which is alarmingly high when compared to the average of other developing regions of the world, 43.0 % (UN-Habitat, 2016). Thus, a major focus in sustainable development and issues related to it should be directed towards the urban environment and problems caused by rapid urban growth with special emphasis on informal settlements. Among the many problems facing urban informal settlements dwellers, lack of access to basic services such as water, sanitation, waste removal and health services are the most striking beside overcrowding, unemployment, high mortality and insecure forms of land tenure. Currently, it is estimated that over 60% of urban dwellers in Sub-Saharan Africa are living in informal settlements. Regionally, the rate of growth of urban slums in the East African is among the highest even in the world at around 5 percent but varied across the region. It ranges from a low of less than 20% in Rwanda to about 60 % in Kenya. What is notable is the generally high percent of the urban population living in informal settlements, around 65 per cent.

3. Local context

The roots for the formation of Kenya's informal settlements can be traced back to the pre-independence period when the urban layout was based on government-sanctioned population segregation into separate enclaves for Africans, Asians and Europeans (Zamberia, 1999). During this period, informal settlements essentially developed because of the highly unbalanced allocation of public resources towards the housing and infra-structural needs of the separate sections. The post-colonial period saw a relaxation of the colonial residential segregation policies, and major population shifts occurred, notably rural-to-urban migration, with little obstruction to the proliferation of urban shacks⁴ as long as they were not located near the CBD.

The post-independence period also saw rapid urban population growth without corresponding housing provision, and poor population resettlement due to new developments and extension of city boundaries that included rural parts within urban boundaries, often changing the characteristics of the settlements. A number of informal settlements are located on land that is unsuitable for construction, and all have high to very high population densities. Informal

settlements are widely located across the country, typically in proximity to areas with employment opportunities.

Nairobi and Mombasa cities are the largest urban centres in Kenya accounting for over a half of the urban population in the country. It is estimated that the urban population in Nairobi and Mombasa cities are respectively, 3.5, 1.5 million, and growing at about 5 per cent per annum. Given their large sizes, informal settlements issues in these cities is equally acute.

Both natural growth and rural-to-urban migration continue to contribute to the growth of Nairobi and Mombasa's informal settlements villages. Informal settlements house urban residents of low earning capacities with limited private assets. Their Employment is largely of low skill and often on a casual basis, which they complement by running petty business and other income-generating activities. Most informal settlements are located on unplanned sites that are unsuitable for housing, and exposed to different forms of pollution. It is estimated that 60% of urban population in Kenya lives in informal settlements and the trend is expected to continue if interventions to address tenure security, affordable housing, provision of basic infrastructure and improved livelihoods are not addressed.

Informal settlements in Kenya have undergone three different development paradigms since before independence. The period 1895-1970 was marked by demolition and eviction of informal settlement residents approach. The next phase was characterised by pressure groups and civil rights crusaders in the 1980s forcing government into informal settlement improvement that was painfully halted by the Structural Adjustment Programmes (SAPs).The third phase was heralded by a conference held in 1996 in the city of Istanbul dubbed Habitat II(UN-Habitat,1997). It was in this conference that the world community re-evaluated concern for the informal settlements and its dwellers focussing on adequate housing and land tenure security (Syagga, 2012).

It is in the background of this logic that several policy-sensitive initiatives have been undertaken and institutions and facilities have been established to address the issues of informal settlements in Kenya. The initiatives include Kenya Informal Settlement Improvement Project (KISIP), Kenya Slum Upgrading Program (KENSUP), and Mombasa Slum Upgrading Project (MSUP) with the aim of improving the standard of living in the informal settlements in the urban areas of Kenya through the provision of security of tenure and physical and social infrastructure (Muraguri, 2011). Improving security of tenure through property mapping, surveying and planning, titling and registration; improving basic infrastructure and access to basic services, removal or mitigation of environmental hazards are deliberate government efforts in sync with the big four agenda especially on affordable housing and health that the current Kenya government is keen to deliver.

4. Tenure Security Options

2.4.1. Introduction

Tenure security is a major component contributing towards improvement in the working and living conditions of the urban poor. It is an important pillar supporting development of urban areas, as it has a catalytic effect and invariably leads to other processes and issues vital to sustainable shelter delivery. However, right to land is not just a source of economic production, but is also a basis of social relationships and cultural values, and a source of prestige. People who fear eviction are not likely to operate to their maximum potential, or invest in improving their homes and neighborhoods, creating hurdle in development and up gradation of living standards. For all forms of tenure, the two major components are:

- i. Reasonable duration of ownership rights
- ii. Effective legal protection against eviction or arbitrary curtailment of land rights, with enforceable guarantees and legal/social remedies against the loss of these rights.

UN-HABITAT regards tenure security as a strategic entry point to poverty reduction rather than as a panacea to the same. In practical terms for the individual slum dweller, security of tenure translates into a degree of certainty that can motivate investment of own resources for the purposes of improving shelter and services. Providing periodical occupation rights can help people to make best utilization of public resources and also to avail and negotiate for basic services, provided by Government Authorities. Secure tenure also authorize owners of a land and building to utilize their property as forms of security against the loan, credit and therefore investment.

Tenure security has direct implications on the absence of forceful eviction and a major impact on the improvement of economic condition of the poor. Tenure security to informal slum dwellers may be provided through rental agreement, leasehold and freehold title, conditional leasehold title and collective proprietorship.

2.4.2. Options for Tenure Security

There are many options available to ensure secure tenure for residents living in informal settlements. According to the Land Act No. 6, 2012, the recognised forms of land tenure are:

- i. Freehold,
- i. Leasehold,
- ii. Other forms of partial interest as may be defined under this Act and other law
- iii. Customary land rights, where consistent with the Constitution.

The Act further states that there shall be equal recognition and enforcement of land rights arising under all tenure systems and non-discrimination in ownership of, and access to land under all tenure systems.

2.4.3. Brief description of the different types of recognised forms of tenure security

- i. **Freehold** is the form of tenure that confers on the title-holder the maximum control and discretion over the land, normally only circumscribed by law and/or planning and zoning restrictions. It provides for the land (and improvements) to be used as collateral and mortgaged, it may be transferred or bequeathed in the discretion of the title-holder, and is free from any time restrictions – it is title in perpetuity. It is the form of tenure most associated with investment and, indeed, speculation. Ideologically, it is most favoured by the proponents of the free- market and individualist conceptions of society.
- ii. **Leasehold** on the other hand conveys the right of beneficial occupation to land or property, but such occupation is circumscribed both by a finite period of time, as well as the specific conditions of the lease. The lessor retains ultimate control over the property, through the stipulated time limit and conditions. Upon expiry of the lease, the lessor may automatically reassume occupation, reallocate the lease to another person or body, or extend the lease of the occupant. For the period of the lease, which may be very long (e.g., 99 years), and subject to compliance with the terms of the lease, the occupant does enjoy secure tenure. This type of tenure security is applicable to urban areas like Embakasi informal settlement.
- iii. **Conditional freehold** is a hybrid of leasehold and freehold, which is effectively a lease that may be converted to freehold upon fulfilment of stipulated conditions. These are some of the most expensive tenure types, because they use professionals to create the right, transfer it and maintain the (centralized) registration.
- iv. **Community land.** Community land shall vest in and be held by communities identified on the basis of ethnicity, culture or similar community of interest.

2.4.4. Other Tenure Types from documented, unregistered Rights

Apart from what is defined in Kenyan Law, other forms of internationally documented form of tenure are explained below:

- i. **Rental Agreements:** These operate either in the private domain, as contract between private citizens and bodies corporate or companies, or in the public domain, wherein the rent is provided by a public body, such as a local authority, as part of a social housing policy. It is common in formal rental agreements, for the lessor to assume some responsibility for the maintenance of the property. It is the form of secure tenure least likely to lead to capital investment by the lessee (and, some may argue, by the lessor).

- ii. **Group Tenure:** Group tenure principle relates to the sharing of access to a property **based on** an agreement, which specifies the terms and conditions of such access. This may take the form of the creation of a body corporate, such as a condominium or a private, land-buying company, or a housing association or co-operative. All these forms of tenure share the need for a relatively high level of common interest, and the skills and capacity to administer the arrangement, which generally requires quite a high level of organisational ability and commitment.
- iii. **Community Land Trust:** (CLT) is an important variant to the above mentioned forms of tenure is the “community-land trust.” The CLT is an important hybrid of individual and collective forms of ownership. Persons agree to pool private-owned land in a collective land trust such that they can sell property, however, only under terms stipulated by the trust. The CLT is designed specifically to prevent speculation and “market eviction,” and is, as such a secure form of tenure for property owners as well as tenants.
- iv. **Communal Tenure:** One of the defining features of communal tenure is that it is common for the community to have a long and common history and cultural identity, such as a clan. Access to such land may be governed by custom, and include the right to use and to occupy, but not to transfer or alienate, which decision would be determined by the community as a whole. Under Islamic tenure systems, Musha, refers to a collective land holding, whereas waqf is category of land held in perpetuity by a religious institution, and is effectively removed from market mechanisms.

2.4.5. Land Registration and Tenure Options for Embakasi this Assignment:

During this assignment, the Consultant jointly with KISIP and County Government has explored the different land registration options for Embakasi informal settlement. Due the nature of land (owned by Nairobi City County) and its location in a urban area, individual leases will be issued to the beneficiaries. The key features of this mode of ownership are:

- i. It attracts rates and levies from the local authorities. This will enable the Nairobi City County Government to generate revenue from the settlement for the services it will offer in the settlement.
- ii. The lease comes with restrictive clauses to promote development control. This will restrict emergence of developments that does not conform to the surrounding developments. A maximum of five (5) floors will be allowed in Embakasi informal settlement. This is due to its location within the flight path of Jomo Kenyatta International Airport.
- iii. Leases have renewal clauses that the lessee can use to apply for an extension. This will promote inheritance of the property among beneficiaries.

CHAPTER 3. CONSTITUTIONAL, POLICY AND LEGISLATIVE CONTEXT

This chapter outlines the policy, legal, regulatory and institutional framework for planning in Kenya. These covers the frameworks for preparation of physical plans, public participation, Environmental Management, land administration among others.

3.1 The Constitution of Kenya

The constitution of Kenya set in motion a shift from a centralized system government to a devolve system thus a two tier government structure consisting of the National and county governments. The governments at the national and county levels are distinct and inter-dependent and shall conduct their mutual relations based on consultation and cooperation. The constitution has several provisions that are of relevant to this assignment. These are provisions that touch on public participation, Planning, Access to Land, Bill of Rights, and Environmental conservation.

3.1.1 Bill of Rights

Under The Bill of Rights, article 27. (1) Every person is equal before the law and has the right to equal protection and equal benefit of the law. (3) Women and men have the right to equal treatment, including the right to equal opportunities in political, economic, cultural and social spheres, while article 28 grants the right to dignity and the right to have that dignity respected and protected. Article 39 (3) Every citizen has the right to enter, remain in and reside anywhere in Kenya. While article 40 (1) Subject to Article 65, every person has the right, either individually or in association with others, to acquire and own property— (a) of any description; and (b) in any part of Kenya. (3) The State shall not deprive a person of property of any description, or of any interest in, or right over, property of any description unless— (a) results from an acquisition of land or an interest in land or a conversion of an interest in land, or title to land, in accordance with Chapter Five; or (b) is for a public purpose or in the public interest and is carried out in accordance with this Constitution and any Act of Parliament that— (i) requires prompt payment in full, of just compensation to the person; and (ii) allows any person who has an interest in, or right over, that property a right of access to a court of law. (4) Provision may be made for compensation to be paid to occupants in good faith of land acquired under clause (3) who may not hold title to the land. Article 42 grants the right to clean and healthy environment, while article 43 bestows the right to the highest attainable standard of health, accessible and adequate housing, right to reasonable standards of sanitation; right to clean and safe water in adequate quantities; right to (d) to social security; and right to education.

The bill of right is key in the slum improvement process as the exercise is geared towards granting dignity to the slum dwellers, enhancing their access to property, access to clean and healthy environment as well as decent housing.

3.1.2 Public Participation

Specifically, the constitution emphasizes the importance of public participation in development matters. Article 1(2) of the **Constitution of Kenya**, vests all power to the people of **Kenya**. **Article 10 (2) a, b and c:** The national values and principles of governance include; democracy and participation of the people; inclusiveness; good governance, integrity, transparency and accountability. **Article 61:** Gives the public, individually or as a group, a say in matters of land including acquisition, management, transfer, disposal, or ownership of private, public and/or community land. **Article 69(1) (d):** The State shall encourage public participation in the management, protection, and conservation of the environment while under Article 174(d): Communities have the right to manage their own affairs and to further their development. **Article 184(1):** National legislation shall provide for the governance and management of urban areas and cities and shall, in particular— (c) provide for participation by residents in the governance of urban areas and cities. The **Fourth Schedule Part 2(14):** functions and powers of the county are to coordinate and ensure the participation of communities in governance. Counties are also to assist communities to develop the administrative capacity to enhance their exercise of power and participation in governance at the local level.

Slum improvement projects have to be participatory in nature, and must respect the views, and wishes of the project affected populations, and provide appropriate channels for people to air their views.

3.1.3 Access to land and land management

Article 60 outlines the principles of land management 60 (1) states that Land in Kenya shall be held, used and managed in a manner that is equitable, efficient, productive and sustainable, and in accordance with the following principles— (a) equitable access to land; (b) security of land rights; (c) sustainable and productive management of land resources; (d) transparent and cost effective administration of land; (e) sound conservation and protection of ecologically sensitive areas; (f) elimination of gender discrimination in law, customs and practices related to land and property in land; and (d) encouragement of communities to settle land disputes through recognized local community initiatives consistent with this Constitution Article 62-65 defines the different forms of land tenure systems applicable in Kenya, where land can be either private, public or communal.

The issue of access to land is key in slum improvement projects, as land is the key point of focus for such interventions aimed at improving land administration in informal settlements, providing tenure security, as well as putting in place measures for sustainable management of land resources.

3.1.4 Planning Functions of the National Government

Article 66 gives the State (national government) the power to regulate the use of any land, or any interest in or right over any land, in the interest of among others, public safety, public order, public morality, public health, or land use planning. The constitution empowers the National Land Commission (NLC) to monitor land use planning all over Kenya under article 67. The National government is mandated to provide general principles of land use planning, co-ordination of planning by the counties and perform national and economic policy and planning under item No. 9 in the Fourth Schedule of the Constitution.

3.1.5 Planning Functions of the County Government

Planning functions of the counties are provided for in item No. 8 of Part 2 of the Fourth Schedule of CoK 2010. To actualize this, parliament has enacted the County Government Act (CGA), 2012 and Urban Areas and Cities Act, (UACA), 2011.

3.2 Policy Framework

3.2.1 Vision 2030

Kenya Vision 2030 is a long-term development blueprint to guide the country towards holistic growth. It aims to transform Kenya into a newly industrializing “middle-income country providing a high quality life to all its citizens by the year 2030”. The Vision 2030 is based on three main pillars of development: Economic, Social and Political. The Vision 2030 Social Strategy involves “the building of a just and cohesive society that enjoys equitable social development in clean and secure environment”. The 2030 goal for urban areas is to achieve “a well-housed population living in an environmentally-secure urban environment.” This will be achieved by bringing basic infrastructure and services—roads, streetlights, water and sanitation facilities, storm water drains, footpaths, and others—to informal settlements.

3.2.2 Sessional Paper No. 3 of 2009 on National Land Policy

The National Land Policy was formulated with the aim of securing rights over land and provide for sustainable growth, investment and reduction of poverty in line with Government overall development objectives. The policy will offer a framework of policies and laws designed to ensure the maintenance of a system of land administration and management. The broad objectives of the National Land Policy are to secure rights over land and provide for sustainable growth, investment and the reduction of poverty. The Policy provides a framework of laws that provide: All citizens with the opportunity to access, beneficially occupy, and use land; economically viable, socially equitable and environmentally sustainable allocation and use of land; Efficient and effective utilization of land and land based resources and Efficient and transparent land dispute resolution mechanisms.

The National Land Policy of Kenya also identifies that special interventions are required for resolving several land related issues such as:

- a. Historical injustices,
- b. Land rights in informal settlements and for informal activities
- c. Land rights of minorities and marginalized groups
- d. Land rights of women
- e. Pastoral land issues
- f. Coastal region land issues
- g. Land rights of children

The provisions for informal settlements to be undertaken by the government and as provided in the policy are as follows:

- i. Take an inventory of genuine squatters and people who live in informal settlements
- ii. Determine whether land occupied by squatters is suitable for human settlement
- iii. Establish appropriate mechanisms for the removal of squatters from unsuitable land and their resettlement
- iv. Facilitate planning of land found to be suitable for human settlement;
- v. Ensure that land subject to informal settlement is developed in an ordered and sustainable manner;
- vi. Facilitate negotiation between private owners and squatters in cases of squatter settlements found on private land;
- vii. Facilitate the regularization of existing squatter settlements found on public and community land for purposes of upgrading or development;
- viii. Establish a legal framework and procedures for transferring un-utilized land and land belonging to absentee land owners to squatters and people living in informal settlements;
- ix. Develop, in consultation with affected communities, a slum upgrading and resettlement program under specified flexible tenure systems;
- x. Put in place measures to prevent further slum development;
- xi. Facilitate the carrying out of informal commercial activities in a planned manner;
- xii. Regulate the disposal of land allocated to squatters and informal settlers; and
- xiii. Establish an appropriate legal framework for eviction based on internationally acceptable guidelines.

3.2.3 Sessional Paper No. 3 on National Housing Policy for Kenya

The National Housing Policy for Kenya identifies low incomes and poverty as the main impediment to access for decent and affordable housing for citizens .The overall goal of the Housing Policy is to facilitate the provision of adequate shelter and a healthy living environment at an affordable cost to all socio-economic groups in Kenya in order to foster sustainable human settlements. This will minimize the number of citizens living in shelters that are below the habitable living conditions. It will also curtail the mushrooming of slums and informal

settlements especially in the major towns.

The National Housing Policy consists of the following key elements:

- i. Policy targets highlighting urban housing, rural housing, slum upgrading and vulnerable groups and poverty alleviation solutions.
- ii. Main housing inputs and addresses ways of managing the housing inputs namely land, infrastructure, building materials, technology and finances.
- iii. Estate management and maintenance necessary to ensure long lifespan for housing stock, disaster management, environmental impact assessment for major housing projects, human resource development, monitoring and evaluation.

An integral part of the policy identifies the need for up-gradation of slums and informal settlements as high priority elements. The strategies proposed to be undertaken for slum up-gradation are:

- i. Upgrading of slum areas and informal settlements will be given high priority. It will be undertaken with minimal displacement to cater to proper planning and necessary infrastructure provisions.
- ii. The government intends to streamline land acquisition for housing the poor, adopt appropriate tenure systems, planning standards to suit the given slum settlements and prevent unwarranted destruction of existing housing stock and displacement of the residents. Economy generating activities that address poverty alleviation will be enhanced.
- iii. Integrated institutional framework that accommodates participatory approaches involving relevant stakeholders, particularly the benefitting communities to facilitate slum-upgrading activities.

The policy also aims to address proliferation of slums and informal settlements through ensured supply of minimally developed but incrementally upgradable low cost housing

3.2.4 National Land Use Policy 2016

It provides guidelines for proper management of land resources as well as anchoring land development initiatives. It focuses on environmentally and socially responsible use of land and land based resources for socio-economic transformation. The policy promotes best land use practices for optimal utilization of the land resource in a productive, efficient, equitable and sustainable manner.

3.2.5 The National Spatial Plan 2015-2045

This is the spatial blueprint guiding development in the country based on the land capabilities and potential while addressing the concern arising from the need to protect and conserve the environment. The Plan addresses disconnect between economic and spatial planning by establishing a broad physical planning framework that provides physical planning policies to

support economic and sectoral planning. The plan form the framework upon which county plans (spatial and sector plans) are to be based.

3.2.6 The National Slum Upgrading and Prevention Policy (NSUPP)

In the absence of a comprehensive policy and legal framework for slum upgrading interventions, the Government of Kenya initiated the National Slum Upgrading and Prevention Policy in 2012. Since, the government took up many slum-upgrading initiatives, local authorities, NGOs etc. the NSSUP was initiated under a multi-stakeholder process held under the support of Multi-Stakeholder Support Group Forum (MSSG). Work under NSUPP has commenced since December 2012 under a coordinating secretariat, steering committee and various thematic groups. The recommendations suggested to cater to the fundamental slum issues include the following:

- i. Provision of adequate budgetary allocation for all programs relating to slum upgrading and prevention
- ii. Legislate a comprehensive slum upgrading and prevention policy to deal with all the key areas of slum upgrading and prevention issues including security of tenure, tenure regularization, institutional arrangement, regulations, environmental protection, planning and development control, participation of all stakeholders especially the vulnerable groups, infrastructure development and maintenance, security and safety.
- iii. Clear frameworks for the participation of all stakeholders including the vulnerable groups in all stages of slum upgrading and prevention process.
- iv. Strengthen the capacity of urban community groups so that they can actively participate in slum upgrading process
- v. Create an effective enforcement mechanism of all the laws and regulations including an inbuilt monitoring and evaluation system.
- vi. Develop and implement an effective slum upgrading and prevention information and communication strategy.
- vii. Develop and implement an effective incentive program/strategy to attract other stakeholders including the private sector in slum upgrading and prevention programs.
- viii. Establish an accountable and transparent body to coordinate all slum upgrading and prevention programs
- ix. Establishment of sustainable income generating sources for slum dwellers including saving schemes to enhance provision of financial services.

3.2.7 National Environmental Policy 2012

The goal of the National Environment Policy is to ensure better quality of life for current generation without compromising the quality of life of future generations through sustainable management of the environment and natural resources. The policy aims to provide a holistic

framework to guide the management of the environment and natural resources in Kenya. It further ensures that the linkage between the environment and poverty reduction is integrated in all government processes and institutions in order to facilitate and realize sustainable development at all levels. The policy advocates for use of cleaner production mechanism in waste management to ensure that environmental impact, health and safety are protected

3.3 National Legal and Institutional Framework

3.3.1 Legislation on Planning

County Government Act 2012 (CGA): Sections 102 -115 of CGA has requisite provisions for county planning. The overall goal of county planning, to integrate economic, physical, social, environmental and spatial planning. According to Section 104(2) of the Act, county plans guide counties on their assigned functions, in matters such as health, agriculture, pollution, culture, transport, trade, education, public works and services and disaster management.

Section 37 mandates the county executive committee (CEC) to monitor the process of planning, formulation and adoption of integrated development plan (IDP) prepared by a city or municipality within the county and assist in the process. The Governor to the county assembly will submit county plans for approval in line with Section 38 of the Act, while public will be incorporated to participate in planning processes under Section 104(4).

Section 111 (1) provides for city and municipal planning that covers: (a) City or municipal land use plans; (b) City and municipal building and zoning plans; (c) City and urban area building ad zoning plans; and (d) Location of recreational areas and public facilities plans.

The designated planning authorities in county government area a (Section 104(3): County Departments; Cities and Urban Areas; Wards; and Sub-counties.

Section 103 states that the objectives of county planning are to:

- i. Ensure harmony between national, county and sub-county spatial planning requirements;
- ii. Facilitate the development of a well-balanced system of settlements and ensure productive use of scarce land, water and other resources for economic, social, ecological and other functions across a county;
- iii. Maintain a viable system of green and open spaces for a functioning eco-system;
- iv. Harmonize the development of county communication system, infrastructure and related services;
- v. Develop urban and rural areas as integrated areas of economic and social activity;

- vi. To provide the preconditions for integrating under-developed and marginalized areas to bring them to the level generally enjoyed by the rest of the county;
- vii. protect the historical and cultural heritage, artefacts and sites within the county;
- viii. Make reservations for public security and other critical national infrastructure and other utilities and services;
- ix. Work towards the achievement and maintenance of a tree cover of at least ten per cent of the land area of Kenya; and
- x. Develop the human resource capacity of the county

Urban Areas and Cities Act No 13 of 2011 establishes a legislative framework for classification of areas as urban areas or cities, governance and management of urban areas and cities and participation by the residents in the governance of urban areas and cities.

Physical planning Act, 1999: the act provides for preparation of different types of a physical development plans at various levels (national, regional and local). The purpose is to improve the land and provide for the proper physical development of such land, securing suitable provision for transportation, public purposes, utilities and services, commercial, industrial, residential and recreational areas, including parks, open spaces and reserves and the making of suitable provision for the use of land for building or any other purposes

Section 29 allows for prohibition or control of the use and development of an area. Section 30 state that any person who carries out development without development permission will be required to restore the land to its original condition. It also states that no other licensing authority shall grant license for commercial or industrial use or occupation of any building without a development permission granted by the respective local Authority.

3.3.2 **Legislations on Land Management**

The National Land Commission Act, 2012: The purpose of the Act is to make further provision as to the functions and powers of the National Land Commission, qualifications and procedures for appointments to the Commission; to give effect to the objects and principles of devolved government in land management and administration.

Land Act No. 6 of 2012: The purpose of this statute is to give effect to Article 68 of the constitution of Kenya 2010, to revise, consolidate and rationalize land laws in Kenya and to provide for the sustainable administration and management of land in Kenya. The Act provides for the land systems in Kenya namely; Freehold, Leasehold and Customary land holding. The Act provides for the creation and administration of secondary / derivative interests in land these include leases, charges, and easements. Particularly on charges, the Act provides for elaborate

procedures on creation of Charges which include; new forms of charges namely formal, Informal and customary charges. The Act provides for compulsory land acquisition for public benefit.

Land Registration Act, 2012: The purpose of this statute is, amongst other things, to revise, consolidate and rationalize the registration of title to land as well as to give effect to the principles of devolved government in Kenya. The Act provides for elaborate transfer and registration procedures of interests in land. It provides for the effect of registration of interest in land just as it was provided under the Registration of Land Act. It provides for the doctrine of indefeasibility of Title as well as elaborate exceptions to the doctrine namely misrepresentation, fraud and un-procedural acquisition of land.

The Act provides for elaborate provisions relating to Co-tenancy and Partition, which enacts the common user law principles on Co-tenancies in Statutory provisions. Of particular interest is the Protection of Spouses in co-tenancies. The Act recognizes the Jurisdiction of the Environment and Land Court established by the Environment and Land Court Act, 2011 No. 19 of 2011, on matters emanating from the Act.

Land Laws (Amendment) Act 2016. Amended some sections of the Land Act, 2012, Land Registration Act, 2012 and the National Land Commission Act, 2012. Under the Act, role of Cabinet Secretary for Lands (falling under the National Government) vis-à-vis the National Land Commission is clarified. NLC remains the responsible for managing public land on behalf of national and county governments including the maintenance of records and data in respect of public land. However, the decision to allocate any part or parcel of public land is to be made by the national or county government (as the case may be), and implemented by NLC. It introduces "controlled land" meaning land which is within a zone of 25km from the inland national boundary of Kenya; (b) within the first and second row from high water mark of the Indian Ocean; (c) any other land as may be declared controlled. The Act requires that "transactions" in controlled land proceed with prior written approval of the Cabinet Secretary, who must seek approval of the relevant authorities. On Compulsory Acquisition, compensation is to be made by the NLC only after final survey and determination of the acreage, boundaries, ownership and value of the land.

Community Land Act (2016). Gives effect to Article 63 of the Constitution of Kenya, which provides for a classification of land known as community land. Provide for recognition, protection and registration of community land rights, as well as management and administration of community land. It spells out the role of county governments in relation to unregistered community land and related matters. Provides for different tenure systems including customary, freehold, leasehold, and such other tenure system recognized under the Act or other written law. The Act limits compulsory acquisition by State of any interest in, or right over community land unless it is done in accordance with the law; is for public purpose. The Act provides that at least two-thirds of the community members must approve any conversion of community land.

3.3.3 Legislations on Environmental Management

Environment Management and Coordination Act 1999 (Amendment Act) 2015: Framework law for environmental management in Kenya. Section 58 of the Environmental Law requires that an Environmental Impact Assessment (EIA) study precede all development activities proposed to be implemented in Kenya. Sections 68 and 69 EMCA require that all ongoing projects be subjected to annual environmental audits.

Subsidiary regulations include:

- i. EMCA (Water Quality Regulations, 2006): provides for sustainable management of water resources including prevention of water pollution and protection of water sources (lakes, rivers, streams, springs, wells and other water sources. Regulation No. 11 makes it an offence for any person to discharge or apply any poison, toxic, noxious or obstructing matter, radioactive waste or other pollutants or permit the dumping or discharge of such matter into the aquatic environment unless such discharge, complies with the standards for effluent discharge into the environment
- ii. EMCA (Waste Management Regulations, 2006): provide details on management (handling, storage, transportation, treatment and disposal) of various waste streams including: domestic, hazardous and toxic, pesticides, biomedical, and radioactive wastes
- iii. EMCA((Environmental (Impact Assessment and Audit)) Regulations; Provide for Procedures for preparation, submission and approval of EIA and EA reports, Registration of EIA/EA experts, Public participation in the EIA and EA processes & Participation of lead agencies in the EIA and EA process

Water Act (2016) is in place. The Act seeks to align the water sector with the Constitution's primary objective of devolution. The Act establishes Water Resource Authority to be in charge of regulating and Permitting use of water. At the basin level, there is provision for Basin water resource committees to be gazette by Cabinet Secretary, as well as water resource user associations. The Water Resources Authority is supposed to prescribe requirements and a period for the formulation of Basin area Water Resources Management Strategy. The Act also establishes the National Water Harvesting and Storage Authority (development of public works for water storage), Water Regulatory Board, and Water Sector Trust Fund.

3.4 Nairobi City County Relevant Policies and Legislations

3.4.1 City County Integrated Development Plan 2018-2022

The Urban Renewal and Housing sector comprises of Urban Renewal, Housing and Building Services. The goal of the sector is to promote and provide decent and affordable housing and to improve the living standards and proper sanitation in slum areas. The CIDP recognises that the

sector development needs are:

- Reservation of land through land banking for future housing development
- Recruitment of staff especially technical staff to fill staff gap to enhance service delivery
- Political good will to facilitate public participation and provision of quality services
- Provision of adequate funds implement planned programmes and projects and facilitate operations.

The sector has prioritised social housing for low and middle-income earners and slum upgrading to provide basic services and improve living conditions.

3.4.2 Nairobi City County Urban housing renewal and regeneration policy

Like most cities in developing countries, the housing situation in Nairobi City is characterized by an acute shortage of affordable housing. Put differently, the demand for affordable housing far outstrips the supply. As at 2018, only 35,000 new homes were constructed against an annual demand of 120,000 homes. The shortage of affordable housing units has manifested itself in overcrowding and sprawl of informal settlements.

The specific objectives of the urban housing renewal and regeneration policy are to:

- a. promote sustainable urban land use in the old estates and informal settlements;
- b. encourage private investment in the provision of decent and affordable housing in the city;
- c. rehabilitate or refurbish dilapidated housing units in the old estates and informal settlements;
- d. secure reasonable access to water, sewerage and sanitation services within the old estates and informal settlements;
- e. Improve the physical environment and enhance the aesthetic appeal of the old estates;
- f. Improve the living conditions of persons residing in the old estates and informal settlements;
- g. Diversify the land use of the old estates by adopting a mixed-use development approach to renewal.

The implementation of this policy will witness the improvement of the living conditions of the City's old estates and informal settlements.

3.5 World Bank's Safeguard Policies

The World Bank's Safeguard policies are designed to help ensure that projects proposed for Bank financing are environmentally and socially sustainable. Of the 10 SGPs only OP 4.01 (Environmental Assessment) and OP 4.12 (Involuntary Resettlement) are deemed relevant to slum improvement programs.

Environmental Assessment (OP 4.01) requires Environmental Assessment (EA) for projects proposed for Bank financing to ensure that they are environmentally sound and sustainable, and as a basis for decision-making. Under OP 4.01 projects are screened and assigned either of four categories each of which requires different levels of environmental assessment as follows:-

- i. **Category A:** Projects likely to have significant adverse environmental impacts those are sensitive, diverse, or unprecedented. These impacts may affect an area broader than the sites or facilities subject to physical works.
- ii. **Category B:** potential adverse environmental impacts on human populations or environmentally important areas—including wetlands, forests, grasslands, and other natural habitats—are less adverse than those of Category A projects. These impacts are site-specific; few if any of them are irreversible; and in most cases, mitigation measures can be designed more readily than for Category A projects.
- iii. **Category C:** have minimal or no adverse environmental impacts. Beyond screening, no further EA action is required for a Category C project.
- iv. **Category FI:** involves investment of Bank funds through a financial intermediary in subprojects that may result in adverse environmental impacts.

OP 4.04 Natural Habitats; incorporation into their development and environmental strategies analyses of any major natural habitat issues, including identification of important natural habitat sites, the ecological functions they perform, the degree of threat to the sites, and priorities for conservation

OP 4.11 Cultural Heritage; avoid or mitigate adverse impacts on physical cultural resources are defined as movable or immovable objects, sites, structures, groups of structures, and natural features and landscapes that have archaeological, paleontological, historical, architectural, religious, aesthetic, or other cultural significance

Involuntary Resettlement (OP4.12) requires that a Resettlement Action Plan (RAP) be prepared for all projects that anticipate displacement of both settlements and livelihoods.

3.6 Institutional framework

3.6.1 Ministry of Environment, & Forests

Has the mandate for Environment and Natural Resources Policy formulation, analysis and review, as well as Promoting, monitoring and coordinating environmental activities and enforcing compliance of environmental regulations. The Mission is to facilitate good governance in the protection, restoration, conservation, development and management of the environment and natural resources for equitable and sustainable development

Relevant institution under this ministry is **National Environment Management Authority** whose responsibility is to exercise general supervision and, co-ordination of all matters relating to the environment and to be the principal instrument of government in the implementation of all policies relating to the environment. The Authority review proposed plans, polices and reports submitted to them, undertake consultations or visit the project site to verify information provided in the plans/report and issue an EIA license if it considers that all the issues relevant to the policy/plan or project have been identified and mitigation measures to manage them proposed

3.6.2 Ministry of Water and Irrigation

The Water and Irrigation is the trustee of all water and natural resources in the country. Key roles and functions include water policy formulation; water resources management policy; apportionment of water resources and abstraction licensing; appointment of water undertakers; regulation, setting and approval of standards; approval of water tariffs, levies, rates and charges; development and operation and maintenance of urban and rural water supply systems; wastewater treatment and control; water quality and pollution control; catchment area conservation; water conservation; irrigation and dam construction schemes; flood control and land reclamation.

Relevant institutions under this ministry include:

- i. **Water Resource Authority** is a body corporate charged under the water act with the overall responsibility of overseeing sustainable development of the national water resource base. The functions of the WRA are to manage, protect and conserve the water resources
- ii. **Water Service Providers:** Provide water services to consumers, ranging from public urban utilities, small private network operators in rural areas and community managed self-supply through water users' associations.

3.6.3 Ministry of Lands and Physical Planning

Facilitate improvement of Kenyans livelihood through efficient administration, equitable access, secure tenure and sustainable management of Land resources. The ministry has the following key departments

Administration and Support Services: Overall policy direction and co-ordination of the Ministry's functions

Physical Planning: Provision of advisory and National Physical Planning services, general principles on land planning and coordination of planning by counties in terms of policies, standards and guidelines and technical assistance and capacity building for counties on Physical Planning matter

Land Adjudication and Settlement: Ascertainment of land rights and interests, land consolidation and adjudication, Acquisition of agriculturally viable land for settlement of poor landless Kenyans, management of the Agricultural Settlement Fund, management of Group Ranches as well as Arbitration of Land disputes.

Survey: The official Government agency for land surveying and mapping. Its responsibilities include production, maintenance and distribution of accurate geographical data in form of various types of both analogue and digital maps in full range of scales.

Land Administration: Administration and management of private land, control and regulation of land use and property in respect of all categories of land and maintenance of land records.

Land Valuation: Valuation of land and assets for stamp duty, Government leasing including foreign missions, asset valuation, rating and development of National Land Value Index.

Land Registration: Registration of land transactions and other legal documents and determination of land and boundary disputes in collaboration with Surveys Department.

In addition, Kenya Institute of Surveying and Mapping is a training institute under the Ministry, which offer Diploma courses in surveying and mapping. The agencies within the Ministry are Physical Planners Registration Board, Valuers Registration Board, Estates Agents Registration Board and Land Surveyors Board. The responsibility of these boards is to regulate the qualifications, registration and practice of the respective professionals in the land sector.

CHAPTER 4. APPROACH AND METHODOLOGY

4.1 Introduction

As mentioned above, in undertaking this assignment, we fully adhere to the constitutional, policies and legislative provisions at both National and County Governments. We have ensured that the principle of public participation is complied with. The Constitution of Kenya 2010, Vision 2030, National Land Policy, Physical Planning Act 1996, National Land Commission Act, County Government Act of 2012, EMCA, 2002, Land Act, 2012, Urban Areas and Cities Act 2011, and Survey Act and other relevant regulations will guide the planning and surveying of the selected informal settlements in Nairobi and Mombasa Counties.

4.2 Data Sources

In planning and surveying of the targeted informal settlements, both secondary and primary data have been used. Secondary data sources that have been used include published and unpublished government documents and other sources. Some of this data included the already available data from the previous consultant including maps, plans, reports, photos, stakeholder engagement reports, among others.

Primary data sources have included socio-economic data collected at household level. We have conducted structured interviews with both the National and County Government institutions operating in the informal settlement.

Some of the data variables for this assignment include the gender, ages, literacy levels, occupations of the household heads in the settlements. The distance to vital services like health and education will also been collected for planning purposes.

4.3 Preparatory Stage

The first step in undertaking this assignment was preparatory work, which included meeting with the Client, reconnaissance survey, acquisition of literature, publicising the process and scheduling activities. This was followed by community mobilization and sensitization for stakeholder engagement.

At the commencement of the project, a pre-survey visit to the informal settlements was conducted to explore the initial condition of the neighbourhoods and to gather any information that may assist in proper planning of the project tasks. During such visit, we established contact with the Client representative and other stakeholders to further understand the context of the project in terms of the following:

- i. The security situation of the neighbourhoods and any foreseeable security issues through the project activity period.
- ii. The amount of project awareness among the communities resident in the project sites/neighbourhoods
- iii. Mobilization and sensitization of the resident communities in the projects areas
- iv. The respective project obligations of the parties in the contract i.e. consultant and the client.
- v. Any extra support the consultant might need from both the client and the resident community in successful execution of the project tasks.
- vi. The best work plan and possible activity timelines in execution of the project activities.
- vii. The best technologies, methodologies and resources to apply in execution of project tasks depending on the field circumstances

4.4 Community Engagement and Sensitization

Our important entry point in stakeholder mobilization was the introduction of the consultant by KISIP to the County Governments of Nairobi and Mombasa, Settlement Executive Committees (SEC) and the respective communities in the respective settlements. The first step was to re-sensitize them on the project and introduce the new consultant. The consultant engaged and re-sensitized the community through workshop-based approach, meetings, focused group discussions, transect walks, and participatory planning and mapping.

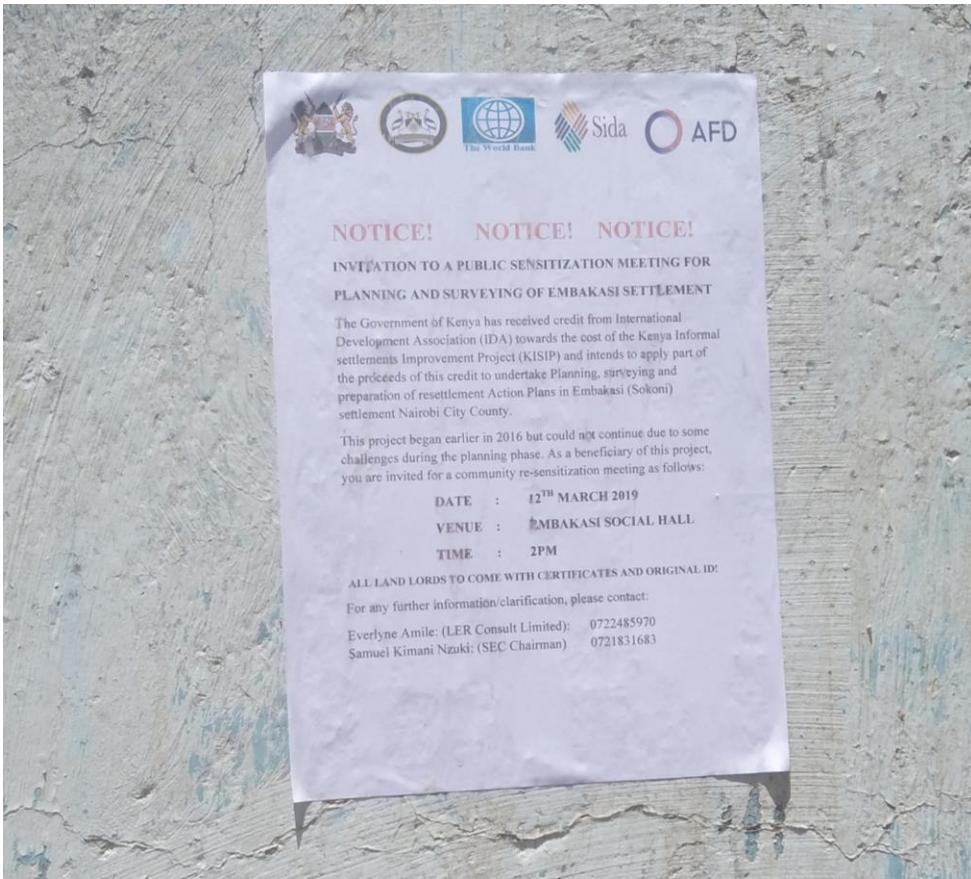


Plate 4-1 Sample notice issued to beneficiaries ahead of a community sensitization meeting
Source: Field survey, 2019

The community was further involved in the socio-economic survey and physical mapping of their settlement. Several levels of surveys were undertaken concurrently (socio economic, physical mapping and base maps preparation). This included socio economic survey of the households and businesses as well as biophysical characteristics in each settlement. Socio – economic survey covered issues such as i.e. details about the beneficiaries, structure owners and tenants. This was achieved using specific instruments, i.e. structured household and business questionnaires, observation sheet, GPS and GIS platform, and photography. Research assistants, were recruited from the 4 informal settlements under this consultancy. Recruitment of research assistants from the respective informal settlements was an integral part of stakeholder participation and ensured successful execution of the assignment. The research assistants were trained and piloting done to ensure efficacy of the approach and methodology.

4.5 Preparation of the Base Map

Local demarcation of the structures was carried out in preparing Embakasi informal settlement base map. This was to ensure all the structures and vacant parcels are captured. As noted above the local demarcation plan informed the socio-economic survey exercise. Biophysical characteristics including wetland, biodiversity, and other environmentally sensitive areas, etc,

were mapped. The updated base map will later be overlaid with the existing LPDP to check on the accuracy.

The preparation of the base map entailed several sequential processes:

- i. **Sourcing available data and maps on the Settlement:** Registry Index Map (RIM), existing LPDPs, aerial photograph map of the settlement will be acquired in the form of hard copies (for LPDPs and RIMs) and soft copy aerial images for the site. The hard copy LPDPs and RIMs will be scanned and geo-referenced using both GIS and CAD software i.e. ArcGIS and AutoCAD to bring them to a common coordinate system i.e. Universal Transverse Mercator (UTM) projection on Arc 1960 datum.
- ii. **Local demarcation:** This step will be done by carrying out ground local demarcation of all the existing structures. The importance of this activity will ensure where aerial mapping cannot be done the congested slums, the consultant will capture the actual details i.e. the size and location of each plot by use of GPS. This information will be integrated with the digital PDPs.
- iii. **Establishment of settlement site survey controls:** Using the RIM information, survey plans will be sourced in the neighbourhood of the settlement to identify previously used cadastral survey control points or existing property corner beacons that could be used as reference in verification of settlement site boundaries and site plan demarcation.
- iv. **Verification of settlement boundary and other salient features in the settlement:** Field ground truthing and accurate demarcation of the informal settlement perimeter boundaries, fixing of survey control point and identification of salient topographic features, public institutions, public spaces, utilities and other land uses of interest within the project site will be undertaken through transect walks and in collaboration with the beneficiary community representatives and County Government officials. These features will be mapped using GPS.

The SEC was particularly important in the verification and demarcation of the settlement boundary to confirm the spatial extent of the settlement site. During a transect walk in the settlement, the SEC were able to confirm the extent of their settlement using key features. Additionally, there may be some other buildings within the settlements, which belong to individual institutions and other organizations such as churches, which may need to be identified. In addition, the SEC confirmed the existing beneficiary plot boundaries which were identified during the transect walks.

The prepared base map has been used as a basis for conducting the socio-economic survey to verify the socio-economic report. The structure maps in the settlement base map were used to identify the structures, mark and number them according to the numbering system that fit the

informal settlement. A digital data collection system was employed to undertake socio – economic survey and generate geo – referenced plots matching with their ‘plot owners.’ Recruitment of research assistants from the informal settlement was an integral part of the socio economic survey and ensured successful execution of the assignment. The research assistants were trained and piloting done to ensure efficacy of the approach and methodology. Further, during the community meeting held on 2nd April 2019, the recruited research assistants were introduced to the community for familiarity with the community members.



Plate 4-2 Project Sociologist addressing research assistants during their training
Source: Field survey, 2019

4.6 Socio-economic survey

A 100 percent socio-economic survey of households, businesses and other institutions was based on agreed eligibility criteria, and undertaken in close collaboration with the community representatives, i.e. SEC, KISIP and City County Government. The agreed criteria is that the census covered persons who made use of the land in the informal settlement either living in the informal settlement, or undertaking a commercial activity in the settlement. The following approach was adopted:

- i. **Identification, enumeration and verification of people against identified structures:** the community representatives, i.e. SEC officials to avoid cases of land grabbing, identified each beneficiary. Appropriate identification documents (National Identity Cards, ownership documents issued by lawful authority) were assessed to form the basis

for issuance of identification documents to the enumerated household/businesses. A photograph of the beneficiary was also taken. All beneficiaries were captured; whether male headed, women headed or child headed.

- ii. **Enumeration of structures:** Each identified structure was marked using GPS coordinates. A digital photo of the structure was also captured for inclusion in the database of the structures. All other attributes of the structures were captured. Each plot as identified by the beneficiary was measured to ascertain the size.

Table 4-1 Nature of plots in Embakasi informal settlement

Type of plot	Number of plots
Developed plots	105
Undeveloped plots	6
Total	111

Source: Field survey, 2019

Table 4-2 Nature of structures in Embakasi informal settlement

Nature of structure	Number of structures
Permanent structures	70
Temporary structures	35
Total	105

Source: Field survey, 2019

- iii. **Enumeration of structure attributes:** Alongside the spatial attributes, other non-spatial attributes of each structure were also captured such as names of the structure owners, and tenants, the entire household of both structure owners and the tenants. All this and other necessary data were captured in the digital questionnaire during the socio- economic survey.
- iv. **Verification of socio-economic data:** The final socio-economic data was updated, verified and adopted by the community representatives and county government at the end of the exercise. The socio-economic report as presented to the community, KISIP and Nairobi City County for review and verification. The reviewed report was presented to the stakeholders in a verification workshop and discussed for validation.

The socio-economic data reveals the required amount services for the settlement. The total population of the settlement is a vital data variable for physical planning.

4.7 Stakeholder Participation

A transect walk was conducted in the settlement on 12th March 2019 ahead of the enumeration exercise. City County officials, SEC members and the community participated in this exercise.

This was aimed at mapping out immediate planning needs of the community. During the transect walk, the following issues were deduced:

- i. More than 90% of the structures in the settlement are permanent thus, this will be a factor to be given much consideration in an effort to minimise displacement and relocation of beneficiaries.
- ii. Although the roads are clearly mapped out, some structure owners had built into the road proposed reserve. Further discussions will be carried out on how to handle these beneficiaries.
- iii. The settlement is composed of 111 plots.



Plate 4-3 The SEC members verifying the settlement plan for the consultant
Source: Field survey, 2019

Nairobi City County confirmed on the settlement boundary and the existing plots according to the draft survey plan of the area. This boundary was in tandem with the planning boundary given by KISIP.

Key stakeholders were involved in the preparation of the settlement for socio-economic survey. The meeting held on 9th May 2019, which was attended by KISIP, NCCG, Ministry of Lands and Physical Planning, SEC and the community, the community were informed on the socio-

economic survey. During the meeting, it was noted that the socioeconomic survey generates planning data and provides baseline data for future interventions in the settlement.

CHAPTER 5. SITUATIONAL ANALYSIS

5.1 Location size and extent of Nairobi County

Nairobi is the capital city and the largest city of Kenya, as well as, one of the most important economic centres in the East and Central African Regions. It borders the Counties of Kiambu to the north and west, Kajiado to the south and Machakos to the east. Among the three neighbouring counties, Kiambu County shares the longest boundary with Nairobi County. The County has a total area of 696.1 Km² and is located between longitudes 36°45' East and latitudes 1°18' South. It lies at an altitude of 1,798 metres above sea level.

Administratively, the county is divided into seventeen administrative sub counties, namely: Embakasi west, Embakasi east, Embakasi south, Embakasi north, Embakasi central, Kamukunji, Kasarani , Kibra , Langata , Makadara , Mathare , Roysambu , Ruaraka , Starehe , Westlands, Dagoreti north, Dagoreti south . (Republic of Kenya, Nairobi CIDP, 2018-2022).

The terrain in the eastern side of the County is gently rolling but divided by steep valleys towards the City boundaries. There are three forests in the County, namely Ngong Forest to the south, Karura Forest to the north and the Nairobi Arboretum.

Embakasi informal settlement is in Embakasi East Constituency in Nairobi County. It is located near Embakasi Road to the north of the Jomo Kenyatta International Airport. The settlement is linked through North Airport Road/Eastern bypass with Mombasa Road and Outer ring road. The Nairobi City County owns the land where Embakasi informal settlement is located. The settlement is approximately 2.43ha in size.

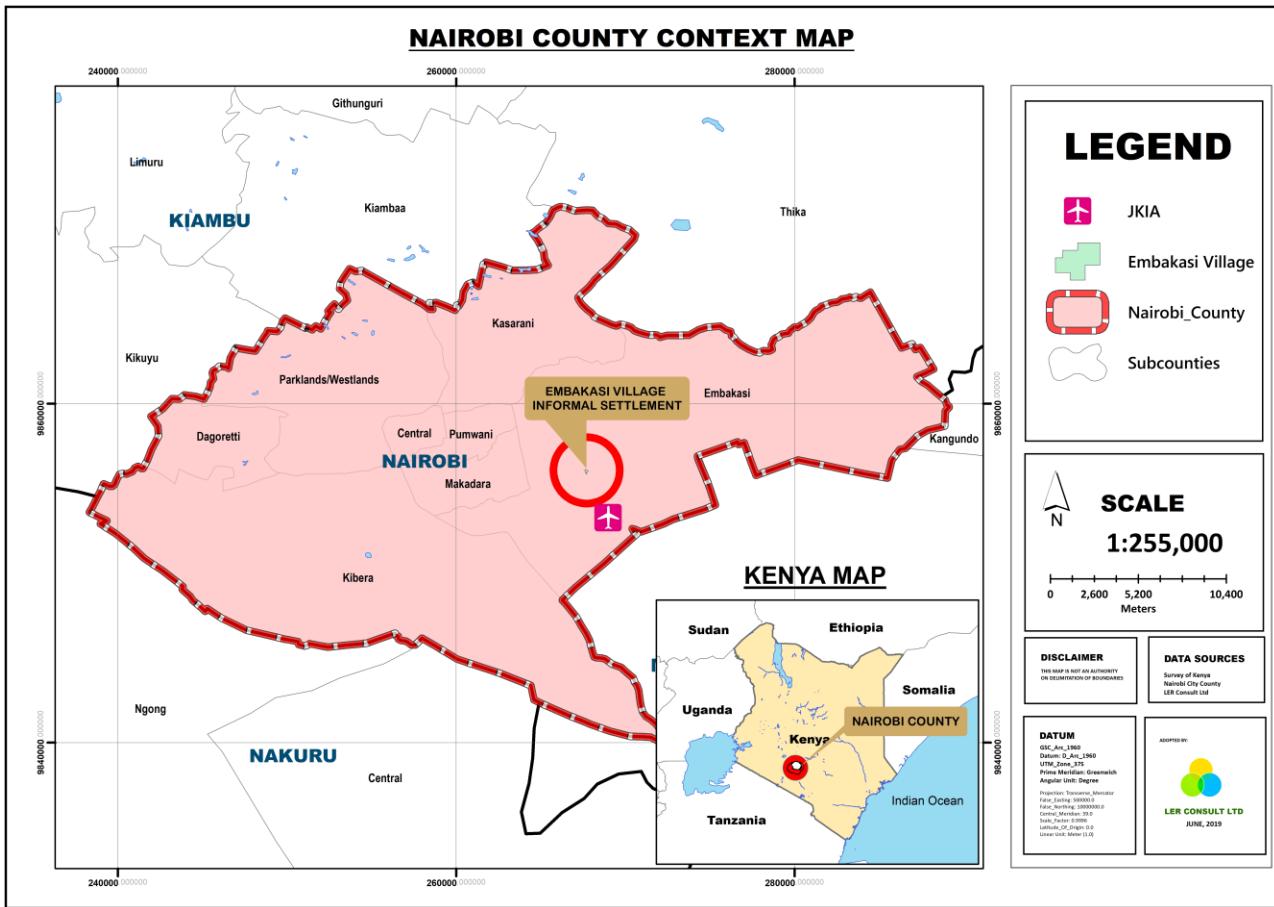


Figure 5-1 Embakasi settlement within the Nairobi City County context
Source: LER Consult, 2019

5.2 Climate

The County has a cool climate resulting from its high altitude. Temperature ranges from a low of 10°C to a high of 29°C . It has a bi-modal rainfall pattern. The long rains season falls between March and May with a mean rainfall of 899 mm while the short rains season falls between October and December with a mean rainfall of 638 mm. The mean annual rainfall is 786.5 mm.

5.3 Population size and density

According to the National Population Census of 2009, the population of Nairobi County stood at just 3,138,369, however, as of 2019, the population is projected to have grown to 4,556,381. The county has about 200,000 households. The population density is relatively low approximately 209 persons per Km². Poverty rate in the county is 32.4 percent, which is below the national average of 46.6 percent. In 2030, the population of the city is projected to be 7,030,891 persons. This population will exert more pressure on the available resources such as housing, water and other related infrastructure.

5.4 Education, literacy, and infrastructure

The County enjoys one of the highest literacy levels in the country as highlighted below:

5.4.1 Pre-school education

The County has 555 (211 public, 344 private) ECD centers with a teacher to pupil ratio of 1:29. The pre-primary retention rate is 99% with a dropout rate of 0.2% while the transition rate is 99%.

5.4.2 Primary education

The County has 2,205 public and private primary schools with total enrolment of 447,534. The gross enrolment rate is 84% while the net enrolment rate is 77.8%. Dropout rate stands at 3.6%. The average years of attendance for primary school are 8 years while the retention rate is 90%. Transition rate to secondary is at 78%.

5.4.3 Secondary Education

Nairobi County has 95 public secondary schools and 57 private secondary schools with 2,028 teachers with a total enrolment is 48,669.

5.4.4 Tertiary education

Nairobi County hosts two public universities namely, University of Nairobi and Technical University of Kenya. There are 10 private universities and 16 campuses operated by both public and private universities in the County. Most of the campuses are located within the Central Business District (CBD). In addition, the County has 237 science and technology institutes.

5.4.5 Technical, vocational education and training

There are 12 vocational centers in the County with total enrolment of 477 students. The numbers of vocational training instructors is 45. The teacher to student ratio is 1:11; transition rate is 45% while the retention rate is 55%.

5.5 Water and sanitation

Nairobi County has no major water tower and relies on other neighboring counties within the Tana Basin that is around 50 km from the City for its water supply. This bulk water supply is not reliable during periods of drought, and is endangered by siltation of the reservoirs due to deforestation in the catchment areas. The supply problem is further aggravated by the poor state of the distribution system, which results in about 38% losses due to leakage, illegal connections and inefficient and wasteful use of water by some consumers.

5.6 Road, railway network and airports

The current road network in the County is inadequate in terms of coverage to meet current and future demands as envisaged in the Vision 2030. There is heavy congestion on most of the City's roads especially during the morning and evening peak hours. The total road network covers 3,602km out of which 1,735km are tarmac while 1867km are earth roads. The current poor state of the road network is a great impediment to socio-economic growth leading to high production costs and low productivity. The completion of Thika Super Highway, bypasses and missing links within the County has helped to reduce congestion but a lot more needs to be done.

Nairobi County hosts three airports; Jomo Kenyatta International Airport, Wilson Airport and Eastleigh Airport. Jomo Kenyatta International Airport (JKIA) is the biggest airport in East and Central Africa, and is the focal point for major aviation activities in the region. Its importance as an aviation centre makes it the pacesetter for other airports in the region. JKIA, located 18 kilometers to the east of Nairobi City Centre, is served by 49 scheduled airlines.

Wilson Airport is the second airport in the County. It has two runways one that is 1,463m long and 24m wide while the other is 1,558 m by 24m wide with displaced threshold giving a landing distance of 1,350m.

The Kenya Air Force uses East Leigh Airport. The County has a railway network of 75km and 10 functional railway stations that are Embakasi, Makadara, and Nairobi main terminal, Dandora, Githurai, Kahawa, Kibra, Dagoretti, JKIA and Syokimau. The established Makadara and Imara Daima railway stations and expansion of Nairobi platform has improved public transportation in Nairobi and with it socio-economic development.

In Embakasi informal settlement, the transport network of the settlement is well established. The main access road to the settlement is a 9m wide road that goes round the settlement. There is a network of roads within the settlement including 9m, 6m, 4.5m, 3m roads and 1.5m wide paths between the structures. Part of settlement is connected to a sewer line while the other parts use septic tanks. The sewer line runs along the 9m road abutting the settlement to the west.

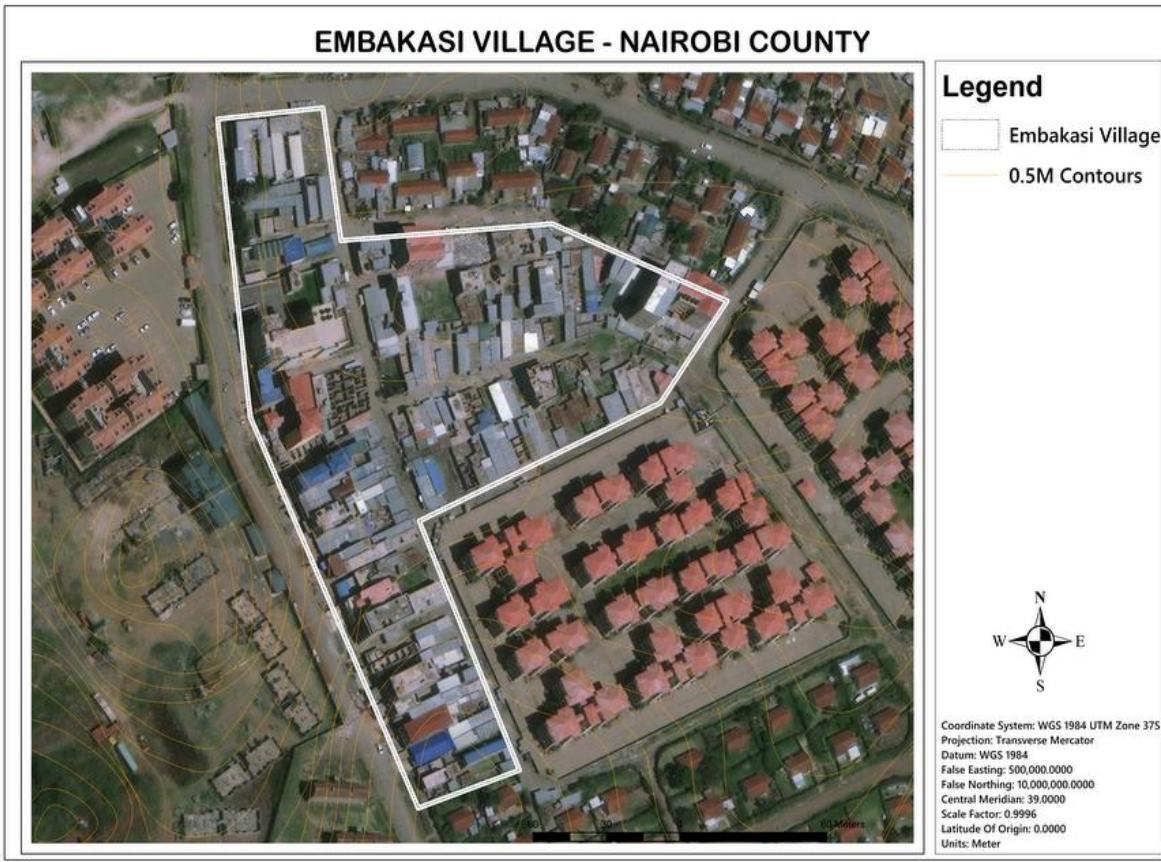


Figure 5-2 Map showing extent of Embakasi informal settlement
Source: LER Consult, 2019

5.7 Energy access

The main sources of energy in Nairobi County are electricity, solar, liquefied petroleum gas (LPG), biogas, paraffin, charcoal and firewood. Lack of access to clean sources of energy is a major impediment to development due to health related complications such as increased respiratory infections and air pollution. The type of cooking fuel used by households is related to their socio-economic status. High-level energy sources are cleaner but cost more and are used by households with higher levels of income compared to simpler sources of fuel, mainly firewood, which are mainly used by households with a lower socio-economic profile. For instance, 63.2% of the population use paraffin as cooking fuel. Other sources of energy for cooking include LPG (20.2%), charcoal (10.5%) and firewood (1.8%). About 68.2% of households use electricity as a means of lighting 28.8% use while 2.9% and 1.7% use grass and dry cells respectively.

5.8 Housing typology

Materials used in the construction of dwelling units are an indicator of housing conditions and the extent to which they protect occupants from the elements and other environmental hazards.

Availability of materials, cost, weather and cultural conditions have a major influence on the type of materials used in different localities.

Stone, brick / block, mud/wood and corrugated iron sheet mainly characterize the housing type by wall materials in Nairobi County. The stone and block walled houses account for 65.9% while wood and corrugated iron sheet account for 31.1%.

The classification by floor type indicates that 75.8% of household have cement floor, 14.2% earthen floor, 7.5% tiles and 2.2% for those with wooden floor. Most of the households in Nairobi have corrugated iron sheet roofed houses that accounts for 56.6%. Tiles and concrete roofs account for 12.4% and 27.9% respectively.

5.9 Incidences of landlessness

The proportion of households that have title deeds in the County is low, a higher proportion of the non-poor compared to the poor own title deeds. The numbers of parcels held by the poor stands at 1,565 while those of the non-poor stands at 6,944. It is worth noting that all of the 1,565 parcels operated by the poor have no title deeds. This situation is also shared by 33.4% of the non-poor operating about 2,389 parcels.

The complexity of land issues in the County has affected a big proportion of its residents both poor and non-poor with the poor living in informal settlements and bearing the highest burden of landlessness. This situation is fuelled partly by historical land injustices, land grabbing and influx of unskilled and semi-skilled job seekers from rural areas. About 450,000 households living in informal settlements experience some form of landlessness, Embakasi informal settlement being one of them.

5.10 Economic situation

Nairobi commands the largest share of formal sector wage employment in Kenya. The manufacturing industry accounts for the highest wage employment followed by trade, restaurants and hotels. The construction, transport and communications industries also play a key role in generation of wage employment. Other important sectors include finance, real estate and business services. The main formal employment zones in Nairobi are the CBD, Industrial Area, along Mombasa Road, along Thika Road and Dandora.

A large segment of the labor force in Nairobi is self-employed largely in the informal sector. The informal sector covers small-scale activities that are semi-organized, unregulated and which use low and simple technologies while employing few people. The ease of entry and exit into the informal sector, coupled with the use of low level of technology, makes it an easy avenue for employment creation especially for the youth.

Employment is a major source of income and an important determinant of social and economic outcomes. Holding all other factors constant, households that are most affected by unemployment are more often poor households. Urban poverty and labor force participation are strongly related because earnings in the labor market are the main sources of income for urban dwellers. However, participation in the labor market does not guarantee being above the poverty line. The level of unemployment in Nairobi stands at 14.70%. The “working poor” account for a substantial proportion of all the poor in Nairobi. This reflects in part the fact that the poor are employed in low productivity industries, including the informal sector.

5.11 Environmental threat and degradation

Environment degradation in the County has contributed to loss of biodiversity, floods and destruction of habitats along river basins. It has also led to diminishing health and sanitation standards because of pollution.

Nairobi’s large and growing population is one of the main forces driving the County’s overwhelming environmental degradation. Other contributors include increased number of vehicles, unplanned and uncontrolled settlements, poor solid waste management, uncontrolled development, untreated industrial discharge and inefficient energy use. Pollution control measures are hampered by inadequate capacity for enforcement of existing environment conservation policies.

5.12 Solid waste management

Major challenges facing Nairobi County with respect to solid waste management include management of waste collection and disposal. Identification and maintenance of final disposal sites will be a critical concern in the immediate term. There is need for private organizations to take up critical functions like recycling, transportation and solid waste management.

Nairobi County generates over 2400 tons of garbage per day projected to be 3200 tons per day by year 2022. Under the current scenario only about 60% of generated waste ends up at the final disposal point. Approximately 10% of generated waste is recycled with the rest ending up in rivers and other undesignated places.

CHAPTER 6. SOCIO-ECONOMIC PROFILE OF EMBAKASI INFORMAL SETTLEMENT

6.1 Introduction

Embakasi informal settlement is composed of 111 plots. The beneficiaries compose of 126 male and 91 female beneficiaries. It has a population of approximately 6,743 people. It is composed of 1625 households with a mean household size of four (4). The following subsections discuss the socio-economic characteristics of the residents in Embakasi informal settlement.

Population size and population projection

At the time of this survey April 2019, the population of Embakasi informal settlement stood at 6,743 people. With a population growth rate of 2.9 percent per annum, the population of the settlement is projected to rise to 9,334 people by the year 2030.

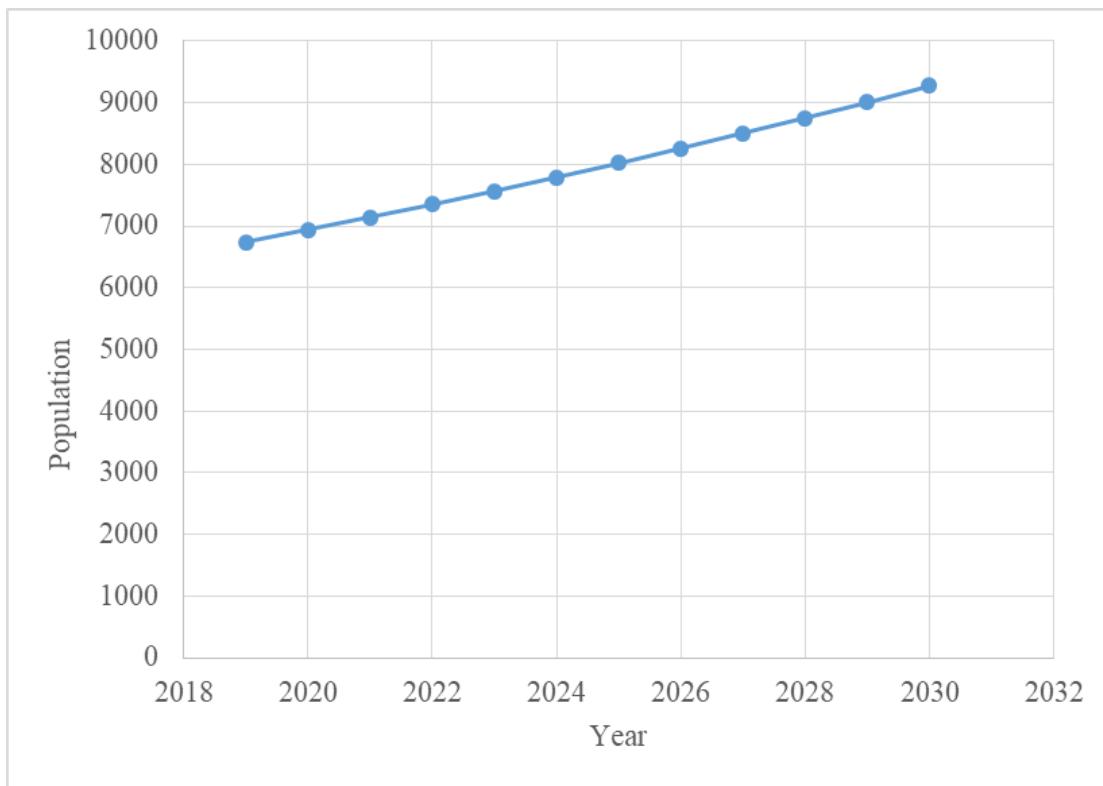


Figure 6-1 Population projection, Embakasi informal settlement

Source: Field survey, 2019

The population density in the settlement is 2,774 persons per hectare and it is projected to rise to 3,817 persons per hectare by the year 2030. The rise in population will have implications on service delivery.

6.2 Mode of plot acquisition

The mode of acquisition of plots in Embakasi informal settlement has predominantly been through purchasing (58%). However, 21% reported that they were allocated the plots by the local administration while 13% acquired the plots themselves something akin to what lawyers call adverse possession. Despite these modes of acquisition, 37% of the structure owners did not have any document as proof of ownership. Forty-four (44%) had a temporary occupancy license, 5% claimed to having title deed but failed to produce authentic proof. Structure caretakers who did not have any form of proof mainly claimed this. The City County Government further confirmed that the land still belonged to them and alienation had not been done. 14% of the structure owners had other documents including sale agreement and certificate of ownership written by the area chief or the village elder. The beneficiaries have a registered community based organisation that they use to manage the settlement. The CBO has issued membership cards to the members. This membership card was the one beneficiaries stated as certificate of ownership of the land. It must be noted that this other documents (14%) had not been registered in the sense of Land Act 2016 section 2 (i) rendering them legally not binding and of no effect to security of tenure. This reveals low level of knowledge among the beneficiaries on the legally known forms of land registrations. The planning and surveying of the informal settlement will culminate into issuance of legal land titles for the structure owners thus giving all structure owners legal recognition of the structures and the land the structures sit on.

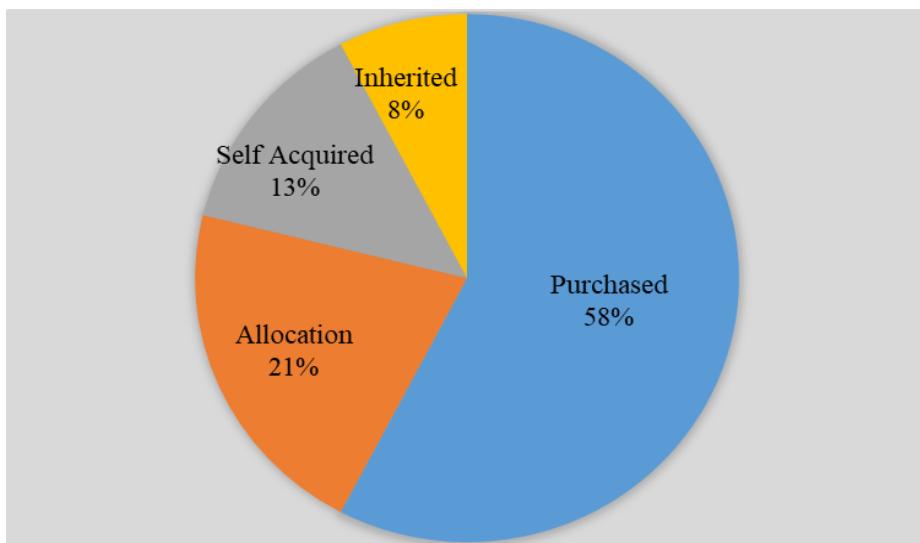


Figure 6-2 Mode of structure acquisition, Embakasi informal settlement
Source: Field survey, 2019

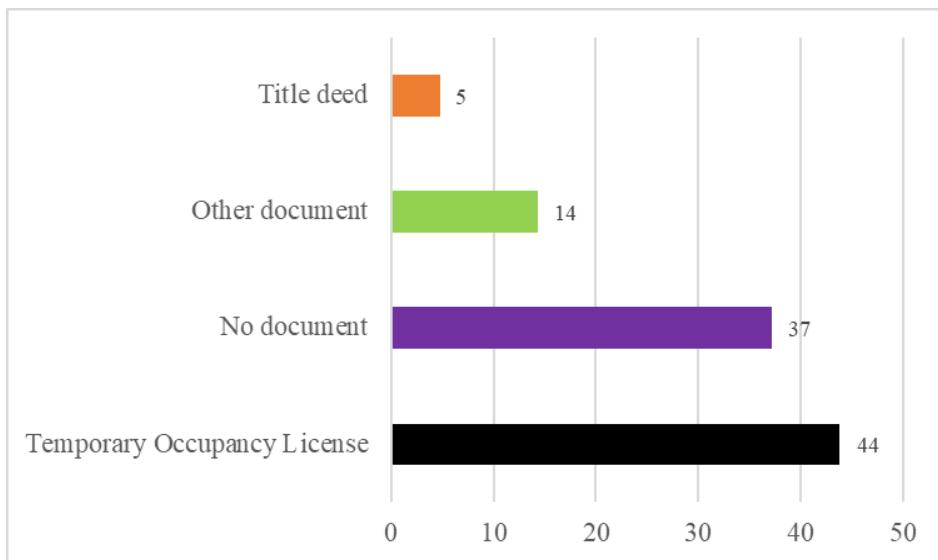


Figure 6-3 Proof of ownership, Embakasi informal settlement

Source: Field survey, 2019

6.3 Length of residence within the settlement

More than 62% of the beneficiaries have resided in the settlement for more than 10 years. This is a long period to understand the challenges the settlement faces and probable solutions to them. One of the main benefits of living in one place is developing a strong sense of community/social network, making it easier to establish and maintain long term.

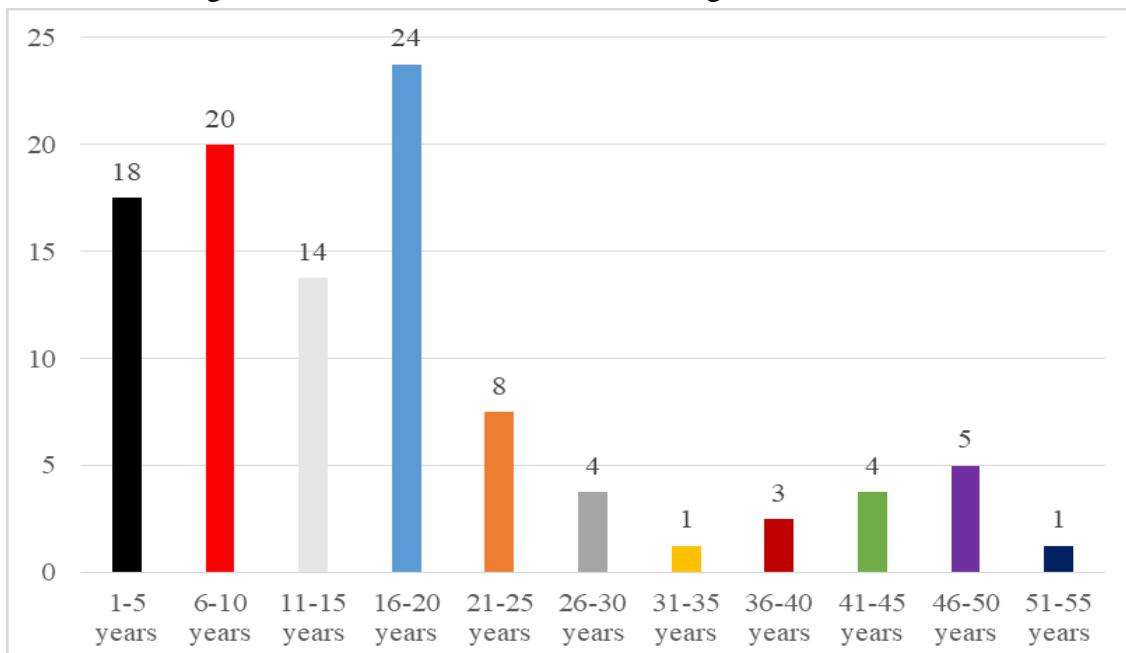


Figure 6-4 Length of stay among beneficiaries in Embakasi informal settlement

Source: Field survey, 2019

Economic reasons are the main reason for the movement into the settlement. Majority of the beneficiaries have built rental houses and established businesses within the settlement. Fourteen percent (14%) of the beneficiaries experience eviction elsewhere forcing them to settle into the settlement.

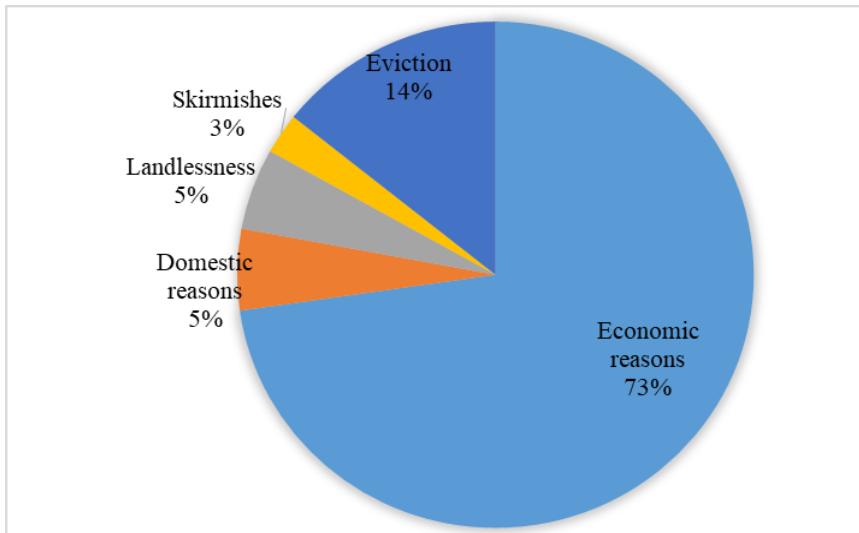


Figure 6-5 Reasons for settling in the settlement

Source: Field survey, 2019

6.4 Plot sizes

Plot sizes within the settlement ranges from 0.1 – 0.28 ha. These plot sizes are bigger compared to other informal settlements that are usually characterised by very small plots. The plot sizes in Embakasi informal settlement are adequate to produce an individual title according to the Physical Planning Handbook.

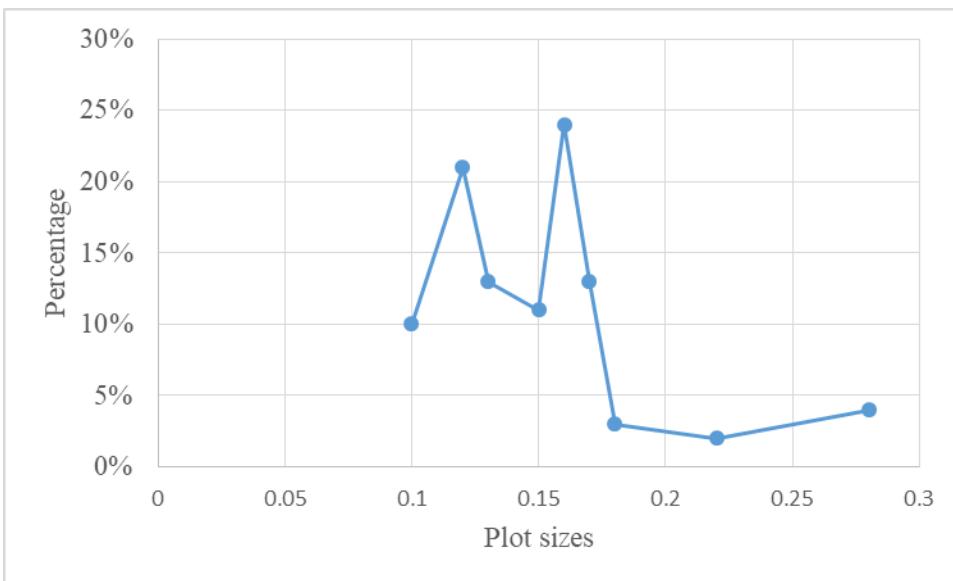


Figure 6-6 Plot sizes in Embakasi informal settlement

Source: Field survey, 2019

6.5 Structure ownership according to gender

There exist large gender inequities in the ownership and control of assets of primary importance such as land for housing and property for entrepreneurial activities both globally and Africa in particular (Cheryl, et.al. 2013; Robe horst, 2011). Embakasi settlement men own 58% of the structures while the women own 42%. High male population can be explained by the dictates of our social structure that demanded men to go out in search of salaried work leaving behind their families in the countryside.

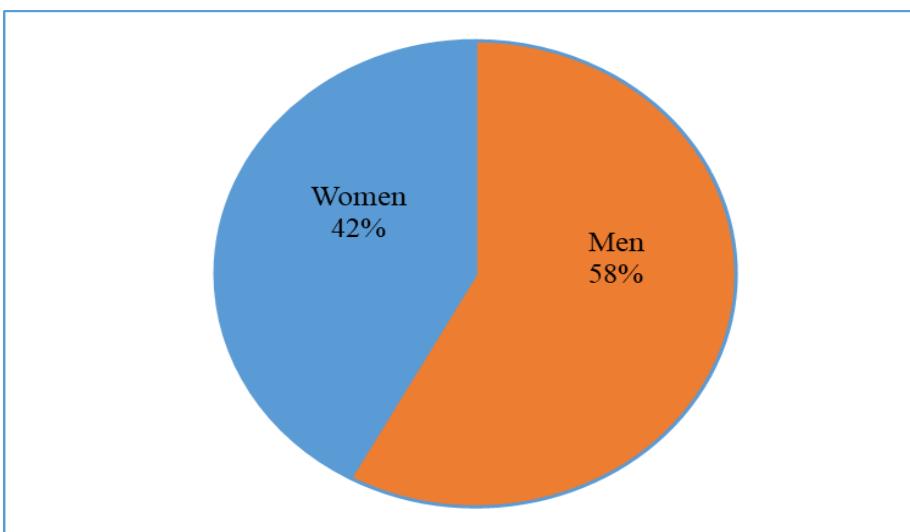


Figure 6-7 Gender of beneficiaries

Source: Field survey, 2019

6.6 Marital status of the beneficiaries

The marital status of beneficiaries of Embakasi informal settlement is presented in figure 6-8. Information carried in this figure reveals that 81% of the beneficiaries were married, about 7.6% were single, 9.5% were widowed and 1.9% were separated. This is very high compared to the Nairobi county marital status which stands at 38.4% married (KNBS, 2017). Over seventy per cent of the Embakasi settlement beneficiaries being married and/or in family set up means this population is hopeful and aspire for a better tomorrow, which will be hugely boosted by tenure security.

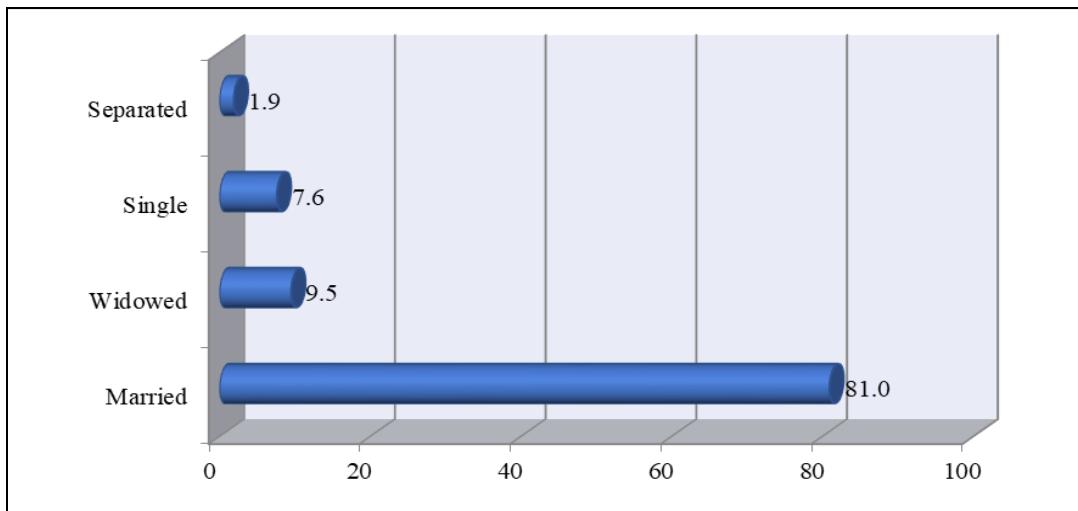


Figure 6-8 Marital status of the beneficiaries

Source: Field survey, 2019

6.7 Education level of beneficiaries

Socio-economic survey data contained in figure 6-9 shows that a significant portion of beneficiaries had attained secondary education (37%) and another 31% have attained university education. The presence of several private primary schools within the settlement also shows that the community has embraced education. This indicates a very high literacy and transition rates for both secondary and tertiary/university education. High literacy levels of the beneficiaries' increases their chances in accessing opportunities that would improve their livelihoods through higher incomes. The higher incomes coupled with secure land tenure would lead to improved standards of living in the informal settlement, therefore investing in education as part of planning for Embakasi informal settlement should be a priority.

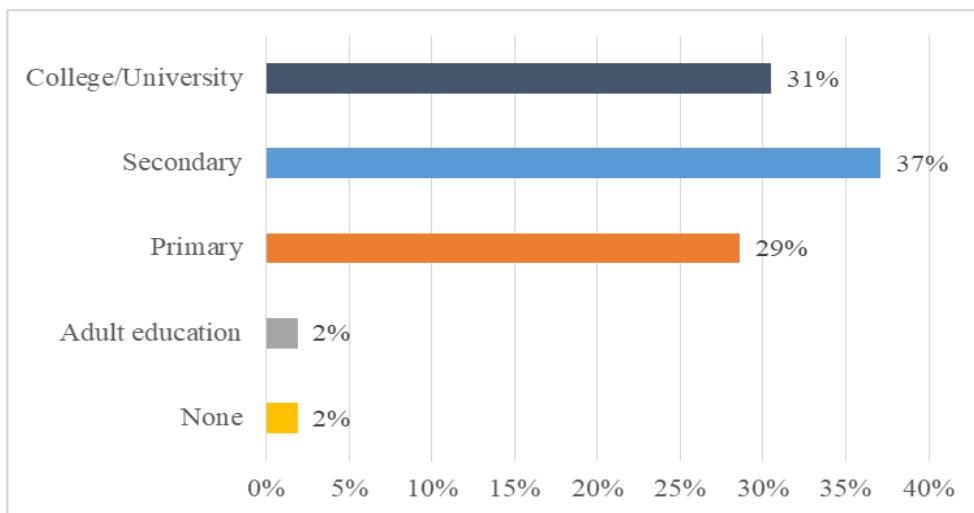


Figure 6-9 Education level of beneficiaries

Source: Field survey, 2019

6.8 Occupation and income

The employment structure is a basic indicator of economic soundness of households. It gives the ratio of the working and non-working population and dependency ratio. Over 80% of beneficiaries of Embakasi informal settlement were employed either as self-employed, private sector employee or as civil servant. This comes as no surprise given their level of education and proximity to the Jomo Kenyatta International Airport and being situated in the capital city of Kenya, Nairobi. Nevertheless, 6% of the beneficiaries are unemployed.

The prevalent of unskilled work among the residents reflects their uncertainty and vulnerability to unstable income. Less than 25% of the Embakasi informal settlement population is engaged in formal work mainly consisting of Civil Servants (14%) and private sector employees (10%). This is not surprising given that over 70% of the residents have no post-tertiary training.

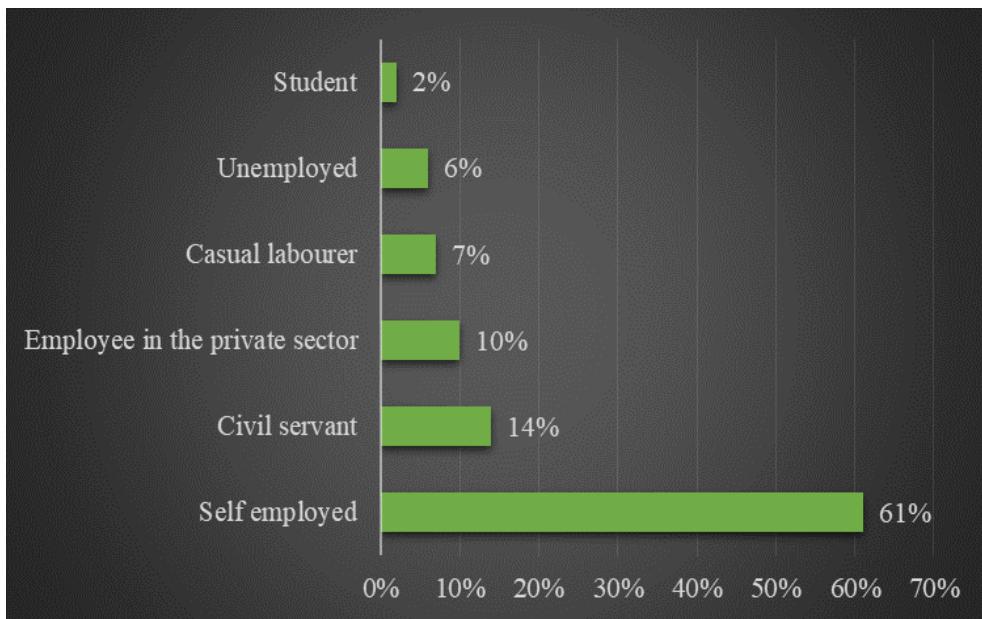


Figure 6-10 Occupation profile for beneficiaries in Embakasi informal settlement
Source: Field survey, 2019

The distribution of monthly income as shown in figure 6-11 indicate that around 31% of household have an income of less than one hundred US dollars a month and only 69% of the households earn more than two hundred dollars a month. This enhances their capacity to reach the basic socioeconomic requirements such as paying for infrastructure services. The occupational profile (figure 6-10) of Embakasi informal settlement reveals that the returns on their labour may be high because of technical training.

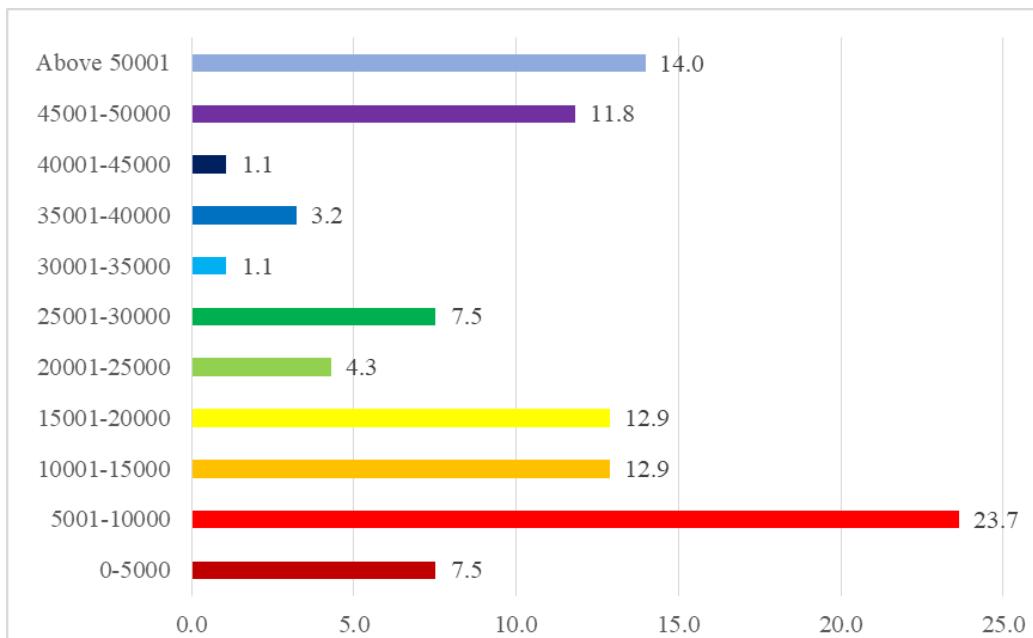


Figure 6-11 Income profile for beneficiaries in Embakasi informal settlement
Source: Field survey, 2019

Comparison between income for male and female beneficiaries reveal that females are better placed than the males. These may be attributed to women empowerment campaigns that have been carried out by both governmental and non-governmental organisations in the country.

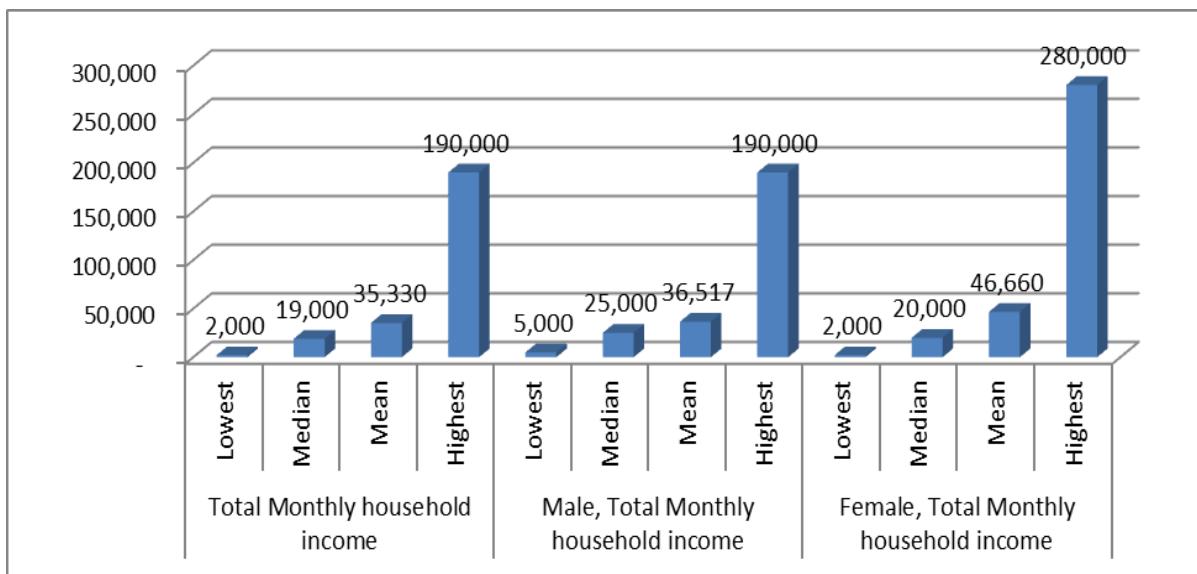


Figure 6-12 Comparison between male and female income levels

Source: Field survey, 2019

6.9 Transport and communication of beneficiaries

The settlement is located in Embakasi East constituency. It is well served by a motorable road connection, which is tarmac and partly earth roads within the settlement. The access road cutting across the settlement forms an economic hub where most of the economic activities within the settlement are carried out. The settlement is served by public transport and 51% of the beneficiaries said to utilise it as their common form of transport. Twenty-one percent (21%) of the beneficiaries use private car to move around (figure 6-13). Twenty-eight percent (28%) of the beneficiaries supplement their mode of transport with walking, use of motorcycles and bicycles to move around within the settlement. This may be attributed to the properly established road network within the settlement. Although the road network meets the recommended street widths, it lacks the requisite drainage facilities and other street infrastructures.

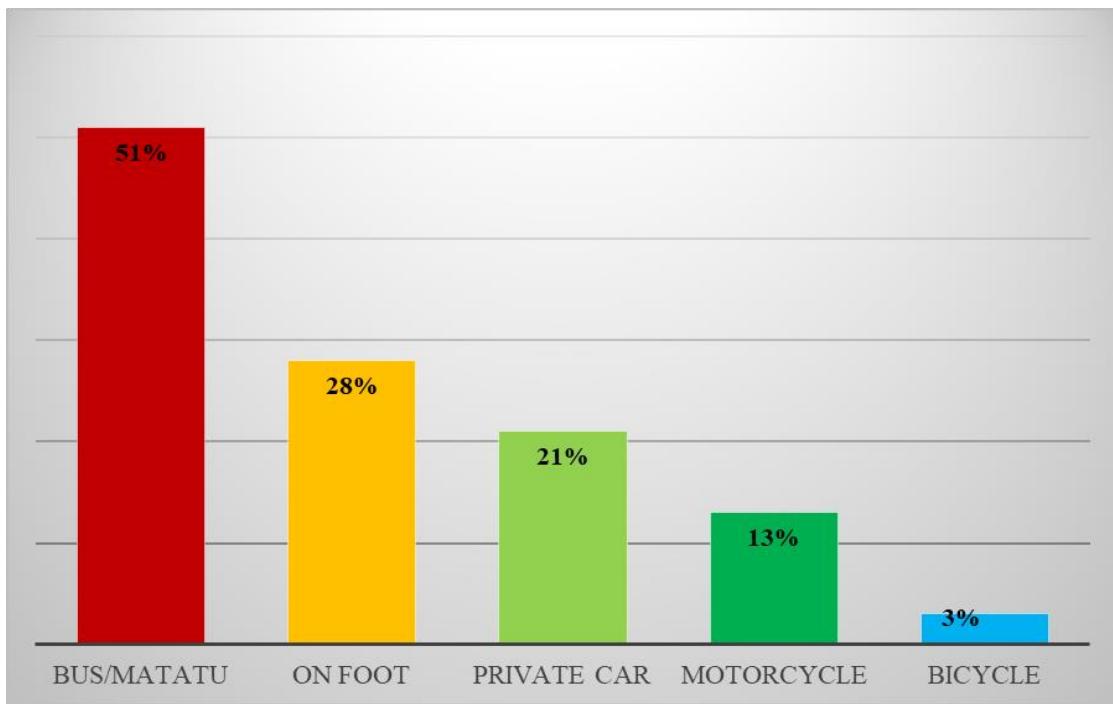


Figure 6-13 Mode of transport among beneficiaries in Embakasi informal settlement
Source: Field survey, 2019



Plate 6-1 An example of earth roads within Embakasi formal settlement
Source: Field survey, 2019

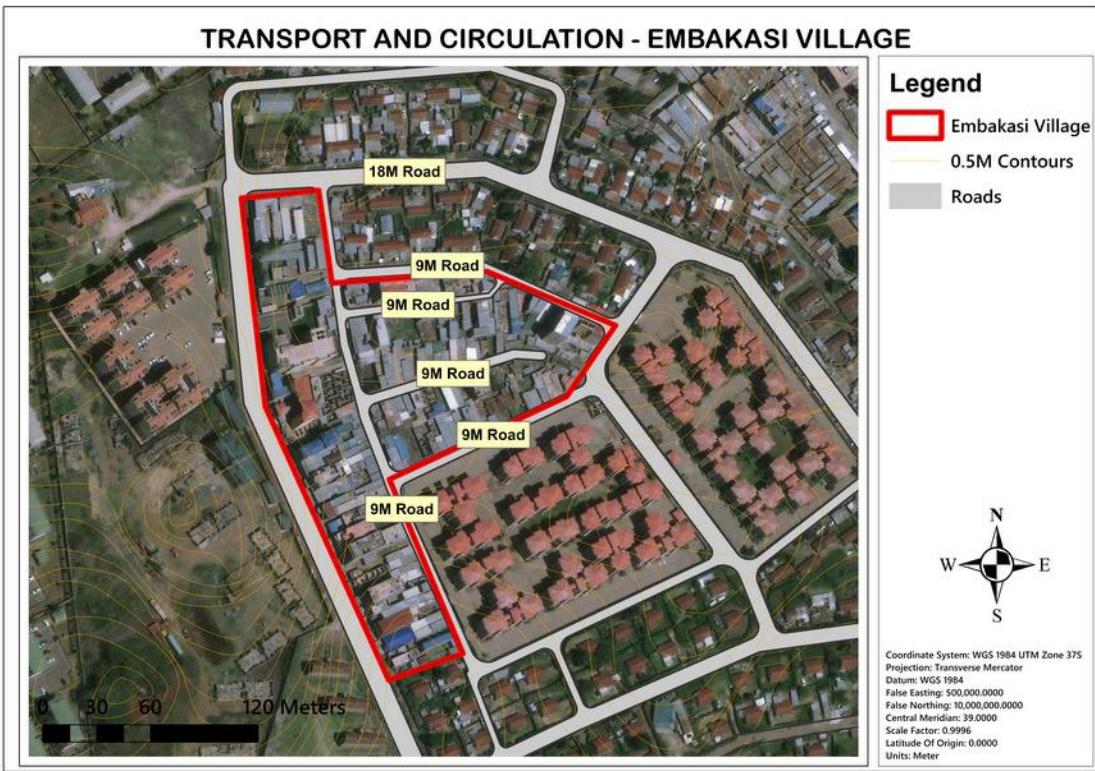


Figure 6-14 Existing road network within Embakasi settlement

Source: Field survey, 2019

All beneficiaries in Embakasi formal settlement use mobile phones as the primary mode of communication as shown in (figure 6-15). This is in line with the national mobile phone penetration rate of 100.1% (CA, 2018). Some community members use pay phones, letter and parcels as a way of communication. In addition, 26% of the community members also use physical contact as another important mode of communication.

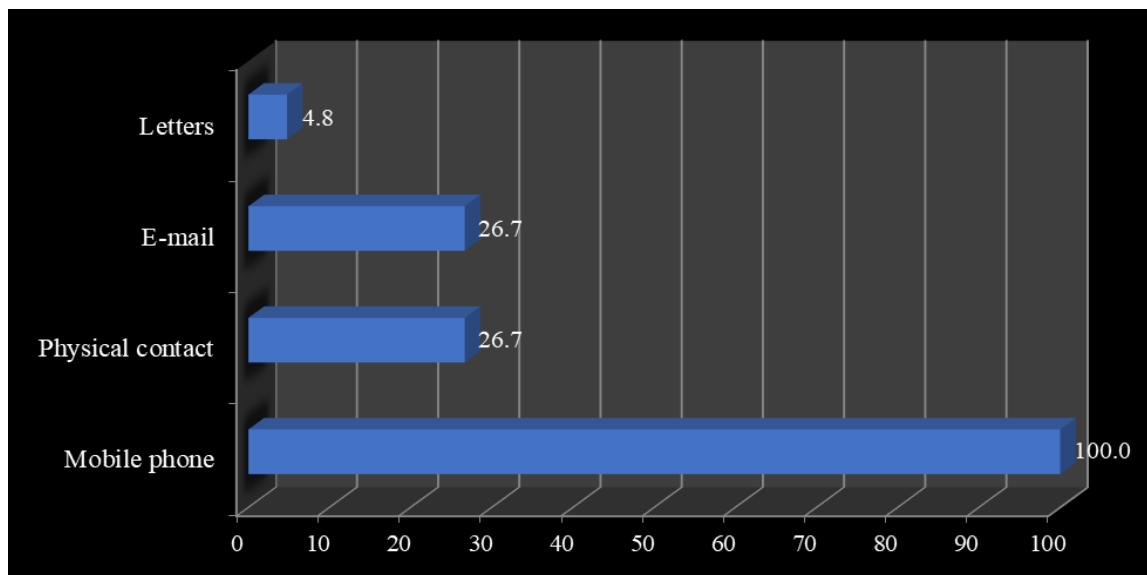


Figure 6-15 Mode of communication among beneficiaries in Embakasi informal settlement
Source: Field survey, 2019

6.10 Sources of Energy

LPG (62%) is the most popular source of cooking energy in Embakasi informal settlement. This is much higher than the County average of 20%. Slightly less than half the households in the settlement also use kerosene (42%). Other households supplement their cooking energy with charcoal (25%). Other sources of cooking energy recorded in the settlement include biogas, electricity and firewood.

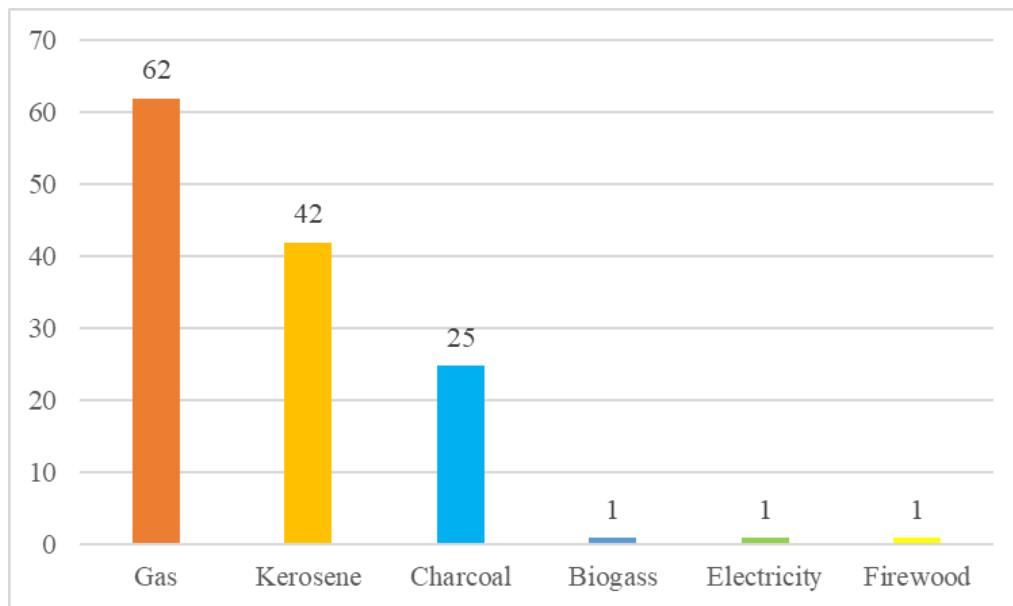


Figure 6-16 Cooking energy, Embakasi settlement
Source: Field survey, 2019

Electricity connectivity has expanded in the recent past due to the last mile government electricity connection programme and other funding of electricity projects. This has seen 83% of the households in Embakasi informal settlement connect their households to electricity and use it for lighting purposes. This is higher than the County average of 68%. However, it would be necessary to consider other sources of renewable energy, such as solar energy in the settlement.

6.11 Housing

Most of the structures in Embakasi informal are permanent in nature. Most of the houses are new and comprise of 3-5 storey houses. This is unusual of informal settlements that are characterised by temporary, old and poorly maintained structures. Most structures are made of iron – sheet roofs and stone walling. 82% of the structures have stone walls and 16% of iron sheet walls. The dominant flooring materials for structures in Embakasi informal settlement is cement (97%). Iron sheet is the predominant roofing material (90%). However, there are some structures with concrete slabs and tiles.

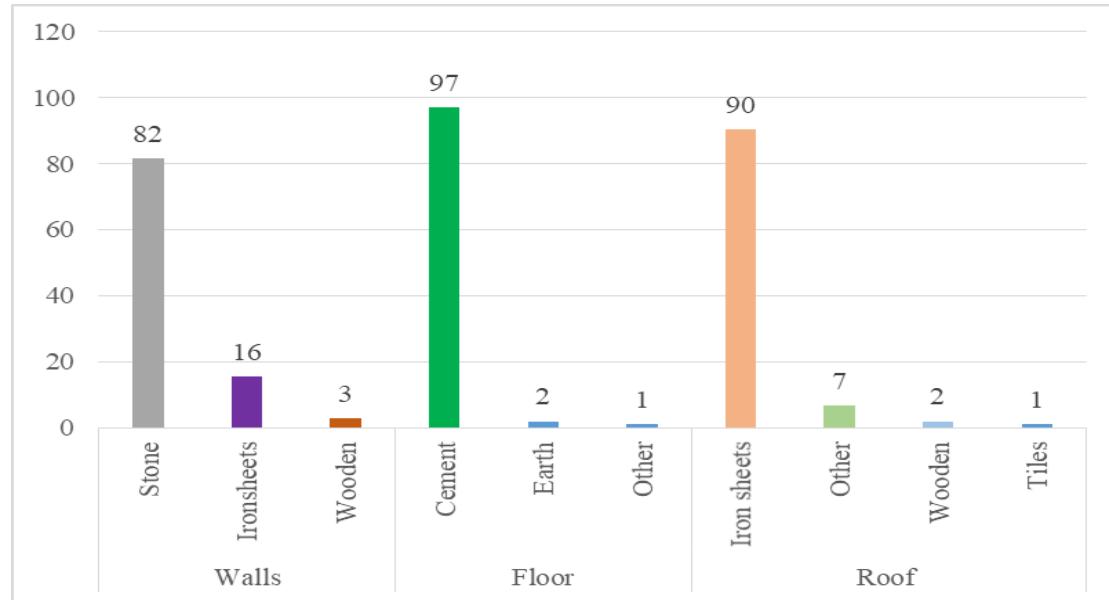


Figure 6-17 Structure characteristics, Embakasi informal settlement

Source: Field survey, 2019



Plate 6-2 Housing typologies in Embakasi informal settlement

Source: Field survey, 2019

6.12 Access to water and sanitation by beneficiaries

The causes of morbidity and mortality in the country are largely driven by the underlying determinants of health that relate to factors in the household/individual, environment, and the health system. Factors of environmental deficiencies include poor access to clean water and adequate sanitation, environmental degradation and its resultant stresses, presence of vectors, and other disease carrying variables (WHO, 2016).

The main water source for residents of Embakasi informal settlement are community water points and borehole water supplied by vendors at 49% and 34% respectively. The average cost of a 20liters jerry can of water retails at 10shillings. Thirteen (13%) of the residents reported to have access to pipe water either at their plot or in their house mainly supplied through Nairobi Water and Sewerage Company, with a negligible 1% of beneficiaries making use of rainwater when it occasionally rains.

6.13 Health seeking behaviour of beneficiaries

Health care seeking behavior receives enormous attention from Governments, households and development partners. To achieve good health in the population, significant amounts of resources have to be devoted from all the stakeholders. For instance, service providers have to provide affordable quality healthcare services to maximize health benefits to the highest number of plot beneficiaries. Figure 6-18 shows the healthcare seeking behavior of beneficiaries of Embakasi informal settlement.

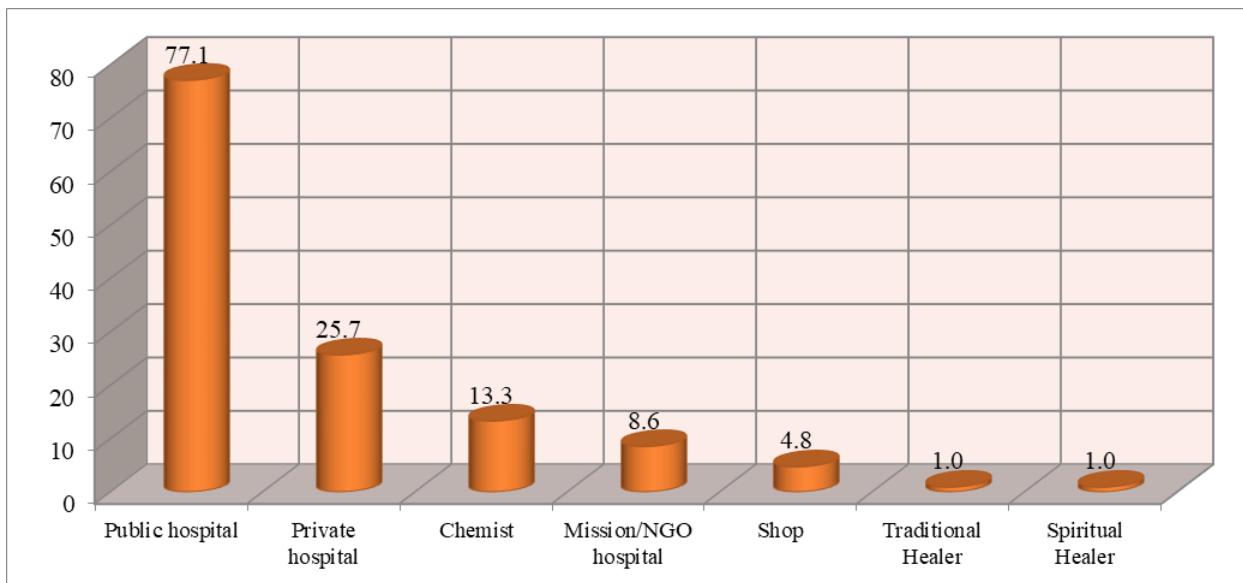


Figure 6-18 Health seeking behavior, Embakasi informal settlement

Source: Field survey, 2019

Due to low income of the residents, majority of them (77%) prefer to seek treatment from public hospitals from within and outside the settlement. Due to high cost of treatment, only 25% of the residents prefer to consult with Private hospitals while the remaining 28% residents seek medical treatment from Chemist, Mission/NGO hospital and Spiritual Healer and Traditional Healer.

Due to high accessibility occasioned by short distance, 41% of the residents are able to access medical treatment within the settlement. However, majority of the residents (59%) still have to travel outside the settlement for medical treatments. Some of the medical facilities frequented by the beneficiaries include Trinity chemist, Embakasi health center, The Mater hospital, Aga khan, Coptic and Kenyatta National Hospital.

The most prevalent disease that was reported was common cold at 41%, followed by diarrhea at 27% mainly due to poor sanitary conditions in the area. Malaria has also attacked a significant number of residents in the settlement with 26% of them reporting to have suffered from the same in the last four months. Other diseases reported are as follows: amoeba/typhoid at 11%, TB at 10% and diabetes at 3%.

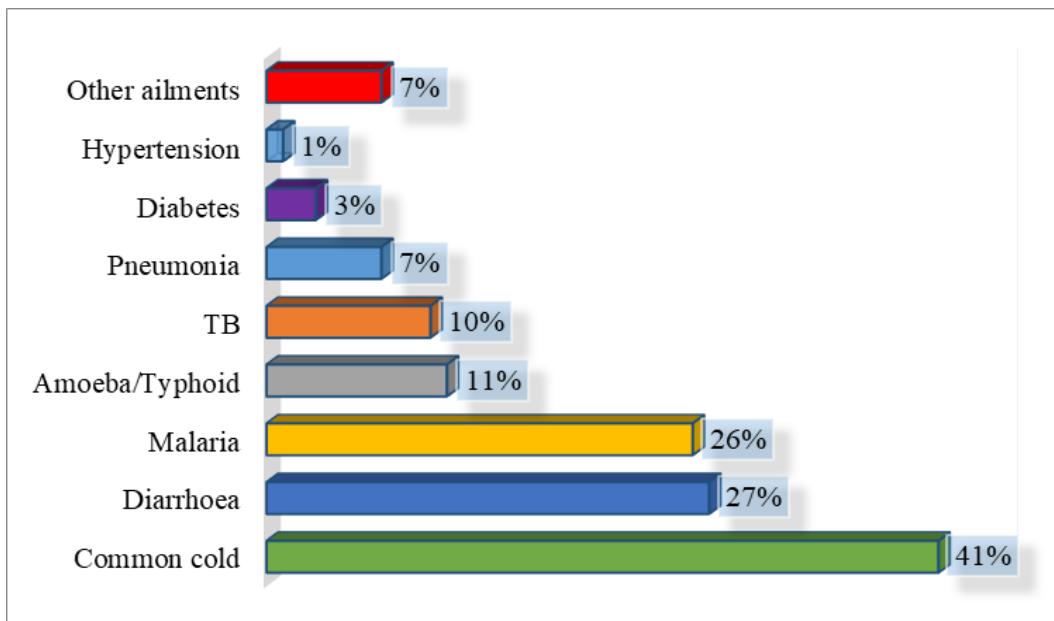


Figure 6-19 Diseases reported by households, Embakasi informal settlement
Source: Field survey, 2019

6.14 Existing land uses

The settlement is a typical urban settlement where the beneficiaries engage in commercial activities. The major land uses are residential 70 percent, transport 16 percent and educational 6 percent.

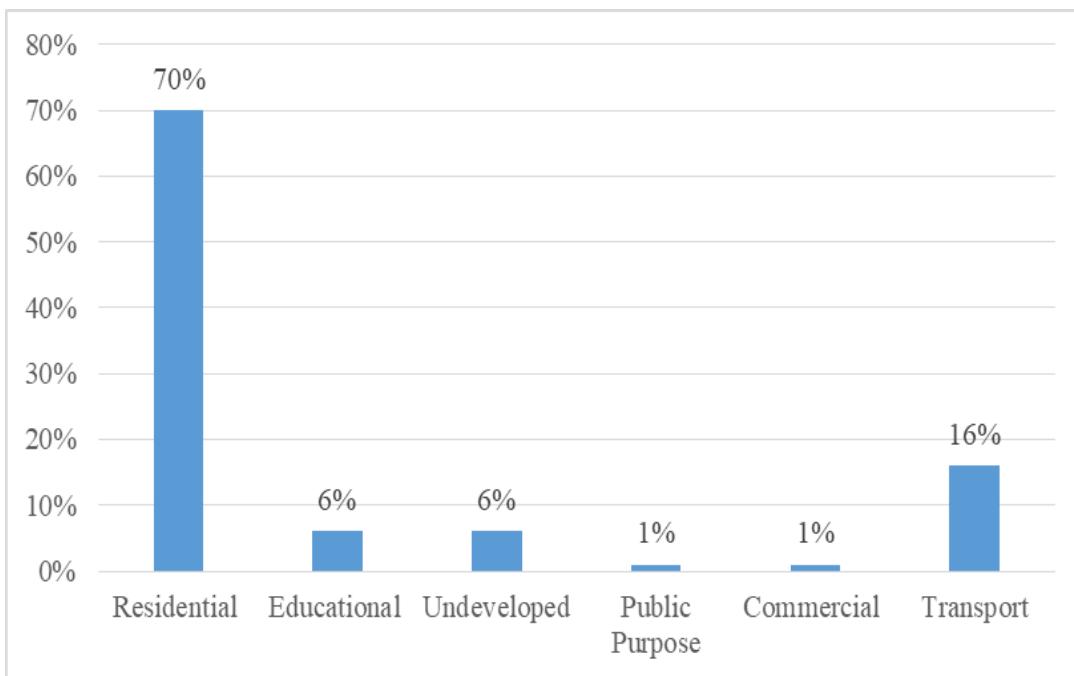


Figure 6-20 Land use budget, Embakasi informal settlement
Source: Field survey, 2019

Most of the structures in Embakasi informal are permanent in nature. Most of the houses are new and comprise of 3-5 storey houses. This is unusual of informal settlements that are characterised by temporary, old and poorly maintained structures.

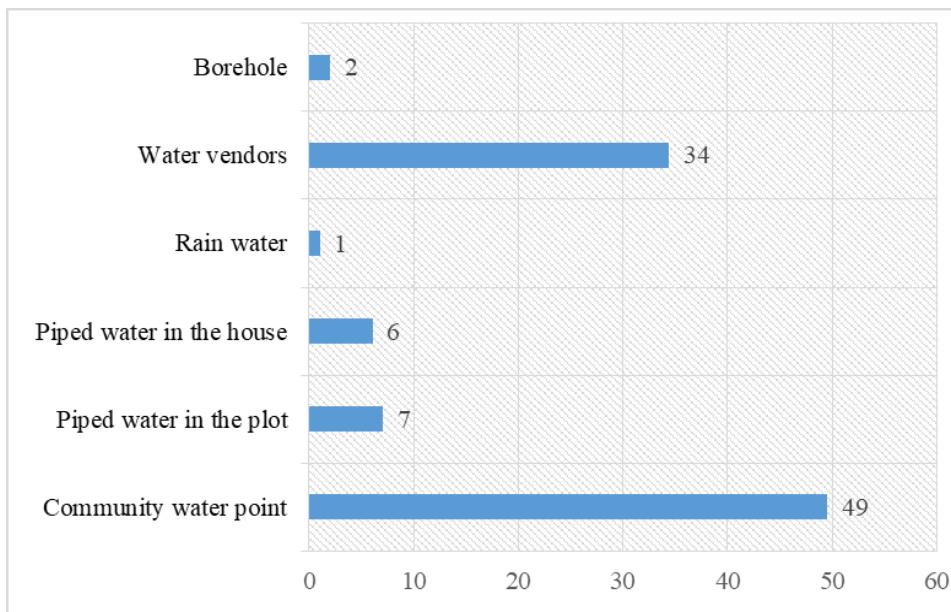


Figure 6-21 Source of water for beneficiaries in Embakasi informal settlement

Source: Field survey, 2019

Majority of the residents have access to bathroom: 52% reporting to be having the facility in their houses while 28% have it outside the structure. However, it is important to note that 20% of the residents do not have bathrooms, thus use makeshift bathroom structures, and direct the wastewater direct to the open drainage that is emptied in to the storm water drains. Wastewater from the kitchen is also poured outside the households, sullying the open spaces and alleyways.

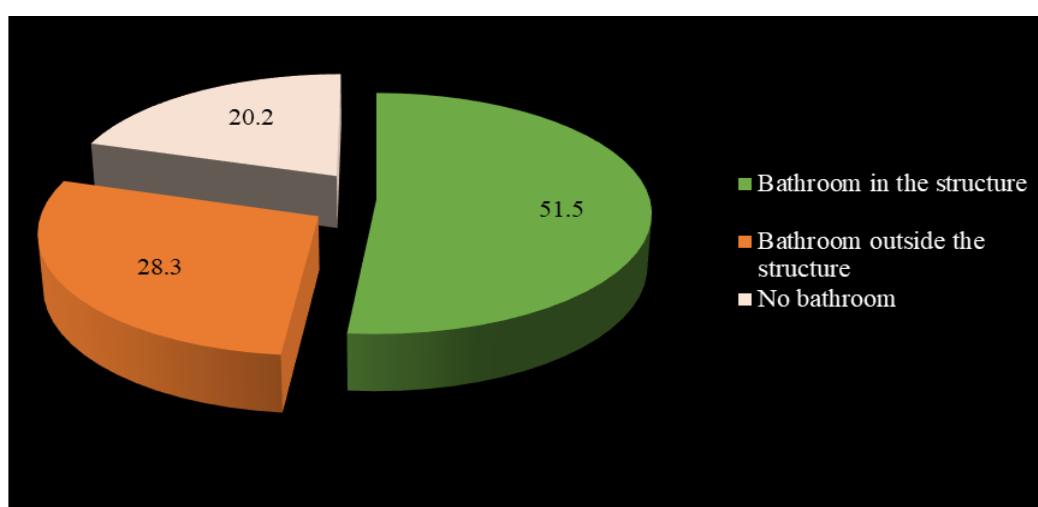


Figure 6-22 Access to bathroom facility

Source: Field survey, 2019

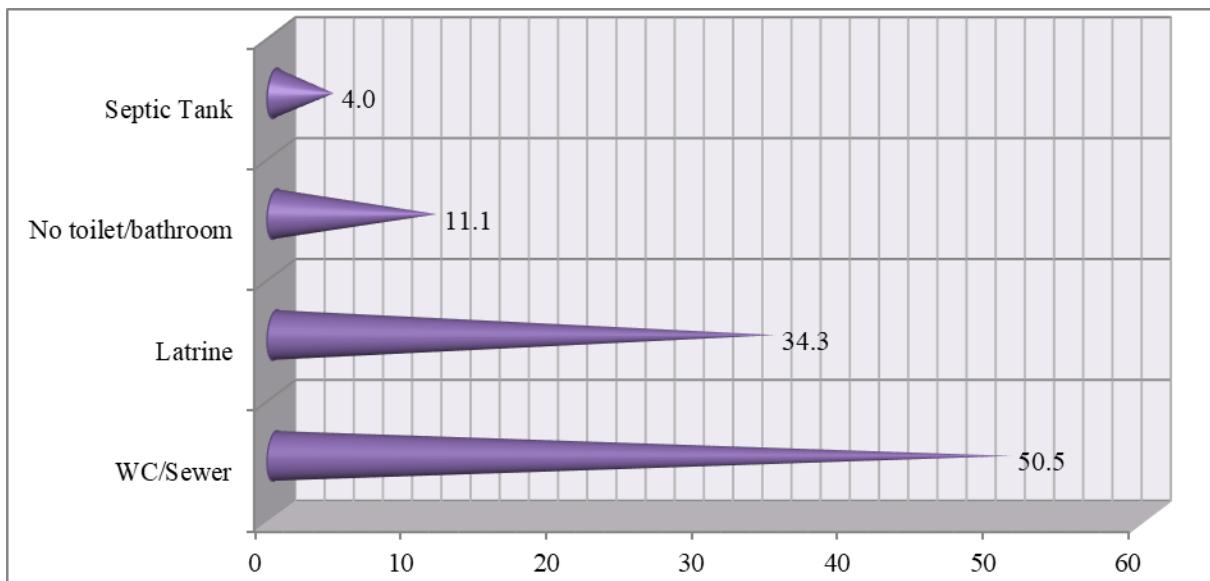


Figure 6-23 Access to toilet facility

Source: Field survey, 2019



Plate 6-3 A case of sewerage connection in the settlement

Source: Field survey, 2019

Survey data revealed that most beneficiaries in Embakasi have access to WC/Sewer (51%), a further 34% reported to having access to pit latrines. A significant number of residents do not have access to toilet. This poses serious health and sanitation risks to the residents in the settlement.

Figure 6-24 shows that majority of the residents use private service provider (69%), these mainly compose of youth groups who would collect the waste once a week and charge a small fee at the end of the month. The county government also participates in waste disposal through its trucks that would visit the environs of the settlement on occasional basis.

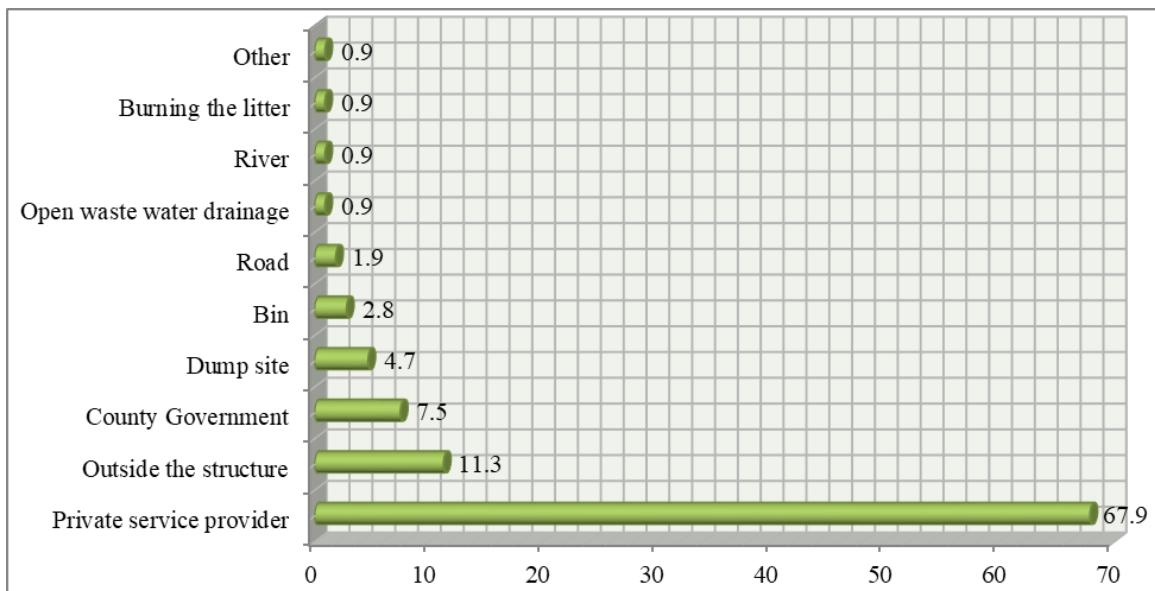


Figure 6-24 Solid waste disposal mechanisms in Embakasi informal settlement

Source: Field survey, 2019



Plate 6-4 Incidence of dumping in the settlement
Source: Field survey, 2019

Since Embakasi informal settlement is within an urban area, it would be encouraged that a proper solid waste management program to be initiated to encourage safe and efficient waste disposal in the area. Waste disposal methods such as burning, throwing on the road and in the river should be discouraged.

6.15 Prioritisation of community needs

As discussed above the settlement experiences a number of challenges including poor road conditions, lack of piped water, poor solid waste management among others. When asked to prioritise these needs, 91% of the beneficiaries listed lack of piped water as the most pressing need of the community. Poor condition of roads was prioritised by 65% of the residents. Figure 6-25 shows the other priorities of the beneficiaries in Embakasi informal settlement. These may be considered during planning of the settlement.

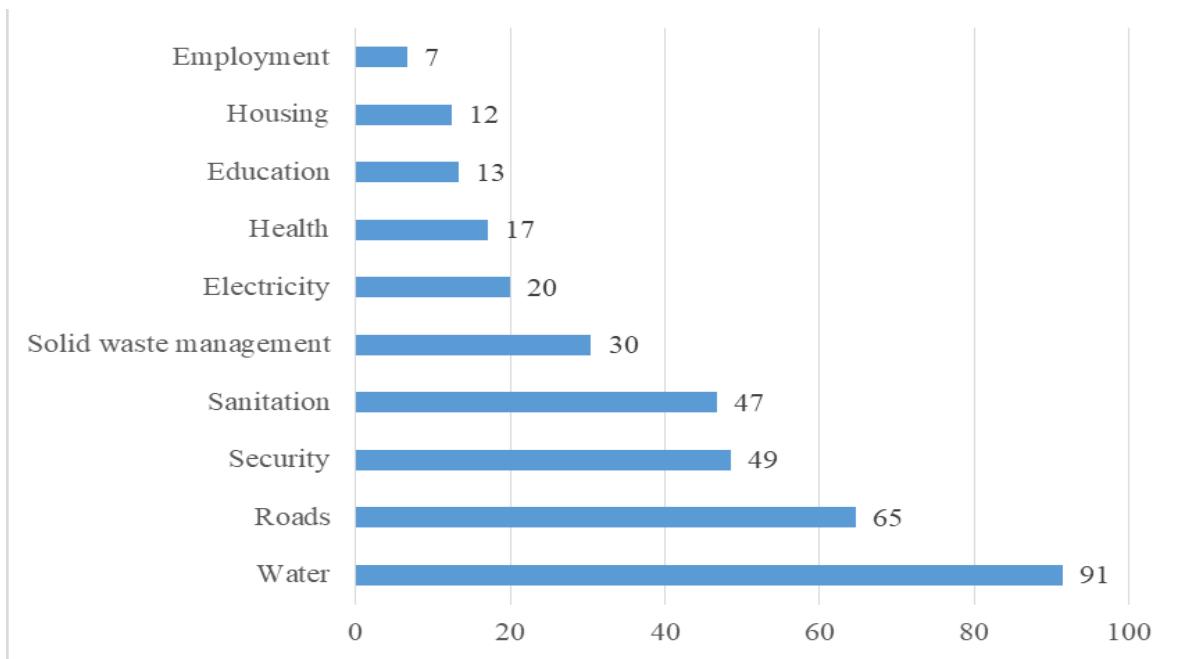


Figure 6-25 Prioritisation of community needs, Embakasi informal settlement
Source: Field survey, 2019

6.16 Key Emerging Issues and Recommendation

Table 6-1 presents the key emerging issues in Embakasi informal settlement

Table 6-1 Key emerging issues in Embakasi informal settlement

Thematic	Issues	Recommendation
Land	<ul style="list-style-type: none"> Lack of legal ownership documents for the land Strategic location of the settlement 	<ul style="list-style-type: none"> Enhancing security of tenure through; Issuance of Title Deeds to genuine structures owners Utilization of the strategic location of the settlement near the airport and the by-pass
Environment and Natural Resources	<ul style="list-style-type: none"> Poor solid waste management 	<ul style="list-style-type: none"> Ensuring environmental conservation and sustainability through: Initiating proper solid waste management mechanism
Social Infrastructure	<ul style="list-style-type: none"> Lack of adequate social facilities such as schools and health facilities and open spaces. Lack of waste collection points 	<ul style="list-style-type: none"> Provision of accessible, affordable and adequate social facilities within the settlements Provision of waste transfer

		stations
Physical Infrastructure	<ul style="list-style-type: none"> • Scarcity of water • Poor road conditions • Poor drainage system 	<ul style="list-style-type: none"> • Improvement of road conditions and connectivity through: • Upgrading all the access roads within the settlement • Provision of safe footpaths • Installation of streetlights and floodlight • Regular maintenance and repair of drainage systems

CHAPTER 7. ENVIRONMENTAL SCREENING

7.1 Objectives of Screening

Screening is aimed at fulfilling the following key objectives

- a. To identify, evaluate and manage the environment and social risks and impacts of the project in a manner consistent with the ESSs and EMCA.
- b. To adopt a mitigation hierarchy approach to:
 - i. Anticipate and avoid risks and impacts;
 - ii. Where avoidance is not possible, minimize or reduce risks and impacts to acceptable levels;
 - iii. Once risks and impacts have been minimized or reduced, mitigate; and
 - iv. Where significant residual impacts remain, compensate for or offset them, where technically and financially feasible.

7.2 Environmental issues identified during settlement community Participation

7.2.1 Poor disposal of solid waste

The solid waste management system is not organized and formalized. Solid waste is not sorted at source and is not evacuated from the households. The residents thus dispose at the any open space within the settlement including on the street access. There is an unoccupied plot at the edge of the settlement which is being used as an open dumpsite. There is also indiscriminate open combustion of solid waste in the outdoor areas of the settlements which causes air pollution and related health hazards.

7.2.2 Inadequate Clean Water Supply

The settlement is not served adequately with clean water though it is connected to the City Water Reticulation Mains. Residents complain of contamination of water due to what they term as mixing sewage with clean water supply. They able to identify this anomaly through an offensive odour in the water they receive. Cases of water borne diseases from local hospitals need to be checked to corroborate the claims. The areas where there is contact between sewage and clean water need to be identified and rectified. The possible contamination is attributed to old and dilapidated water and sewerage infrastructure in the entire neighbourhood of Embakasi.

7.2.3 Poor liquid waste management in Settlement

Typical of informal setups in the City of Nairobi, Embakasi Informal Settlement is underserved by official city sewerage network. Currently, some residents have undertaken rudimentary connection to the sewer line. The poorly engineered connections are creating a concomitant problem of blockage at the joining sections thus aggravating the situation. The problem of clean

water-foul water mixing could be as a result of this situation.

There is notable environmental degradation in terms of discharge of raw sewage to the open drainages surrounding the settlement. This can pose a health hazard to the residents ranging from respiratory ailments to environmental diseases like diarrhoea.

Grossly inadequate number of toilets and ablution blocks further worsens the sanitation problems. Bathrooms are also equally inadequate. Residents also lack capacity and resources to connect to the City Sewerage network as highlighted earlier. To bridge this gap, residents rely on shallow pit latrines, which overflow during periods of heavy precipitation thus posing health hazards to the population. Children (Under 5) are particularly at risk.

The alternatives technologies of managing liquid waste which are mostly onsite need to be explored as a short term measure. In the medium and long term, the settlement needs to be connected to the Main City Sewer System. The residents would require technical assistance to achieve this measure.

7.2.4 Poor storm water management

Embakasi informal settlement is situated in a flat terrain and clay soils characterizes the area. During periods of heavy precipitation (March April May season), the area experiences flooding. The problem is accentuated by perennially clogged drainage systems. The both the natural and engineered drainage systems are further clogged by the effect of numerous housing constructions taking place in the vicinity of the settlement.

7.2.5 Potential Fire Hazards and disasters

Fire remains one of the key potential environmental hazards in the area due to the informality of the settlement. This is mainly attributed to congested nature of the settlement coupled with minimal requisite infrastructure to manage such disasters. Though the settlement is fairly accessible by access roads, it does not have adequate source of water to contain potential fire hazards. The causes of such fire hazards could range poorly connected electricity, overload or misuse of power connections and reliance on kerosene stoves for cooking.

7.2.6 Air Pollution

The settlement suffers the effects of both indoor and outdoor air pollution. Indiscriminate open combustion of solid waste in the outdoor areas of the settlements which causes air pollution and related health hazards. The use of firewood for cooking in food kiosks within the settlement and in home kitchen together with ordinary charcoal jikos or improvised ones have the potential of causing indoor pollution and related health impacts. Depending on the biomass being combusted, there is need to investigate the extent and nature of air pollution prevalent in the settlement.

7.2.7 Vegetation cover, open spaces and aesthetics

Embakasi Informal Settlement has neither community open space nor playgrounds. Apart from road accesses, there is virtually no extra outdoor space. This provides a constraining environment for growing children and youth who naturally require space to play. Equally, tree cover is grossly minimal. There is need for the physical and Survey Planning exercise to salvage space to plant trees especially along road access to improve on the area's vistas and microclimate. This is key as a contribution to climate change resilience.

CHAPTER 8. CONCLUSION

The preparation of the socio-economic survey report for Embakasi informal settlement has been undertaken as part of planning, surveying and preparation of resettlement action plans for 4 No. informal settlements in Nairobi, Mombasa and Nakuru counties done under lot 2. Embakasi informal settlement is in Embakasi Constituency in Nairobi County. It is located near Embakasi Road to the north of the Jomo Kenyatta International Airport. The settlement links through North Airport Road/Eastern bypass with Mombasa Road and Outer ring road. The major land uses are residential 70 percent, transport 16 percent and educational 6 percent.

It is estimated that 60% of urban population in Kenya lives in informal settlements and the trend is expected to continue if interventions to address tenure security, affordable housing, provision of basic infrastructure and improved livelihoods are not addressed. Embakasi informal settlement is one of the informal settlements dotting Nairobi City County.

Plot ownership situation in Embakasi informal settlement is impressive as it tended towards gender parity in land ownership given that 58 percent of the beneficiaries are male. Literacy level of plot owners is high at 98 percent. The occupation profile of Embakasi informal settlement reveals that the returns to their labor is high given that a sizeable proportion of them are self-employed. Over 50% of the beneficiaries acquired the plots through purchasing and 21 percent of the beneficiaries were allocated the plots by local administration. Despite these modes of acquisition, 37% of the structure owners did not have any document as proof of ownership.

The settlement is well served by a motorable road connection, which are earth roads within the settlement. The access road cutting across the settlement forms an economic hub where most of the economic activities within the settlement are carried out. Most of the residents in Embakasi informal settlement used both mobile phones and face-to-face communication as their preferred modes of communication.

Despite electricity connectivity having expanded in the recent past due to the last mile electrification programme and funding of electricity projects, most of the residents are using it for lighting only. Ten percent of beneficiaries in Embakasi informal settlement had no electricity indicating inadequate electricity connection in the settlement. LPG is the most popular cooking energy in the settlement. This is supplemented by kerosene and biofuels.

Survey data revealed that most beneficiaries in Embakasi have access to WC/Sewer (51%), a further 34% reported to having access to pit latrines. A significant number of residents do not have access to toilet. This poses serious health and sanitation risks to the residents in the settlement.

The main source of water is communal water point in the community whose safety cannot be

guaranteed. Dwelling units are permanent with stone walls, cement floors and iron sheet roofing being the dominant building materials.

A high number of beneficiaries sought healthcare services from public hospitals. The most prevalent disease that was reported was common cold, followed by diarrhea mainly due to poor sanitary conditions in the area.

The main objective of this assignment is to address the longstanding issue, i.e. insecure land tenure in this informal settlement. Secure land tenure is seen as an important means to improve the standard of living of those living in the informal settlement. With secure land tenure, those living in the informal settlement can make long – term investment commitment in the land, which would not be possible in the present circumstances. Similarly, the City County Government can support development of basic infrastructure, i.e. roads, water and electricity, which are lacking in the informal settlement.

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ANNEX

Draft List of beneficiaries, Embakasi informal settlement

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
1	NAHASHON MAINA NGATHO	0841907	A001371904B	0722-457207	RESIDENTIAL	JOINTLY OWNED
	PHILIP KYAULA MBOVA	5061692	A0059384575	0722-453498		
	CECILIA GACERI MUGAMBI	8611475	A002413221Z	0703551427		
	JOHN NJUE NJOGU	24884886	A006207425O	0711-482491		
2,4,6,7,8,9 and 10	JOSEPH NJOROGE MUTUGI	11074706	A0024457730T	0711739207	RESIDENTIAL	INDIVIDUALLY OWNED
3	JOSEPH NJOROGE MUTUGI	11074706	A0024457730T	0711739207	RESIDENTIAL	JOINTLY OWNED
	GILBERT M MUNYAO	8861058	A002401548F	0722232771		
5	RICHARD MUENDO KIMANI	0351344	A001293410Y	0722-475962	RESIDENTIAL	INDIVIDUALLY OWNED
	JOSEPH NJOROGE MUTUGI	11074706	A0024457730T	0711739207		
11	MURUTHI TITUS THUO	0253326	A001307302D	0722-706648	RESIDENTIAL	INDIVIDUALLY OWNED
12	ROSEMARY NJAMBI KARUGU	7441545	A001540954R	0720-705464	RESIDENTIAL	INDIVIDUALLY OWNED
13	KERANI KILISHA GWANDOHO	6979986	A003925518Y	0796-009659	RESIDENTIAL	JOINTLY OWNED
	ZACHEUS MUSUNGU KANGU	23468534	A003925518Y	0719485834		
	PETERSON OMBEGO NYAKEGO	6547025	A002228900K	0721787862		
	TATU NUTHONI ALI					
	MELISA ATSULU OLUOCH	1807594	A004331716I	0700476583		
14	ROBERT KANGOGO KULEI	11427798	A002414781U	0722-733691	RESIDENTIAL	INDIVIDUALLY OWNED
15	JAPHETH WAMBUA KYENGO	0989673	A002145220Y	0725894883	RESIDENTIAL	JOINTLY OWNED
	DAVID MWODYA GAKURE	16105894	A013530866U	0720-996606		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	HANNAH NYAMBURA MAINA	132750 28	A005922 174B	0722-107513		
	DAVID KAMAU WANYOIKE	106084 01	A002574 276C	0721680763		
	JULIUS ODUOR OKOTH 'HOLDING IN TRUST FOR' 1. MIRIAM AWUOR ODHIAMBO 2. HELLEN ADHIAMBO ODHIAMBO 3. NATASHA AKINYI ODHIAMBO	783917 9	A002078 384B			
16	BEATRICE JUNGA ONDIGU	129664 52	A007642 290A	0726-011185	COMMERCIAL	JOINTLY OWNED
	FRANCIS MUCHIRA KITHECE	188424 0	A001287 838A	0724387590		
	ANNAH OMWARI	-		-		
	GABRIEL KARAYA MURAGE	133976 9		-		
	FRIDAH IGOJI MRIMUNYA	509910 6	A00192 94820	0720-768660		
	JAMES KYALO NDUMO	145221 89	A013454 784B	0716-125698		
17	COLLINS KIPROP CHERUIYOT	128503 37	A002535 279F	0721-427263	RESIDENTIAL	INDIVIDUALLY OWNED
18	PATRICK KARANJA KAMUYU	137969 75	A00490 4147X	0726-213164	COMMERCIAL	JOINTLY OWNED
	JANET JEPKOECH KOSGEY	318747 39	A00906 6824U	0725654057		
	JAFRED IMELI ATSIAYA	207436 43	A002666 574K	0733613633		
	ALEX OMOLLO	-		0720743643		
	REUBEN NGARIHIU NGATHIA	134644 44		0705745674		
19	MICHAEL OGANDA OKUMU	128348 44		0724-938347	RESIDENTIAL	INDIVIDUALLY OWNED
20	MARY MUTINDI KIMULU	509053 9	A007320 274M	0726-213164	COMMERCIAL	JOINTLY OWNED
	FLORENCE NDUNGE	485805 9	A01345 1067K	0700554412		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS		
	SAMUEL MWANGI MUGO	-		-				
	BONIFACE KASANGA MUTUA	213476 72	A00487 8895D	072172692 7				
	CHRISTINER MUENI MUSAU	284195 79		071466202 1				
	MOSES AWINO OKEYO	107932 269	A00134 6850U	072250612 4				
21	GERALD KAMOTHO MUTURI	550920 7	A002621 42M	070037903 8	RESIDENTIAL	JOINTLY OWNED		
	ROSELYNE KORONGO KAGAI	966054 3	A001179 034M	072240562 0				
22	JULIUS KYALO WANJAU	110477 49	A003456 715Q	072248529 8	COMMERCIAL	JOINTLY OWNED		
	GIBSON MWANGI WARUI	514917 2	A010076 011V	0727- 312699				
	RICHARD CHEPTO CHEMWENO	-		0710- 409938				
	TERESIA WAITHIRA KARIOKI	037295 5		0722- 68730				
	RICHARD - NYARAGO	201078 22		0721- 937180				
	MOSES KIPTANUI SIELE	180675 7	A008850 867J	0712- 208992				
23	CYPRIAN ARITHO KITHURI	830777 8	A001451 322X	0722- 837365	RESIDENTIAL	INDIVIDUALLY OWNED		
24	JACINTA SYOMBUA	960825		0731- 530949	COMMERCIAL	JOINTLY OWNED		
	MILLICENT NJOKI NDUNGU	241324 95	A004651 359V	0723- 851509				
	PAUL MBUURI	-						
	ANGELINA KANINI MUTUNGA	129411 50						
	AGNES WAMBUI WANG'OMBE	706467 7	A001502 094Q	0734- 781351				
25	BENARD KYANGU PETER MUSANGO	180742 9	A002651 870T	0720- 744864	RESIDENTIAL	INDIVIDUALLY OWNED		
26	THOMAS MUIA MUTUA	202242 48	A004882 175F	072343025 1	COMMERCIAL	JOINTLY OWNED		
	BONIFACE KASANGA MUTUA	213476 72	A00487 8895D	0724- 534069				
	JANE KARIMI KANGETHE	853762 3	A00161 2629Z	072493834 7				

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
27	JANE KARIMI KANGETHE	8537623	A001612629Z	0724938347	RESIDENTIAL	JOINTLY OWNED
	JULIUS OMUKONYI LOLO	11416941	A002821320D	0727649131		
28	MUTUA INANI	6818988	A003127040D	0720-288507	RESIDENTIAL	INDIVIDUALLY OWNED
29	SABINA MONGINA KERIGA	23025963	AD12130126P	0722-475962	RESIDENTIAL	JOINTLY OWNED
30	ADDY NGOMBE WAFULA	5280942	A001330174G	0721964444	RESIDENTIAL	INDIVIDUALLY OWNED
31	FANCY JEBET ROTICH	21347642	A003682816R	0722-233685	RESIDENTIAL	JOINTLY OWNED
	JOSHUA KOECH KIPKURUI	10080076	A003253787Z	0722-257445		
32	ROSE NDUNGWA MUTINDA	6144893	A006190591P	0725-687087	RESIDENTIAL	INDIVIDUALLY OWNED
33	EMILY WANGARI KAHURIA	3481479	A000095649T	0722-263902	RESIDENTIAL	INDIVIDUALLY OWNED
34	MARGARET MBITHE MUTHOKA	20040131	A005544244S	0714056939	RESIDENTIAL	JOINTLY OWNED
	EMMA DANIEL KALII	8684596	A001505215G	0722649562		
	JUSTUS NZIOKA MUTWIWA	20053887	A008338005P	0728832765		
	TITUS KEEN MWANGI	4419893	A001776237C	0720835857		
35	MARY NKİROTE MBOBUA	0190494	A001260659N	0722-716407	RESIDENTIAL	JOINTLY OWNED
	MOSES ELOLOI	3328399	A001687237D	0721818098		
	ALICE MOGENDI	3228399		-		
	ABDI OMAR SHELKHA	-		0725361310		
	JOSEPH MAINA GITHAU	8335906		-		
	ANTHONY NGUGI KAMAU	21973661	A004080110N	0723501668		
36	MICHAEL ODHIAMBO MUHARE	13786446	A002814255X	0724083895	RESIDENTIAL	JOINTLY OWNED
	MALUKI KIMOTHO MUMBO	3359515	A001229843V	0722475322		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	ALBERT KARANI MURITHI	106497 05	A002784 839G	0724- 032212		
37	MARY MUTHONI KAMAU	356055 5	A00133 5046L	072277960 3	RESIDENTIAL	INDIVIDUALLY OWNED
38	JOSEPH NDUNGU GACUGU	102284 91	A003899 294Z	070833196 5	RESIDENTIAL	JOINTLY OWNED
	MAINA KAGIRI KIBUBU	204742 5	A00511 8973A	071119005 0		
39	JOSHUA KOECH KIPKURUI	100800 76	A003253 787Z	0722- 257445	RESIDENTIAL	
	FANCY JEBET ROTICH	213476 42	A00368 2816R	072223368 5		
40	JOHN GITAU KAMANJI	332970 4	A001547 642Y	071483914 2	RESIDENTIAL	JOINTLY OWNED
	CHRISTINE MUNYIVA MUTUA	058386 3	A00203 8234K	072298735 7		
	NAOMI KWAMBOKA ARUYA	484971 4	A00143 9420P	072073982 6		
	FLORENCE AUMA OCHIENO	181025 8	A001744 568F	072492184 4		
41	JACKLINE NGINA MUTHOKA	203892 95	A003657 497S	072138273 9	RESIDENTIAL	JOINTLY OWNED
	SAMUEL NGUGI MWAURA	113738 2	A001100 551T	072685567 0		
	JOSEPH MUNENE MURIA	084106 9	A00114 6337J	072272733 8		
	ISAAC NJERU MWANGANGI	146448 10	A00264 1018B	072071191 7		
42	LYDIA ODOLI WABURIRI	698423 3	A003932 870D	072699926 5	RESIDENTIAL	JOINTLY OWNED
	JENIFFER MANTU KIMUGE	401224 9	A00166 1350K	072371844 2		
	WILLIAM MWANGI KARIMI	363270	A00447 0327I	072537605 9		
43	STEPHEN NGEI MUSYOKA	181154 79	A002763 111G	0721- 469361	RESIDENTIAL	INDIVIDUALLY OWNED
44	FLORENCE MUENI MUNYWOKI	961643 6	A009021 218U	072125784 8	RESIDENTIAL	JOINTLY OWNED
	JOSEPHINE MUTHONI MUHIA	035104 7	A001803 589G	072245611 4		
45	DORCAS WAIRIMU MUNGAI	957509 5	A001963 637B	072280912 7	RESIDENTIAL	JOINTLY OWNED
	MARGARET MUTHONI MWANGI	755553 20	A001732 544Q	072125268 4		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	JOHNSTON MUTUKU MWANZA	0403657	A001213633C	0722812140		
46	FLORENCE MUENI MUNYWOKI	9616436	A009021218U	0716189902	RESIDENTIAL	JOINTLY OWNED
	ANN WARUGURU GITAU	20699195	A0034945418S	0722618639		
47	MWENDWA MUVENGEI KITHINJI EDWIN MUTHURI	2446201	A006035873X	0727968161	RESIDENTIAL	JOINTLY OWNED
		14412942	A00258071F	0721473093		
48	STEPHEN WARUI NJAGATHA	9333409	A005487583M	0721722591	RESIDENTIAL	JOINTLY OWNED
	NGELE MWAZIGE	5034926		-		
	CAROLINE J KIPROTICH	4124350		0728067556		
	LUCY WANJIKU CHEGE	7917063	A006465874J	0725271690		
	ISAAC NJERU MWANGANGI	14644810	A002641018B	0720711917		
	AGNES NDULULU TUTA	12768596		-		
	PETER MAINA WANENE	20755393	A007490023G	0723958836		
	SAMWEL OYIOKA KEBATI	0667037	A002146342H	0711631871		
49	DINAH JEBET SANG	1237669	A001212224V	0721-463661	RESIDENTIAL	JOINTLY OWNED
	NGELE MWAZIGHE	5034926	A001226873L	0722760242		
	ALEXANDER MUSEMBI	11342057	A002688785V	0722502340		
50	CHARLES MURIGI M	8587447	A003267587K	0720646807	RESIDENTIAL	JOINTLY OWNED
	EVANSON KINGORI NDIRAGU	2964074	A001562562T	0722-905836		
51	JOSHUA KIOKO MUTUNGI	22184799		0727169499	RESIDENTIAL	JOINTLY OWNED
	ZIPPORAH MWONGELI MUTETI	7268238				
53	CAROLINE MBULA MAKENZI	22222059	A008834784P	0715265832	RESIDENTIAL	JOINTLY OWNED
	HELLEN ADHIAMBO ONUNDA	3479105	A001562889H	0722431889		
	DAVID OKEYO NYAGOWA	13397669				

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS		
	STANLEY KAMAUGAICURU	107501 58	A003503 276U	071555466 7				
	SIMON MUNGAI MWAURA	667650	A002235 973Y	072153117 8				
	ANNASTASIA KEMUNTO MAGAKI	066765 0	A006153 012S	071044074 1				
	GABRIEL KARAYA MURAGE							
54	PAUL MUTALA KAVITA	137023 12	A004057 140J	071667773 5	RESIDENTIAL	JOINTLY OWNED		
	JAMES MWANIKI NJUGUNA	134526 82	A004108 382T	071927941 8				
	GEORGE OLUOCH ONYANGO	146193 79	A00745 56663E	071478767 4				
	LEONORA ODERA AKONGO	146808 52		071139337 3				
55	CHERUIYOT KIPLANGAT ALFRED	203365 13	A002876 051D	0720- 766492	RESIDENTIAL	JOINTLY OWNED		
	DAVID MBITHI KILIMBUI	180634 9		072611732 0				
	MARY WANJIKU	-		072437106 5				
56	BENJAMIN RATEMO	342084 3	A001275 698H	071880072 9	INDIVIDUALLY OWNED SCHOOL	INDIVIDUALLY OWNED		
57	PHILEMONA NAMONI TOYWA	231869 63	A007639 667U	0746- 076784	RESIDENTIAL	JOINTLY OWNED		
	MATAYO OLUOCH	669261 8	A00418 0	071352727 1				
	FESTUS RUBARA MUKIRI	776432 7	A00184 2050Z	072346700 3				
	JOHN NJUE NJOGU	248848 86	A00620 7425O	071148249 1				
	OLIVIA AOKO OMOLLO	328083 29	A00142 05357Z	072632558 2				
58	JULIUS OKORA ONDIEKI	133277 85	A003091 517X	0721- 567844	RESIDENTIAL	JOINTLY OWNED		
	HELEN KEMUNTO OBWOCHA	228800 68	A013372 146J	072699994 4				
59	ELUID KIPKOSGEI CHEROP	118424 48	A00163 3549V	072189732 4	RESIDENTIAL			
	JOAN KIGEN	124186 98	A00293 4995Q	072238627 8				
60	CHRISANTUS NYABUTO OIGO	853307 2	A00172 3572X	072249399 5	RESIDENTIAL			

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	JOSEPHINE NZULA MUANGE	236764 62	A00675 3597O	072456266 4		
	ERICK GORDON OBARE ALOO	222855 55	A003583 197E	072437106 5		
61	ROSEMARY ACHANDO OLUCHINA	217174 10		0721- 567844	RESIDENTIAL	
	SELVESTAS JUMA OMADWA	118122 0	A00238 1609F	072354003 2		
	NANCY WAIRIMU KAMURI	810678 2		072139776 3	RESIDENTIAL	
62	ELIZABETH ATIENO AWUOR	136010 66	A010060 351W	072359556 4	RESIDENTIAL	INDIVIDUALLY OWNED
	IDAH CRISPUS TITO	251130 80		072324752 0		
63	MOSES KIBET CHELUGUI	200570 6	A00252 3836R	0722- 546812	RESIDENTIAL	JOINTLY OWNED
	SILVESTER KIBIWOTT KINYOR	217138 24	A00345 0653M	072425538 1		
64	CHARLES AGACHI	114208 49			RESIDENTIAL	JOINTLY OWNED
	ERICK GORDON OBARE ALOO	222855 55	A003583 197E	072437106 5		
	JOSEPH RURIGA MUNYI	114208 49	A002728 207W	072172020 0		
	LUCY WANJIKI CHEGWE			072527169 0		
	JOSEPHINE NZULA MUANGE	236764 62	A006753 597O	072456266 4		
	ALICE NJERI NGOCHI	430064 8	A013455 817Q	072331481 0		
65	SELVESTAS JUMA OMADWA	118122 0	A00238 1609F	0723- 540032	RESIDENTIAL	JOINTLY OWNED
	MONICAH MWENDO NDULULU	146276 74	A00475 7255J	072087086 6		
66	PAUL KISILU MUSILI	349181 5	A000126 046E	071155134 2	RESIDENTIAL	INDIVIDUALLY OWNED
67	GEORGE ODIWUOR AWUONDA	857900 5	A001411 081D	072242279 1	RESIDENTIAL	JOINTLY OWNED
	SIMON MUSYOKI NDAMBUKI	182147 7	A01345 0509E	0716- 447864		
	RAEL KAMULU NGUMBI	147284 1	A00264 1801D	072140104 0		
68	JANE WAIRIMU GIKONYO	101364 68	A00298 4381J	071630900 1	RESIDENTIAL	JOINTLY OWNED
	MARTIN MASYA	116243	A001309	072252360		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	MUSANGO	08	822Q	4		
	GEORGE WAMBUA MUTWIWA	180978 4	A000116 144O	072315533 8		
	JANE NYAMBURA GACHIGO	485828 1	A001454 4228T	072152981 4		
69	RUTH MBULA JOSPHAT MWEU	726522 9	A008023 200T	072634470 9	RESIDENTIAL	JOINTLY OWNED
	EMMANUEL MUTISYA JOEL	226544 90	A00447 7694Z	072324264 0		
70	LILIAN BOSIBORI OCHWANGI	237002 50	A010560 936N	072647918 7	RESIDENTIAL	JOINTLY OWNED
	NANIES KINANU DANIEL	746542 6	A001201 575F	072165539 8		
	JANE MORAA RICHARD	265907 77	A005219 313K	071264034 2		
	ROBERT KEBANDE MOREMA	135680 39	A00279 6884U	072086377 9		
	JOSEPH GATUNDU KIIRU	138952 6	A00150 2408E	072083175 1		
71	MOHAMMED SALIMU MWALONYA	673318 9	A002261 796J	072154233 T	RESIDENTIAL	JOINTLY OWNED
	MONICAH NYAWIRA THIRO	666828 3	A007056 240L	075931021 6		
	VIRGINIA WANJIKU MUNENE	134283 27	A002776 931E	072229014 5		
	MICHEAL NGANGA THIRU	117675 35		079625830 6		
	PETER NJENGA THIRU	136906 39	A003567 746H	072520909 9		
	PAUL KIMANI NGARAMA	606155 7	A005370 159P	072236879 1		
	JOSEPH NJOGU THIRU	786972 4	A006482 9181Z	072930505 5		
72	MOSES AWINO OKEYO	107932 69	A001346 850U	072250612 4	RESIDENTIAL	JOINTLY OWNED
	SAMUEL KIMANI NZUKI	485724 4	A006192 481Q	072183653		
73	FANUEL JAUKO OWINO	134919 89			RESIDENTIAL	JOINTLY OWNED
	ARTHER ONYANGO	138277 01				
74	LYDIA WANJA IRUNGU	075689 2	A00128 70994H	0713- 603434	RESIDENTIAL	JOINTLY OWNED
	ANYONA ROSEMARY	180774 8	A00164 55490E	072385157 5		

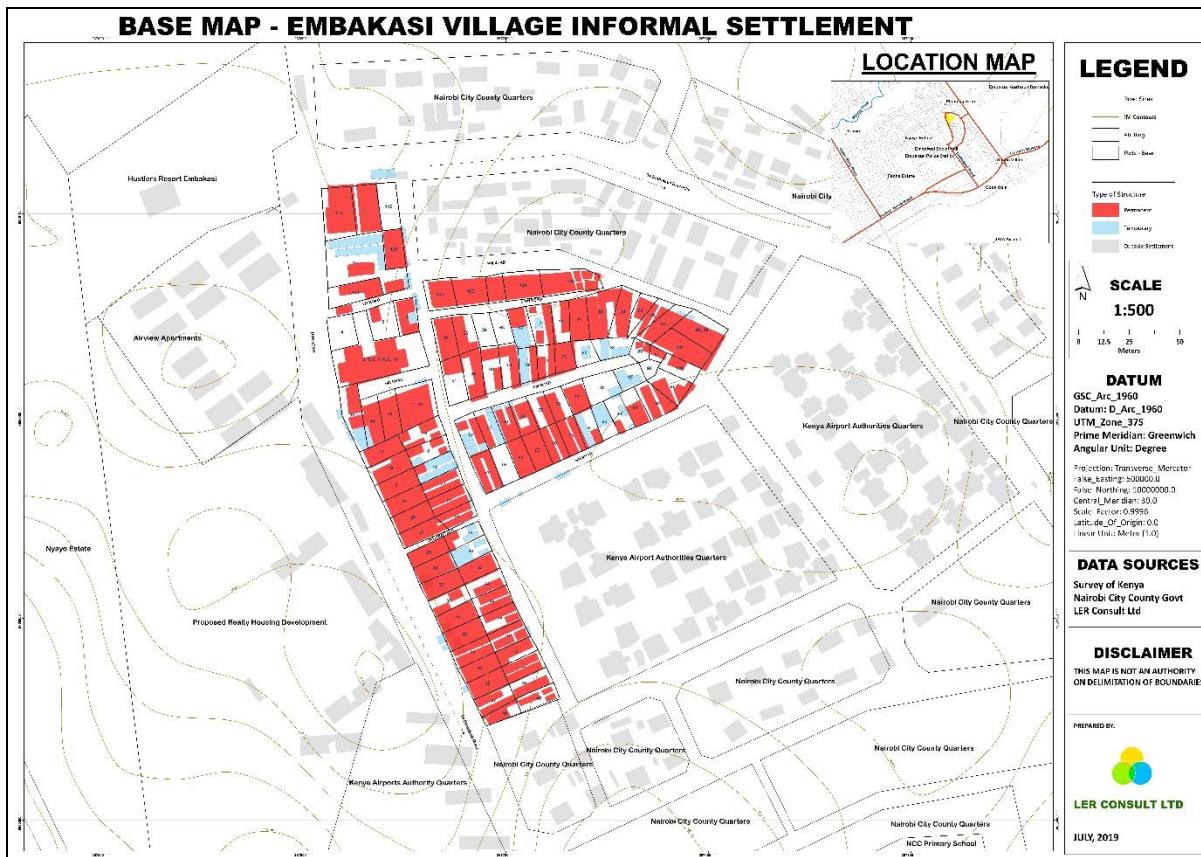
PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	FRANCIS MWANGI WAICHARI	135431 21		072550473 1		JOINTLY OWNED
75	DOROTHY SYOMBUA MUTHEE	903596 7	A00298 4512T	0722- 539606	RESIDENTIAL	
	ANGELINA ITAYA OTIENO	181016 4		071671896 0		
	ELIZABETH WAWIRA KARIITHI	221775 55	A00573 2833U	072586146 2		
	FRANCIS ORATA MUNTENDO	110438 69	A00459 7819G	072088002 6		
76	BERITA WANZA KIOKO	484974 7	A157561 5R	072462769 9	RESIDENTIAL	INDIVIDUALLY OWNED
77	JULIUS OKORA ONDIEKI	133277 85	A003091 517X	072156784 4	RESIDENTIAL	INDIVIDUALLY OWNED
78	FRANCIS KAMENWA CHEGE	766242 7	A001107 315Y	0722- 417158	RESIDENTIAL	JOINTLY OWNED
	ROSE NYAURA			072099730 8		
	LINET APIYO OGINGA	202712 89	A00792 2357E	072045141 6		
79	ELIZABETH WAWIRA KARIITHI	221775 55	A00573 2833U	072586146 2	RESIDENTIAL	INDIVIDUALLY OWNED
80	JACINTA WAIRIMU NJOROGE	052774 4	A002052 452E	072432910 0	RESIDENTIAL	
	DANIEL OGECHI KINARA	304400 55	A006896 009F	072302132 4		
81	JANETH NYABOKE MASITA	107844 86	A003921 173T	072351881 2	RESIDENTIAL	JOINTLY OWNED
	ABRAHAM KIRWA NGETICH	560045 9	A002640 940M	072240926 9		
82	JUSTIN IRUNGU	181058 3		072434103 7	RESIDENTIAL	JOINTLY OWNED
	ELIZABETH WAKAGIO	101058 3		072291629 4		
	LUCY WATHERA					
83	MUSYOKA MUTUNGA MUSYOKI	603556 3	A01345 0534F	072532728 1	RESIDENTIAL	JOINTLY OWNED
	DAVID MBITHI KILIMBUA	180634 9		0725- 327281		
	SAMUEL NTHOLI MUOKI	146168 55	A00245 4264S	075825528 4		
	GILBERT MUNYAO	886105	A00240	072223277		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
		8	1548F	1		
84	JANE MUTHONI KAMUYU	7980794	A002641184R	0724282627	RESIDENTIAL	
85	GEOFFREY GATUNA KUNGU	13549682	A004190080F	0721809131	RESIDENTIAL	JOINTLY OWNED
	DAVID MBOGO MWANGANGI	1919513		0726642584		
	MARTHA KANINI MWAU	1010513	A002171938F	0700347763		
86	EMILY KAHURIA WANGARI	3481479	A000095649T	0722-263902	RESIDENTIAL	INDIVIDUALLY OWNED
87	WANYOIKE KINUTHIA	4849173	A001092204V	0725041294	RESIDENTIAL	
	NJERI NGOCHI BERNADETTE	8473586	A001423462M	0722299208		
	MUTUA NDEME	4849173	A001992487M	0722755598		
88	SHADRACK GITONGA NJERU	21873912	A003668867T	0711566567	RESIDENTIAL	JOINTLY OWNED
	FRANCIS MWANGI	8923422		0722813307		
90	AGNES N'SALAMBI MBUTHYE MBONDO	0564793	A001576450Z	0722596618	RESIDENTIAL	JOINTLY OWNED
	SHADRACK GITONGA NJERU	21873912				
91	BENJAMIN SAFARI KISILU	9346527	A001346311D	0720212411	RESIDENTIAL	JOINTLY OWNED
	LINET MMBONE AGESA	13367735		0721230637		
92	CHRISPUS MUTHOKA NDUNDA	20046238	A003345745U	0722648696	RESIDENTIAL	JOINTLY OWNED
	BONIFACE KINGOKU NDUNDA	1810305		0722648696		
	PETER THIORA M'INOTI	3747234	A001115177M	0724170675		
93	CHRISTINE NDILA MUANGE	6445826	A007268347C	0724113424	RESIDENTIAL	INDIVIDUALLY OWNED
94	MUTUA NDEME	8721233	A001992487M	0722755598	RESIDENTIAL	JOINTLY OWNED
	MUTHONI MARY KARIUKI	3338059	A001299022P	0720434366		
95	JANNIS KARIMI BUURI	21040827	A008695253J	0721230637	RESIDENTIAL	INDIVIDUALLY

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
	MUTUA NDEME	872123 3	A001992 487M	072275559 8		OWNED
96	VICKY JEPTOO CHANGWONY	221336 94	A002753 876I	072231142 4	RESIDENTIAL	JOINTLY OWNED
	ANNAH KANINI MAINGI	109244 81	A00284 8204X	0723- 595564		
	SHADRACK GITONGA NJERU	218739 12	A00366 8867T	071156656 7		
97	MARY MUENI MASILIA	892342 21	A00327 6979L	0722- 813307	RESIDENTIAL	JOINTLY OWNED
98&99	JOSEPH NJOROGE MUTUGI	110747 06	A002457 730T	071173920 7	RESIDENTIAL	JOINTLY OWNED
	MARGARET MUTHONI	516161		072148080 0		
100	JOSEPH KILONZO MBUMBU	480947 6	A01336 9963J	0721- 869789	RESIDENTIAL	INDIVIDUALLY OWNED
101	JOSEPH KILONZO MBUMBU	480947 6	A01336 9963J	0710- 440741	RESIDENTIAL	JOINTLY OWNED
	FLORENCE KANINI MUSYOKI	095599	A00905 4437Q	072212209 3		
	DANIEL MULE ANTHONY	480647 6		072186948 9	RESIDENTIAL	
102	JENNIFER MUENI NZUKI	323272 92	A00346 2926P	072003274 7	COMMERCIAL	INDIVIDUALLY OWNED
103	DANIEL MULE ANTHONY	146544 75	A003549 726F	0721- 271288	COMMERCIAL	INDIVIDUALLY OWNED
104	PATRICK KIMATU KIOKO	735027 9	A00143 1549I	0722- 935286	COMMERCIAL	INDIVIDUALLY OWNED
104B	NICHOLAS MUIA WAMBUA	161152 84	A00014 0988N	0722- 648696	RESIDENTIAL	JOINTLY OWNED
	CHARLES ODHIAMBO ONONGO	161152 84		072778889 3		
105	CORNELIUS KIIO SOMBA	136153 24	A00315 9776F	072163988 7	COMMERCIAL	JOINTLY OWNED
	STANELY MULIGE MUSYOKA	136153 24	A002660 767Z8	0737- 873959		
	GIDEON MUREGWA MURIITHI	112414 1	A01054 7398L	072072388 4		
	CATHERINE WANJIKU KAMIRI	239517 31	A009231 999C	072040979 2		
	STANELY GATURA NJIMA	204661 5	A006911 527R	072479032 0		

PLOT NO.	NAME	ID NUMBER	PIN NO.	PHONE NUMBER	USER	REMARKS
106	JOSEPH NJOROGE MUTUGI	110747 06	A002457 730T	0722-493995	RESIDENTIAL	INDIVIDUALLY OWNED
107	JOYCE MUTINDA MWOLOLO	571679 4	A00446 5617R	0736592213	RESIDENTIAL	INDIVIDUALLY OWNED
108	EMMAH WANGUI MUNENE	103799 26	A001495 058Z	0722846395	RESIDENTIAL	INDIVIDUALLY OWNED
109	JUSTIN IRUNGU	181058 3	-	0724341037	RESIDENTIAL	JOINTLY OWNED
	ALICE WAMBUI KARANJA	574270 2				
	LAWRENCE MUCHOKI IRUNGU	248050 38				
110	GEORGE NGATIA JACKSON	467300 2	A001116 794V	0728840337	RESIDENTIAL	INDIVIDUALLY OWNED
111	HANNAH WARIARA THIONG'O	180761 6	A013367 896N	0711945700	RESIDENTIAL	INDIVIDUALLY OWNED

Base Map, Embakasi informal settlement



Minutes of validation of LPDP, socio-economic survey report and the list of beneficiaries

LER CONSULT



Striving for a Sustainable Environment

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS
FOR 4 NO. INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES
DONE UNDER LOT 2 CONTRACT NO. MTIHUD/KISIP/CS/006D/2018-2019

MINUTES OF SOCIO-ECONOMIC REPORT PRESENTATION, BASE MAP AND DRAFT PLAN PRESENTATION IN EMBAKASI INFORMAL SETTLEMENT HELD AT EMBAKASI SDA CHURCH CONFERENCE HALL ON 6TH MAY 2019

Agenda

- 1 . Introduction
- 2 . Socio Economic Survey output presentation
- 3 . Planning outputs presentation
- 4 . Feedbacks/Reaction from presentation
- 5 . Verification of List of Beneficiaries
- 6 . AOB

Preliminary

The SEC chair brought the meeting to order at 1100 hours. The SEC members introduced themselves and it was noted that the official name of the settlement is Mother Estate from the initial name 'Embakasi Sokoni.' KISIP team, the City County and the consultant introduced themselves.

KISIP reminded the stakeholders that the assignment is a National Government project funded by World Bank and Nairobi is one of the 14 counties where informal settlements improvement projects were being undertaken. The main objective of the project was to improve livelihood of the slum dwellers by; ensuring security of tenure and infrastructure upgrading. Other important objective that KISIP sets out to achieve is institutional strengthening. It was further noted that the previous planning of the settlement stalled because the previous consultant was not able to complete the work within the stipulated timelines.

The area chief urged the structure owners should not allow tenants to use their premises to do illegal activities. She later requested all members to apply for *Huduma* number that was an ongoing National Government Initiative.

MIN: 06/05/19/1 PROJECT OVERVIEW

Ms Amile, the project Social safeguards specialist gave project overview and the key milestones the consultant has done since the inception of the project. She noted that in a period of two months, the consultant has achieved the following;

- Completion of introductory meeting of the consultant to the SEC members
- Boundary verification of the settlement by the consultant with the help of the SEC members

- Community participation meetings
- Conducting social economic survey
- Preparation of the draft list of beneficiaries
- Preparation of the draft base map

The remaining aspects of the assignment were the validation of the base map, list of beneficiaries and presentation of the draft plan.

MIN: 06/05/19/2 PRESENTATION OF THE DRAFT SOCIO-ECONOMIC SURVEY REPORT

It was noted that the socio-economic survey of the settlement was undertaken between 15th and 18th April 2019. It was noted that the objective of the presentation was to present the findings of the survey.

The following were the highlights of the socio-economic survey analysis:

- i. Plot ownership situation in Embakasi informal settlement is impressive as it tended towards gender parity in land ownership given that 58 percent of the beneficiaries are male.
- ii. Literacy level of plot owners is high at 98 percent.
- iii. The occupation profile of Embakasi informal settlement reveals that the returns to their labour is high given that a sizeable proportion of them are self-employed.
- iv. Over 50% of the beneficiaries acquired the plots through purchasing and 21 percent of the beneficiaries were allocated the plots by local administration.
- v. The settlement is well served by a motorable road connection, which are earth roads within the settlement
- vi. Ten percent of beneficiaries in Embakasi informal settlement had no electricity indicating inadequate electricity connection in the settlement.
- vii. LPG is the most popular cooking energy in the settlement. This is supplemented by kerosene and biofuels.
- viii. 51% have access to WC/Sewer (51%), a further 34% reported to having access to pit latrines. A significant number of residents do not have access to toilet. This poses serious health and sanitation risks to the residents in the settlement.
- ix. The main source of water is communal water point in the community whose safety cannot be guaranteed.
- x. Dwelling units are permanent with stone walls, cement floors and iron sheet roofing being the dominant building materials.
- xi. The most prevalent disease that was reported was common cold, followed by diarrhea mainly due to poor sanitary conditions in the area.

There were discussions on the planning needs priorities listed in the socio-economic report. It was agreed that the following priorities needs to be listed

- 1 . Title Deed
- 2 . Road
- 3 . Water

Florence Musyoki and Mr Martin Musangu proposed for the adoption of the socio-economic report. The community, by a show of hands, adopted the report subject to updating of the priorities list as discussed during the meeting.

MIN: 06/05/19/3 PRESENTATION OF THE SETTLEMENT BASE MAP AND PROPOSED LOCAL PHYSICAL DEVELOPMENT PLAN

Planner Paul Chege made the initial introduction remarks on the need of planning within the settlement. He highlighted the following planning needs of the settlement: insecure land tenure inadequate survey and planning data, inadequate provision of infrastructure services, poor sanitation and loss of aesthetic and high population density.

Planner Joakim Nyarangi highlighted the planning process that had been undertaken in the settlement. He started by reminding the community the vision they adopted in the previous meeting: The vision of the settlement was "A Clean, Safe and Secure Estate with good Infrastructure to Support Economic Growth of all its residents." He also indicated that currently the settlement has a total number of 111 plots and approximately 6743 people. He later presented the proposed development scenario for consideration by the community.

Three development alternatives were presented to the community:

- 1) The nil intervention where the base map is retained as it is. This proposal will not make any improvements in the settlement and the existing planning needs in the settlement would persist.
- 2) The standards intervention, which was guided by the original part development plan for the area that was not officially approved but used to allocate the parcels. This proposal would witness the expansion of roads for improved access in the settlement. However, this proposal would witness the displacement of some beneficiaries who did not obey the original part development plan.
- 3) The minimal displacement alternative. This plan would witness compromise of the planning standards in some sections of the settlement especially where the community has encroached on the initial plot boundaries.

The settlements members were very keen on the proposed development scenario and several issues were raised. The SEC Chairman Mr Nzuki wanted a clear clarification of the merits and demerits of the proposed standard plan intervention and the minimal displacement plan intervention. Mr Martin Musangu also requested the consultant to convert the road measurements into feet, which the local understands instead of using metres. He also said he was supporting the standard plan intervention considering the future needs of the estates.

One of the SEC members raised his support for the standard plan intervention indicating that very few people will be affected and it will retain a proper urban character. He also proposed opening of the six (6) metres road within the settlement, which was supported, by the 5 of the affected people by the road while two were against the proposal but the community members agreed to open the road.

One of the settlement members had a concern on the proposed minimum number of the floors in the settlement which was three floors building. She wanted to know in case the structure owner is not in a position to construct what will be repercussions. Mr Martin replied and explained that the proposed minimum number of floors is for approving purposes when the development is submitted for approval purposes by the county.

Ms Emily Wangari requested for freehold tenure system of the title deed to be generated. She also requested for assistance from the consultant to help them contact Nairobi Water and Sewerage Company in regards to water connection in the area. Planner Paul Chege indicated that the Title Deed could only be provided under leasehold tenure system for a term of 99 years. Nairobi City County assured Emily that they will ensure that the officials of Nairobi Water and Sewerage Company and the area MCA will be in attendance in the next meeting in case of any issues which requires their intervention.

After a lengthy discussion, the community members adopted option 2 of the three options presented to them. The other community agreed to this proposal by a show of hands.

MIN: 06/05/19/4: VERIFICATION OF LIST OF BENEFICIARIES

The community then were called one by one to verify their details as captured during the socio-economic survey. The details that were verified include the name of the beneficiary (as captured in the ID), their ID number, PIN number, plot number and phone number. All the structure owners present were given a chance to verify their detailed.

Ms Faith from KISIP informed the community that in the event that any of the beneficiary is dead, the family members should follow the succession process by appointing an administrator with the knowledge of the area chief.

RESOLUTION

The community resolved the following:

- 1 . The base map should be adopted as it is.
- 2 . The socio-economic report should be adopted based on the corrections on the priorities list
- 3 . The standards plan (option 2) should be adopted and prepared for approval by the Nairobi City County and the Ministry of Lands and Physical Planning

MIN: 06/05/19/5 ADJOURNMENT

The meeting ended at 4:00pm with prayer from one of the community members.

Signatures

1. Faith Birir Birir 6/6/2019

(KISIP National representative)

2. Margaret Wachira Wachira 6/6/2019.

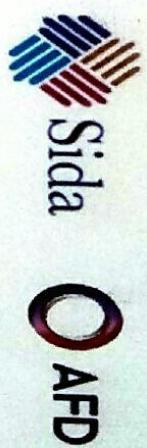
(Nairobi City County Representative)

3. Samuel Nzuki, Nzuki. 6/6/2019

(SEC Chairman)

4. Andy. Everlyne Amile 6/6/2019.

LER Consult Representative



ATTENDANCE SHEET

NAME OF SETTLEMENT: Embakasi

DATE: 06/05/2019

ACTIVITY: <u>PRES EN TATION OF BASE MAP, DRAFT LPO, LIST OF BENEFICIARIES</u>		<u>ORGANISATION/SETTLEMENT</u>	<u>TELEPHONE NUMBER</u>	<u>SIGN</u>
1				
2	Joakim Nyang'anya	LER CONSULT LTD	0721224735	J. N.
3	Aaron Kechia	LER consult LTD	0720571339	A.
4	Bernard Kimothu		0725120884	B.K.
5	Tony Njeri		0726249004	T.N.
6	Clement Moge	LER consult	0712023887	C.M.
7				
8				
9				
10				
11				
12				
13				
14				
15				

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2
CONTRACT NO. MTHUD/KSIP/CS/006D/2018-2019

LER CONSULT

Setting for a sustainable environment

Male - 4
Female - 1





NAME OF SETTLEMENT: EMBAKASI

ATTENDANCE SHEET

DATE: 06/05/2019

ACTIVITY: PRESNTATION OF BASEMAP DRAFT LPDP & LIST OF BENEFICIARIES

NAME	ORGANISATION/ SETTLEMENT	TELEPHONE NUMBER	SIGN
1 Everline Amile	LER Consult	0792485970	
2 Dorcas W. Mungai		0722809127	
3 MARY NUTONI K.	SEC Secretary	0722774603	
4 Phyllis K. Kora	EmbaKasi Landline	0720646807	
5 GEORGE DINNOOR AUNDOPA	EmbaKasi Landline	0722422791	
6 Fulton J. Panyu	EmbaKasi	0420498936	
7 Joseph N. Ongoro	EmbaKasi	0708331965	
8 THOMAS MUIA MUTHIA	EmbaKasi	072345051	
9 NELLIOUS MBITHIE MWOLLO	EmbaKasi	072072461	
10 CHRISTINE NDILA	EmbaKasi	0724113424	
11 Grace Karuka Nyamki	EmbaKasi	072903819	
12 Jane Mburu	EmbaKasi	0727383228	
13 Selvestra Sankut	EmbaKasi	0725540032	
14 Simeon Musyoki Ndambuki	EmbaKasi	0716447864	
15 Ndoni Kamamboka Amuya	EmbaKasi	0720739826	

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2
CONTRACT NO. MTHUD/KSIP/CS/006D/2018-2019

LER CONSULT

Strive for a sustainable environment

Female - 6
Male - 6



ATTENDANCE SHEET

NAME OF SETTLEMENT: Embakasi

DATE: 06/05/2019

ACTIVITY: PRESENTATION OF BASE MAP, DRAFT LPP & LIST OF BENEFICIARIES

NAME	ORGANISATION/ SETTLEMENT	TELEPHONE NUMBER	SIGN
1 JESNAH KIREKOE	MOTHER ESTATE	0722596618	Athen
2 SAWICKI NGUMWA	MOTHER ESTATE	0720281467	Wanjiru
3 MARGARET NIBIHE MUTHOKA	MOTHER ESTATE	0714056939	Kenya
4 PATRICK KIRANYI KARIUKI	MOTHER ESTATE	0726-213164	Lunyu
5 ACNES WAMBUA WANGOMBE	MOTHER ESTATE	0734 781351	Danah
6 JOSEPH KMONDO MBURUBA	MOTHER	0721869789	John
7 HANNAH WARINDA	MOTHER ESTATE	071945700	Hanen
8 BETTY SOY OMBOGO NYAKOEGE	EMILY KARIUKI	0721 781862	Omoko
9 HELEN OKUNDA	MOTHER ESTATE	0722 431885	Helen
10 ADRIOT YUYANZI NAFUA	MOTHER ESTATE	0705048601	Yuyanzi
11 JEANE KHARIO	MOTHER ESTATE	0735962736	Jeane
12 JANE WACHUMA MUNENE	MOTHER ESTATE	0740 822503	Afie
13 LILIAN BOSIBORU OCTAVIANA	MOTHER ESTATE	0726 479187	Lilian
14 RAY MOTHON KARICHI	MOTHER ESTATE	0720434366	Muthoni
15 ROBERT KANJENO KULE	MOTHER ESTATE	0722733691	Robert

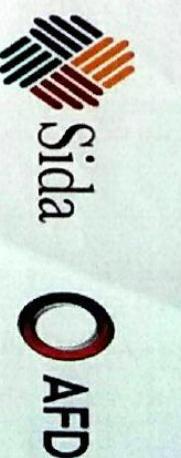
PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
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Striving for a sustainable environment



F - 10
m - 5



ATTENDANCE SHEET

NAME OF SETTLEMENT: EMBAKASIDATE: 06/05/2019ACTIVITY: PRESENTATION OF BASEDRAFT DRAFT LDP & LIST OF BENEFICIARIES

NAME	ORGANISATION/SETTLEMENT	TELEPHONE NO.	SIGN
1 Mary Klangari	MOTHER ESTATE	0725209170	Mary
2 Monica Nyawira Thoro	MOTHER ESTATE	0720290026	Nyawira
3 Samuel Wanjiru Muchiki	Embakasi	0724938347	Samuel
4 JANE KARIMI KANGETHI	MOTHER ESTATE	0726011185	Jane
5 BEATRICE JUNA OMBIGU	MOTHER ESTATE	0744631871	Beatrice
6 SAMUEL GYOKA KEBATTI	MOTHER ESTATE	0725209170	Samuel
7 THOMAS MUTHIKE	MOTHER'S ESTATE	0716189102	Thomas
8 Peter Kipiano MUSANGO	Embakasi	0720-744864	Peter
9 ESPETH N. KIRIACH	CHIEF	0722-783529	Esperance
10 SADIA MONG'AI KENYA	STRUCTURE NATION	0724749131	Sadia
11 Margaret Ngwenya	NC Housing	0720711093	Margaret
12 Maureen Muthoni Mwendwa	LER CONSULT	0722555334	Maureen
13 CHRISSANTUS NYABUA ODE	MASTER ESTATE	0722493925	Chrisantus
14 Dennis Kimathi	DESIGN TEAM	0725120334	Dennis
15 SAMUEL NITHI	MOTHER ESTATE	07258255284	Samuel
16 Daniel Mwanduki	MOTHER ESTATE	0721731250	Daniel
17 ROBERT KEBANDI MOREMA	MOTHER ESTATE	0728272355	Robert

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.

INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2

CONTRACT NO. MTHUD/KISIP/CS/006D/2018-2019

MAINE - 8 County - 2

families - 2

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ATTENDANCE SHEET

NAME OF SETTLEMENT: Embakasi

DATE: 06/08/2019

ACTIVITY: PRESERVATION OF BASEMAP, DRAFT LDDP & LIST OF BENEFICIARIES

NAME	ORGANISATION/ SETTLEMENT	TELEPHONE NUMBER	SIGN
1 <u>BENJAMIN RAYMOND ONSARIO</u>	<u>MOTHER ESTATE</u>	<u>0718-800729</u>	<u>Ben</u>
2 <u>JONATHON MUSICA MUDOKO</u>	<u>II</u>	<u>044-2688140</u>	<u>Jon</u>
3 <u>EMMANUEL MATUA JOEL</u>	<u>MOTHER ESTATE</u>	<u>0723-242640</u>	<u>Emmanuel</u>
4 <u>MARYAM KUSABHO</u>	<u>MOTHER ESTATE</u>	<u>072523600</u>	<u>Maryam</u>
5 <u>CHRISPUS MUTHKA NUSODA</u>	<u>MOTHER ESTATE</u>	<u>072-648896</u>	<u>Chrispus</u>
6 <u>DANIEL MULE ASHONY</u>	<u>MOTHER ESTATE</u>	<u>0731271288</u>	<u>Daniel</u>
7 <u>JOHN NJE NJOGO</u>	<u>MOTHER ESTATE</u>	<u>0241482451</u>	<u>John</u>
8 <u>Elizabeth NAL Karithi</u>	<u>Mother Estate</u>	<u>0725861462</u>	<u>Elizabeth</u>
9 <u>MARYO OLUBUCH</u>	<u>Mother Estate</u>	<u>0713527271</u>	<u>Maryo</u>
10 <u>Edwin Kithinji Muthuri</u>	<u>Mother Estate</u>	<u>07222233470</u>	<u>Edwin</u>
11 <u>EMILY WANGARE KAHURIA</u>	<u>MOTHER ESTATE</u>	<u>0722263902</u>	<u>Emily</u>
12 <u>CORNELIAS SOMBA</u>	<u>MOTHER ESTATE</u>	<u>0721629887</u>	<u>Cornelia</u>
13 <u>GRACE KITOKO</u>	<u>MOTHER ESTATE</u>	<u>0724605138</u>	<u>Grace</u>
14 <u>ROSE KATHEU</u>	<u>MOTHER ESTATE</u>	<u>0721465506</u>	<u>Rose</u>
15 <u>GODAH Mumbua</u>	<u>Mother Estate</u>	<u>0705822125</u>	<u>Godah</u>

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2
CONTRACT NO. MTIHUD/KISIP/CS/006D/2018-2019

LIER CONSULT



ATTENDANCE SHEET

NAME OF SETTLEMENT: EMBAKASI

DATE: 06/05/2019

ACTIVITY: PRESIDENTIAL PRESENTATION OF BASEMAP, NRAFT, LER & LIST OF BENEFICIARIES.

NAME	ORGANISATION/SETTLEMENT	TELEPHONE NO.	SIGN
1 EFE BIRIX	KCSP	0722462989	
2 Philip Dale WALTER	KISIP	072228061	
3 DR. OBIKWA	LER	072027771	
4 TERRY OKEMWA	LER	0715042342	
5 Peter Mwangi	LER	0712214966	
6 SAKIE G. KODONYO	LER	0716309501	
7 JONATHAN N. NASHINGOLO	0723518812		
8 GIBSON H. MULUNGUJI	0		
9 RICK NYAMU	WAPRI	0721140322	
10 JACKSON KENSI	LER	07209798728	
11 CECILIA MUSONI MALENCI	EMBAKASI	0715265832	
12 NADSYNA MUNYANGA	LIP	0725327281	
13 JANE MODERA	0717640341		
14 HANON ONGERI	LER	0726351129	
15 CYPRIANE K. AMITHO	Embakasi	0722839365	
16 FRANCISCO MULUNGUJI	KISTP	0701220356	
17 Peter Thiong'uthi	KIHP	0724170675	
18 KENNEDY RAPENO	15th May 2019	0711757106	

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2
CONTRACT NO. MTIHUD/KISIP/CS/006D/2018-2019

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Striving for a sustainable environment



KISIP - 62
MATE - 7+1



ATTENDANCE SHEET

NAME OF SETTLEMENT: EMBAKASI

DATE: 06/05/2019

ACTIVITY:	PRESENTATION OF BASEMAP	DRAFT LPDP,	LIST OF BENEFICIARIES
NAME	ORGANISATION/ SETTLEMENT	TELEPHONE NUMBER	SIGN
1 Papelu K. Koko	Embacon	0720646807	
2 GEORGE ODINGA AYANDA	EMBAKASI	0722422791	
3 Anthony Mwangi WACHALA	EMBAKASI	0720494955	
4 Joseph M. Gacage	Embacon	0708331962	
5 Thomas Muia MUTHIA	EMBAKASI	0723430251	
6 DELLIUS MOITHE MWOLDO	EMBAKASI	0720724611	
7 CHRISTINE NDILA	EMBAKASI	0724113424	
8 FLORENCE KAMUNI MASHOKI	EMBAKASI	0726049767	
9 MARY MUTHIBI KIRUBU	EMBAKASI	0721326927	
10 VICTORIA N. MUSYOKI	EMBAKASI	0722311447	
11 JOSEPHINE NZUKI MUNGETE	EMBAKASI	0724562664	
12 HANNAH NYABURA MAMA	EMBAKASI	0722107513	
13 JACKLINE NGINA MUTHOKA	EMBAKASI	0721382739	
14 RUTH MBULA TOSOPHIA MUSEU	EMBAKASI	0726344709	
15 LYDIA WARURIRI	EMBAKASI	0726999865	

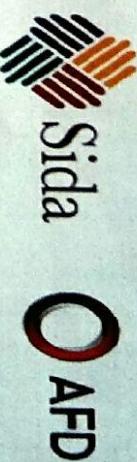
PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
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CONTRACT NO. MTIHUD/KSIP/CS/006D/2018-2019

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Maine - 5
Gamma - 10

Striving for a sustainable environment





ATTENDANCE SHEET

NAME OF SETTLEMENT: EMBAKASI

DATE: 06/05/2019

ACTIVITY: PRESENTATION OF BASEMAP, DRAFT LDPD, LIST OF BENEFICIARIES	NAME	ORGANISATION/SETTLEMENT	TELEPHONE NO.	SIGN
1	Collins N. CHEUTYOT	Embaus! Mother Estate	0322852470	
2	R. Liach	Embaus! Mother Estate	0721897324	
3	V. JEPHOD (Chairwoman)	Embaus! Mother Estate	0422311424	
4	FRANCIS MUSINDA	Embaus! Mother Estate	0724387933	
5	PERCE NAMAK WANENE	MOTHER LAND ESTATE	0723958836	
6	ALSERI KAREN MURITHI	Embaus! Mother Estate	0724032418	
7	TITUS KEEN MUSINGI	MOTHER ESTATE	0720830857	
8	JANE MUTHONI KAMUYU	Embaus! Mother Estate	0724282627	
9	ELIZABETH ATIENO ANGOR	Embaus! Mother Estate	0723595564	
10	POLLOMENA N. TOWIA	Embaus! Mother Estate	071606784	
11	Naivus Bakure Murithi	MOTHER ESTATE	0711240157	
12	BONIFACIO KAMASHE	EMBAPASS! Mother	0724536669	
13	RICHARD NYIRAKHO	Embaus! Mother	0721939180	
14	THOMAS MANG'ATI	Embaus! Mother	0722726698	
15	ROSEMARY H. KANYAU	Embaus! Mother	0726705464	
16				
17				

PLANNING, SURVEYING AND PREPARATION OF RESETTLEMENT ACTION PLANS FOR 4 NO.
INFORMAL SETTLEMENTS IN NAIROBI AND MOMBASA COUNTIES DONE UNDER LOT 2
CONTRACT NO. MTHUD/KISP/CS/006D/2018-2019

LER CONSULT

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KENYA INFORMAL SETTLEMENTS IMPROVEMENT PROJECT (KISIP)

**FOMU YA KUHESABU WAKAAZI WA VIBANDA
INFORMAL SETTLEMENT ENUMERATION FORM**

<i>Date:</i>	
<i>Serial No:</i>	
<i>Enu. No:</i>	
<i>County:</i>	
<i>Settlement:</i>	
<i>Villages</i>	
<i>ZoneID</i>	
<i>ParceID</i>	
<i>Structure ID</i>	
<i>RoomID</i>	

A Enumeration details	
	Mwenye kujibu (<i>Respondent</i>):
3	Jina la kwanza (<i>First Name</i>):
4	Jina la kati (<i>Middle Name</i>):
5	Jina la mwisho (<i>Last Name</i>):
6	Nambari ya kitambulisho (<i>ID card No</i>):
7	Nambari ya Kodi (<i>Pin No.</i>)
8	1. Mwenye ploti (<i>Plot Owner(s)</i>) 2. Mwenye Nyumba (<i>Structure owner(s)</i>)

		3. Mpangaji (Tenant/ Occupier(s)) 9. Mwingine (Other) <i>(If 9 please explain)</i>
8		

B Parcel owner's/ occupier's/ Tenant's general details		
1	<i>(Structure Owner/</i>	<input type="checkbox"/> Mtu <i>(Person)</i> <input type="checkbox"/> Shirika <i>(Organisation)</i>
2	<i>(Photo number):</i>	
3	<i>(First</i>	
4	<i>(Middle Name):</i>	
5	<i>(Last Name):</i>	
6	<i>(Gender):</i>	1. Mume (Male) 3. Not Applicable (N/A) 2. Mke (Female)
7	<i>(Year of birth (Registration)):</i>	
8	<i>(ID No (Registration No)</i>	
9	<i>(Nationality):</i>	1. Raia wa Kenya (Kenyan Citizen) 2. Mkimbizi (Refugee) 9. Raia wa nchi nyininge (Other Nationality) <i>(If 9 please explain)</i>
10	<i>(Marital status):</i>	1. Hajaoa/Hajaolewa (Single) 2. Ameolewa (Married) 3. Wameachana (Separated) 4. Mjane (Widowed)
11	<i>(Any disability?)</i>	1. Ndio (Yes) 2. La (No) 9.If yes, please specify
12	<i>(Educational level)</i>	1. Chuo/Chuo Kikuu (College/University) 2. Shule ya upili (Secondary) 3. Shule ya msingi (Primary) 4. Shule ya gumbaru (Adult Education) 5. Asiye na elimu (None) 9. Elimu nyininge (Other) Ikiwa 9 (Elimu nyininge), tafadhali ueleze <i>(If 9 please explain)</i>
13	<i>(Occupation)</i>	<input type="checkbox"/> 1. Mwajiriwa wa Serikali (Civil Servant) <input type="checkbox"/> 2. Mwajiriwa wa kampuni ya kibinafsi (Employee in private sector) <input type="checkbox"/> 3. Kibarua (Casual Labourer) <input type="checkbox"/> 4. Mwajiriwa wa kibinafsi (Self-employed) <input type="checkbox"/> 5. Asiyeajiriwa (Unemployed)

		<input type="checkbox"/> 6. Mwanafunzi (Student)
		<input type="checkbox"/> 7. (N/A)
		<input type="checkbox"/> 9. Kazi nyingine (Other)
14	<i>Place of work</i>	<input type="checkbox"/> 1. Katika kijiji hiki (In this village) <input type="checkbox"/> 2. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 3. Nje ya Mtaa huu (Outside this settlement)
15	<i>(Mode of transport used to work)</i>	<input type="checkbox"/> 1. Gari la kibinafsi (Private car) <input type="checkbox"/> 2. Matatu/ Basi (Bus/ Matatu) <input type="checkbox"/> 3. Pikipiki (Motor cycle) <input type="checkbox"/> 4. Baiskeli (Bicycle) <input type="checkbox"/> 5. Kwa miguu (On foot) <input type="checkbox"/> 6. (N/A) <input type="checkbox"/> 9. Usafiri Mwingine (Other mode of transport) Ikiwa 9 (Usafiri mwingine), tafadhali eleza (If 9 please explain)
16	<i>(Total Monthly household income)</i>	
17	<i>(Which mode of communication do you use?)</i>	<input type="checkbox"/> 1. Barua (Letters) <input type="checkbox"/> 2. Simu (Land line telephone) <input type="checkbox"/> 3. Simu ya jamii (Pay phone) <input type="checkbox"/> 4. Simu ya rununu (Mobile phone) <input type="checkbox"/> 5. Furushi (Parcels) <input type="checkbox"/> 6. Barua Pepe (E-Mail) <input type="checkbox"/> 7. Mawasiliano ya uso kwa uso (Physical contact)
18	<i>(Where do you most often seek medical treatment when sick?)</i>	<input type="checkbox"/> 1. Hospitali ya raia (Public hospital) <input type="checkbox"/> 2. Hospitali ya kibinafsi (Private hospital) <input type="checkbox"/> 3. Hospitali ya kidini/Shirika lisilo la sirikali (Mission / NGO hospital) <input type="checkbox"/> 4. Mganga wa mitishamba (Traditional Healer) <input type="checkbox"/> 5. Duka la Dawa (Chemist) <input type="checkbox"/> 6. Duka la Kawaida (Shop) <input type="checkbox"/> 7. Kuombewa / (Spiritual Healer)
19	<i>(Name of the medical facility)</i>	
20	<i>(Where is this medical facility located?)</i>	<input type="checkbox"/> 1. Katika kijiji hiki (In this village) <input type="checkbox"/> 2. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 3. Nje ya Mtaa huu (Outside this settlement)
21	<i>(What would you like to be considered during the upgrading process in order of priority?)</i>	
	<input type="checkbox"/>	Usalama (Security)
	<input type="checkbox"/>	Afyा (Health)
	<input type="checkbox"/>	Elimu (Education)
	<input type="checkbox"/>	Maji (Water)

	<input type="checkbox"/> Umeme/Stima (Electricity) <input type="checkbox"/> Barabara (Roads) <input type="checkbox"/> Nyumba (Housing) <input type="checkbox"/> Ajira (Employment) <input type="checkbox"/> Usafi wa mazingira (Sanitation) <input type="checkbox"/> Takataka (Solid waste management) <input type="checkbox"/> Mambo mengine (Other issues)	
	Ikiwa Mambo mengine, tafadhalii taja (<i>If any other please state</i>)	
22	Magonjwa ambayo umeugua miezi 4 iliyopita	(<i>Diseases suffered in the last 4 Months</i>)
	<input type="checkbox"/> 1. Malaria <input type="checkbox"/> 2. TB <input type="checkbox"/> 3. Diarrhoea <input type="checkbox"/> 4. Pneumonia <input type="checkbox"/> 5. Common	<input type="checkbox"/> 6. Amoeba / Typhoid <input type="checkbox"/> 7. Hypertension <input type="checkbox"/> 8. Diabetes <input type="checkbox"/> 9. Magonjwa mengine (Other ailments)
	(If 9 please explain)	
Additional details for owners		
23	<i>(Mode of Acquisition):</i>	<input type="checkbox"/> 1. Kujikatia (Self Acquired) <input type="checkbox"/> 2. Kupewa na Serikali (Allocation) <input type="checkbox"/> 3. Kumiliki (Inherited) <input type="checkbox"/> 4. Kununua (Purchased) <input type="checkbox"/> 9. Njia Nyingine (Other Mode)
24	<i>(Ownership proof):</i>	<input type="checkbox"/> 1. Cheti cha kumiliki ardhi (Title deed) <input type="checkbox"/> 2. Cheti cha muda (Temporary Occupancy License) <input type="checkbox"/> 3. Hakuna waraka (No document) <input type="checkbox"/> 9. Waraka mwingine (Other document)
25	<i>(Number of plot owners)</i>	
26	<i>(If joint ownership indicate your share)</i>	
27	<i>(Owner's residence if not within this structure):</i>	<input type="checkbox"/> 1. Katika kijiji hiki (In this village) <input type="checkbox"/> 2. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 3. Nje ya Mtaa huu (Outside this settlement)
28	<i>(If you don't reside within the village, are you renting?):</i>	<input type="checkbox"/> 1. Yes 2. No <input type="checkbox"/>
For Information on additional Owners See Appendices B1.....		

Additional details for Occupiers		
29	(Your share of the rent)	
30	(Where did you live before you came here?)	1. Katika kijiji hiki (In this settlement) 2. Katika Mtaa moja jijini (In a formal residential area in the town) 3. Nje ya jiji hii (Outside this town) 4. N/A
31	(Why did you move here?)	1. Sababu za kinyumbani (Domestic reasons) 2. Sababu za uchumi (Economic reasons) 3. Ukosefu wa Shamba (Landlessness) 4. Kuhamishwa (Eviction) 5. Mapigano (Skirmishes) 6. N/A 9. Sababu nyingine (Other reason)
32	(How many years have you lived in this village?)	

C Household unit details

1	(Structure/Room use):	Makao(Residential): Viwanda (Industrial) Elimu (Educational) Kuburudika (Recreational) <input type="checkbox"/> 301. Michezo (Sports/Gym) <input type="checkbox"/> 302. Muziki (Music) <input type="checkbox"/> 303. Nyumba la michezo (Theatre) <input type="checkbox"/> 304. Nyumba la disk/<i>Nyumba ya vinywaji</i> (Disco/Night club) <input type="checkbox"/> 399. burudani nyingine (Other Recreational) Ikiwa 399 (burundani nyingine), tafadhali ueleze (If 9 please explain) Commercial (Biashara) Uchukuzi (Transport) Ukulima(Urban Agriculture) Lengo la uma: (Public purpose)
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Utoshelevu wa Uma (Public Utility)			
2	Vifaa vya ujenzi vinavyotumika (Building materials used)		
	(Walls)	<input type="checkbox"/> Mawe (Stone) <input type="checkbox"/> Mabati (Ironsheets) <input type="checkbox"/> Mbao (Wooden) <input type="checkbox"/> Udongo na simiti (Cemented earthwall) <input type="checkbox"/> Udongo (Earth) <input type="checkbox"/> Karatasi (Polythene/ Carton)	
3	Sakafu (Floor):	<input type="checkbox"/> 1. Saruji (Cement) <input type="checkbox"/> 2. Udongo (Earth) <input type="checkbox"/> 9. Nyingine (Other)	
		Ikiwa 9 tafadhali eleza (If 9 explain)	
4	<i>(Roof)</i>	Vigae (Tiles) Mabati (Iron sheets) Mbao (Wooden) Nyasi (Grass thatched) Kifaa Kingine (Other) Ikiwa 9 (Kifaa kingine), tafadhali ueleze (If 9 please explain)	
5	<i>House size</i>	Urefu <i>(Length):</i>	Upana (Width):
6	<i>(Rental Agreement):</i>	1. Mapatano ya kupangisha (Written Agreement) 2. Mapatano ya kuongea (Verbal Agreement)	
7	<i>(Monthly rent for the room):</i>		
8	<i>(What is the main source of water?):</i>	0. Hakuna maji (No water) 1. Maji ya mfereji (Piped water) 2. Kisima kisicho kirefu (Shallow well) 3. Maji ya mvua (Rain water) 4. Mto (River/stream) 9. Njia nyingine ya kupata maji (Other water source)	
		Ikiwa 9 (Njia nyingine ya kupata maji), tafadhali ueleze	
9	<i>(Average cost of water per day):</i>		
10	<i>(Do you have access to a bathroom?):</i>	<input type="checkbox"/> 0. Hakuna Bafu (No bathroom) <input type="checkbox"/> 1. Bafu (Bathroom in the structure) <input type="checkbox"/> 2. Bafu (Bathroom outside the structure)	
11	<i>(Which type of toilet facilities do you have access to?):</i>	<input type="checkbox"/> 0. Hakuna Choo/Bafu (No toilet/bathroom) <input type="checkbox"/> 1. Choo cha shimo (Latrine) <input type="checkbox"/> 2. Choo malumu (VIP) <input type="checkbox"/> 3. Choo cha maji (WC/Sewer) <input type="checkbox"/> 4. Tenki ya kinyesi (Septic Tank) <input type="checkbox"/> 5. Kinyesi kwenye plastiki (Flying Toilet)	

		<input type="checkbox"/> 9. Choo kingine (Other) <i>If 9 please explain</i>
12	(Average cost of use of toilet facilities incurred daily):	
13	(How do you utilize electricity?)	<input type="checkbox"/> 0. Hakuna umeme/stima (No Electricity) <input type="checkbox"/> 1. Mwangaza (Lighting) <input type="checkbox"/> 2. Kupika (Cooking) <input type="checkbox"/> 9. Matumizi mengine (Other)
14	(Average cost of use of electricity per month:)	Ikiwa 9 (Matumizi mengine), tafadhali ueleze (<i>If 9 please explain</i>)
15	(Cooking energy)	<input type="checkbox"/> 1. Umememe/stima (Electricity) <input type="checkbox"/> 2. Gesi (Gas) <input type="checkbox"/> 3. Gesi ya kinyesi (Biogass) <input type="checkbox"/> 4. Mafuta ya taa (Kerosene) <input type="checkbox"/> 5. Makaa (Charcoal) <input type="checkbox"/> 6. Kuni (Firewood) <input type="checkbox"/> 7. Vumbi la makaa na udongo (Chaarcoal dust) <input type="checkbox"/> 9. Nishati nyingine (Other)
16	(Where do you dispose your solid waste?):	1. Mtoaji wa huduma ya kibinafsi (Private service provider) 2. Huduma ya serikali ya Kaonti (County Government) 3. Mahali maalum pa takataka (Dump site) 4. Pipa la takataka (Bin) 5. Barabarani (Road) 6. Mtoni (River) 7. Nje ya nyumba (Outside the structure) 8. Mitaru ya maji machafu (Open waste water drainage) 9. Nyingine (Other)
17	(Number of persons living in this household unit)	Ikiwa 9 (Nyingine), tafadhali ueleze (<i>If 9 please explain</i>)

18. Household Census						
PERSON NO.	18.1 NAME	18.2 RELATIONSHIP TO PERSON 1	18.3 NATIVE GROUP	18.4 STATUS	18.5 GENDER	18.6 AGE
<i>Person 1 is the Head of the household</i>	Names of the people who usually live at this address Or Regards this	1. Spouse (husband/wife) 2. Partner 3. Father 4. Mother 5. Sister 6. Brother	1. Native 2. Migrant 3. Other	1. Owner 2. Tenant 3. Heir 4. Joint Heir	1. Male 2. Female	Age last birthday

18. Household Census						
PERSON NO.	18.1 NAME	18.2 RELATIONSHIP TO PERSON 1	18.3 NATIVE GROUP	18.4 STATUS	18.5 GENDER	18.6 AGE
	address as their “Usual Place of Residence	7. Daughter 8. Son 9. Cousin 10. Not related Add S for step relative e.g. S8 for Step Son				
1						

19	Parcel Details (for Parcel Owners)		
19.1	Kipimo cha Ploti	(Size of Parcel)	
19.2	Idadi ya wenyewe ploti	(Number of Owners):	
19.3	Idadi ya vyumba kwenye ploti	(Number of structures):	
19.4	Huduma zilizo kwenye Ploti?	(Services available):	
	1. Choo (Toilet)		
	2. Bafu (Bathroom)		
	3. Stima (Electricity)		
	4. Maji (Water)		
19.5	(Access to this Parcel)	1. Njia ya miguu (Foot path) 2. Barabara ya gari (Motorable road) 3. Hakuna Njia (No / Blocked Access)	
19.6	Dominant use of this parcel		

20	Structure Details	Structure No.
20.1	Idadi ya Vyumba katika Nyumba hii (Number of rooms in the structure)	
20.2	Idadi ya wenyewe nyumba hii (No of structure owners)	
20.3	Ulijenga nyumba hii mwaka Gani? (Year of construction)	
20.4	Ukuta (Walls)	1. Mawe (Stone) 2. Mabati (Ironsheets) 3. Mbao (Wooden) 4. Udongo (Earth) 5. Karatasi (Polythen/Carton)
20.5		1. Vigae (Tites)

	Paa (Roof):	2. Mabati (Ironsheets) 3. Mbao (Wooden) 4. Nyasi (Grass) 9. (Other)
20.6	.	(if 9 please explain)
20.7	Size (Kipimo)	Urefu (<i>Length</i>) (<i>Width</i>)
20.8	Matumizi ya Nyumba	Structure Use

D Business details		
1	<i>(Trade License)</i>	
2	<i>(Company)</i>	
3	<i>(Company/trading)</i>	
4	<i>(Business Type)</i>	<input type="checkbox"/> 501. Supamaketi (Supermarket) <input type="checkbox"/> 502. Duka la jumla (Wholesale shop) <input type="checkbox"/> 503. Duka la rejareja (Retail shop) <input type="checkbox"/> 504. Duka la vifaa (Hardware) <input type="checkbox"/> 505. Pumpu ya petroli/ mafuta ya taa (Petrol/Kerosene pump) <input type="checkbox"/> 506. Viwanda vya nguo (Textiles) <input type="checkbox"/> 507. Mitumba (Secondhand clothes) <input type="checkbox"/> 508. Duka la nyama (Butchery) <input type="checkbox"/> 509. Kibanda cha vyakula (Food kiosk) <input type="checkbox"/> 510. Duka la mboga (Green grocer) <input type="checkbox"/> 511. Mwuzaji makaa (Charcoal dealer) <input type="checkbox"/> 512. Seremala (Carpenter) <input type="checkbox"/> 513. Fundi wa baiskeli (Bicycle repair) <input type="checkbox"/> 514. Fundi wa viatu (Shoe cobbler) <input type="checkbox"/> 515. Ushonaji (Tailoring) <input type="checkbox"/> 516. Kinyozi/Mahali pa kutengeneza nywele (Hair salon) <input type="checkbox"/> 517. Ukumbi wa filamu/Maktaba ya video (Video show/Video library) <input type="checkbox"/> 518. Baa (Bar) <input type="checkbox"/> 519. Vifaa kuukuu (Secondhand goods) <input type="checkbox"/> 520. (Battery charging) <input type="checkbox"/> 521. (Telephone bureau) <input type="checkbox"/> 521 Motorcycle transport <input type="checkbox"/> 599. Biashara nyingine (Other commercial)
		Ikiwa 599 (Biashara nyingine), tafadhalii
5	<i>(Monthly Income):</i>	
6	<i>(Source of raw material)</i>	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 2. Nje ya Mtaa huu (Outside this settlement)
7	<i>(Problems encountered)</i>	

8	(How do you transport your raw material/products?)	1. Lori (Lorry) 2. Gari la kibinafsi (Private car) 3. Mkokoteni (Hand cart) 4. Pickup 5. Baiskeli (Bicycle) 6. Mchukuzi (Porters) 7. Wilibaro (Wheelbarrow) 8. Pikipiki (Motorcycle) 9. Nyingine (Other)
	Ikiwa 9 (Nyingine), tafadhali ueleze (If 9 please explain)	
9	(Where do you sell your products?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)
10	(Where do your customers come from?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)
11	(Number of workers including yourself):	
12	(Where do you live?)	<input type="checkbox"/> 1. Katika kijiji hiki (In this village) <input type="checkbox"/> 2. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 3. Nje ya Mtaa huu (Outside this settlement)

E Industry details		
1	(Trade License No):	
2	(Company Registration No):	
3	(Company):	
4	(Industry Type):	101. Uchomeleaji (Welding) 102. Mhunzi (Blacksmith) 103. Kinu cha kusagia unga (Posho mill) 104. Utengenezaji wa pombe (Brewing) 199. Kiwanda kingine (Other)
	Ikiwa 199 (Kiwanda kingine), tafadhali ueleze (If 199 please explain)	
5	(Monthly Industry Income)	
6	(Source of raw material)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)
7	(Problems encountered)	
8	(How do you transport your raw material/products?)	1. Lori (Lorry) 2. Gari la kibinafsi (Private car) 3. Mkokoteni (Hand cart)

		4. Pickup 5. Baiskeli (Bicycle) 6. Mchukuzi (Porters) 7. Wilibaro (Wheelbarrow) 8. PikiPiki (Motorcycle) 9. Nyingine (Other)
		(If 9 please explain)
9	(Where do you sell your products?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 2. Nje ya Mtaa huu (Outside this settlement)
10	(Where do your customers come from?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)
11	(Number of workers including yourself):	
12	(Where do you live?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)

F	School details
1	Nambari ya shule (<i>School ID No</i>):
2	(<i>School Ownership Class</i>):
	<ol style="list-style-type: none"> 1. Shule ya raia (Public School) 2. Shule ya kibinafsi (Private School) 3. Shule ya watu wa Mtaa (Communal School) 4. Shule ya Misheni (Mission School)
3	(<i>Name of school</i>):
4	(<i>School Type</i>) <ul style="list-style-type: none"> 201. Shule ya watoto wadogo (Nursery school) 202. Shule ya msingi (Primary school) 203. Shule ya upili (Secondary school) 204. Shule ya ufundi kijini (Village Polytechnic) 205. Shule ya gumbaru (Adult Education School) 206. Shule ya wale mavu (School for disabled) 207. Shule ya viziwi (School for deaf) 208. Shule ya vipofu (School for blind) 209. Shule ya wenye akili punguani (School for mentally disabled) 299. Elimu nyingine (Other Education)

		<i>(If 299 please explain)</i>
5	<i>(Problems encountered)</i>	
6	<i>(Number of students):</i>	
7	<i>(Where do your students come from?)</i>	<p>1. Katika kijiji hiki (In this village)</p> <p>2. Katika Mtaa huu (Inside this settlement)</p> <p>3. Nje ya Mtaa huu (Outside this settlement)</p>

G	Public Utility/ Purpose	
1	<i>(Facility ID No):</i>	
2	<i>(Ownership):</i>	<p>1. Uma (Public)</p> <p>2. Kibinafsi (Private)</p> <p>3. Watu wa Mtaa (Communal)</p> <p>3. Misheni (Mission)</p>
3	<i>(Name of facility):</i>	
4	<i>(Type of facility?):</i>	<p>1. Ofisi ya Maji (water office)</p> <p>2. Kituo cha Umeme (Power station)</p> <p>3. Sewerage treatment plant</p> <p>4. Kituo cha kidini (Religious institution)</p> <p>5. Makaburi (Cemetery)</p> <p>6. Ofisi ya rais (Administration office(s))</p> <p>7. Kituo cha polisi (Police post)</p> <p>8. Pipa la taka (Dumping site)</p> <p>9. Aina nyingine ya lengo la uma/utoshelevu wa uma (Other Public purpose/utility Service)</p>
		Ikiwa 9 (Aina nyingine ya lengo la uma/utoshelevu wa uma), tafadhali ueleze (If 9 please explain)
5	<i>(Number of clients per day)</i>	
6	<i>(Where do your clients come from?)</i>	<p>1. Katika kijiji hiki (In this village)</p> <p>2. Katika Mtaa huu (Inside this settlement)</p> <p>3. Nje ya Mtaa huu (Outside this settlement)</p>
7	<i>(No of employees)</i>	
8	<i>(Problems encountered)</i>	

H	Health facility details	
1	Nambari ya kituo cha afya:	<i>(Health facility ID No):</i>
2	<i>(Ownership):</i>	<p>1. Uma (Public)</p> <p>2. Kibinafsi (Private)</p>

		3. Watu wa Mtaa (Communal) 3. Misheni (Mission)
3	(Name of facility):	
4	(What services do you offer?):	1. Mgonjwa asiyelazwa hospitalini (Out-patient) 2. Mgonjwa alazwaye hospitalini (In- 3. Duka la dawa (Pharmacy) 4. Maabara(Laboratory) 9. Huduma nyingine ya afya (Other Ikiwa 9 (Huduma nyingine ya afya),
5	(Average number of patients per day)	
6	(Number of beds)	
7	(Rate of bed occupancy)	
8	(What are the common ailments?):	
	<input type="checkbox"/> 1. Malaria	7. Amoeba / Typhoid
	<input type="checkbox"/> 2. TB	8. Hypertension
	<input type="checkbox"/> 3. Diarrhoea	10. Diabetes
	<input type="checkbox"/> 4. Pneumonia	11. Eye Infections
	<input type="checkbox"/> 5. STD	12. Soft Tissue Injuries
	<input type="checkbox"/> 6. Common cold	9. Magonjwa mengine (Other ailments) <i>(If 9 please explain)</i>
9	(Where do your patients come from?)	1. Katika kijiji hiki (In this village) 2. Katika Mtaa huu (Inside this settlement) 3. Nje ya Mtaa huu (Outside this settlement)
10	(No of Medical personnel)	
		4. Mkunga (Midwife)
		5. Muuguzi (Nurse)
		9. Waajiriwa wengine wa afya (Other medical personnel) Ikiwa 9 (Waajiriwa wengine wa afya),
11	(Where are referrals made to?)	
12	(Problems encountered)	
I	Urban Agriculture	
1	ParcelID / StructureID / RoomID :	
2	(Type of agriculture):	1. (Ukuzaji wa mimea) Crop

		<p>2. Ufugaji wa Mifugo (Livestock) 3.Ufugaji wa Ndege (Poultry) 9.Kilimo kingine (Other type of</p>
		(If 9 please explain)
3	(How many animals)?	
4	(State your farm produce per day/month/year)	
5	(Use of produce?)	<p>1. Matumizi ya kinyumbani (Domestic Use) 2. Matumizi ya Biashara (Commercial Use) 9. (Other Use), if 9. Please Explain below</p>

B1 Owner Details		
1	(Owner):	<input type="checkbox"/> Mtu (Person) <input type="checkbox"/> Shirika (Organisation)
2	(Photo number):	
3	(First Name/Org.:	
4	(Middle Name):	
5	(Last Name):	
6	(If Gender):	<p>1. Mume (Male) 3. Not Applicable (N/A) 2. Mke (Female)</p>
7	(Year of birth) :	
8	(ID No /Registration	
9	(Nationality):	<p>1. Raia wa Kenya (Kenyan Citizen) 2. Mkimbizi (Refugee) 9. Raia wa nchi nydingine (Other Nationality)</p>
		If 9 please explain
10	(Marital status):	<input type="checkbox"/> 1. Hajaoa/Hajaolewa (Single) <input type="checkbox"/> 2. Ameolewa (Married) <input type="checkbox"/> 3. Wameachana (Separated) <input type="checkbox"/> 4. Mjane (Widowed)
11	(Any disability?)	1. Ndio (Yes) 2. La (No)
12	(Highest educational level)	<input type="checkbox"/> 1. Chuo/Chuo kikuu (College/University) <input type="checkbox"/> 2. Shule ya upili (Secondary) <input type="checkbox"/> 3. Shule ya msingi (Primary) <input type="checkbox"/> 4. Shule ya gumbaru (Adult Education) <input type="checkbox"/> 5. Asiye na elimu (None) <input type="checkbox"/> 9. Elimu nydingine (Other)
		Ikiwa 9 (Elimu nydingine), tafadhalu ueleze (If 9 please explain)
13	(Main occupation)	<input type="checkbox"/> 1. Mwajiriwa wa Serkali (Civil Servant) <input type="checkbox"/> 2. Mwajiriwa wa kampuni ya kibinafsi (Employee in private sector) <input type="checkbox"/> 3. Kibarua (Casual Labourer) <input type="checkbox"/> 4. Mwajiriwa wa kibinafsi (Self-employed) <input type="checkbox"/> 5. Asiyeajiriwa (Unemployed)

		<input type="checkbox"/> 6. Mwanafunzi (Student) <input type="checkbox"/> 7. (N/A) <input type="checkbox"/> 9. Kazi nyingine (Other)
14	(place of work)	<input type="checkbox"/> 1. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 2.. Nje ya Mtaa huu (Outside this settlement)
15	(Mode of transport mainly used to work)	<input type="checkbox"/> 1. Gari la kibinafsi (Private car) <input type="checkbox"/> 2. Gari la moshi (Train) <input type="checkbox"/> 3. Matatu/ Basi (Bus/ Matatu) <input type="checkbox"/> 4. Pikipiki (Motor cycle) <input type="checkbox"/> 5. Baiskeli (Bicycle) <input type="checkbox"/> 6. Kwa miguu (On foot) <input type="checkbox"/> 7. (N/A) <input type="checkbox"/> 9. Usafiri Mwingine (Other mode of transport) Ikiwa 9 (Usafiri mwingine), tafadhali eleza (If 9 please explain)
16	(Total monthly income)	
17	(Which mode of communication do you mainly use?)	1. Barua (Letters) 2. Simu (Land line telephone) 3. Simu ya jamii (Pay phone) 4. Simu ya rununu (Mobile phone) 5. Furushi (Parcels) 6. Barua Pepe (E-mail) 7. Mawasiliano ya uso kwa uso (Physical contact)
18	(Where do you mainly seek medical treatment when sick?)	<input type="checkbox"/> 1. Hospitali ya raia (Public hospital) <input type="checkbox"/> 2. Hospitali ya kibinafsi (Private hospital) <input type="checkbox"/> 3. Hospitali ya kidini (Mission / NGO hospital) <input type="checkbox"/> 4. Mganga wa mitishamba (Traditional) <input type="checkbox"/> 5. Najitibu kwa kununua dawa kwa Duka la Dawa (Chemist) <input type="checkbox"/> 6. Najitibu kwa kununua dawa kwa Duka la Kawaida (Shop) <input type="checkbox"/> 7. Kuombewa / (Prayer)
19	(Jina la mahali pa (Name of the matibabu) medical facility)	
20		<input type="checkbox"/> 1. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 2.. Nje ya Mtaa huu (Outside this settlement)
21	What would you like to be considered during the upgrading process (in order of priority)?(Show order with 1 being the one highly prioritized)	
	Usalama (Security)	<input type="checkbox"/> Barabara (Roads)
	Afya (Health)	<input type="checkbox"/> Nyumba (Housing)
	Elimu (Education)	<input type="checkbox"/> Ajira (Employment)
	Maji (Water)	<input type="checkbox"/> Usafi wa mazingira (Sanitation)
	Umeme/Stima (Electricity)	<input type="checkbox"/> Kiwanda (Industry)
	Kitengo cha ardhi kwa matumizi ya uma (Public Utility Space)	<input type="checkbox"/> Mambo mengine (Other issues)

		mambo mengine, tafadhali taja (<i>If any other please state</i>) <input type="checkbox"/>
22	Magojwa ambayo umeugua miezi 4 iliyopita	(Diseases suffered in the last 4 Months)
	<input type="checkbox"/> 1. Malaria	5. Common cold (Homa)
	<input type="checkbox"/> 2. TB (Kifua)	6. Amoeba / Typhoid (Amoeba/Homa ya matumbo)
	<input type="checkbox"/> 3. Diarrhoea	7. Hypertension (Kupanda kwa mishipa ya damu)
	<input type="checkbox"/> 4. Pneumonia	8. Diabetes (Ugonjwa wa sukari)
		9. Magonjwa mengine (Other ailments)
		Ikiwa 9 (Magonjwa mengine), tafadhali ueleze (<i>If 9 please explain</i>)
Ownership and Mode of Acquisition		
23	<input type="checkbox"/> 1. Kujikatia (Self Acquired)	
	<input type="checkbox"/> 2. Kupewa na Serikali kuu/serikali ya mtaa (Allocation)	
	<input type="checkbox"/> 3. Kuridhi (Inherited)	
	<input type="checkbox"/> 4. Kununua (Purchased)	
	<input type="checkbox"/> 5. Kupewa na rafiki/gift (Token/Gift from a friend)	
	<input type="checkbox"/> 9. Njia Nyingine (Other Mode)	
24	(Do you have any document for proof of Ownership)	1. Cheti cha kumiliki ardhi (Title deed) 2. Cheti cha muda (Temporary Occupancy License/Allotment letter) 3. Hakuna waraka (No document) 9. Waraka mwingine (Other document)
25	(How many people own this piece of land)	
26	(If joint ownership what is your share)	
27	(Owner's residence if not on this structure):	<input type="checkbox"/> 1. Katika Mtaa huu (Inside this settlement) <input type="checkbox"/> 2.. Nje ya Mtaa huu (Outside this settlement)
28	(If you don't reside within the settlement, are you renting?):	<input type="checkbox"/> 1. Yes <input type="checkbox"/> 2. No
B2 Co -Tenants / Additional Household Members		
1	(Occupier):	<input type="checkbox"/> Mtu (Person) <input type="checkbox"/> Shirika (Organisation)
2	(Photo number):	
3	(First Name/Org.	
4	(Middle Name):	
5	(Last Name):	
6	(If Gender):	<input type="checkbox"/> 1. Mume (Male) 3. Not Applicable (N/A) <input type="checkbox"/> 2. Mke (Female)
7	(Year of birth):	

8	(ID No.):		
9	(Nationality):		
	<input type="checkbox"/>	1. Raia wa Kenya (Kenyan Citizen)	
	<input type="checkbox"/>	2. Mkimbizi (Refugee)	
	<input type="checkbox"/>	9. Raia wa nchi nyine (Other Nationality)	
Ikiwa 9 (Raia wa nchi nyine), tafadhali ueleze (If 9 please explain)			
33.	Uhusiano na mpangaji (<i>Relationship with tenant/household head</i>)		
10	(Marital status):		
	<input type="checkbox"/>	1. Hajaoa/Hajaolewa (Single)	
	<input type="checkbox"/>	2. Ameolewa (Married)	
	<input type="checkbox"/>	3. Wameachana (Separated)	
	<input type="checkbox"/>	4. Mjane (Widowed)	
11	(Any disability?)		
12	(Highest educational level)		
		1. Ndio (Yes)	2. La (No)
		<input type="checkbox"/>	1. Chuo/Chuo kikuu (College/University)
		<input type="checkbox"/>	2. Shule ya upili (Secondary)
		<input type="checkbox"/>	3. Shule ya msingi (Primary)
		<input type="checkbox"/>	4. Shule ya gumbaru (Adult Education)
		<input type="checkbox"/>	5. Asiye na elimu (None)
		<input type="checkbox"/>	9. Elimu nyine (Other)
Ikiwa 9 (Elimu nyine), tafadhali ueleze (If 9 please explain)			
13	(Main occupation)		
	<input type="checkbox"/>	1. Mwajiriwa wa Serkali (Civil Servant)	
	<input type="checkbox"/>	2. Mwajiriwa wa kampuni ya kibinafsi (Employee in private sector)	
	<input type="checkbox"/>	3. Kibarua (Casual Labourer)	
	<input type="checkbox"/>	4. Mwajiriwa wa kibinafsi (Self-employed)	
	<input type="checkbox"/>	5. Asiyeajiriwa (Unemployed)	
	<input type="checkbox"/>	6. Mwanafunzi (Student)	
	<input type="checkbox"/>	7. (N/A)	
	<input type="checkbox"/>	9. Kazi nyine (Other)	
14	(Place of work)		
	<input type="checkbox"/>	1. Katika Mtaa huu (Inside this settlement)	
	<input type="checkbox"/>	2. Nje ya Mtaa huu (Outside this settlement)	
15	(Main mode of transport used to work)		
	<input type="checkbox"/>	1. Gari la kibinafsi (Private car)	
	<input type="checkbox"/>	2. Motorcycle	
	<input type="checkbox"/>	3. Matatu/ Basi (Bus/ Matatu)	
	<input type="checkbox"/>	4. Pikipiki (Motor cycle)	
	<input type="checkbox"/>	5. Baiskeli (Bicycle)	
	<input type="checkbox"/>	6. Kwa miguu (On foot)	
	<input type="checkbox"/>	7. (N/A)	
	<input type="checkbox"/>	9. Usafiri Mwingine (Other mode of transport)	
Ikiwa 9 (Usafiri mwingine), tafadhali eleza (If 9 please explain)			
16	(Total Monthly income)		
17	(Which mode of communication do		
	<input type="checkbox"/>	1. Barua (Letters)	
	<input type="checkbox"/>	2. Simu (Land line telephone)	

	<i>you mainly use?)</i>	<input type="checkbox"/> 3. Simu ya jamii (Pay phone)
		<input type="checkbox"/> 4. Simu ya rununu (Mobile phone)
		<input type="checkbox"/> 5. Furushi (Parcels)
		<input type="checkbox"/> 6. Barua Pepe (E-mail)
		<input type="checkbox"/> 7. Mawasiliano ya uso kwa uso (Physical contact)
18	<i>(Where do you mainly seek medical treatment when sick?)</i>	<input type="checkbox"/> 1. Hospitali ya raia (Public hospital)
		<input type="checkbox"/> 2. Hospitali ya kibinafsi (Private hospital)
		<input type="checkbox"/> 3. Hospitali ya kidini (Mission / NGO hospital)
		<input type="checkbox"/> 4. Mganga wa mitishamba (Traditional)
		<input type="checkbox"/> 5. Duka la Dawa (Chemist)
		<input type="checkbox"/> 6. Duka la Kawaida (Shop)
		<input type="checkbox"/> 7. Kuombewa / (Prayer)
19	<i>(Name of the medical facility)</i>	
20	<i>(Where is this medical facility located?)</i>	<input type="checkbox"/> 1. Katika Mtaa huu (Inside this settlement)
		<input type="checkbox"/> 2.. Nje ya Mtaa huu (Outside this settlement)
21	<i>What would you like to be considered during the upgrading process (in order of priority)?</i>	
	Usalama (Security)	<input type="checkbox"/> Barabara (Roads)
	Afyा (Health)	<input type="checkbox"/> Nyumba (Housing)
	Elimu (Education)	<input type="checkbox"/> Ajira (Employment)
	Maji (Water)	<input type="checkbox"/> Usafi wa mazingira (Sanitation)
	Umeme/Stima (Electricity)	<input type="checkbox"/> Mambo mengine (Other issues)
		<input type="checkbox"/>
		Ikiwa Mambo mengine, tafadhali taja (<i>If any other please state</i>)
22	Magonjwa ambayo umeugua miezi 4 iliyopita	<i>(Diseases suffered in the last 4 Months)</i>
	<input type="checkbox"/> 1. Malaria	<input type="checkbox"/> 5. Common cold
	<input type="checkbox"/> 2. TB	<input type="checkbox"/> 6. Amoeba / Typhoid
	<input type="checkbox"/> 3. Diarrhoea	<input type="checkbox"/> 7. Hypertension
	<input type="checkbox"/> 4. Pneumonia	<input type="checkbox"/> 8. Diabetes
		<input type="checkbox"/> 9. Magonjwa mengine (Other ailments) <i>(If 9 please explain)</i>
29	<i>(Your share of the rent)</i>	
30	<i>(Where did you live before you</i>	<input type="checkbox"/> 1. Katika Mtaa huu (Inside this settlement)
		<input type="checkbox"/> 2.. Nje ya Mtaa huu (Outside this settlement)
		<input type="checkbox"/> 3. N/A

	<i>came here?)</i>	
31	<i>(Why did you move here?)</i>	<input type="checkbox"/> 1. Sababu za kinyumbani (Domestic reasons) <input type="checkbox"/> 2. Sababu za uchumi (Economic reasons) <input type="checkbox"/> 3. Kuhamishwa (Eviction) <input type="checkbox"/> 4. Mapigano (Skirmishes) <input type="checkbox"/> 5. Landlessness <input type="checkbox"/> 5. N/A <input type="checkbox"/> 9. Sababu nyine (Other reason)
32	Ikiwa 9 (Sababu nyine), <i>(How many years have you lived in this settlement?)</i>	