ATHI WATER SERVICES BOARD



Water and Sanitation Service Improvement Project

Nairobi Informal Settlements Resettlement Action Plan for LOT 3

Sanitation Component for Matopeni Informal Settlement

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LIST OF ABBREVIATIONS

Abbreviation Full Name

AWSB Athi Water Services Board

CBOs Community Based Organisations

CDF Constituency Development Fund

CWSB Coast Water Services Board

DPs Displaced Persons

GoK Government of Kenya

KIHBS Kenya Integrated Household Budget Survey

KNBS Kenya National Bureau of Statistics

LVNWSB Lake Victoria North Water Service Board

M&E Monitoring and Evaluation

NCC Nairobi City Council

NCWSC Nairobi City Water and Sewerage Company

NGOs Non-Governmental Organisations

PAPs Project Affect Persons

PDP Physical Development Plan
RAP Resettlement Action Plan

RPF Resettlement Policy Framework

WAB Water Appeal Board

WaSSIP Water and Sanitation Service Improvement Project

WB World Bank

WSB Water Services Board

WSRB Water Sector Regulatory Board

WSS Water and Sanitation Sector

DEFINITION OF TERMS USED IN THIS REPORT

The following terms shall have the following meanings, unless the context dictates otherwise¹:

Census: A field survey carried out to identify and determine the number of Project Affected Persons (PAP) or Displaced Persons (DPs). The meaning of the word shall also embrace the criteria for eligibility for compensation, resettlement and other measures emanating from consultations with affected communities.

Project Affected Person: This is a person affected by land use or acquisition needs of the Water Supply and Sanitation Service Improvement Project (WaSSIP) in Kenya. The person is affected because s/he may lose "title to land or right to its use", and/or "title rights or other rights to structures constructed on the land" (thus s/he may lose, be denied, or be restricted access to economic assets, shelter, income sources, or means of livelihood). The person is affected whether or not s/he must move to another location.

Compensation: The payment in kind, cash or other assets given in exchange for the acquisition of land including fixed assets thereon.

Cut-off date: The date of commencement of the census of PAPs or DPs within the project area boundaries. This is the date on and beyond which any person whose land is occupied for project use, will not be eligible for compensation.

Displaced Person: A person who, for reasons due to involuntary acquisition or voluntary contribution of their land and other assets under the project, will suffer direct economic and or social adverse impacts, regardless of whether or not the said Displaced Person is physically relocated. The person will have his or her: standard of living adversely affected, whether or not the Displaced Person must move to another location; lose right, title, interest in any house, land (including premises, agricultural and grazing land) or any other fixed or movable assets acquired or possessed, lose access to productive assets or any means of livelihood.

Involuntary Displacement: The involuntary acquisition of land resulting in direct or indirect economic and social impacts caused by: loss of benefits from use of such land; relocation or loss of shelter; loss of assets or access to assets; or loss of income sources or means of livelihood, whether or not the Displaced Person has moved to another location or not.

Involuntary Land Acquisition: This is the repossession of land by government or other government agencies for compensation, for the purpose of a public project against the will of the landowner. The landowner may be left with the right to negotiate the amount of compensation proposed. This includes land or assets for which the owner enjoys uncontested customary rights.

Land: This refers to agricultural and/or non-agriculture land and any structures thereon whether temporary or permanent and which may be required for the Project.

Land Acquisition: This means the repossession of or alienation of land, buildings or other assets thereon for purposes of the Project.

¹ Water Supply and Sanitation Service Improvement Project (WaSSIP). 2007. Resettlement Policy Framework, RP 583. Government of the Republic of Kenya.

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Rehabilitation Assistance: This means the provision of development assistance in addition to compensation such as land preparation, credit facilities, training, or job opportunities, needed to enable a Displaced Person to improve their living standards, income earning capacity and production levels; or at least maintain them at pre-Project levels.

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SUMMARY

1) INTRODUCTION

Kenya, through its long-term development blueprint, *Kenya Vision 2030*, aims to ensure water and sanitation availability and access for all its citizens by the year 2030. For this to be a reality, the development blueprint documents eight challenges in the sector that need addressing through an integrated approach that involves: a) more efficient land management; b) investment in infrastructure in terms of both rehabilitation and expansion of existing facilities; and c) institutional strengthening in terms of adequacy with respect to equipment, and number and technical ability of staff. Key actors to the delivery of Kenya's goals are the country's eight water services boards (WSBs) that are established under the Water Act 2002.

Against this, one of the eight WSBs, Athi Water Services Board (AWSB), has received funding from the World Bank (WB) to finance a defined part of its overall investment plans on water supply and sanitation services improvement in its area of operation. The WB assistance targets to benefit areas within Nairobi. The assistance covers: i) water and sewerage infrastructure rehabilitation and expansion, which is focused on increasing access to safe water and improved sanitation services; and, ii) institutional strengthening, which is focused on the quality, reliability, affordability, and sustainability of service provision to beneficiaries as well as long term viability and sustainability of the service provision institution.

Some of the areas to benefit from the WB assistance are informal settlements within Nairobi. A total of 31 villages in informal settlements are targeted. These are grouped into phases as action is planned to be carried out in two stages, commencing with settlements grouped under Phase I. Settlements tagged for intervention under a Phase are further grouped into Lots so as to facilitate intervention activities. On 27th October 2010, consultancy services to undertake design, bid documentation and works supervision for WaSSIP informal settlements works commenced. By August 2011, the following reports towards improvement of water and sanitation services in Matopeni Informal Settlement (Matopeni, Spring Valley and Manna Settlements) were complete and handed over to AWSB: Inception Report; Conceptual Design Report; Detailed Design Reports – Water and Sanitation Components; Draft EIA Report; and, Draft Socio-Economic Report. Intervention activity under the sanitation component for Matopeni Informal Settlement (Matopeni, Spring Valley, and Manna Settlements) is labelled as LOT 3.

As part of the consultancy, another report required is a Resettlement Action Plan (RAP) Report for Matopeni Informal Settlement that is acceptable to AWSB, the World Bank, and NEMA. This report is in fulfilment of this output. The objective of the RAP report is to present an entitlement compensation package, put together and, consisting of a set of provisions to be funded by WaSSIP. The aim is to adequately re-install Project Affected Persons (PAPs) in Matopeni Informal Settlement. This is undertaken with the overall intent of minimising and reversing negative effects of compulsory asset acquisition.

Towards preparation of this RAP report, cognisance was taken on the requirements of: a) The laws of Kenya with regard to land tenure, development, usage, and compulsory acquisition; b) World Bank Operational Policy (OP) 4.12 on compensation; and, c) WaSSIP's Resettlement Policy Framework.

Vis-à-vis, the design for improvement of water and sanitation services in Matopeni Informal Settlement envisages losses and disruptions that require development of a RAP Report. The

design developed to improve on the water and sanitation situation in the Informal Settlement makes use of the land use planning done on the Informal Settlement, which provides for way leaves that water pipelines and sewage lines can be laid. The losses and disruptions anticipated are with respect to structures constructed on the way leaves identified to lay lines. Where these losses and disruptions are inevitable, this RAP Report proposes mitigation measures to minimise on the impact.

2) BRIEF ON THE DISRUPTIONS AND LOSSES EXPECTED FROM IMPROVEMENT OF WATER AND SANITATION SERVICES IN MATOPENI SETTLEMENT AND THE PROPOSED MITIGATION MEASURES

From February 2013 to 16th May 2013, a study was carried out in Matopeni Settlement to identify the disruptions and losses anticipated toward effective implementation of the Proposed Project to lay sewer lines in the Settlement. The disruptions and losses it identified, as well as the proposed mitigation measures were as follows:

a. Type of Affected Structures and the Mitigation Measures Proposed

Verandas constitute the largest number of structures that would be affected on implementation of the Project. Other structures in significant numbers are: septic tanks, and structures for commercial use (in specific kiosks or *Kibandas*).

All the structure owners would like to be compensated for the loss of their structures, which is necessary towards effective implementation of the Project. They indicated they would like a combination of connection to sewer lines and either cash compensation or reconstruction of their structure as is appropriate. Accordingly, their choice for combination of connection to main sewer and cash compensation is that some of the affected structures cost more in value than the connection fee of the sewer, thus the cash compensation would be the difference in value.

Guided by the responses from the PAP, this RAP Report proposes the following overall mitigation measures, specifics of which are contained in the main text of this report and Annex 8.2.:

- 1) Combination of connection to main sewer and cash compensation. This would be made as is appropriate. The cash compensation value would be calculated as the difference in value between the connection fee of the sewer and the value of the Project affected structure. This mitigation measure should be made compulsory for all households with affected structures that include: septic tank, manhole, sewer line, toilet and bathroom.
- 2) Combination of connection to main sewer and reconstruction of the affected structure on laying the pipelines, as is appropriate.
- 3) Regarding structure for housing, the project should avoid movement of population to new sites. This should take place under very compelling reasons. With respect:
- i. The project could think of redesigning to: a) Utilise the adjacent road reserve, if it was not considered in the design, but is feasible and the likely compensation is less; or, b) Where the way leave is large enough, utilise the extra space to lay the pipelines thus avoiding damage to the housing structure.
- ii. In unavoidable circumstances, explore possible ways of laying the pipelines with minimal damage to the housing structure, and thereafter, reconstruct the damaged section.
- iii. In extremely unavoidable circumstances, the Project to identify within the Settlement an empty housing structure, relocate the household to this structure, and compensate the

structure owner for the demolition of the structure. The value of the compensation to the structure owner should not be less than the replacement cost of the structure.

b. Loss of Access to Natural Resources and Energy

The Project's design does not envisage loss of access to natural resources, and energy.

c. Loss of Access to Water and Sanitation

The Project's objective is to improve on the water supply and sanitation services of Matopeni Settlement. However, there are concerns that need addressing. On the way leaves proposed to lay the pipelines are septic tanks, some of which provide services to tall buildings that house tenants. These septic tanks will be affected by the engineering works necessary to lay the pipelines, thus affecting sewage discharge from connected buildings.

Additionally, the drainage system in the Settlement is poor. Adjacent to buildings are roads. Each time these roads are re-carpeted, their level is elevated. Consequently, rain water drains into the buildings that are at a lower level than the re-carpeted road. To act against this, affected building owners have constructed perimeter walls. Toward effective implementation of the Project, these perimeter walls may be brought down, and if it rains, the flood water will drain into the building.

With respect, the mitigation measures proposed by this Report include:

- 1) Regarding the septic tank concern: during construction, a temporary pit will be constructed and connected to a building with a septic tank (manhole or sewer line), into which the building will temporarily discharge its waste. Waste from the septic tank that is located along the route to lay the sewer pipeline will then be exhausted to pave way for construction of the sewer pipeline. On completion of construction of the sewer pipeline infrastructure in the Settlement, and after this infrastructure has been tested and approved, the proposal is for the building that was connected to the damaged septic tank (or manhole or sewer line) to be connected to the improved sewer line infrastructure in lieu of compensation.
- 2) On the drainage concern: a) encouraged is construction to take place during dry weather conditions to reduce flooding; and, b) provision of appropriate alternative wastewater disposal method during construction process.

d. Increase of Morbidity, and Proposed Mitigation Measures

Should it be likely for re-installation of population, highly recommended is re-installation of PAPs within their pre-project settlements which are synonymous to the project beneficiary area. In the project beneficiary area, during the construction process for the pipelines, expected are negative impacts to the environment with potential undesirable effects on the health and safety of residents from the beneficiary community. These and their proposed mitigation measures are as follows:

- 1) Solid waste management: The proposed mitigation measure is contractor complying with waste management regulations and the environment management plan developed under the ESIA Report.
- 2) Drainage: The proposed mitigation measure is: a) encouraging construction to take place during dry weather conditions to reduce flooding; and, b) provision of appropriate alternative wastewater disposal method during construction process.
- 3) Noise and vibration due to construction machinery: The proposed mitigation measures are: a) encouraging construction process to be undertaken during the day over night; b) whenever appropriate, use of hand labour over machinery to reduce on the noise and

vibration levels; and, c) compliance to noise and vibrations regulations as provided under the laws of Kenya.

- 4) Air quality due to undesirable emissions during construction: The proposed mitigation measure is compliance to air quality guidelines as provided by the laws of the country.
- 5) Water quality due to possibility of contamination of water in existing water distribution pipes located near works areas: The proposed mitigation measures are: a) avoidance of damage to water pipes during construction; b) immediate repair of damaged water pipe areas; and, c) controlling waste spillage near water distribution lines.
- 6) Trenches and open areas due to digging during construction process: The proposed mitigation measures are, as appropriate: provision of barriers and reflectors at the respective sites; and, digging and laying of pipes to be undertaken on the same day for each affected section, and at the end of day, covering the trenches.
- 7) Transmissible diseases due to increased interaction between community members and construction workers, and, also among community members due to increased earning: The proposed mitigation measure is integration of public health initiatives at project implementation stage, targeting both construction workers and beneficiary community.

e. Disruption of Family and Community Values, and Proposed Mitigation Measures

This is highly probable due to persons from outside migrating into the beneficiary community in response to income opportunities. This population from outside may disrupt established community values with possible undesirable effects. A most viable mitigation measure is for the project to get its labour, to the extent possible, from the beneficiary community.

f. Potential Impacts of New Re-Installation Site

The Project's design is deliberately conceived toward use of existing road reserves and public passageways, (and not compulsorily acquiring land). However, some structures on this land constitute structures for housing: approximately 0.3% of the affected structures. Highly discouraged is movement of population, and particularly to sites outside. Where reinstallation is eminent, highly recommended under this RAP Report is re-installation of affected populations within their pre-project settlements. This strategy is bound to significantly minimise on the potential impacts associated with new re-installation sites.

3) BRIEF ON THE PROPOSED RAP ACTIVITIES TOWARD EFFECTIVE IMPLEMENTATION OF THE PROJECT IN KAYOLE SOWETO SETTLEMENT

The broad activities proposed towards effective implementation of the Project, and which will be implemented as per WB requirements and the applicable laws of Kenya (which are quoted in the main report) include:

- 1. Preliminary notice (i.e. a legal notice) notification to PAPs and general public of intention to acquire the property toward effective implementation of the project.
- 2. Public inquiry to: a) determine the persons with genuine interest on the affected property; and, b) receive written claims of compensation from those with interest on the affected property.
- 3. Establishment of a Project Settlement Committee with an overall objective of easing the process of compensation.
- 4. Drafting, reading and signing of resettlement and compensation agreements.

- 5. Payment of compensation the payment would be in accordance to individual awards established from the public inquiry process. The awards will only be made to persons eligible to receive them (e.g. asset owner).
- 6. Resettlement activities these include and not limited to: a) serving all persons with interest on the property with a notice specifying date possession of the property and its title (where applicable) will vest in the Government; b) taking all possession of documents to title; c) Field visits by a team constituted by the Project, preferably from the Project Resettlement Committee, to monitor re-installation of PAPs (The Project will develop a checklist against which this activity apply to be useful); and, d) Quarterly meetings, quarterly and annual reports.
- 7. Implementation of post-project community support activities this includes, but not limited to evaluation of how PAPs are settling, and as appropriate rectifying the situation. This is important as the Project has a responsibility of ensuring PAPs enjoy the same or higher standards of living than before.
- 8. Grievances, recording, reporting, and related mitigation action this is in recognition that grievances are inevitable and can be of different levels. How channel for addressing the grievances is provided in this RAP report; and encouraged is fearless expression of grievances. Based on the grievances reported, the Project can design mitigation measures.

4) BRIEF ON THE PROPOSED RAP MONITORING AND EVALUATION COMPONENT

Monitoring and evaluation of the Project, as regards compensation, is significant as it facilitates in assessing whether the Project objectives of compensation are met. The monitoring plan indicates parameters to be monitored, institute monitoring guidelines and provide resources including responsible persons or institutions, necessary to carry out the monitoring activities. This RAP report has proposed a monitoring and evaluation framework which that the Project could use. This could be improved on by the Project team as may be required, for a more comprehensive framework.

Generally, the broad activities discussed in brief constitute the broad parameters in the monitoring and evaluation framework developed for the Action.

5) BRIEF ON ORGANISATIONAL RESPONSIBILITIES

In connection to the Action Plan described here, the Project, through AWSB, bears the primary duty of: a) Administrator; b) Notifying structure owners and the general public; c) Taking and keeping thorough documentation, including of all holdings and assets affected by the Project; d) Observing to the greatest practical extent, fair resettlement and compensation practices, guarding against infringement of PAPs interests; e) Drawing resettlement and compensation agreements that will be signed by PAPs; and, f) Monitoring and evaluating resettlement and compensation activities brought about by its implementation; and appropriately acting on the adverse effects observed.

6) BRIEF ON VALUATION AND COMPENSATION

Assets in Kenya are valued on the principal of 'market value'. Under the Action described in this report, market value will be understood to mean an amount equal to or greater than the replacement value of the affected asset as at the time of the Project compulsorily acquiring the asset. Thus, the just compensation value that will be awarded to affected persons will be an amount not less than the market value of the asset as at the time of acquiring the asset.

7) BRIEF ON THE PROPOSED RAP BUDGET

The estimated value for the Action Plan is Ksh. 64,013,234.13 disaggregated as described below:

	BUDGET ITEM	PROPOSED
		COST (KSH)
1.	Notification to title holders and general public of intention to acquire land	*2,800,000
2.	Public inquiry	3,300,000
3.	Payment of compensation	
	a) Land basing on the estimated value derived by the Project Team	0
	b) Structures basing on the estimated value derived by the Project Team	44,843,352
	and guided by average reservation price of owners	
4.	Resettlement activities	3,300,000
5.	Implementation of post-project community support activities, if any	1,000,000
6.	Total Costs 1	55,243,352
7.	Project Resettlement Committee Activities (at 3% of the Total Costs 1)	
	a) Establishment of a Project Resettlement Committee	
	b) Drafting, reading and signing of resettlement and compensation	1,657,300.56
	agreements	
	c) Grievances redressing	
8.	Total Costs 2	56,900,652.56
9.	Contingency (at 12.5% of the Total Costs 2)	**7,112,581.57
10.	GRAND TOTAL	64,013,234.13

Note:

This RAP Report, in addition, proposes an implementation schedule, giving the timelines by activities.

^{*}Estimated for print, audio and television services

^{**}The contingency is in addition expected to cover cost of handling affected services – water pipelines, electricity etc.

1.0 INTRODUCTION

This is a Resettlement Action Plan (RAP) report for Matopeni Informal Settlement (Matopeni, Spring Valley and Manna Settlements), which is located in Kayole North Location of Embakasi Central Constituency, in Nairobi County. The RAP report is in part fulfilment of a consultancy service under the Water Supply and Sanitation Service Improvement Project (WaSSIP) in Kenya, to undertake feasibility studies, detailed designs, tender document preparation and works supervision for extension of water and sanitation services to Matopeni Informal Settlement; and, the client is Athi Water Service Board (AWSB). WaSSIP is a World Bank (WB) funded project.

One activity associated with extending water and sanitation services to Matopeni Informal Settlement is losses and disruptions associated with damage of assets. The design developed to improve on the water and sanitation situation in Matopeni Informal Settlement makes use of the land use planning done on the Settlement, which provides for way leaves that water and sewage pipelines can be laid. These way leaves have been encroached on. The anticipated losses and disruptions are therefore with respect to structures constructed on the way leaves identified to lay the respective pipelines.

According to the WB Policy on Resettlement as regards projects funded by the Bank, and also according to WaSSIP's Resettlement Policy Framework (RPF), persons with i) no recognisable legal rights or claim to the land they are occupying, using or getting their livelihood from, and ii) they occupied this land earmarked for project activities prior to the cut-off date (i.e. the date recommended for the census of project affected persons), are determined under the Project as eligible for resettlement assistance in lieu of compensation. Persons under this class include encroachers and illegal or bona fide occupants.

Vis-à-vis, this RAP Report documents the encroachers from Matopeni Informal Settlement that would be affected towards effective implementation of WaSSIP, as well as the losses and disruptions the encroachers would suffer. The Report additionally proposes mitigation measures to minimise on the impact of the losses and disruptions that would be experienced. The proposed mitigation measures are informed by face-to-face consultations held with the affected encroachers; and also a memorandum from the community.

The objective of this RAP report is thus to present an entitlement resettlement assistance package that is aimed at adequately re-installing the encroachers from Matopeni Informal Settlement that would be affected on implementation of WaSSIP in the Settlement - an action which is reasoned necessary for the effective extension of water and sanitation services to the Settlement. This is undertaken with the overall intent of minimising and reversing negative effects of the losses and disruptions brought upon these people.

2.0 BACKGROUND

2.1 Kenya Vision 2030

Kenya Vision 2030 is Kenya's long-term development blueprint. It documents by sector, challenges that need addressing to transform Kenya into a middle income country by the year 2030. On water and sanitation sector, it documents eight challenges that need addressing toward ensuring "water and sanitation availability and access for all" by 2030. Two challenges particularly related to this report are: increased demand as a result of

population growth and economic development; and, a wanting water and sewerage infrastructure in terms of both coverage and condition².

2.1.1 Increased Demand Due to Population Growth and Economic Development

According to the Kenya National Bureau of Statistics (2010), in the period 1999-2009, Kenya experienced an average annual household growth rate of 3.19%. This was slightly lower than for the period 1989-1999, which was estimated at 3.81% (KNBS, 2010).

Nairobi County, as subsequent sections illustrate, is not an exception to the high population growth experienced within the country. Additionally, as the region where located is the capital city of Kenya, the County's functions have over the years developed and expanded to make the County the largest urban centre in Kenya.

A-1) Nairobi - The Largest Urban Centre in Kenya

Nairobi is the capital city of Kenya. It is located at an altitude of between 1600 and 1850 metres above sea level, 1.19° of the Equator and 36.59° East of the Prime Meridian. Its area is approximately 686 Km².

Nairobi City owes its birth and growth to the Kenya Uganda Railway (KUR) which reached Nairobi in May 1899 from Mombasa enroute Kisumu (part of what is now Uganda). In June 1899, it was made the railway headquarter of KUR. In 1907, Nairobi was designated the capital of Kenya; but it was not until 1950 that the British Colonial Administration, through a Royal Charter, granted it city status³.

In terms of functions and population, Nairobi is the largest urban centre in Kenya; and this primacy position is expected to be sustained and strengthened in the coming years. The primacy position of Nairobi is due to its market attractiveness as a centre of economic activity. From a KUR headquarter in 1899, the functions of Nairobi have developed and expanded such that today it has achieved an overwhelming dominance in the political, social, cultural and economic life of the people of Kenya, as well as the whole of the Eastern African Region. It additionally performs a significant role in the global economy⁴. For instance, it is the headquarters for the United Nations in Africa, as well as the headquarters

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² Government of the Republic of Kenya. 2007. Vision 2030: A Globally Competitive and Prosperous Kenya. Ministry of Planning and National Development and, National Economic and Social Council (NESC), Nairobi, Kenya

³ Mitullah, Winnie. 2003. The Case of Nairobi, Kenya in UN-Habitat Global Report on Human Settlements 2003.

Aligula, Eric M; Zachary Abiero-Gariy; John Mutua; Fredrick Owegi; Charles Osengo; and, Reuben Olela. 2005. Urban Public Transport Patterns in Kenya: A Case Study of Nairobi City. Special Report No. 5. Kenya Institute for Public Policy Research and Analysis. Nairobi, Kenya; and,

Ministry of Nairobi Metropolitan Development. 2008. Nairobi Metro 2030 (NMetro 2030): A Vision for a World Class Metropolis, First and Foremost in Africa. Draft Executive Summary. Nairobi, Kenya

http://www.unu.edu/unupress/unupbooks/uu26ue/uu26ue0o.htm - (Obudho, R.A. undated. 9 Nairobi: National Capital and Regional Hub)

City Council of Nairobi. 2006. Strategic Plan: 2006-2010. Nairobi, Kenya

⁴Aligula, Eric M; Zachary Abiero-Gariy; John Mutua; Fredrick Owegi; Charles Osengo; and, Reuben Olela. 2005. Urban Public Transport Patterns in Kenya: A Case Study of Nairobi City. Special Report No. 5. Kenya Institute for Public Policy Research and Analysis. Nairobi, Kenya; and,

Ministry of Nairobi Metropolitan Development. 2008. Nairobi Metro 2030 (NMetro 2030): A Vision for a World Class Metropolis, First and Foremost in Africa. Draft Executive Summary. Nairobi, Kenya

for two United Nations agencies: United Nations Environment Programme (UNEP) and United Nations Centre for Human Settlement (UN-Habitat).

Table 1: Pattern of Urbanisation in Kenya by Province, 1962 to 1999⁵

Province		Urt	N	as % of ational Urban	Interd Grow Rate (th			
	1962	1969	1979	1989	1999	1989	ulation 1999	1979 -89	1989 -99
Nairobi	343,500	506,286	827,775	1,324,570	2,087,668	34	39	5	5
Central	35,407	45,955	128,932	309,821	354,017	8	7	9	1
Coast	195,834	283,652	406,991	588,470	894,311	15	17	4	4
Eastern	28,746	37,965	233,316	354,359	265,280	9	5	4	3
Nyanza	28,068	43,829	207,757	352,527	423,183	9	8	5	2
Rift Valley	112,517	148,576	341,696	672,177	940,311	17	18	7	3
Western	3,939	10,645	105,743	186,049	270,503	5	5	6	4
North Eastern		63,486		90,724	125,644	2	2	4	3
Total	747,651	1,079,908	2,315,696	3,878,697	5,360,917	100	100	5	3

On population, as Table 1 shows, Nairobi has had the highest share of urban population in Kenya. This population has grown from slightly over 10,000 persons when Nairobi was a KUR headquarter to, as per the 2009 national census, over 3 million persons.

Table 2: Estimated Population of Nairobi, 1906 to 20096

Year	1906	1928	1931	1936	1944	1948	1962
Population	11,512	29,864	47,919	49,600	108,900	118,976	343,500
Year	1963	1969	1979	1989	1999	2009	
Population	342,764	509,286	827,775	1,324,570	2,143,254	3,138,369	

As Table 3 shows, the 2009 national census results estimated 68% of the City's population was between the ages of 15 and 64 years old. This age bracket is described by many of Kenya's development plans as the productive age. The Government of the Republic of Kenya recognises persons ages 15 and above to be within the working age population of Kenya.

Table 3: Population by Sex and Age Cohorts for Nairobi

Table 5.1 optimized by 50% and 11ge control for runnor									
Age Cohort	Male	Female	Total						
0-14	471,232	479,771	951,003						
15-34	744,080	790,262	1,534,342						
35-64	370,516	243,747	614,263						
65-80+	17,592	17,598	35,190						
Age NS	1,810	1761	3,571						
Total - Nairobi	1,605,230	1,533,139	3,138,369						
15-64 Age Bracket									
Total: 15-64 age cohort	1,114,596	1,034,009	2,148,605						
Share of Nairobi's total population (%)	36	33	68						
Total - Nairobi Total: 15-64 age cohort	1,605,230 15-64 Age Bracket 1,114,596	1,533,139 1,034,009	3,571 3,138,369 2,148,605						

Source: Director of KNBS, 2010

Kenya National Bureau of Statistics, Government of the Republic of Kenya. 2009 Kenya Population and Housing Census: Volume I C – Population Distribution by Age, Sex and Administrative Units

⁵ Mitullah, Winnie. 2003. The Case of Nairobi, Kenya in UN-Habitat Global Report on Human Settlements 2003.

⁶ Mitullah, Winnie. 2003. The Case of Nairobi, Kenya in UN-Habitat Global Report on Human Settlements 2003.

Resettlement Action Plan for Matopeni Informal Settlement

Significant of Nairobi's population, as is characteristic of major towns and cities globally, is that it has both a daytime and night-time population. Its daytime population embraces persons coming from outside the City, particularly from adjacent regions. These persons come into Nairobi City during normal business hours, more often than not to transact varied businesses; and, after business hours or transacting their respective business, leave the city. The City's night-time population is that which is present within Nairobi after close of business hours – i.e. during evening or night-time hours. This latter group of persons is often described as Nairobi's permanent or resident population. During the day-time, on business days, Nairobi's population is estimated to be between 20-25% higher. This has implications on the City's planned services and infrastructure⁷.

A-2) Well-Being in Nairobi

The Constituency Report on Well-Being in Kenya (2008) estimates that 22% of persons residing in Nairobi live below the poverty line. According to the report, as Table 4 illustrates, Westlands region has the least number of persons living below the poverty

Table 4: Distribution of Nairobi's Population by Sex, Number of Households, Area, Density and Region

Region (described	Populatio	Poverty Incidence, 2005/06 Survey							
using old constituency boundary and name)	Male	Female	Total	Households	Area in Sq. Km	Density	*Poverty Incidence	**Poverty Incidence (1999)	***Ranking
Westlands	124,748	122,354	247,102	75,427	97.4	2,537.0	15.3	31.3	4
Lang'ata	185,836	169,352	355,188	108,477	223.2	1,591.3	20.5	40.1	8
Embakasi	468,097	457,678	925,775	296,942	203.6	4,547.0	20.7	40.7	9
Starehe	142,097	132,510	274,607	87,519	10.7	25,664.2	20.8	44.1	10
Kamukunji	136,920	124,935	261,855	75,555	12.1	21,640.9	22.5	45.8	12
Dagoretti	166,391	163,186	329,577	103,818	38.6	8,538.3	23.6	45.7	15
Kasarani	266,684	258,940	525,624	164,354	86.4	6,083.6	24.2	47.3	19
Makadara	114,457	104,184	218,641	75,427	23.1	9,465.0	29.8	59.1	36
Nairobi City	1,605,230	1,533,139	3,138,369	987,519	695	4,515.0	22.0		

Source: KNBS₁, 2010⁸; and, KNBS, 2008⁹

Notes: * Percentage of Individuals below Poverty Line (2005/06);

http://www.census.gov/population/www/socdemo/daytime/daytimepop.html

City Council of Nairobi. 2006. Strategic Plan: 2006-2010. Nairobi, Kenya

^{**} Poverty Incidence: Percentage of Individuals below Poverty Line 1999;

^{***} Constituency National Poverty Ranking (1=Richest, 210=Poorest)

Okpala, Don C. I. undated. Spatial Information: The Basic Tool for Sustainable Human Settlements Development Planning and Management. United Nations Centre for Human Settlements (Habitat);

⁸ Kenya National Bureau of Statistics, Government of the Republic of Kenya. 2010. 2009 Kenya Population and Housing Census: Population Distribution by Political Units - Volume I B

⁹ Source: Kenya National Bureau of Statistics, Government of Kenya. 2008. Constituency Report on Well-Being in Kenya (Based on the Integrated Household Budget Survey 2005/06)

line; and, it is ranked the fourth richest region in Kenya. Makadara region has the highest number of persons living below the poverty line in Nairobi. Countrywide, it is ranked as the 36th richest region in Kenya. This ranking is based on a total of 210 regions, whose boundaries are described based on the old constituency boundaries. Based on this ranking, regions in Nairobi are within the first quarter of the richest regions in Kenya. This is hardly surprising as Nairobi alone accounts for between 40 to 50 per cent of Kenya's Gross Domestic Product.

The Constituency Report on Well-Being in Kenya (2008) is based on the Integrated Household Budget Survey 2005/06. It is arguable the most detailed poverty study available on Kenya. The survey establishes the number of poor people in Kenya by use of a monetary poverty line. This poverty line is determined and based on the expenditure required to purchase a food basket that allows minimum nutritional requirements to be met (set at 2,250 calories per adult equivalent per day) in addition to the costs of meeting basic non-food needs such as education, health, transportation and rent (KNBS, 2008). The 2008 Constituency Report on Well-Being in Kenya estimated this poverty line to be about Ksh. 2,331 for rural areas and Ksh. 6,673 for urban areas¹⁰. Nairobi, as aforementioned, is officially recognised as an urban area.

A-3) Informal Settlements of Nairobi

Nairobi has urbanised rapidly, but against poor planning which has resulted in proliferation of informal settlements. The 2009 census estimates the number of informal settlements in Nairobi at over 200. These are spread across Nairobi, occupy about 2% of Nairobi's land, and are resident to about 44% of the City's population. The census results also inform Lang'ata region has the largest informal settlement inhabitants; and, Westlands region, the least.

The informal settlements in Nairobi are generally of two types: squatter settlements, and illegal subdivisions of either government or private land¹¹. Typical of the settlements is: (a) They are located in proximity to areas with employment opportunities¹²; (b) Bad living conditions (i.e. poor infrastructure services and, overcrowding as described in Table 6 and shown by the examples given in Figures 1 to 3); (c) Insecure land tenure status (as presented in Table 6); and, (d) A number are found on land that is inappropriate for construction. Tables 5 and 6 give more information on the settlements. Table 5 is derived from Table 6.

Table 5: Summary Data on Informal Settlements in Nairobi

Region (described using old constituency boundary and name)		Total land size occupied (ha)	Distribution of informal settlement population (%)
Westlands	13	14	3.09
Lang'ata	31	329.5	42.34
Embakasi	30	117	13.76
Starehe	21	55	5.96
Kamukunji	20	46	7.48
Dagoretti	37	36	4.56
Kasarani	30	525	9.61
Makadara	24	61	13.20

¹⁰ Government of Kenya. 2008. Constituency Report on Well-Being in Kenya (Based on the Integrated Household Budget Survey 2005/06). Kenya National Bureau of Statistics. Nairobi, Kenya

¹¹ http://www.ucl.ac.uk/dpu-projects/Global_Report/cities/nairobi.htm

¹² (*ibid*)

Water and Sanitation Service Improvement Project (WaSSIP)

Resettlement Action Plan for Matopeni Informal Settlement

Figure 2: Mathare 4B Informal Settlement

Figure 1: Mashimoni Informal Settlement

Within Mashimoni Informal Settlement is a blocked septic tank (*on the picture, mid left stone structure*) belonging to the Kenya Air Force. This discharges its contents as shown in the picture. Adjacent are households. When it rains, the discharge overflows to the households

Figure 3: One of the In-Roads in Matopeni Settlement

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size	Population		Trunk proximity	PDP
			(ha)		(people/ha)		
					AMUKUNJI		
1.	Biafra City Cotton	CNN	0.2	800		Piped water, no access to electricity	None
2.	Blue Estate - B.A.T. House	Private land	0.8	500	625	Near trunk infrastructure	N/A
3.	Buru Buru City Cotton	CCN (alleged allocations)	12	6,000	500	Piped water, sewer, electricity mains near but no individual connection	Done
4.	Eastleigh Muungani	Private land	1	700	700	Electricity, piped water, electricity	
5.	Galole	Government	1.2	3,000	2,500	Sewer, piped water, electricity	None
6.	Gatanga Base - Pumwani	Private land	0.2	300	1,500	Near trunk infrastructure	N/A
7.	Giciriri Slum 3rd street	Private land	0.2	300	1,500	Near trunk infrastructure	N/A
8.	Kiambiu	CCN and AIRFORCE	6	17,000	2,833	Near trunk sewer, no electricity, piped water	None
9.	Kinyago Kanuku	CCN	1.7	20,000	11,765	Near water, electricity, road, sewer	Done
10.	Kitui	CCN	6	12,000	2,000	Near water, electricity, road, sewer	None
11.	Majengo	Private land	10	25,000	2,500	Electricity, piped water, fairly good access	None
12.	Motherland	Private land	0.8	5,000	6,250	Near trunk infrastructure	None
13.	Muganda					Near trunk infrastructure	
14.	New Akamba Dancers	Private land	0.2	400	2,000	Electricity, piped water, fairly good access	N/A
15.	Nyambura Slum - 12th street	0	0.4	1,000	2,500	Near trunk infrastructure	N/A
16.	PLOT 30	Private land	0.8	500	625	Near trunk infrastructure	N/A
17.	Sewer slum	Private land	0.4	400	1,000	Near trunk infrastructure	N/A
18.	Sophia - Pumwani	Private land	0.1	700	7,000	Near trunk infrastructure	N/A
19.	Upendo Slum - Eastleigh Airbase	Private land	0.4	800	2,000	Near trunk infrastructure	N/A
20.	Zawadi	Alleged as a private?	4	9,000	2,250	Piped water, sewer, electricity mains near but no individual connection	N/A
	Total - Kamukunji		46	103,350			

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Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP					
	MAKADARA											
1.	Barclays Village	Road reserve, power way leave	1.2	2,000	1,667	Piped water, electricity, sewer	None					
2.	Commercial	Private	0.5	6,000	12,000		N/A					
3.	Donholm	Government	0.4			Latrines, proximity of sewer TBC, piped water with private water points access fairly good	None					
4.	Fuata Nyayo	Alleged private ownership (TBC)/CCN	1.2	9,000	7,500	Near trunk infrastructure	None					
5.	Hazina Sokoni	Kenya Railways	2.4	13,000	5,417	Piped water, toilets, earth road runs across the settlement, electricity	None					
6.	Jamaica	Government	4				None					
7.	Kabiria	Government	0.8	3,500	4,375	Piped water with private water points, private exhaust toilets, electricity, poor access	?					
8.	Kaloleni - Agare Village	Railways/CCN?	1.6	10,000	6,250	Sewer, piped water, no individual connection for electricity, Agare Village self help group	None					
9.	Kanaro	Government	1.2	10,000	8,333	No toilets, no electricity, very poor access, piped water with private water points	?					
10.	Kenya Wine	Kenya Railways, power way leave and riparian way leave	2.8	10,000	3,571	Piped water, exhaust latrines, proximity of trunk sewer, TBC, electricity	N/A					
11.	Kingston	Power way leave, private(TBC)	0.8	4,500	5,625	Piped water, no electricity, all weather road serve the area, access fairly good	N/A					
12.	Kisii Village	Government	1.6	10,000		Piped water points, sewer, electricity	None					
13.	Lunga Lunga	Power way leave	3.6	15,000	4,167	Latrines, proximity of sewer TBC, piped water with private water points, access fairly good	N/A					
14.	Mariguini	NHC-Government	2.7	3,500	1,296		None					
15.	Maasai Village	Power way leave	0.8	3,000		Piped water, with few private exhaust latrine	N/A					
16.	Maziwa	Road reserve/alleged	1.2	15,000	12,500	Residents get water from Kaloleni and Makongeni, no	N/A					

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP
		private ownership	()		(F = F = 7 = 3)	toilets- residents go to Makongeni and Kaloleni, no electricity, few CBO's exist	
17.	Mbotela	Government					
18.	Mukuru Kayaba	Kenya Railways, power way leave	8	20,000	2,500	Piped water, electricity, access fairly good	N/A
19.	Paradise	Private	4			Piped water, toilets, earth road runs across the settlement, electricity	?
20.	Paradise	TBC-Government	6			Piped water with private water points, pit latrines, electricity, poor internal access	None
21.	Shimo La Tewa	Road reserve, power way leave	1.2	3,000	2,500	Piped water with private water points, pit latrines, electricity, poor internal access	None
22.	Sinai	Kenya Railways ,Kenya pipeline, Power way leave	6	30,000	5,000	Piped water with private water points, few private latrines, electricity, poor internal access	N/A
23.	Site Village (off Aoko Rd South B)	Government	2.8	15,000	5,357	Near trunk sewer, electricity, piped water with water points	?
24.	South B	Government	6				
	Total - Makadara		61	182,500			
]	EMBAKASI		
1.	48 Zone - Imara Daima	Private	1.2	1,000	833	No sewer	N/A
2.	Bins - Imara Daima	Private	1	600	600	No sewer	N/A
3.	Canan - Dandora	CCN/private	8	15,000	1,875	Near trunk infrastructure	None
4.	Embakasi Village	CCN	1.2	3,000	2,500	Near water, electricity, road, sewer	Done
5.	Gatope Zone - Imara Daima	Kenya railways / private	2	1,000	500	No sewer	N/A
6.	Gitari Marigo	Riparian/CCN	4		0	No sewer, there is electricity, piped water	None
7.	Kamulu	Private	1	200	200	no sewer	N/A
8.	Kangurue-Komarock	Power way leave	1	1,000	1,000	Near trunk infrastructure	N/A
9.	Kayole Soweto	CCN	8	10,000	1,250	Trunk sewer connection, there is electricity but few	None

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Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP
						individual connection, access is good but requires opening up, there are CBO, NGO and CDF projects	
10.	KCC	CCN - alleged allocations	3.6	10,000	2,778	8 Trunk sewer, electricity & water	
11.	Kwa Gitau	Private	1.2	1,000	833	No sewer, there is electricity, piped water	N/A
12.	Kware Village	Government	4	10,000	2,500	Near trunk infrastructure	None
13.	Kyangombe	Private	2	10,000	5,000	Piped water, electricity, poor sanitation proximity to sewer to be confirmed	N/A
14.	Maili Saba	Government	12	27,000	2,250	No sewer, there is electricity, piped water	None
15.	Mihango	Private	0.8	500	625	No Sewer	N/A
16.	Milimani - Imara	Private	1	2,000	2,000	No sewer	N/A
17.	Mohlaa Moidada	Disputed (private)	2	1,000		No piped water, no sewer, no electricity, poor access, no organised community	
18.	Mowlem Village	Private	25	20,000	800	Near trunk infrastructure	
19.	Muigi Inn - Njiru	Private	0.8	3,000	3,750	No sewer	N/A
20.	Mukuru kwa Reuben	Private	8		О	Piped water, no electricity connection, poor accessibility	
21.	Mukuru Sinai	CCN & Private	2	10,000	5,000	Piped water, no electricity connection, poor accessibility	None
22.	Mwengenye	Private	2.5	700	280	No sewer	N/A
23.	Mworoto - Dandora	Private	4	10,000	2,500	Near trunk infrastructure	N/A
24.	Pipeline	Private	5	20,000	4,000	Piped water, electricity, no CBO or NGO ,proximity to sewer to be confirmed	N/A
25.	Railway Zone - Imara Daima	Kenya railways	2.8	5,000	1,786	No sewer	N/A
26.	Riruta - Imara Daima	Private	0.8	700	875	No sewer	N/A
27.	Rurii - Imara Daima	Private	2	5,000	2,500	No sewer	N/A
28.	Tasia Village	Private	6	10,000	1,667	No sewer	N/A
29.	Waisige - Imara Daima	Private	1.2	2,500	2,083	No sewer	N/A

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP
30.	Vietnam	Private	3	10,000		Near trunk infrastructure	None
	Total - Embakasi		117	190,200			
				l	LANG'ATA		
1.	Bangladesh - Mugumoini	Private	2	1,000	500	Near trunk infrastructure	N/A
2.	City cotton - Wilson	Government	1	1,600	1,600	Piped water, electricity, near trunk sewer	None
3.	DC slum	Government				Piped water, electricity, near trunk sewer	None
4.	Gatwikira	Government	40	70,000	1,750	Piped water, electricity, near trunk sewer	None
5.	Kambi Kisii	Government				Piped water, electricity, near trunk sewer	None
6.	Kambi Lamu	Government				Piped water, electricity, near trunk sewer	None
<i>7</i> .	Kambi Muru	Government	8	7,000	875	Piped water, electricity, near trunk sewer	None
8.	Karanja Village	Government				Piped water, electricity, near trunk sewer	None
9.	Kianda	Government	4	15,000	3,750	Piped water, electricity, near trunk sewer	None
10.	Kiangombe	Government				Piped water, electricity, near trunk sewer	None
11.	Kichinjo	Government	20	50,000	2,500	Piped water, electricity, near trunk sewer	None
12.	Kisumu Ndogo	Government	30	35,000	1,167	Piped water, electricity, near trunk sewer	None
13.	Kariobangi-Karen	Private				Piped water, electricity, near trunk sewer	N/A
14.	Kuwinda	Government	5	7,000	1,400	Piped water, electricity, near trunk sewer	None
15.	Kwa Gathoni slums	Government				Piped water, electricity, near trunk sewer	None
16.	Laini Saba	Government	50	60,000	1,200	Piped water, electricity, near trunk sewer	None
17.	Lindi	Government	20	50,000	2,500	Piped water, electricity, near trunk sewer	None
18.	Makina	Government	20	50,000	2,500	Piped water, electricity, near trunk sewer	None
19.	Makina slums	Government	20	50,000	2,500	Piped water, electricity, near trunk sewer	None
20.	Mashimoni	Government	7	25,000	3,571	Piped water, electricity, proximity to sewer to be confirmed	None
21.	Mitumba	Government	14	6,000	429	Piped water, electricity, proximity to sewer to be confirmed	None
22.	PLOT 30	Government	1.5	650	433	Near trunk infrastructure - water, sewer, electricity	None
23.	Quarry/Raila Estate	Government	8	9,000	1,125	Piped water, electricity, near trunk sewer	None
24.	Riverside Mbagathi	Government	13	18,000	1,385	Piped water, electricity, near trunk sewer	None

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Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP
25.	Sara Ng'ombe	Government				Piped water, electricity, near trunk sewer	None
26.	Silanga	Government	6	35,000	5,833	Piped water, electricity, near trunk sewer	None
27.	Songa Mbele slums	Government				Piped water, electricity, near trunk sewer	None
28.	Southlands - Mugumoini	Government/ private	5	5,000	1,000	Near trunk infrastructure	None
29.	Soweto East	Government	15	50,000	3,333	Near trunk infrastructure - water, sewer, electricity	None
30.	Soweto West Kianda	Government	40	40,000	1,000	Piped water, electricity, near trunk sewer	None
31.	Wangombe- Nairobi West					Piped water, electricity, near trunk sewer	None
	Total -Lang'ata		329.5	585,250			
					STAREHE		
1.	Ghetto	CCN	1.4	1,000	714	Near trunk infrastructure: water, sewer, electricity	None
2.	Gitathuru	CCN	0.8	1,000		Near water, electricity, road, sewer	None
3.	Gorofani/Pipeline	Private	1.2	3,000	2,500	Near trunk infrastructure	N/A
4.	Kahonoki	Private	8	6,000		Near trunk infrastructure	
5.	Kambi Moto	CCN	0.4	1,241	3,103	Near trunk infrastructure: water, sewer, electricity	None
6.	Kiamutisya	Government/ Alleged allocations	5	1,700	340		
7.	Kosovo	CCN				Near trunk infrastructure: water, sewer, electricity	None
8.	Kwa Kariuki	Private	1.6	1,000	625	Near trunk infrastructure	N/A
9.	Mabatini	CCN	1.4	1,200		Near water, electricity, road, sewer. Have previous	None
						intervention. Have organised community groups	
10.	Madoya village	Private	1.6	3,000		Near trunk infrastructure	N/A
11.	Mahira	CCN	1.2	1,174		Near trunk infrastructure: water, sewer, electricity	None
12.	Mathare 3C	Private	6	3,000		Near trunk infrastructure	N/A
13.	Mathare 4B	Government	4	12,000		Near water, electricity, road, sewer. Have no previous intervention. Have organised community groups	None
14.	Mathare Mashimoni	Government	2	4,000		Near water, electricity, road, sewer. Have previous intervention. Have organised community groups	None
15.	Mathare no. 10	Private	2.8	4,000	1,429	Near trunk infrastructure	N/A

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP		
16.	Mathare 3B	Private	2	3,000	/	Near trunk infrastructure	N/A		
17.	Mathare 4A	Private	4	10,000		Near trunk infrastructure	N/A		
18.	Redeemed	CCN	0.8	1,000		Near trunk infrastructure: water, sewer, electricity	None		
19.	Thayo	Private	1.2	3,000		Near trunk infrastructure	N/A		
20.	Tsunami	Private	1.2	2,000	1,667	Near trunk infrastructure	N/A		
21.	Village two	Private	8	20,000	2,500	Near trunk infrastructure	N/A		
	Total - Starehe		55	82,315					
	DAGORETTI								
1.	Catholic area - Ngando	Private	0.8	2,000	2,500	No sewer	N/A		
2.	Dagoretti Centre	Private	0.4	300	750	No sewer	N/A		
3.	Gachui	Private	0.2	400	2,000				
4.	Gatina	Private	8	20,000	2,500	Near trunk infrastructure	N/A		
5.	Githarani	Private	0.2	400	2,000		N/A		
6.	Kabiria	Private	0.8	1,000		No sewer			
7.	Kabiro	Private	4	5,000	1,250	No sewer	N/A		
8.	Kaburi	Government	0.3	300	1,000	No sewer	N/A		
9.	Kamwaya	Government		1,500		Near water mains, electricity, road, sewer	None		
10.	Kandutu	Private	0.4	1,000	,	No sewer			
11.	Kanguku	CCN/Private	0.4	500		No sewer	None		
12.	Kanunganga	Private	2	3,000		Near trunk infrastructure, no sewer			
13.	Kareru	CCN	0.2	300		No sewer	None		
14.	Kareru	CCN	0.2	200		No sewer	N/A		
15.	Kawangware - coast	CCN	0.1	100		No sewer			
16.	Kawangware - Kiambooni	CCN-road reserve	0.8	50		No trunk infrastructure			
17.	Kawangware - Sokoni	Private	0.05	100	2,000	No sewer	N/A		
18.	Kimbo	Private	0.4	800	2,000	No sewer	N/A		
19.	Kinyanjui	Private	4.9	3,000	612	No sewer	N/A		

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Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size	Population	Density	Trunk proximity	PDP
			(ha)	- o F	(people/ha)	y	
20.	Kirigu	Private	0.1	200	2,000	No sewer	N/A
21.	Ki-West Ngando	Private	0.2	800	4,000	No sewer	N/A
22.	Kongo	Private	2.8	8,000	2,857	Near trunk infrastructure	N/A
23.	Kwa Nganga	Private	2	3,000	1,500	No sewer	N/A
24.	Lenana	Private	1	2,000	2,000	No sewer	N/A
25.	Magithondia	Private	0.4	500	1,250	No sewer	
26.	Muria Mbogo	CCN	0.2	200	1,000	No sewer	
27.	Musamba	Private	0.4	1,000	2,500	No sewer	N/A
28.	Muslim	Private	0.8	3,000	3,750	No sewer	
29.	Mutego	Kenya Railways	0.2	200	1,000	No sewer	
30.	Njiku	Government	1	1,300	1,300	Far from water, electricity, road, sewer	None
31.	Pipeline	CCN	0.3	200	667	Near trunk infrastructure	
32.	Riruta East	Private	0.8	500		No sewer	
33.	Riruta Githembe	Private	0.4	300	750	No sewer	N/A
34.	Soko Mujinga	Government/CCN	0.8	1,000	1,250	No sewer	
35.	Stage Waria	CCN	0.2	400	2,000	No sewer	
36.	Stage 2	CCN	0.2	500	2,500	No sewer	
37.	Wanyee	Private(pockets in Githembe)				No sewer	
	Total - Dagoretti		36	63,050			
				I	KASARANI		
1.	Beth Village	Government	2	15,000	7,500	No sewer, there is electricity, piped water	None
2.	Clay Village						
3.	Dam Side	CCN/Private	12	10,000	833	Near trunk infrastructure	None
4.	Dampsite	Government	1.2	700	583	Near trunk infrastructure	None
5.	Gatheca	Private	5.7	15,000		Near trunk infrastructure	None
6.	Githurai	Private	5	3,000	600	No sewer	N/A
7.	Githurai-Majengo	Private	0.02	170		No sewer	N/A
8.	Gituamba-Mwiki	Private	5	3,000	600	No sewer	N/A
9.	Gituamba	Private	10	4,000	400	No sewer, there is electricity, piped water	N/A

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size	Population		Trunk proximity	PDP
			(ha)		(people/ha)		
10.	Jangwani	Government/ Church claim ownership	4	5,000	1,250	Near trunk infrastructure	N/A
11.	Kahawa Soweto	CCN	1.2	3,000	2,500	Near water, electricity, road, sewer	Done
12.	Kamae	Private-KU	421	6,000		No sewer	None
13.	Kariadudu-Baba Dogo	Private	3	3,000	1,000	Near trunk infrastructure	N/A
14.	Kariobangi Light Industry	CCN/Alleged private ownership (GRABBED)	1.2	800	667	Near trunk infrastructure	None
15.	Korogocho Grogon A	Government	8	7,000		Near trunk infrastructure	None
16.	0	Government	2.8	9,000		Near trunk infrastructure	None
17.	Korogocho A	Government	7.5	5,000	667	Near trunk infrastructure	None
18.	Korogocho B	Government	5	5,000		Near trunk infrastructure	None
19.	Kwa Njoroge	Private	2	1,000		No sewer	N/A
20.	Kware Village	CCN/GSU - no clear ownership	1.2	3,000	2,500	No sewer	None
21.	Marurui	Private	0.8	3,500	4,375	No sewer, there is electricity, piped water	N/A
22.	Mugure - Baba Dogo	Private	1	300	300	No sewer	N/A
23.	Muthokinjo	Govt, Road reserve	1	600	600	No sewer	N/A
24.	Ngomongo	Private	3.2	6,000	1,875	Near trunk infrastructure - water, electricity - no sewer	N/A
25.	Ngunyumu	Government	4	10,000	2,500	Near trunk infrastructure	None
26.	Quarry Squatters	Private	12	10,000	833	No sewer	
27.	Ruaraka Akamba Dancers	CCN	0.4	400	1,000	Near trunk infrastructure	
28.	Sharp Corner	Government	4	2,500	625	No sewer	None
29.	Tusker	Road reserve					N/A
30.	Zimmerman B	KPLC	1.2	800	667	No sewer	N/A
	Total - Kasarani		525	132,770			
				W	ESTLANDS		

Table 6: List of Informal Settlements in Nairobi by Region and, Land Tenure Status

	Name of settlement	Land tenure status	Size (ha)	Population	Density (people/ha)	Trunk proximity	PDP
1.	Dam	Vet lab & Kenya Railways		5,000			N/A
2.	Deep Sea	Govt-bypass road reserve, Private		7,500			
3.	Githogoro	Road reserve	6.9	17,000	2,464	Piped water & communal water points, electricity, no sewer	N/A
4.	Kaptagat	Road reserve		1,600			
5.	Kariua	Private	1.2	1,000	833		
6.	Kibarage	CCK, Nairobi School	1.6	2,000	1,250	Piped water, no sewer-private and communal latrines, no electricity, access through an all weather road but internal circulation through an earth road	N/A
7.	Kwa Njoroge	Private		500			N/A
8.	Matopeni	Alleged private		750			N/A
9.	Mji wa Huruma	Government	2	2,500	1,250	Piped water, only 1 tap, no electricity, no sewer-use latrines	
10.	Ndumbuini	Road reserve, alleged private ownership	1.2	800		Water is inadequate, no sewer, no electricity, access fairly good	N/A
11.	NITD	Government	1	1,800	1,800	Piped water but inadequate water points, electricity, poor sanitation due to use of pit latrines	N/A
12.	Suswa	CCN(TBC)-road reserve	0.25	1,820	7,280 Piped water & a communal water point, no electricity no sewer		No
13.	Waruku	CCN	0.2	500	2,500	No sewer, no electricity, water point	N/A
	Total - Westlands		14	42,770			
	GRAND TOTAL	GRAND TOTAL		1,382,205			

Source: KNBS Director, 2011 (based on the 2009 national population census results)

Resettlement Action Plan for Matopeni Informal Settlement

Residents of the informal settlements of Nairobi are low income earners with limited resources. They are observed to be engaged largely in low skill employment in casual and permanent work, (e.g. as domestic servants, construction workers, barmaids, and security guards), self-employment, and farming. The self-employed own micro-businesses, either retailing goods or services. Figure 5 gives some examples of micro-businesses that were observed in WaSSIP beneficiary settlements.

The farming activities observed are few and of subsistence level, the products of which are largely sold to residents of the informal settlements. Examples of the activities are pig, cow, chicken and rabbit farming.

1200 Number of Respondents 1000 800 600 400 200 0 **Employed** Self Employed Casual Work Total Farming (Permanent) 1 379 1057 178 499

Figure 4: Occupation of Household Heads

Source: Socio-Economic Study - under the consultancy

Figure 5: Examples of Self-Employment Ventures Found in the Informal Settlements of Nairobi

Observable as well in the informal settlements of Nairobi is discrimination, particularly along ethnic lines. The result is that most ethnic groups in these settlements live in (sub) communities of their own ethnic background¹³.

2.1.2 Development of Water and Sanitation Infrastructure

The population growth and economic development witnessed in Kenya over the years, and in particular Nairobi County as the foregoing discussion informs, has been registered against low level of water and sanitation infrastructure development.

B-1) Development of Water Infrastructure

As indicated by findings from the Kenya Integrated Household Budget Survey (KIHBS) 2005/06, at the time of the survey, an estimated 32.5% of households in Kenya had piped water (piped into dwelling, piped into plot/yard and, public tap) as their main source of drinking water¹⁴. This estimate is close to that of the 2009 national census results which, as Table 7 shows, estimated 30% of households in Kenya had piped water (piped into dwelling and piped) as their main source of water.

Table 7: Households by Main Source of Water and District

Main source of water	Kenya	Nairobi	Distribution of households by
by region	·	Province	district

¹³ http://www.ucl.ac.uk/dpu-projects/Global Report/cities/nairobi.htm

¹⁴ Ministry of Planning and National Development, Government of the Republic of Kenya. Kenya Integrated Household Budget Survey (KIHBS) 2005/06: Basic Report

	Total	% of Kenya HHs	Of which % in Urban Area	Total	% of HHs	Nairobi West	Nairobi East	Nairobi North	Westlands
Pond/Dam	352,821	4.02	10.92	2,761	0.28	0.27	0.26	0.32	0.24
Lake	97,925	1.12	16.12	99	0.01	0.01	0.00	0.02	0.01
Stream	1,893,004	21.59	13.76	1,345	0.14	0.23	0.05	0.14	0.25
Spring/ Well/ Borehole	3,106,622	35.43	26.56	70,729	7.18	22.05	4.35	1.21	5.16
Piped into dwelling	602,884	6.88	80.09	230,704	23.42	15.08	23.26	26.45	34.54
Piped	2,023,745	23.08	64.56	514,943	52.28	42.27	49.61	62.29	50.07
Jabia/Rain/Harvested	95,279	1.09	24.99	1,691	0.17	0.23	0.17	0.12	0.20
Water Vendor	573,088	6.54	78.63	162,057	16.45	19.82	22.20	9.38	9.44
Other	22,586	0.26	13.06	687	0.07	0.04	0.09	0.06	0.09
Total	8,767,954	100.0	38.85	985,016	100.0	100.00	100.00	100.00	100.00
Distribution of Househ	iolds in Naii	robi (%)			100.0	21.6	37.5	33.2	7.7

Source: KNBS, 201015

Both estimates of KIHBS and 2009 census, which are supported by estimates given by the 2004 State of Environment Report on Kenya, inform that of these households in Kenya, the highest proportion is located in the urban areas of Kenya. From the 2009 census, of the approximately 30% of households in Kenya using piped water as their main source of water:

- a) About 68% were located in the urban areas of Kenya; and,
- b) Of these households located in the urban areas of Kenya, an estimated 42% were located in Nairobi.

Notable of this urban trend, as indicated by the 2004 State of Environment Report on Kenya, access to piped water services is markedly lower in the informal settlements than in the formal settlements¹⁶.

B-2) Development of Sanitation Infrastructure

With respect to sanitation coverage, as Table 8 shows, the 2009 national census results estimated 85.93% of households in Kenya had access to some type of sanitary facility. Out of these, about 19.04% were grouped among those with improved main mode of human waste disposal facility that include main sewer, septic tanks, cess pool and VIP latrines. Of these estimated 19.04% households:

- a) About 47.03% had main sewer as their main mode of human waste disposal; while an estimated 20.85% had the septic tank, 2.08% the cess pool and, 30.04% the VIP latrine; and,
- b) An estimated 81% were located in the urban areas of Kenya; and, of these households located in the urban areas of Kenya, an estimated 52% were in Nairobi.

Similar to improved water services, access to improved sanitation services in the urban areas of Kenya is markedly lower in the informal settlements over the formal settlements.

(http://www.nema.go.ke/index2.php?option=com_docman&task=doc_view&gid=153&Itemid=35)

¹⁵ Kenya National Bureau of Statistics. 2010. 2009 Kenya Population and Housing Census: Volume II. Ministry of Planning, National Development and Vision 2030, Government of the Republic of Kenya, Nairobi

¹⁶ Chapter 8: State of Environment Report 2004, Kenya

Table 8: Households by Main Source of Human Waste Disposal

Main		Kenya		Nairobi (County	Distributi	on of hous	seholds by	district
source of water by region	Total	% of Kenya HHs	Of which % in Urban Area	Total	% of HHs	Nairobi West	Nairobi East	Nairobi North	Westlands
Main sewer	674,541	7.69	98.54	469,963	47.70	19.51	57.97	55.74	41.70
Septic tank	299,030	3.41	91.46	95,437	9.69	5.98	6.53	14.55	14.50
Cess pool	29,881	0.34	83.75	10,492	1.06	0.47	1.03	1.59	0.58
VIP latrine	430,827	4.91	46.84	26,486	2.69	3.73	2.05	2.97	1.65
Pit latrine (covered & uncovered)	6,100,234	69.57	34.90	370,587	37.61	68.55	31.35	23.88	40.83
Bucket	22,828	0.26	82.65	5,207	0.53	0.64	0.46	0.63	0.15
Bush	1,196,509	13.65	7.28	3,963	0.40	0.68	0.32	0.30	0.51
Other	14,104	0.16	45.79	3,181	0.32	0.44	0.29	0.34	0.08
Total	8,767,954	100.00	38.85	985,016	100.0	100.00	100.00	100.00	100.00
Distribution	of Househo	lds in Na	irobi (%)		100.0	21.6	37.5	33.2	7.7

Source: KNBS, 201017

2.1.3 Addressing the Water and Sanitation Challenges

Addressing the two specific water and sanitation sector challenges identified in *Kenya Vision* 2030, according to *Kenya Vision* 2030, will involve increasing development of water resources to meet the demand of an increasing population and a growing economy. It will also involve investment in infrastructure in terms of both rehabilitation and expansion of existing facilities.

Kenya Vision 2030 is being implemented through five five-year medium-term development plans. The medium term development plan in use at present is the first for Kenya, and it covers the period 2008 to 2012. This plan guides on the delivery of the 2012 goals for water and sanitation through four strategies. Of specific interest here are the following two strategies:

- a) "Upgrading Water Supply and Sanitation Systems", and its related Flagship Project National Water Supply and Sanitation, whose goal is improvement of water and sanitation services; and,
- b) "Water Sector Reforms" which has one of its initiatives as: *Increased national coverage of water supply and sanitation*. Covered under this particular initiative and is applicable to this report are: rehabilitation and expansion of urban water supply and sanitation; and, promotion of use of VIP latrines and septic tanks. These interventions would be undertaken with an overall aim of improving infrastructure and achieving improved access to safe water and sanitation.

Key actors to the delivery of the water and sanitation goals identified by *Kenya Vision 2030* are the eight Water Services Boards (WSBs) of the Republic of Kenya¹⁸. These are: Coast

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¹⁷ Kenya National Bureau of Statistics. 2010. 2009 Kenya Population and Housing Census: Volume II. Ministry of Planning, National Development and Visio 2030, Government of the Republic of Kenya, Nairobi

Water and Sanitation Service Improvement Project (WaSSIP) Resettlement Action Plan for Matopeni Informal Settlement

Water Services Board (CWSB); Athi Water Services Board (AWSB); Lake Victoria North Water Services Board (LVNWSB); Rift Valley Water Services Board (RVWB); Lake Victoria South Water Services Board (LVSWSB); Tana Athi Water Services Board; Tana Water Services Board (TWSB); and, Northern Water Services Board (NWSB). The WSBs are established under the Water Act 2002. Each is allocated a defined region to provide it with water and sanitation services. Each is in addition mandated to establish Water Service Providers (WSP) to whom it delegates the day-to-day responsibilities. The mandate of WSBs is to offer water and sewerage services to institutions under their area of control.

Of the eight WSBs, one that is related to this report is the AWSB, whose area of coverage embraces Nairobi, Thika, and Kiambu. In Nairobi, AWSB in turn has established Nairobi City Water and Sewerage Company (NCWSC) to provide water and sewerage services to residents of Nairobi City.

2.2 Water Supply and Sanitation Service Improvement Project

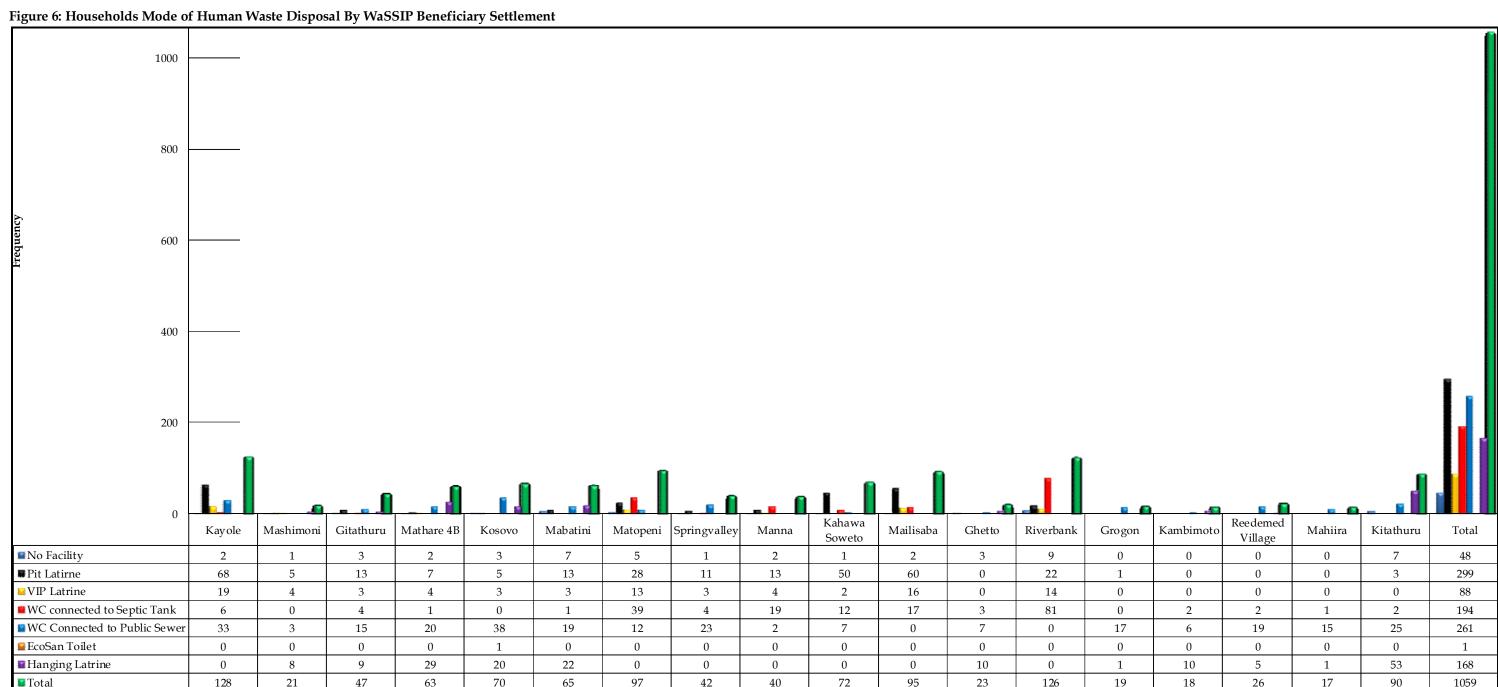
Against the foregoing discussion, AWSB has received funds from The World Bank (WB) to support a defined part of its overall investment plans on water and sanitation services improvement in Nairobi. The WB assistance is through the Water Supply and Sanitation Service Improvement Project (WaSSIP) in Kenya.

In specific, WaSSIP's support involves:

- a) On water supply:
 - i. Rehabilitation of selected existing water supply systems including transmission, treatment, storage and distribution facilities, and boreholes; and,
 - ii. Expansion of piped water supply services to under-served areas of Nairobi through extension of primary and secondary distribution pipes where required.
- b) On sewerage:
 - i. Rehabilitation of wastewater collection, treatment and disposal facilities in Nairobi; and,

¹⁸ Government of the Republic of Kenya. 2007. Kenya Vision 2030: A Globally Competitive and Prosperous Kenya. Ministry of Planning and National Development and, National Economic and Social Council (NESC), Nairobi, Kenya

Government of the Republic of Kenya. 2008. Kenya Vision 2030: First Medium Term Plan, 2008-2012. Ministry of State for Planning, National Development and Vision 2030, Nairobi, Kenya



Source: Socio-economic study carried out as one of the deliverables under the Consultancy: Detailed Design, Bid Documentation and Works Supervision for WaSSIP Informal Settlements Works

- ii. Expansion of existing networks.
- c) On institutional strengthening of AWSB and NCWSC:
 - i. Supporting selected equipment and activities toward building the technical ability of AWSB and NCWSC, with emphasis on accountability and transparency of the institutional, governance and management framework.

WaSSIP, in addition, has a component supporting the operationalisation and strengthening of the Water Sector Regulatory Board (WSRB) and the Water Appeals Board (WAB).

Noteworthy of WaSSIP, portions of its budget have been set aside to rehabilitate existing water and sanitation infrastructure in, as well as expand water and sanitation infrastructure to informal settlements in Nairobi. This is through a balanced programme including the active involvement of beneficiary communities in decision making.

On the whole, the overall objective of WaSSIP is to increase access to reliable, affordable and sustainable water supply and sanitation services in Nairobi.

This Project: a) also supports CWSB and LVNWSB; and, b) has a life span of five years.

2.2.1 Informal Settlements in Nairobi Identified to Benefit from WaSSIP

As discussed above, one of WaSSIP's activities is targeted at benefiting selected informal settlements located within the areas of control of beneficiary WSBs. In connection to AWSB, the informal settlements from Nairobi that are identified to benefit read as follows:

		Phase I			Ph	ase II
Settlement		Village		Settlement		Village
Njiru	1.	Maili Saba		Dagoretti	1.	Njiku
	2.	Matopeni & Spring Valley		Githogoro	2.	Githogoro
Embakasi	3.	River Bank		Kayole	3.	Soweto
	4.	Kayole Soweto		Kiambiu/City Cotton	4.	Kiambiu/City Cotton
Kahawa West	5.	Kahawa Soweto		Kiangombe	5.	Kiangombe
Mathare	6.	4B		Kinyago	6.	Kinyago
	7.	Gitathuru		Kitui	7.	Kitui
	8.	Mashimoni		Maasai	8.	Maasai
	9.	Mabatini Kosovo		Mathare	9.	3A
	10.					3B
	11.	Kiamutisya			11.	No. 10
	12.	Bondeni		Mitumba	12.	Mitumba
	13.	3C				
Huruma	14.	Gitathuru				
	15.	Ghetto				
	16.	Kambi Moto				
	17.	Redeemed				
	18.	Grogon				
	19.	Mahira				

These settlements are grouped into phases as intervention is planned to be carried out in two stages, commencing with settlements grouped under Phase I. A classification criterion, developed by AWSB, enabled the identification and placement of settlements by phase. Phase I settlements were those, at project inception, had processes underway that would facilitate infrastructure improvements and the likelihood that investments would be sustainable. These processes were: a) mobilisation and organisation of communities (with

support of local NGOs and CBOs); b) physical planning processes which were complete or underway; and/or, c) land tenure issues had been resolved (in coordination with the Nairobi City Council).

Phase II settlements were those, at project inception, data collection, physical planning and mapping was in the early stages, but were expected to be completed by the third quarter of the year 2010.

2.2.2 Consultancy Services for Detailed Design, Bid Documentation and Works Supervision

On 12th October 2010, Runji & Partners Consulting Engineers and Planners Ltd (Runji & Partners) signed a contract with AWSB to undertake a detailed design, bid documentation and works supervision for WaSSIP – informal settlements works. The contract became effective on 27th October 2010. The scope of the consultancy included: a) site visits; b) carrying out a feasibility study for different water and sanitation options in each site; c) carrying out detailed designs of the water and sanitation infrastructure in targeted informal settlements and preparing bidding documents for the procurement of contractors; d) carrying out an Environmental Impact Assessment (EIA) of the recommended options and issue an EIA Report in accordance with the Environmental Management and Coordination Act (EMCA) 1999 and WB environmental safeguards requirements; e) carrying out a financial impact analysis of the intended investment indicating project revenues over a five year period, expected break-even point, the internal rate of return for each village, and for the sub-project; and, f) preparing contract packages for the construction works.

Outputs expected of the consultancy were: a) Feasibility Study; b) Conceptual Design for Sewerage and Water Supply; c) Proposals for Design Criteria, and Packaging of Works Contract; d) Environmental Impact Assessment Report; e) Social, Environmental Management Plan, and Resettlement Action Plan Reports; f) Financial Analysis Report; g) Detailed Design Sewerage and Water Supply Improvements Report; h) Technical Report; i) Bidding Documents in three volumes; and, j) Support to AWSB in preparing evaluation reports for selection of contractors.

By August 2011, the following reports for Matopeni Informal Settlement (Matopeni, Spring Valley, and Manna Settlements) were complete and handed in to AWSB: Inception Report; Conceptual Design Report; Detailed Design Reports – Sanitation and Water Components; Draft EIA Report; and, Draft Socio-Economic Report.

As part of the consultancy, another report required is a Resettlement Action Plan (RAP) Report for Matopeni Informal Settlement that is acceptable to AWSB, the WB, and NEMA. This report is in fulfilment of this output. Toward development of this RAP report, reference was made on The Resettlement Policy Framework (RPF) for WaSSIP, as well as the abovementioned reports the consultant has completed and handed over to AWSB. The sections that follow are focused on the Resettlement Action Plan for Matopeni Informal Settlement, i.e. LOT 3 Settlements. LOT 3 is the label given to intervention activity under the sanitation component for Matopeni Informal Settlement.

3.0 OBJECTIVE OF THE RESETTLEMENT ACTION PLAN

WaSSIP is a development project. It involves investment in infrastructure in terms of both rehabilitation and expansion of existing facilities as described in Section 2.2. above. As with development projects worldwide, implementation of WaSSIP may disrupt previous production systems and way of life of affected persons. In connection, WaSSIP has an obligation to the affected persons (henceforth referred to as Project Affected Persons,

abbreviated PAPs), to observe fair practice in payment of compensation. This is the backbone of this RAP report.

The objective of the RAP report is to present an entitlement compensation package, put together and, consisting of a set of provisions to be funded by WaSSIP, with an aim at adequately re-installing PAPs in Matopeni Informal Settlement. This is undertaken with the overall intent of minimising and reversing negative effects of compulsory asset acquisition.

In the preparation of this RAP report, cognisance was taken on the requirements of:

- a) The laws of Kenya with regard to land tenure, development, usage, and compulsory acquisition;
- b) World Bank Operational Policy (OP) 4.12 on compensation; and,
- c) WaSSIP's RPF.

4.0 LEGAL FRAMEWORK THAT GUIDED THE DEVELOPMENT OF THIS RESETTLEMENT ACTION PLAN

This section gives a description of the Laws of Kenya whose requirements were reflected upon in preparation of this RAP report. The section in addition describes the provisions of WB OP 4.12 taken into cognisance; and, makes a comparison of this with the Kenyan law.

4.1 Land Tenure Systems in Kenya

Interests on land in Kenya broadly fall into two groups: rights that are held through traditional African systems; and, rights that are derived from the English system introduced and maintained through laws enacted by the colonial administration and then the national parliament. The former is loosely known as customary tenure and the latter statutory tenure. These are secured and expressed through national law, namely:

- a) The Constitution of Kenya (2010): the supreme law of the Republic of Kenya.
- b) The Land Act, 2012 (Act No. 6 of 2012): This Act provides for the sustainable administration and management of land and land based resources, and connected purposes in Kenya.
- c) The Land Registration Act, 2012 (Act No. 3 of 2012): This is the Act on registration of titles to land in Kenya. It gives effect to the principles and objects of devolved government in land registration, and connected purposes.

4.1.1 Customary Land Tenure

This tenure is made possible through land rights conferred by or derived from Kenyan customary law whether formally recognised by legislation or not, and is consistent with the Constitution of Kenya (2010). It refers to land ownership practices by certain communities in accordance with the law relating to community land enacted pursuant to Article 63 of the Constitution of Kenya (2010). Kenya is a diverse country in terms of its ethnic composition. Subsequently it has multiple customary tenure systems, which vary mainly due to different agricultural practices, climatic conditions, and cultural practices. However, most customary tenure systems exhibit a number of similar characteristics as follows:

 a) Individuals or groups by virtue of their membership in some social unit of production or political community have guaranteed rights of access to land and other natural resources; and, b) Individuals or families thus can claim property rights by virtue of their affiliation to the group.

4.1.2 Freehold Tenure

This tenure confers the greatest interest in land called absolute right of ownership or possession of land for an indefinite period of time, or in perpetuity. Freehold land is governed by the Land Act 2012 and Land Registration Act 2012 of the Laws of Kenya. The Acts provide that the registration of a person as the proprietor of the land vests in that person the absolute ownership of that land together with all rights, privileges relating thereto. A freehold title generally has no restriction as to the use and occupation but in practice there are conditional freeholds, which restrict the use for say agricultural or ranching purposes only. Land individualisation was demanded by the colonial settlers who required legal guarantee for the private ownership of land without which they were reluctant to invest.

4.1.3 Leasehold Tenure

Leasehold is an interest in land for a definite term of years and may be granted by a freeholder usually subject to the payment of a fee or rent, and is subject also to certain conditions which must be observed, e.g. relating to development and usage.

Leases are granted by the government for government land, community land, and by individuals or organisations owning freehold land.

4.1.4 Public Tenure

This is where land owned by the government for her own purpose, and which includes unutilised or un-alienated government land reserved for future use by the government itself or may be available to the general public for various uses. The land is administered under the Land Act 2012; and, is managed by the National Land Commission on behalf of the national and county governments. Categories of public land are as prescribed under Article 62 of the Constitution of Kenya (2010). They include: forest reserves; other government reserves; alienated and un-alienated government land; national parks; townships and other urban centres; and, open water bodies.

4.2 Public Trust Doctrine

Notwithstanding the foregoing discussion, it is a common law doctrine to the effect that common property resources such as rivers, forests and parks are held by the state in trust for the general public. Consequently, the state cannot alienate these resources or use them in a way detrimental to public interest. This is the doctrine that would ensure that public land cannot be alienated or committed to waste to the detriment of public interest.

4.3 Police Powers

It is the case that the statutory framework for land ownership in Kenya is heavily influenced by common law jurisprudence on land ownership – the owner's rights include the rights of use and abuse. In Kenya, however, the development of physical planning legislation has vested in the state the cumulative rights of other land owners. The regulatory power is referred to as police power.

Within the Kenyan context, police power is spread in a wide range of statues, such as:

- a) Agriculture, Fisheries and Food Authority Act 2013, which provides the statutory framework for the establishment of an Authority with the functions of, among others: administering the Crops Act and Fisheries Act; regulating and promoting best practices on agriculture and aquatic matters, excluding livestock matters; and, determining research priorities for agriculture and aquatic matters (excluding livestock matters), advising on the research and, based on the research findings, advising the national and county governments on policy wants towards development of general guidelines promoting best practices with respect to development, preservation and utilisation of agricultural land.
- b) The Public Health Act Cap 242, which regulates activities detrimental to human health. It safeguards against environmental nuisances that affect human health, their introduction as well as their levels. Under this Act, the owner of the premises responsible for environmental nuisances, such as noise and emission, at levels that can affect human health, are liable to prosecution. An environmental nuisance is defined in the Act as one that causes danger, discomfort or annoyance to the local inhabitants or that is hazardous to human health.
- c) **Urban Areas and Cities Act 2011,** which is a legislative framework providing for: a) classification of areas as cities or urban areas; b) governance and management of cities and urban areas; c) participation by residents in the governance of cities and urban areas; and, d) other matters for the attainment of the objects provided for in "a" and "c".

By this Act, a city means an area conferred with the status of a city (as provided under Section 8 of the Act), and an urban area means a municipality or a town (as provided, respectively, under Sections 9 and 10 of the Act). With reference, these sections of the Act instruct an area can be conferred with the status of a city or an urban area on fulfilment of a particular benchmark, the evaluation of which is based on dimensions that include: a) population size, b) revenue generation capacity vis-à-vis ability to sustain its operations; c) management system; d) level of service provision to its residents; e) level of infrastructure development; f) level of citizen participation in the governance of the area; and, g) development plans.

This Act, in Section 36(1), provides that every city and municipality established under the Act shall operate within the framework of integrated development planning which shall, among other objectives, be the basis for development control. Section 36(2) further provides, the integrated development plan prepared for a city or municipality shall bind, guide and inform all planning development and decisions and ensure comprehensive inclusion of all functions.

Before moving on, there are four observations worth mentioning about the Act. First, the Act classifies Nairobi as the capital city of Kenya, and provides this capital city shall be governed and managed in the same manner as a county government. It additionally lists the functions of the capital city, and instructs the capital city shall supply infrastructure necessary to sustain these functions.

Second, in relation to level of service provision, the Act, in its First Schedule, provides the list of essential services a city or urban area should have the capacity to effectively and efficiently deliver to its residents. For cities and municipalities, water and sanitation is amongst the list of essential services. In the Second Schedule, the Act provides residents of a city or urban areas have the right to have access to services which the city or municipality provides.

Third, on governance and management of either a city or urban area, the Act establishes a Board and directs on its functions as well as its relationship with the National Government

and County Government. Among the functions of the Board are to: a) implement applicable national and county legislation; b) develop and manage schemes, including site development in collaboration with the relevant national and county agencies; c) monitor the impact and effectiveness of any services, policies, programmes or plans; and, d) promote a safe and healthy environment.

Lastly, regarding participation by residents in the governance of the city or urban area, the Act instructs, subject to the Second Schedule of the Act, the residents of the city or urban area may, among other, deliberate and make proposals to the relevant bodies or institutions on, but not limited to, the provision of services.

- d) Physical Planning Act Cap 286, which stipulates development control measures. It deals with all matters relating to preparation of all kinds of physical development plans and subdivisions. Through the Act: physical planners are empowered to carry out all planning issues on all categories of land; planning problems between boundaries of two local authorities are dealt with; and, encouraged is involvement of varied expertise in planning.
- e) Environmental Management and Coordination Act, No. 8 of 1999, which provides for the establishment of an appropriate legal and institutional framework for the management of the environment and for matters connected therewith and incidental thereto. By the Act: every person in Kenya is entitled to a clean and healthy environment; has the duty to safeguard and enhance the environment; and, may seek legal redress should they allege the entitlement to a clean and healthy environment has been, is being or is likely to be contravened in relation to them. Vis-à-vis, the Act regulates how projects or activities should behave prior to, during and, on their implementation. It subjects these projects or activities to environmental audits through which, potential impacts and their mitigation measures are enumerated for compliance. An environmental audit and compliance to it, is vital for a licence, from the National Environmental Management Authority (NEMA), to proceed.
- f) The Forests Act 2005, which provides for the establishment of a legal and institutional framework for the management of forest land and connected matters. Using this Act: gazetted forest land is reserved; a piece of forest land can be de-gazetted and converted to other uses, but following approval based on a rigorous vetting process as provided for under the Act; and, forest land can be leased for use for other purposes provided that such use does not contradict conservation goals. The same act also allows for Participatory Management of Forests and thus guarantees communities rights to access and utilise certain forest goods and services, including citing of water supply intake works in forest areas.
- g) Wildlife (Conservation and Management) Act, Cap 376, which establishes the legal and institutional framework for the protection, conservation and management of wildlife in Kenya, and related purposes. The point of this Act is ensuring wildlife in Kenya is managed and conserved so as to yield to the Nation in general and to individual areas in particular, optimum returns incidental to proper wildlife management and conservation, and which may be secured without prejudice to such proper management and conservation. By this Act, security of the animal and vegetable life is ensured by notice in the Gazette, declaring the area they are located on to be a protection area, thus restricting or regulating the extent of human activity on the area. Persons contravening the Gazette notice declaring a protection area are liable to prosecution.
- h) The Water Act, 2002, which provides for the establishment of a legal and institutional framework for: a) the management, conservation, and control of water resources, and for the acquisition and regulation of rights to use water; b) the regulation and management of water supply and sewerage services; and c) related purposes

As is observable from the short descriptions on the Acts, the extent of the exercise of police power varies across these statutes.

4.4 Eminent Domain

This is the common law theory that the government is the ultimate owner of all property. The government can acquire property for the public good. Compulsory acquisition has been used for eminent domain. The laws of Kenya related to compulsory acquisition are contained within Part VIII of The Land Act 2012 (Act No. 6).

4.5 Other Acts of Parliament Relevant to this RAP

Other Acts pertinent to this RAP are:

- a) National Museums of Kenya Act: National Museums of Kenya is a state corporation charged with research, management and documentation of historical sites, archaeological sites and site of natural and national heritage and monuments. National Museums of Kenya has also been designated as a national biodiversity centre and is involved in taxonomic and herbaria activities.
- b) Trust Land Act Cap. 288: Under this Act, all land that is not registered under any Act of Parliament is vested in local authorities as Trust Land. In these Trust Lands, a person may acquire leasehold interest for a specific number of years. The local authorities retain the powers to repossess such land for their own used should the need arise. By invoking the provisions of this Act, it will ensure proper use of such land within the provisions of the Act.
- c) Mining Act: All un-extracted minerals (other than common minerals) under or upon any land are vested in the government, subject to any rights in respect thereof which, by or under this Act or any other written law, have been or are granted, or recognised as being vested, in any other person. Minerals in this Act, does not include clay, murram, limestone, sandstone or other stone or such other common mineral substances as the Minister may by notice in the Gazette declare not be minerals for the purposed of this Act.
- d) Land Control Act 302: This Act restricts transfer of land and as such has some bearing on the flexibility with which affected farmers can acquire replacement land. It also allows for all private land to be adjudicated and registered following which, a title deed is issued to the registered owner. Additionally, the Act controls the subdivision of agricultural land, in the process stating the economic size for agricultural land. Under the Act, all transferred land is registered with the District Land Registrar following approval by the Land Controls Board.
- e) The Prevention, Protection and Assistance to Internally Displaced Persons and Affected Communities Act (No. 56 of) 2012: This Act makes further provision for the prevention, protection and provision of assistance to internally displaced persons and affected communities, and gives effect to the Great Lakes Protocol on the Protection and Assistance of Internally Displaced Persons, and the United Nations Guiding Principles on Internal Displacement and for connected purposes.

In this Act, provisions on the relationship between internal displacement and "public interest" are observed, where "public interest" is construed in reference to development projects or interests for the benefit of the people of the Republic, including persons displaced by such projects or interests. Vis-à-vis, according to the Act, displacement and relocation due to development projects or interests shall only be lawful if justified by compelling and overriding public interest; and, where the displacement and relocation cannot be averted:

The Government shall minimise it;

- ♣ The Government shall undertake public consultations with aims that include: i) awareness creation; ii) education on causes, impacts and consequences of internal displacement; and, iii) defining suitable and durable mitigation measures;
- ♣ The Government shall create the conditions for and provide internally displaced persons with a durable and sustainable solution in safety and dignity, and shall respect and ensure respect for the right of internally displaced persons to make an informed and voluntary decision on re-installation; and,
- ♣ Without limiting, the conditions that apply for durable solutions shall include: long-term safety and security; full restoration and enjoyment of the freedom of movement; enjoyment of an adequate standard of living without discrimination; access to employment and livelihoods; access to effective mechanisms that restore housing, land and property; access to documentation; equal participation in public affairs; and, access to justice without discrimination.

4.6 World Bank Operational Policy 4.12

The WB's Safeguard Policy OP 4.12 applies to some components of WaSSIP, and to all economically and/or physically project displaced persons, regardless of the number of people affected, the severity of impacts, and the legality of land holding. According to the Policy, particular attention should be given to the needs of vulnerable groups, especially those below the poverty line, the landless, the elderly, women and children, indigenous groups, ethnic minorities, and other disadvantage persons.

The Bank's Policy requires that the provision of compensation and other assistance to PAPs is carried out prior to the displacement of people. In particular, repossession of land for project activities may take place only after compensation has been paid. Resettlement sites, new homes and related infrastructure, public services and moving allowances must be provided to the affected persons in accordance with the provisions of the Bank's Policy.

4.6.1 Kenyan Law Vis-à-Vis World Bank Operational Policy 4.12

Table 9 summarises the comparison between Kenyan law and the WB OP 4.12 as regards compensation. The main difference between the two is that the Kenyan system recognises only title holders as bonafide property owners; while under the WB OP 4.12, lack of a legal title does not bar in extending assistance and support to those affected by development projects. With respect, the measure this Project will take to resolve this gap, and is reflected in the relevant sections, is the WB OP 4.12 shall prevail.

Table 9: Comparison of Kenyan Law and World Bank OP 4.12 Regarding Compensation

Table 9: Comparison of Kenyan Law and World Bank OP 4.12 Regarding Compensation										
Category of Project Affected Persons & Type of Assets	Kenyan Law	WB OP 4.12								
Land owners	Just cash compensation based upon market value as prescribed under statute. On agreement with PAP, land compensation not exceeding in value the amount of cash compensation considered would have been awarded.	Recommends land for land compensation. Other compensation is at replacement cost								
Land tenants	Entitled to just compensation based on the amount of rights they hold upon land under relevant laws. Illegal tenants not entitled to compensation	Project Affected Persons are entitled to some form of compensation whatever the legal or illegal recognition of their occupancy.								
Land users	Entitled to just compensation for crops and any other economic assets. Illegal land users not entitled to compensation	Whatever the legal recognition, entitled to compensation for crops, may be entitled to replacement land and income must be restored to at least pre-project levels.								
Owners of temporary buildings	Entitled to just cash compensation based on market value (as prescribed under statute) or entitled to new housing on authorised land under government (state or local) housing programmes.	Entitled to in-kind compensation or cash compensation at full replacement cost including labour and relocation expenses, prior to displacements.								
Owners of permanent buildings	Entitled to just cash compensation based on market value as prescribed under statute. On agreement with PAP, land compensation not exceeding in value the amount of cash compensation considered would have been awarded.	Entitled to in-kind compensation or cash compensation at full replacement cost, including labour and relocation expenses, prior to displacement								
Perennial crops	Cash compensation based upon rates calculated as an average net agricultural income.	As per specifications of the RPF.								

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5.0 MATOPENI INFORMAL SETTLEMENT

5.1 Introduction

Matopeni Informal Settlement is located in North Kayole Location, in Embakasi Central Constituency, Nairobi County. The Settlement borders Kayole Estate to the west, Stone Quarry to the south, and Kangundo Road to the north and east. This settlement is on land measuring about 10 acres, and it is divided into three distinct smaller settlements, namely: Matopeni, Spring Valley, and Manna. Land use planning and sub-division has been done, which provides for social service places as well as way leaves for sewage lines and distribution of water.

Residents were settled in Matopeni Settlement in 1997 by the then area Member of Parliament, the late Honourable Mwenje. An applicant was at the time required to pay a fee of Ksh. 500 only. The Housing Development Department of the City Council of Nairobi is

Figure 7: Example of a Plot Formalisation Card Issued By HDD

therefore not the original allotter of the individually owned plots in the Settlement. After the residents had been settled, the City Council of Nairobi approved formalisation of the Settlement (refer to Annex 8.7 for some of the documents obtained to illustrate the process of approving formalisation of the Settlement). At present, the Council is adopting what is on the ground. In this process of formalisation, it is issuing to an individual plot owner an official document of ownership referred to as a Plot Formalisation Card, an example of which is illustrated by Figure 7. The register of plot owners it is following is the register kept by the chairmen of the individual settlements that form the larger Matopeni Settlement (refer to Annexes 8.4., 8.5 and 8.6 for the registers which the Project Team obtained from the chairmen of the individual settlements).

The total number of plots in Matopeni Settlement is 3,314 distributed by settlement/village as follows: Manna, 495; Spring Valley, 778; and, Matopeni, 2141. Most of the residential plots measure an eighth of an acre in size (i.e. $7.5 \text{m} \times 15 \text{m}$). Few residential plots are larger than this, measuring $7.5 \text{m} \times 18 \text{m}$ in size. The commercial plots measure $15 \text{m} \times 20 \text{m}$ in size.

5.2 Existing Water and Sanitation Facilities

Improved water and sewerage services to Matopeni Settlement are amongst the top priority development items for residents of the Settlement.

5.2.1 Water Facilities

Observed during the socio-economic study under the consultancy, formal water supply to Matopeni Settlement is insufficient and unreliable. Primary water sources for majority of residents of the settlement are water kiosks and water points. Few households have piped

water into their houses. Wanting piped water connection into house is most observed in Manna Settlement. Majority of residents from this settlement access water from neighbouring estates like Kayole or

Figure 8: A Donkey Pulled Cart Doing Its Rounds In Matopeni Estate with Water for Purchase

Spring Valley, while other purchase from vendors.

The socio-economic survey under the consultancy also observed a number of initiatives that have been undertaken in the area towards provision of portable water. One such initiative includes drilling of a borehole by the Ministry of Water and Irrigation. However, the quality of the borehole's water was found to be unsafe for human consumption. Few residents use

this source, but for other domestic chores such as cleaning and washing. In addition, resident structure owners, through the support of the Constituency Development Fund (CDF) have received some funds towards purchase of pipes, trenching and backfilling. This has resulted to connection of a few individuals to the existing water supply network.

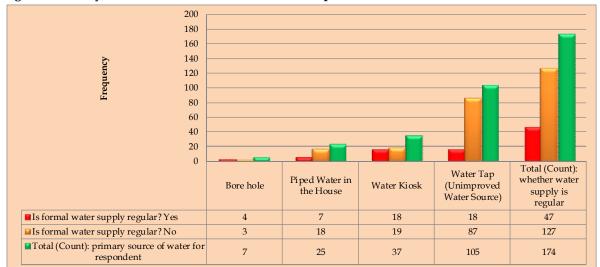
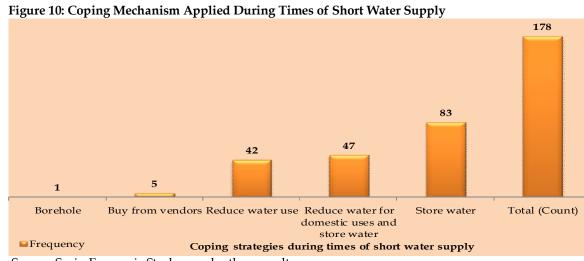


Figure 9: Primary Source of Water for Residents in Matopeni Settlement

Source: Socio-Economic Study - under the consultancy

The cumulative challenges experienced with regard to safe water supply in the Settlement has contributed to high cost of obtaining safe water amongst the residents of the Settlement. In connection, a main coping mechanism the Settlement's residents have adopted is reducing on the amount of safe water a person uses per day. The socio-economic study carried out under this Consultancy estimated an average 25 litres per person per day, which is about the recommended minimum of 22 litres the World Health Organisation considers only just adequate¹⁹.



Source: Socio-Economic Study - under the consultancy

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¹⁹ Runji & Partners Consulting Engineers; and, Athi Water Services Board. 2011. Consultancy Services for Detailed Design, Bid Documentation for WASSIP Informal Settlements, Nairobi City: Socio-Economic Report. Athi Water Services Board, Nairobi

5.2.1.1 Maji Mashinani Initiative

At end of October 2012, the NCWSC launched a social connections programme to improve water supply and sewerage services to the residents of Kayole Soweto Settlement; and, according to the World Bank Country Director who was present at the launch, "the innovations introduced by the initiative hold promise for scalable solutions for improving delivery of water and sanitation services in informal settlements low-income area countrywide". The WB Country Director added, "There are plans to extend the reach of the initiative to other under-served informal settlements in Nairobi, in specific: Kawangware-Gatina (113,000 people), Matopeni-Spring Valley (15, 000 people), Embakasi River Bank (3,000 people), and Kangemi (80,000 people).

The initiative launched is dubbed Maji Mashinani - "water at the grass roots". Partners in this initiative include: NCWSC, WaSSIP, AWSB, K-Rep Bank, and the community (which is providing the labour and security, and for ownership)²⁰.

K-Rep Bank's involvement in the initiative is from the reason that most residents of the settlements are unable to afford the lump sum connection fee charged by NCWSC to install metered water connection to their households. In connection, K-Rep Bank's presence allows households access micro-credit for the metered water connection, to be repaid in instalments together with the monthly water bill²¹. The average cost of getting piped water connection from the NCWSC is Ksh. 8,215.00 (about US\$100), which includes a non-refundable fee, deposit for meter installation, piping and fittings²².

K-Rep was established in 1984 as a project that supported the development of Small and Micro Enterprises through NGO managed programs. In 1987, the project was incorporated as local NGO. It changed its original strategy of supporting NGOs with grants and technical assistance, to that of advancing loans to the NGOs, in 1989.

In the same year it established a micro-credit lending program and established this as the core business and growth area. It also expanded its activities to include research & product development, as well as changing its Technical Assistance (TA) activities to a for-a-fee capacity building service.

In 1999 it established K-Rep Bank and two other entities: K-Rep Development Agency – to carry on its research and development work and K-Rep Advisory Services to serve as its consulting wing. The products offered by K-Rep Bank's are broadly grouped under: Micro-Finance Based Loans; Personal Banking; and, Business Banking. http://www.k-repbank.com/about-us/history.html

5.2.2 Sanitation Facilities

Matopeni Settlement lacks a sewer and wastewater collection system. Subsequently, as Figure 10 illustrates, (which is derived from the socio-economic survey that is one of the deliverables in the Consultancy for water supply and sanitation service improvement in Matopeni Settlement), observed of households in the Settlement is a heavy reliance on on-site mode of human waste disposal. Few households are connected to the main sewer. These households have taken advantage of the presence of two public sewer lines located close to the settlement to

http://www.wsp.org/sites/wsp.org/files/publications/wsp-Press-Release-Nairobi-Water-Company-launches-innovative-social-connections-program.pdf; and,

http://www.epa.gov/international/public-participation-guide/workshopPDFs/kayole.pdf
²¹ http://www.worldbank.org/en/news/feature/2012/11/09/social-connections-increase-access-to-water-for-

kenya-s-urban-poor 22 http://www.wsp.org/sites/wsp.org/files/publications/wsp-Press-Release-Nairobi-Water-Company-launchesinnovative-social-connections-program.pdf

get connected to the main sewer. However, these connections are faced with a number of challenges, the major one being frequent blockages and bursts. This is blamed on poor workmanship, which is offered by unqualified persons.

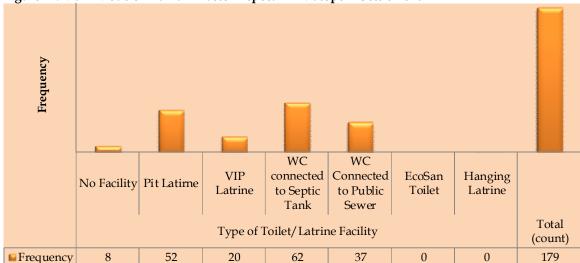


Figure 11: Main Mode of Human Waste Disposal in Matopeni Settlement

Source: Socio-Economic Study - under the consultancy

Respecting households connected to septic tanks, reported, the septic tanks are shallow, thus take a short duration to fill up. Construction of deeper septic tanks is said to be expensive due to the rocky nature of the Settlement's land.

Majority (slightly less than two-thirds) of the on-site human waste facilities are manually emptied on filling up. This action is mainly undertaken by a youth group from the Settlement. The manual exhauster services offered are preferred because they are cheaper than mechanised exhauster services: costing about Ksh. 1,500 per drum, while the mechanised charges average Ksh. 5,500.

The heavy presence of on-site human waste disposal facilities in the Settlement has been linked to high incidence of waterborne illnesses in the Settlement.

6.0 WASSIP SUPPORT TO MATOPENI SETTLEMENT

6.1 Improved Water Supply and Sanitation Services to Matopeni Settlement

Through WaSSIP support, AWSB plan of improving water supply and sanitation services to Matopeni Settlement involves construction of water and sewer main pipelines on the basis of individual connections. An individual connection would be made on payment of the connection fee charged by NCWSC to install metered connection to the household.

7.0 ACTION PLAN

7.1 Study Assessing the Sites Selected to Construct the Proposed Sewer Lines

From February 2013 to 16th May 2013 a study assessing the road reserves selected for placement of the proposed sewer pipelines was conducted. The overall objective of the study was to enable development of a RAP Report. The specific objectives of the study were:

1. To establish the degree of bareness of the road reserves identified to lay the sewer pipelines;

- 2. To establish type of structures and other assets on the road reserves identified to lay the sewer pipelines
- 3. To obtain details of Project Affected Persons (PAPs) owners of the structures and other assets on the road reserves identified to lay the sewer pipelines; and,
- To engage the PAPs on compensation matters, (to obtain their opinion, suggestions and consent), an action that is considered necessary toward effective implementation of the Project.
 Figure 12: Some of the Local Research Assistants the Project Utilised to Collect Data on PAPs

An interview guide designed for face-to-

face interviews with each PAP, was prepared for this purpose. Annex 8.2 gives the interview guide used. Additionally, the PAPs held a meeting at the end of the face-to-face interview data collection period set by the Project team, the report of which is given in Annex 8.6. This report, among other issues, reports on the PAPs recommendations to the Project on compensation matters.

Prior to proceeding with the report from this point, two details need mention:

- a) May 16th 2013 represents the cut-off date.
- b) Should a large amount of time lapse between the cut-off date and implementation of engineering works of the Project, it is likely, at the time to implement the engineering works of the Project, new development may have taken place on the road reserves identified to locate the sewer lines. Knowledge of the public nature of the land selected to lay the sewer pipelines has in the past not deterred residents from utilising the land, and this behaviour is not expected to change immediately, even with threats that utilising the land is at one's own peril. Under these circumstances, the facts presented in this report need to be verified immediately prior to commencement of works. Additionally, this report, in its subsequent sections, proposes alternatives that could be adopted.

Notwithstanding the details, the facts obtained provide adequate guide to development of this report.

7.2 Potential Impacts of the Project

7.2.1 Evaluation of the Impacts of the Project

To make possible evaluation of the impacts of WaSSIP support on Matopeni Settlement, the guidelines provided by the Resettlement Policy Framework (RPF) for WaSSIP was made use of. Generally, the design for water supply and sanitation improvement in Matopeni Settlement envisages the following disruptions and losses. Proposed against each anticipated disruption and loss is its mitigation measure(s).

a) Loss of Land and Proposed Mitigation Measures

According to the project design, compulsory acquisition of land will not be necessary toward works for the water and sewer pipelines. These are confined to existing access road reserves and public passageways.

b) Loss of Structures and Proposed Mitigation Measures

However, there are structures on the existing access road reserves and public passageways identified to lay the water and sewer pipelines. The description of these structures is as presented in Figures 13 to 15 and Tables 10 to 13.

Figure 13: Figure Showing Example of Structures on the Existing Way Leaves to Lay the Pipelines

Observable, verandas constitute the largest number of structures that would be affected on implementation of the Project. Other structures in significant numbers are: septic tanks, manholes, and structures for commercial use (in specific kiosks or *Kibandas*).

All the structure owners would like to be compensated for the loss of their structures, which is necessary towards effective implementation of the Project. When consulted on how they would like to be compensated, as recommended in the report of the meeting they held (refer to Annex 8.6 for the full report), all the respondents indicated they would like a combination of connection to main sewer and either cash compensation or reconstruction of affected structure. That is, all affected PAPs should be connected to the main sewer, the connection fee being borne by the Project. Cash compensation would then be calculated as the difference in value between the connection fee of the sewer and the value of the structure. According to the PAPs on why the choice of mitigation measure "combination of connection to main sewer and cash compensation", some of the affected structures cost more in value than the connection fee, hence the cash compensation.

Based on the responses, and not including affected structures for housing (which is handled in "f" below), the Project has two main choices as mitigation measure:

- 1) Combine connection to main sewer and cash compensation. The cash compensation value would be calculated as the difference in value between the connection fee of the sewer and the value of the structure. This mitigation measure should be made compulsory for all households with affected structures that include: septic tank, manhole, sewer line, toilet and bathroom.
- 2) Combine connection to main sewer and reconstruction of the affected structure on laying the pipelines, as is appropriate. The reconstruction would be on case by case basis, as is appropriate. For example, the Project would not reconstruct structures that include: septic tank, manhole, or sewer line. However, it can reconstruct structures that include veranda, water pipeline laid across way leave, staircase, and structures for commercial use.

c) Loss of Revenue and Proposed Mitigation Measures

As noted under 'b', the field survey conducted from February 2013 to May 2013 documented a significant number of the affected structures are structures for commercial use. Majority of these structures,

Figure 14: An Example of a Structure for Commercial Use That Would be Affected by the Project

- as illustrated in Figure 15, were used as general retail shops. When consulted on how they would like to be compensated, the respondents leaning was on a combination of connection to main sewer and either cash compensation or reconstruction of the structure. From this response, the Project has two choices in mitigation measure:
- 1) Combination of connection to main sewer and cash compensation. The cash compensation value would be approached from two levels, and the compensation made as is applicable:

- i. Level 1: The difference in value between the connection fee of the sewer and the value of the structure to be paid to the structure owner; and,
- ii. Level 2: Loss of income, the value calculated taking into consideration the recommendation made in section 7.4 (*Valuation and Compensation for Losses*) to be paid to the business owner
- 2) Combination of connection to main sewer and reconstruction of the affected structure on laying the pipelines. Under this recommendation, the business owner should be compensated for the days not working due to the Project: where the business owner fits the following description:
 - i. The structure owner who is either letting out the premise or is using the premise; and,
 - ii. The business tenant, where the structure owner is letting out the premise.

Figure 15: Specific Type of Structures Affected



Totals and percentages are based on respondents

Table 10: Types of Structures Affected by	y Group a	and Spec	ific Type										
Group of structures Project Affected					Specific 7	Type of A	Affected	Structure	2		Γ		Total
Person has constructed on this affected parcel of land	Veranda	Septic tank	Sewer line	Wall	Kiosk (or Kibanda)	Manhole	Water Tank	Water distribution line	House	Stair Case	Toilet	Borehole	(Count)
		+	Š	3	K.		3					•	
Septic Tank (or Manhole or Sewer line)	0	388	6	0	0	163	0	0	0	0	30	0	570
Veranda	436	0	0	5	0	0	0	0	0	0	0	0	435
Veranda, and Septic Tank or Manhole or Sewer Line	407	290	1	1	0	129	0	0	0	0	6	0	409
Structures for Commercial Use	0	0	0	0	187	0	0	0	0	0	0	0	181
Structure for Commercial Use, and Veranda	44	0	0	1	47	0	0	0	0	1	0	0	43
Structure for Commercial Use, Veranda, and Septic Tank or Sewer Line	35	20	2	0	36	15	0	0	0	0	0	0	35
Structure for Commercial Use, and Septic Tank or Manhole or Sewer Line	0	22	0	0	35	10	0	0	0	0	3	0	33
Veranda, and Septic Tank or Manhole or Sewer Line, Wall	13	8	1	8	0	6	0	0	0	0	1	0	14
Septic Tank (or Manhole or Sewer Line), Wall	0	4	0	4	0	0	0	0	0	0	0	0	4
Structures for Housing	0	0	0	0	0	0	0	0	3	0	0	0	3
Wall or Fence	0	0	0	3	0	0	0	0	0	0	0	0	3
Borehole and Septic Tank or Manhole or Sewer line	0	2	0	0	0	1	0	0	0	0	0	4	3
Veranda, Septic Tank (or Manhole), Water Tank or Distribution Line	1	0	1	0	0	2	1	1	0	0	0	0	2
Structure for Commercial Use, Veranda, and Water Tank or Distribution Line	1	0	0	0	2	0	1	1	0	0	0	0	2
Structures for Housing, and Veranda	2	0	0	0	0	0	0	0	2	0	0	0	2
Water Tank or Distribution Line	0	0	0	0	0	0	1	0	0	0	0	0	1
Veranda and Water Tank or Distribution Line	1	0	0	0	0	0	0	1	0	0	0	0	1
Structures for Both Housing and Commercial use, and Septic Tank (or Manhole or Sewer Line)	1	0	0	0	1	1	0	0	1	0	0	0	1
Septic Tank (or Manhole or Sewer Line) and, Water Tank or Distribution Line	0	0	0	0	0	1	0	1	0	0	0	0	1
Total (Count)	941	734	11	22	308	328	3	4	6	1	40	4	1743

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Percentages and total are based on respondents N=1743

Source: Field Survey

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Table 11: Wall Material of the Affected Structures with a Wall

Specific type of structure		De	scription of wal	l material of the	e affected structi	ıre		To	tal
affected	Iron sheets	Mud/ earth/	Wood	Concrete/	Cement	Mesh Wire	Metal	Count	Percent
		clay		stone					
Water pipeline (across the way leave)	0	0	0	0	1	0	0	1	
Sewer line	0	0	2	0	0	0	0	2	
Water Tank	0	0	0	0	2	0	0	2	
Borehole	0	0	0	2	0	0	0	2	
House	2	0	2	0	0	0	0	4	
Toilet	4	0	3	0	2	0	0	8	
Wall	1	0	2	18	14	0	0	19	
Manhole	10	0	7	35	74	1	0	85	
Kiosk (or Kibanda)	55	0	41	18	17	1	3	109	
Septic tank	18	1	6	44	82	1	2	118	
Veranda	33	1	17	66	67	2	3	129	
Total (count)	51	1	46	81	166	2	3	273	

Percentages and totals are based on respondents. a. Group

Table 12: Roof Material of the Affected Structures with a Roof

Specific type of affected			Description	n of roof mate	rial of affecte	d structure				Total
structure	Iron sheets	Grass/ reeds	Mud/ earth/	Wood	Tiles	Concrete/	Cement	Mesh Wire	Count	Percent
			clay			stone				
Water distribution line	1	0	0	0	0	0	0	0	1	
Stair Case	1	0	0	0	0	0	0	0	1	
Borehole	0	0	0	0	0	1	0	0	1	
Water Tank	1	0	0	0	0	2	2	0	3	
Sewer line	3	0	0	0	0	2	1	0	4	
House	7	0	0	3	0	0	0	0	5	
Wall	4	0	0	0	0	7	6	0	10	
Toilet	14	0	0	5	0	1	1	0	13	
Manhole	24	0	0	9	0	68	67	0	85	
Veranda	88	0	0	17	0	77	75	0	146	
Septic tank	50	0	1	21	0	166	143	2	204	
Kiosk (or Kibanda)	270	1	0	68	2	17	12	1	256	
Total (count)	287	1	1	79	1	242	219	2	508	

Percentages and totals are based on respondents

a. Group

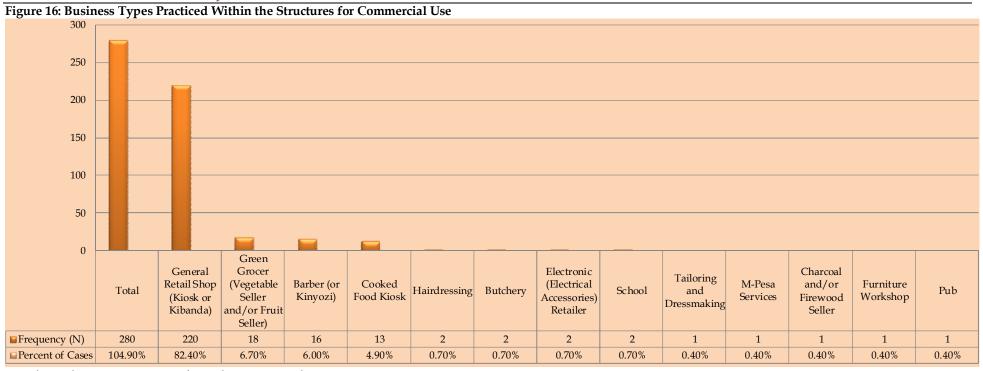
Table 13: Floor Material of the Affected Structures with a Floor

Specific type of				Description	of floor mat	erial of affect	ted structure				Total	
structures on affected	0	Iron	Mud/earth	Wood	Tiles	Concrete/s	Cement	Mesh	Metal	PVC Pipes	Count	Percent
		sheets	/clay			tone		Wire				
Veranda	1	6	20	2	16	1004	1042	10	24	1	850	
Septic tank	0	2	52	6	4	675	691	13	68	5	626	
Sewer line	0	0	0	0	0	9	8	0	0	1	9	
Wall	0	0	1	0	0	20	22	1	2	0	19	
Kiosk (or Kibanda)	0	3	36	4	7	242	214	2	7	0	216	
Manhole	1	1	9	1	2	363	377	2	9	19	290	
Water Tank	0	0	4	0	0	0	0	0	0	0	3	
Water distribution line	0	0	0	0	0	5	3	0	0	0	3	
House	0	0	0	0	0	6	6	0	0	0	3	
Stair Case	0	0	0	0	0	1	1	0	0	0	1	
Toilet	0	0	2	4	0	20	18	0	4	1	22	
Borehole	0	0	0	0	0	6	6	0	0	0	4	
Total (Count)	1	5	95	13	17	1447	1489	17	84	26	1454	

Percentages and total are based on respondents

a. Group

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Totals and percentages are based on respondents

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d) Re-Installation of Population, and Proposed Mitigation Measures

As Figure 15 and Table 10 illustrate, there are structures for housing on the way leaves the Project design indicates pipelines will be laid. These are few, estimated to constitute about 0.34% of the cases surveyed. The PAPs indicated they would like a combination of connection to main sewer and either cash compensation or reconstruction of affected structure. That is, all PAPs should be connected to the main sewer, the connection fee being borne by the Project. Cash compensation would then be calculated as the difference in value between the connection fee of the sewer and the value of the structure. According to the PAPs on why the choice of mitigation measure "combination of connection to main sewer and cash compensation", the affected structures cost more in value than the connection fee, hence the cash compensation.

The mitigation measure the Project could consider, to the extent possible, is avoiding relocation of the PAPs (living in the structures) to new sites. With respect, the Project could:

1) Redesign to:

- i. Utilise the adjacent road reserve, if it was not considered in the design, but is feasible and the likely compensation is less.
- ii. Where the way leave is large enough, utilise the extra space to lay the pipelines thus avoiding damage to the housing structure.
- 2) In unavoidable circumstances, explore possible ways of laying the pipelines with minimal damage to the housing structure, and thereafter, reconstruct the damaged section.
- 3) In extremely unavoidable circumstances, the Project to identify within the Settlement an empty housing structure, relocate the household to this structure, and compensate the structure owner for the demolition of the structure. The value of the compensation to the structure owner should not be less than the replacement cost of the structure.

e) Loss of Access to Natural Resources, Health Facilities, Water and Sanitation, and Energy, and Proposed Mitigation Measures

The Project's design does not envisage loss of access to natural resources, health facilities, water and sanitation, and energy. Vis-à-vis, established from the February to May 2013 field observations:

- 1) The parcels of land identified to lay the pipelines are existing road reserves and public passage ways. Additionally, in none of these parcels of land is constructed a health facility.
- 2) For majority of PAPs, their main mode of human waste disposal is on-site, with most indicating the traditional pit latrine. The Project's objective is to improve on the water supply and sanitation services of Matopeni Settlement. Once the formal sewer system is completed, the PAPs access to improved sanitation services will be enhanced.

However, despite the care taken by the Project to eliminate these negative impacts, there is a concern which was brought out by some of the PAPs consulted. According to the PAPs, on the way leaves proposed to lay the pipelines are septic tanks, some of which provide services to tall buildings that house tenants. These septic tanks will be affected by the engineering works necessary to lay the pipelines, thus affecting sewage discharge from connected buildings. How does the Project intend to address this?

Additionally, the drainage system in the Settlement is poor. Adjacent to buildings are roads. Some of these roads are on a level higher than the base of adjacent buildings (*refer to Figure 13 for an example*). Consequently, rain water drains into the buildings that are at a lower level

than the road. To act against this, affected building owners have constructed perimeter walls. Toward effective implementation of the Project, these perimeter walls may be brought down, and if it rains, the flood water will drain into the building. How does the Project intend to address this?

With respect to the septic tanks, the mitigation measure proposed by this Report is, during construction, a temporary pit will be constructed and connected to a building with a septic tank (or manhole or sewer line), into which the building will temporarily discharge its waste. Waste from the septic tank that is located along the route to lay the sewer pipeline will then be exhausted to pave way for construction of the sewer pipeline. On completion of construction of the sewer pipeline infrastructure in the Settlement, and after this infrastructure has been tested and approved, the proposal is for the building that was connected to the damaged septic tank (or manhole or sewer line) to be connected to the improved sewer line infrastructure in lieu of compensation.

Regarding drainage, refer to mitigation measure recommended under "f (2)" below.

f) Increase of Morbidity, and Proposed Mitigation Measures

Should it be likely for re-installation of population, highly recommended is re-installation of PAPs within their pre-project settlements which are synonymous to the project beneficiary area. In the project beneficiary area, during the construction process for the pipelines, expected are negative impacts to the environment with potential undesirable effects on the health and safety of residents from the beneficiary community. These and their proposed mitigation measures are as follows:

1) **Solid waste:** Excavations and site clearing in most locations of the beneficiary settlement may remove solid waste materials accumulated over time. The solid wastes that may be encountered may comprise contaminated earth, decaying organic matter and, non-biodegradable materials (e.g. plastics). Disposal of this waste will pose serious health challenge to handlers, residents of destination points, and the environment.

The mitigation measures proposed by this Report include the contractor complying with waste management regulations and the environment management plan developed under the ESIA Report.

2) **Drainage:** There is potential but temporary disruption of surface runoff around the construction sites due to possible blockage of existing drainage channels. This could result to flooding during rains, thus affecting both community members and existing infrastructure such as residential homes and roads.

Mitigation measures proposed toward alleviating this condition include: a) encouraging construction to take place during dry weather conditions to reduce flooding; and, b) provision of appropriate alternative wastewater disposal method during construction process.

3) **Noise and vibration:** Noise and vibrations are expected during the construction process due to the construction machinery.

Mitigation measures proposed toward this condition include: a) encouraging construction process to be undertaken during the day over night; b) whenever appropriate, use of hand labour over

and Figure 17: Extensive Use of Manual Labour Where the Possible during Works is Highly Recommended

machinery to reduce on the noise and vibration levels; and, c) compliance to noise and vibrations regulations as provided under the laws of Kenya.

4) Air quality: Undesirable air emissions expected during the construction process include: a) foul smell from disruption of decaying organic matter accumulated over time; b) dust from movement of soil and decaying matters; and, mixing of dry works material such as cement and sand; c) and, smoke from running petrol powered construction machinery.

The mitigation measures proposed toward alleviating this undesirable condition is compliance to air quality guidelines as provided by the laws of the country.

5) Water quality: There is possibility of contamination of water in existing distribution water pipes located near works areas, especially during low pressure. This may have minimal effect. However, its knowledge and mitigation measures are desirable.

The mitigation measures proposed toward alleviating this unwanted situation are: a) avoidance of damage to water pipes during construction; b) immediate repair of damaged water pipe areas; and, c) controlling waste spillage near water distribution lines.

- 6) Trenches and open areas: Digging that will Figure 18: Trenches dug in preparation result to trenches and other open areas are likely to lay water pipes in Matopeni during the construction process. The trenches and Settlement open areas are potentially risky as persons, especially children, could fall into them with damaging consequences. Proposed to mitigate this is, as appropriate:
- i. Provision of barriers and reflectors at the respective sites; or,
- ii. Digging and laying of pipes to be undertaken on the same day for each affected section, and at the end of day, covering the trenches.
- 7) Transmissible diseases: Human beings are naturally social creatures. Highly possible therefore during the construction period is interaction between community members and construction workers. Also highly possible is intensified interaction between community members due to increased earnings which may predispose some members into risky behaviour. The mitigation

measure proposed is integration of public health initiatives at project implementation stage, targeting both construction workers and beneficiary community.

g) Disruption of Family and Community Values, and Proposed Mitigation Measures

A probable outcome of the Project is temporary increase in the population of the Settlement as a result of persons from outside the beneficiary community migrating into the Project area in response to income opportunities. The population from outside may disrupt established community values with possible undesirable effects. A most viable mitigation measure is for the project to get its labour, to the extent possible, from the beneficiary community.

7.2.2 Potential Impacts of New Re-Installation Site

As discussed above, the Project's design is deliberately conceived toward use of existing road reserves and public passageways, (and not compulsorily acquiring land). Noted also from the foregoing discussion:

- 1) There are structures on the identified road reserves and passageways.
- 2) Some of the structures are commercial and housing structures.
- 3) As the mitigation measures recommended illustrate, highly discouraged is new reinstallation, and particularly to sites outside.

For these reasons, potential impacts of new re-installation site are expected to be none, or if present, may be low. Where re-installation is eminent, highly recommended under this RAP Report is re-installation of affected populations within their pre-project settlements. This strategy is bound to significantly minimise on the potential impacts associated with new re-installation sites as discussed under Table 15.

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Table 14: Summary of the Evaluation of the Impacts of WaSSIP on Matopeni Settlement

Element	Yes	No	Result	Mitigation and Attenuation
Does the Project entail:				
1) The loss of land?		No	The pipelines will be laid on existing road reserves and public passageways.	N/A
2) The loss of structures for:				
∔ Housing?	Yes		These are few, estimated to constitute about 0.3% of the cases surveyed.	 a) Redesign to: Utilise the adjacent road reserve, if it was not considered in the design, but is feasible and the likely compensation is less. Where the way leave is large enough, utilise the extra space to lay the pipelines – thus avoiding damage to the housing structure. b) In unavoidable circumstances, explore possible ways of laying the pipelines with minimal damage to the housing structure, and thereafter, reconstruct the damaged section. c) In extremely unavoidable circumstances, the Project to identify within the Settlement an empty housing structure, relocate the household to this structure, and compensate the structure owner for the demolition of the structure. The value of the compensation to the structure owner should not be less than the replacement cost of the structure.
↓ Commercial use?	Yes		Micro enterprises, majority operating as general retail shops.	a) Combine connection to main sewer and cash compensation. The cash compensation value would be approached from two levels, and the compensation made as is applicable: Level 1: The difference in value between the connection fee of the sewer and the value of the structure – to be paid to the structure owner; and, Level 2: Loss of income, the value calculated taking into consideration the recommendation made in section 7.4 (Valuation and Compensation for Losses) – to be paid to the business owner b) Combine connection to main sewer and reconstruction of the affected structure on laying the pipelines. Under this recommendation, the business owner should be compensated for the days not working due to the Project: where the business owner fits the following description: The structure owner who is either letting out the premise or is using the premise; and, The business tenant, where the structure owner is letting out the premise.
3) The loss of access to:				

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Element	Yes	No	Result	Mitigation and Attenuation			
Does the Project entail:							
♣ Natural resources?		No	N/A	N/A			
∔ Health facilities?		No	N/A	N/A			
♣ Water and Sanitation?		No	N/A	N/A			
# Energy?		No	N/A	N/A			
♣ Other	Yes		On the way leaves proposed to lay the pipelines are septic tanks, some of which provide services to tall buildings that house tenants. These septic tanks will be affected impacting on sewage discharge from connected buildings.	During construction, a temporary pit will be constructed and connected to a building with a septic tank, into which the building will temporarily discharge its waste. Waste from the septic tank (or manhole or sewer line) that is located along the route to lay the sewer pipeline will then be exhausted to pave way for construction of the sewer pipeline. On completion of construction of the sewer pipeline infrastructure in the Settlement, and after this infrastructure has been tested and approved, the proposal is for the building that was connected to the damaged septic tank (or manhole or sewer line) to be connected to the improved sewer line infrastructure in lieu of compensation. This mitigation measure should be made compulsory for all affected structures that also include manhole, sewer line, and toilet.			
			Flooding during rains, thus affecting both community members and existing infrastructure such as residential homes and roads.	a) Encouraging construction to take place during dry weather conditions to reduce flooding; and,b) Providing appropriate alternative wastewater disposal method during construction process.			
4) The loss of revenue?	Yes		Refer to 2 (The loss of structures for commercial use)	Refer to 2 (The loss of structures for commercial use)			
5) The re-installation of populations?			There are structures for housing on the way leaves the Project design indicates pipelines will be laid. These are few, estimated to constitute about 0.3% of the cases surveyed.	Refer to 2 (The loss of structures for housing)			
6) Increased morbidity?	Yes		From: Ill handling of solid waste that has accumulated over time in the beneficiary areas.	Compliance to solid waste management regulations, and environmental management plan developed under the ESIA Report			

Element	Yes	No	Result	Mitigation and Attenuation
Does the Project entail:				
			Drainage challenges due to temporary disruption of surface runoff as a result of the construction process.	Working under dry weather conditions and provision of alternative wastewater disposal methods during construction.
			Emission of noise and vibration from the construction machinery	Undertaking to the extent possible daytime construction over night-time, employing hand labour, and compliance to related regulations as provided in the country's regulations.
			Emission of foul smell, dust and smoke from, respectively: disturbing decaying organic matter, mixing of construction materials, and running petrol powered construction machinery.	Compliance to related regulations as provided in the country's regulations.
			Contamination of water in distribution lines due damage of the distribution lines or spillage close to the distribution line.	Avoidance of damage to distribution lines, immediate repairing of damaged distribution lines, and avoidance of spillage of contaminated products close to the distribution lines
			Dug up trenches and open spaces that present risk of persons falling into them with damaging consequences	Use of barriers and reflectors
			Incidence of transmissible diseases due to increased interactions between construction workers and community as well as amongst the community members	Integrate public health initiatives into the project implementation phase.
7) Disruption of family and community values?	Yes		Likely temporary increase in the population of the beneficiary settlement due to in-migration in response to income opportunities.	The Project, to the extent possible, to get manual labour from the beneficiary community.
8) Disruption of socio-	Yes		Similar to '6' above	Similar to '6' above

Element	Yes	No	Result	Mitigation and Attenuation
Does the Project entail:				
cultural or cultural values?				

Table 15: Potential Impacts at New Re-Installation Site

Item	Yes	No	Result	Mitigation and Attenuation
1) Is re-housing necessary?		No	The pipelines will be laid on existing road reserves and public passageways. However, there are structures for housing on these passageways, estimated at about 0.3% of the affected	a) Redesign to: Utilise the adjacent road reserve, if it was not considered in the design, but is feasible and the likely compensation is less. Where the way leave is large enough, utilise the extra space to lay the pipelines – thus avoiding damage to the housing structure. b) In unavoidable circumstances, explore possible ways of laying the pipelines with minimal damage to the housing structure, and thereafter, reconstruct the damaged section. c) In extremely unavoidable circumstances, the Project to identify within the Settlement an empty housing structure, relocate the household to this structure, and compensate the structure owner for the demolition of the structure. The value of the compensation to the structure owner should not be less than the replacement cost of the structure.
2) What persons are affected?		N/A	N/A	N/A
3) Is there any loss of:				
i. Agricultural land?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. And, the predominant land use, both regulated and unregulated, of the informal settlement is residential	N/A
ii. Parks?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. And, the informal	N/A

Item	Yes	No	Result	Mitigation and Attenuation
			settlement is not a protected area that takes the complete ban on the exercise of private rights; and, no part of it has a predominant land use comparable to a park	
iii. Trees?		N/A	N/A	N/A
4) Is the new site difficult to access or subject to inundation?		N/A	Highly recommended under this RAP Report, should it be found necessary, is re-installation of PAPs within their pre-project settlements. This is attainable, and ensures maintenance of similar lifestyle	N/A
5) Does the new site improve mobility of the populations?		N/A	Similar to '4' above	N/A
6) Is:				
i. Solid waste generated?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. Solid waste is generated in the beneficiary informal settlement.	Re-installing affected persons within their pre-project settlements will minimises disruption to their present lifestyles
ii. There an appropriate disposal site?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. Poor solid waste management is an observable problem within the beneficiary community.	The Project could consider partnering with relevant government agencies toward solid waste management within the beneficiary community, which are the re-installation sites
7) Is:				
i. Liquid waste generated?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. Liquid waste is generated within the beneficiary settlements.	Re-installing affected persons within their pre-project settlements will minimises disruption to their lifestyles
ii. There an appropriate disposal system.		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. Evident within the beneficiary community is poor liquid waste management.	Implementation of the Project is expected to some extent improve on liquid waste disposal in beneficiary settlements, which are synonymous with the proposed re-installation sites. Other mitigation measure the Project could consider is partnering with relevant government agencies toward

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Item	Yes	No	Result	Mitigation and Attenuation
				mitigating this difficulty.
8) Is there an adequate sanitation system in place?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. The Project's beneficiary areas heavily rely on on-site disposal systems which pose environmental health difficulties	Project implementation is expected to improve the sanitation situation of the re-installation sites, which are the Project's beneficiary areas. Highly recommended under this RAP is, if found necessary, re-installing affected persons within their respective pre-project settlement, which are the beneficiary villages under the Project.
9) Is any soil erosion likely to occur?		N/A	N/A	N/A
10) Are the drainage systems adequate?		N/A	However, should it be necessary to re-install populations, highly recommended is to re-install within the project settlement. The re-installation sites suffer poor drainage.	Disruption of the affected person's lifestyle is minimised by reinstalling them within their pre-project settlement. However, the Project could consider partnering with relevant government agencies to improve on the drainage situation in the beneficiary villages.
11) Are groundwater resources likely to be polluted?		N/A	The re-installation sites highly recommended for affected persons are the settlements they reside in prior to Project implementation, and which are the Project beneficiary areas. The threat to groundwater sources is real within the beneficiary settlement, even prior to Project implementation.	implementing improved systems of human waste and
12) Is there likelihood of negative impacts on the health of the displaced persons?		N/A	Re-installing affected persons within their pre- project settlements, which are the Project beneficiary areas, predisposes these persons to the potential impacts of the Project as discussed under Section 7.2	As discussed under Section 7.2
13) Is there a plan for the maintenance of the site?		N/A	N/A	N/A

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7.3 Eligibility

Eligibility in this report is used in the context of the person that is entitled to or qualifies for any of the following provisions: compensation, resettlement, and rehabilitation assistance. Under this report, a person is determined amongst those that have qualified for any of the identified provisions when s/he meets in full the following conditions:

- a) Part or whole parcels of his or her land is tagged for compulsorily acquisition for the effective implementation of the Project;
- b) S/he occupied this land earmarked for project activities, prior to the cut-off date i.e. the date recommended for the census.
- c) His or her rights or claim to the tagged land falls into any of the following categories:
- i. Formal legal rights to land as recognised by the national and customary Laws of Kenya. Persons considered here are those that hold leasehold land, freehold land and, land held within the family or passed on through generations.
- ii. No formal legal rights to the land or assets at the time the census begins, but has recognised claim of use of such land or ownership of assets through the national and customary Laws of Kenya. Persons taken into account here are those that come from outside the country and have been given land by the local dignitaries to settle, and or to occupy.
- iii. No recognisable legal rights or claim to the land s/he is occupying, using or getting his or her livelihood from. Persons allowed under this class include encroachers and illegal or bona fide occupants.

An affected person who satisfies paragraph (a) and (b), and his or her land tenure complies with either sub-paragraph (i) or (ii), is determined under the Project as eligible for compensation, resettlement and rehabilitation assistance for the land, building or fixed assets on the land and building taken by WaSSIP. The compensation is in accordance to the conditions of WaSSIP's RPF.

An affected person who satisfies paragraph (a) and (b), and his or her land tenure complies with sub-paragraph (iii), is determined under the Project as eligible for resettlement assistance in lieu of compensation. In addition, s/he is allowed relocation assistance in accordance to the conditions of WaSSIP's RPF.

All PAPs in Matopeni Settlement satisfy paragraph (a) and (b), and their land tenure complies with sub-paragraph (iii). Vis-à-vis, they are determined under the Project as eligible for resettlement assistance in lieu of compensation. In addition, they are allowed relocation assistance in accordance to the conditions of WaSSIP's RPF. Annex 8.3 gives the list of PAPs.

7.4 Valuation and Compensation for Losses

From the foregoing discussion, and as Figure 15 and Table 10 illustrate, assets will be compulsorily acquired toward effective implementation of the Project. Following, the nature of losses anticipated due to the Project include: a) "title rights or other rights to structures constructed on the existing road reserves and public passageways"; and, b) "non-corporal elements of commercial funds".

In connection, the duty of the Project is to promptly make just compensation to the affected persons for the losses incurred. The just compensation value will be fixed either amicably or through legal procedures. Whatever the approach:

1. For losses falling under "title rights or other rights to structures constructed": The just compensation value is an amount not less than the market value of the asset as at the time of the census date. If payment of this compensation value is not made at the time the just compensation value is fixed, the proposal of this Report is for the Project to open a special account into which it shall pay interest on the amount awarded at the prevailing bank rates from the time the just compensation value was fixed until the time of payment. Thus the total amount paid at the time of payment will include the additional amount due to interest, which accounts for inflation over the period.

Assets in Kenya are valued on the principal of 'market value'. Under the Action described in this report, market value will be understood to mean an amount equal to or greater than the replacement value of the affected asset as at the time of the Project compulsorily acquiring the asset.

2. <u>For non-corporal commercial loss:</u> The compensation value will not be less than the value of real benefits declared to fiscal authorities over the last year prior to cut-off date.

On the just compensation value, the Project could budget on a figure as presented in Table 18, and disaggregated by PAP as presented in the valuation report presented together with this report. The compensation value presented in this report is fixed through a combination of consultations with the affected persons as well as beneficiary community and the Project's appointed licensed valuer's expertise.

7.5 Resettlement Measures

The Project will ensure total compensation of PAPs takes place prior to commencement of its works phase. The Project may constitute a Project Resettlement Committee prior to compensation, with an overall objective of easing the process of compensation. Specifically, the functions of the Project Resettlement Committee may include, but not limited to:

- ♣ Ensuring all PAPs are duly registered;
- ♣ Protecting PAPs until adequately re-installed;
- → Overseeing the efficient and effective management and use of the compensation fund provided under the Project;
- ♣ Incorporating an implementation schedule with popular backing, and which takes care of prejudices;
- ♣ Ensuring dissemination of accurate information on the Project to the public, and in particular on compensation matters;
- Monitoring and supervising compensation activities under the Project; and,
- ♣ Preparing, as appropriate, reports relating to the fulfilment of its functions. This is significant for accounting purposes on the situation;

The proposed composition of the Project Resettlement Committee is, but not limited to, as follows:

- a) The Project represented by AWSB, and NCWSC;
- b) Representative from the WB;
- c) Representative(s) from the National Lands Commission, and/or government department responsible for matters relating to land;

- d) Representative(s) from the Attorney General's office, and/or government department responsible for matters relating to justice and constitutional matters;
- e) The Area Chief's Office, which is taken to represent the National Government Service;
- f) Representative from the Kenya National Commission on Human Rights;
- g) Representative from the government department responsible for matters relating to internal displacement;
- Two persons of the opposite gender nominated by PAPs from amongst their number. The nomination of these persons should take into consideration representation of vulnerable persons;
- i) One (or two) persons appointed by AWSB in collaboration with NCWSC to represent the non-state actors;
- j) Village Elder(s) (or Chairman or Chairlady) of the beneficiary informal settlement; and,
- k) Representatives from other relevant government agencies as appropriate.

Members of the Project Resettlement Committee shall hold office for the period until all PAPs are adequately re-installed. No person shall be eligible to be a member of the Committee who does not fulfil the requirement of the integrity set out in Chapter Six of the Constitution of Kenya 2010; and, a member of the Committee may resign from office by notice in writing to the Chief Executive Officer of AWSB, as the head of the Project. A member of the Project Resettlement Committee may be removed from office, on recommendation of the Project Resettlement Committee, if s/he is determined unable or unfit to discharge their functions.

The Project Resettlement Committee shall meet as often as is appropriate for the transaction of the business of the Committee. The quorum for the conduct of business of the Committee shall not be less than half the total number of members; and, a decision reached on any matter before the Committee shall be by a majority of votes of the members present and voting. On its constitution, the Project Resettlement Committee may determine its own procedure and the procedure for any member of the Committee and for the attendance of other persons at its meeting.

7.6 Site Selection, Site Preparation and Relocation

As discussed above, the Project's design is deliberately conceived to utilise existing road reserves and public passageways, so as to avoid displacement of populations. Thus, site selection, preparation and relocation is highly unlikely, and if likely, activities will be oriented on the strategy of re-installing PAPs within their pre-project settlements.

7.7 Housing Infrastructure and Social Services

As discussed above, the Project's design is deliberately conceived to utilise existing road reserves and public passageways, so as to avoid displacement of populations. This faces low challenge as discussed above, and the mitigation measures proposed are toward avoiding disruptions associated with relocation to new land areas outside the Project beneficiary areas, should it be likely. Thus, if the mitigation measures are achieved, which is highly likely, housing infrastructure and social services are aspects that will not applicable under the proposed works for Matopeni Settlement.

7.8 Environmental Protection and Management

As discussed above, the Project's design is deliberately conceived to utilise existing road reserves and public passageways, so as to avoid displacement of populations. This faces low challenge as discussed above, and the mitigation measures proposed are toward avoiding disruptions associated with relocation to new land areas outside the Project beneficiary areas, should it be likely. Thus, if the mitigation measures are achieved, which is highly likely, concerns on environmental protection and management that are associated with relocation to new land areas outside the Project beneficiary areas are aspects that may not concern The Project.

7.9 Community Participation

As discussed above, the Project's design is deliberately conceived to utilise existing road reserves and public passageways, so as to avoid displacement of populations. This faces low challenge as discussed above, and the mitigation measures proposed are toward discouraging relocation of PAPs to new land areas outside the Project beneficiary areas. Community contributions that take place will therefore be limited to within the Project beneficiary areas. In connection, the Project will encourage community contributions on:

- a) Determination of genuine PAPs;
- b) Determination of an adequate compensation as per the Laws of Kenya and WB OP 4.12;
- c) Drafting, reading and signing of resettlement and compensation agreements;
- d) Payment of compensation;
- e) Resettlement activities; and,
- f) Implementation of post-project community support activities, if any.

7.10 Integration with Host Population

As discussed above, the Project's design is deliberately conceived to utilise existing road reserves and public passageways, so as to avoid displacement of populations. This faces low challenge as discussed above, and the mitigation measures proposed are toward discouraging relocation of PAPs to new land areas outside the Project beneficiary areas. Thus, the host population will therefore be the same population the displaced persons will be from. Concerns with host population are therefore anticipated to be low if not nil.

7.11 Grievance Procedures

The Project recognises grievances are inevitable and can be of different levels. It therefore will encourage fearless expression of grievances; and, will not restrict redressing of the grievances. In redressing of the grievances, it will encourage the use of community structures, first elders then Chief's Office, as the first forum. This it will do in an attempt to resolve the grievances in an amicable manner. If this fails, the Chief may refer it to the Project Resettlement Committee as the second forum. If this fails, the Project, on the recommendation of the Project Resettlement Committee, may refer the matter for arbitration. And, where all these avenues are exhausted without arrival of an amicable solution or consensual decision, the Project will not restrict recourse being had with the judicial institutions in place, namely the law courts. In this regard, the Project is obliged to provide, in particular to vulnerable and disadvantaged groups, the requisite assistance enabling them to present their case to such decision-making organs of government.

7.12 Organisational Responsibilities

In connection to the Action Plan described here, the Project, through AWSB, bears the primary duty of:

- 1) Administrator.
- 2) Notifying structure owners and the general public through the mass media (radio, television, and daily newspapers) and local administration of its intention to acquire all or part of the structures for the effective implementation of the Project. Added, a copy of this notice shall be served to each PAP owners, occupiers and agents. This notice shall state:
 - a) The Project's proposal to acquire the structures;
 - b) The public purpose for which the structures are wanted;
 - c) That the proposal or plan may be inspected at AWSB Headquarter or other appropriate office as AWSB may determine; and,
 - d) That any person affected may, by written notice, object to the transaction giving reasons for doing so, to AWSB within a period to be specified at the time of publication of the notice.
- 3) Taking and keeping thorough documentation, including of all holdings and assets affected by the Project.
- 4) Observing to the greatest practical extent, fair resettlement and compensation practices, guarding against infringement of PAPs interests. Toward achieving this, among others, the Project:
 - a) Shall bear the ultimate burden of resettlement and compensation;
 - b) As appropriate, shall totally resettle and compensate PAPs prior to commencement of its works phase;
 - c) Shall take into account the rights and freedoms of PAPs as set out in the Bill of Rights, and Articles 46 and 47 of the Constitution of Kenya (2010);
 - d) Shall provide full information to PAPs on the procedures it applies and decisions it makes, including on valuation of their assets;
 - e) Shall make all compensation payments in the presence of PAPs and a witness; and,
 - f) May involve independent institutions to monitor related activities and report back on deviations. The independent institutions may either or not use their own funding, depending on the agreement entered with the Project.
- 5) Drawing resettlement and compensation agreements that will be signed by PAPs.
- 6) Monitoring and evaluating resettlement and compensation activities brought about by its implementation; and appropriately acting on the adverse effects observed.

7.13 Implementation Schedule

As per the foregoing discussion, the implementation schedule of compensating PAPs will therefore be limited to re-installing PAPs within the Project beneficiary areas. Its proposed broad components, respective timelines, and activities are as given under Table 16. The Project implementation team could improve on this, to make it as exhaustive and effective as possible.

1	Table 16: Proposed Implementation Schedule			
	Component	Proposed Timeline	Proposed Activities	
1	Preliminary Notice: Notification to affected structure owners and general public of intention to acquire the property	1. Base date: The date of publishing the gazette notice. 2. Timeline for component: Not less than 30 working days	 Submit a request to the National Land Commission to acquire the property on the Project's behalf. Publish a gazette notice and deliver a copy of the notice to the Registrar and every person with interest on the property targeted for compulsory acquisition. The person with interest on the property should in addition to the written notice, be orally notified. Publish the notice in at least two mass media publications with national circulation. Note: This component will be implemented as per the laws of Kenya (refer to Part VIII of the Land Act, 2012) 	
2	1. Determine who are the persons with genuine interest on the property; and, 2. Receive written claims of compensation from those with interest on the property.	Component No. 1) 2. Timeline: 30 working Days	 Determine the public inquiry date – which can be scheduled from the 31st working day of the base date. Proposed is the 46th to 50th working day of the base date. Publish a gazette notice giving the date of the public inquiry. The gazette notice: Should be at least 15 days before the date of inquiry; Should call upon all with interest on the identified property affected by the Project to present written claims on compensation before or on the date of the inquiry, and not later. Serve a copy of the notice (of the inquiry) to all persons with interest on the property. Receive not later than the inquiry date written claims to compensation Public hearing of claims to compensation by persons with interest on the property. Objectives of the inquiry will include: Establishing who are the genuine persons with interest on the property; Establishing in accordance with the Laws of Kenya, what compensation is due to each person with interest on the property to be affected by the Project Hearing from all persons with interest on the property on any other matters connected to compensation – e.g. preferred mode of compensation, is it cash compensation etc.? Preparation of a written award report, in which made is a separate award of compensation to each person determined with a genuine interest on the property. An award shall at the minimum contain: The size of the property as determined from the Public Inquiry; The amount of the compensation payable; and, Where more than one person has an interest on the property, the shares payable to the persons. Serve each person determined with an interest on the property identified to be Project affected, with a notice of the award and offer of compensation (established to be due to them). Note: The public inquiry shall be conducted as per WB requirements and the applicab	
3		1. Date of commencement: After the public inquire (stated under	 Two days: Preparation One day: The Project calls for a half to one day workshop attended by representatives of all stakeholders. One 	
-	-1 2012	the public friquite (stated trider	2. One day. The Project cans for a finil to one day workshop attended by representatives of an stakeholders. One	

	Component	Proposed Timeline	Proposed Activities
	Committee	Component 2) 2. Timeline: Three (3) working days	of the agendas of the workshop would be refinement on the composition of Project Resettlement Committee, and selection of community representatives that would be part of the Project Resettlement Committee Members. 3. Note: Establishment of the Project Settlement Committee will be as per applicable Laws of Kenya - refer to Part IX [Settlement Programmes] of Land Act 2012 for guidance
4.	Drafting, reading and signing of resettlement and compensation agreements	1. Date of commencement: After establishment of the Project Resettlement Committee (stated under Component 3) 2. Timeline: Five (5) working days	 One day: Drafting of the agreement by the Project. One day: Presentation of the draft to Project Resettlement Committee for their comments. Two days: Reading of the draft resettlement and compensation agreements to or by persons with interest on the land; and, obtaining their comments One day: Preparation of the final resettlement and compensation agreements
5.	Payment of compensation	1. Date to commence: After preparation of final resettlement and compensation agreements (stated under Component 4) 2. Timeline: Two (2) working days	 Signing of an agreement by a person with interest on the property in the presence of witnesses. Payment of compensation in accordance to individual awards established from the public inquiry process. The awards will only be made to persons eligible to receive them (e.g. asset owner). Record of all payments of compensations Note: The activities are spread over a period of five working days; and, payment of compensation will be in accordance to the applicable Laws of Kenya.
6.	Resettlement activities	1. Date of commencement: After payment of full compensation (stated under Component 5) 2. Timeline: Thirty (30) working days	9. Serving all persons with interest on the property with a notice specifying date possession of the property and its title (where applicable) will vest in the Government 10. Taking all possession of documents to title 11. Field visits by a team constituted by the Project, preferably from the Project Resettlement Committee, to monitor re-installation of PAPs. The Project will develop a checklist against which this activity apply to be useful 12. Quarterly meetings, quarterly and annual reports 13. Other resettlement activities as may be determined by the Project 14. Note: The activities will be implemented as per WB requirements and the applicable laws of Kenya
7.	Implementation of post-project community support activities, if any	1. Date of commencement: Not before completion of works phase of the Project 2. Timeline: Seven (7) working days	1. Evaluation – 2 working days: After completion of works phase, and probably after a year or a period the Project may determine as appropriate, evaluation of how PAPs are settling in may be conducted. The results are not however envisaged to inform of massive disruptions of the PAPs lifestyle for reasons discussed elsewhere in this report. Nonetheless, the Project has a duty to ensure that this does not occur, and should it and it is ascertained it is a result of the Project, it has a duty to step in as appropriate and rectify the situation. The Project has a responsibility of ensuring PAPs enjoy the same or higher standards of living than before. 2. Implementation of the evaluation results – 5 working days
8.	Grievances recording, reporting, and related	Throughout the Project	The Project will encourage PAPs to express their grievances at all times. The timeline for this component is therefore throughout the Project, from when PAPs are engaged to finish of the Project. Based on the grievances

Component	Proposed Timeline	Proposed Activities
mitigation action		reported, the Project can design mitigation measures

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7.14 Monitoring and Evaluation

Monitoring and evaluation of the Project, as regards compensation, is significant as it facilitates in assessing whether the Project objectives of compensation are met. The monitoring plan indicates parameters to be monitored, institute monitoring guidelines and provide resources including responsible persons or institutions, necessary to carry out the monitoring activities. Table 17 is a proposal of the monitoring framework that the Project could use. The "Key Activities" to be monitored under each "Specific Objective", and their "Timeline", are synonymous to the "Proposed Activities" and their "Proposed Timeline" under each "Component" as put in Table 16 (Table 16: Proposed Implementation Schedule). Successful completion of each proposed "Key Activity" marks as the indicator that clearly shows output of the activity has been achieved.

This proposed monitoring framework could be improved on by the Project team as may be required, for a more comprehensive framework. Noteworthy, field visits, quarterly meetings, and quarterly and annual reports are part of this monitoring framework. The reports will be produced basing on the Project Implementation cycle.

About six months after completion of the Project, or as may be determined by the Project team, but a period after end of the Project's implementation works phase, an evaluation of the Project, as regards compensation of PAPs, will be conducted. The objective of this evaluation is to assess whether PAPs are well settled. Successful compensation of each PAP as suggested in:

- a) Section 7.2 (Potential Impacts of the Project which in addition gives the mitigation measures) and summarised in Table 14 (Summary of the Evaluation of the Impacts of WaSSIP on Matopeni Settlement), and
- b) Section 7.4 (Valuation and Compensation for Losses),

will mark as the indicator that clearly shows PAPs are well settled. The Project has a responsibility of ensuring PAPs enjoy the same or higher standards of living than before the Project. The risk of massive disruption to lifestyles of PAPs as a result of the Project is predicted to be low, but the activity is recommended all the same.

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Table 17: Proposed Monitoring and	Evaluation Framework
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Table 17: Proposed Monitoring and Evaluation Framework Specific Objective:									
Expected output: Prelin	ninary notice - notification	to affected structure owners	and general pu	ıblic of intention to acquire	e the structures				
Key Activities (to carry out to attain expected output)	Implementer (person responsible for implementing activity)	Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)				
Specific Objective:									
- ,	c inquiry to determine pers	ons with interest on the prop	erty and receiv	ve written claims of compe	nsation from these persons				
Key Activities (to carry out to attain expected output)	Implementer (person responsible for implementing activity)	Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)				
Specific Objective:									
Expected output: Establ	lishment of a Project Settler	ment Committee							
(to carry out to attain (person responsible for (that clean		Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)				

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Specific Objective:						
• ,						
•	0 0 0	resettlement and compensati	<u> </u>			
Key Activities (to carry out to attain expected output)	Implementer (person responsible for implementing activity)	Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)	
Specific Objective:						
Expected output: Payme	ent of compensation					
Key Activities (to carry out to attain expected output)	Implementer (person responsible for implementing activity)	Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)	
Specific Objective:						
Expected output: Resett	lement activities					
Key Activities (to carry out to attain expected output) Implementer (person responsible for implementing activity)		Key indicators (that clearly show expected output has been achieved) Time line (to achieve output)		Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)	

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Specific Objective:										
Expected output: Grievances reporting										
Key Activities (to carry out to attain expected output)	Implementer (person responsible for implementing activity)	Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)					
Specific Objective:										
Expected output: Post-p	project community support	activities, if any								
Key Activities (to carry out to attain expected output) Implementer (person responsible for implementing activity)		Key indicators (that clearly show expected output has been achieved)	Time line (to achieve output)	Difficulties or obstacles (in the way of delivering the expected output)	Addressing the difficulties or obstacles (How difficulty or obstacle should be addressed to deliver on output)					

7.15 Cost and Budget

The estimated value for the Action Plan is Ksh. 64,013,234.13 disaggregated as described under Table 18.

Table 18: Proposed Budget for RAP in Matopeni Informal Settlement

	BUDGET ITEM	PROPOSED COST (KSH)
1.	Notification to title holders and general public of intention to acquire land	*2,800,000
2.	Public inquiry	3,300,000
3.	Payment of compensation	
	a) Land basing on the estimated value derived by the Project Team	0
	b) Structures basing on the estimated value derived by the Licensed Valuer	44,843,352
	with the Project and guided by average reservation price of owners	
4.	Resettlement activities	3,300,000
5.	Implementation of post-project community support activities, if any	1,000,000
6.	Total Costs 1	55,243,352
7.	Project Resettlement Committee Activities (at 3% of the Total Costs 1) d) Establishment of a Project Resettlement Committee e) Drafting, reading and signing of resettlement and compensation agreements f) Grievances redressing	1,657,300.56
8.	Total Costs 2	56,900,652.56
9.	Contingency (at 12.5% of the Total Costs 2)	**7,112,581.57
10.	GRAND TOTAL	64,013,234.13

Note:

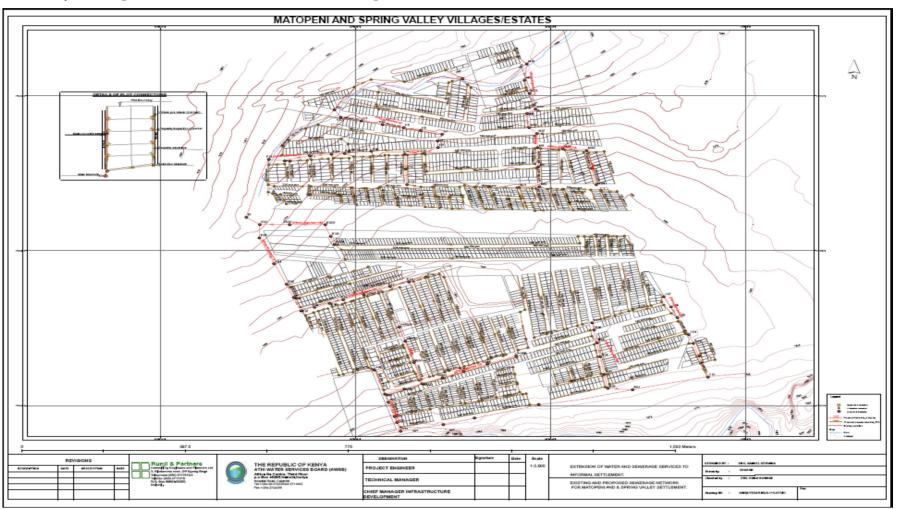
^{*}Estimated for print, audio and television services

^{**}The contingency is in addition expected to cover cost of handling affected services – water pipelines, electricity etc.

8.0 ANNEX

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8.1 Layout Map of the Planned Sewer Line in Matopeni Informal Settlement



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8.2 Interview Guide Used to Collect Data on Project Affected Persons Water and Sanitation Service Improvement Project Nairobi Informal Settlements

Socio-Economic Survey Tool for LOT _____

PROJECT AFFECTED PERSONS

Summary

Athi Water Services Board (AWSB) has received funds from the World Bank to support a specific part of its overall investment plans on water and sanitation services improvement in its area of operation. The World Bank's assistance is through the Water Supply and Sanitation Service Improvement Project (WaSSIP) in Kenya. Through WaSSIP, selected informal settlements in AWSB's area of operation are targeted to benefit. This settlement is amongst those targeted to benefit.

Implementation of WaSSIP involves engineering construction as well as refining and strengthening institutional structure. Designs for engineering construction in this settlement are complete. From the designs, parcels of land in this settlement are to be compulsorily acquired towards implementation of AWSB's investment plans on water and sanitation services improvement in the settlement. This parcel of land is amongst the parcels of land affected. In connection, WaSSIP has an obligation to you, the Project Affected Person (PAP), to observe fair practice in acquiring this land, payment of compensation and, where necessary, resettlement. It is for this reason that we are here, conducting a socio-economic survey.

A socio-economic survey is a must prior to implementation of WaSSIP's engineering construction. The main objective of the survey is to enable determination of the full socio-economic impact of implementing the Project. Its specific objectives are:

- a) To collect full information on the PAPs;
- b) To collect full information on the types of PAPs;
- c) To collect full information on the amounts of housing and land acquisition;
- d) To understand the socio-economic development status of the area affected. This is for optimisation of the engineering design;
- e) To disclose to the PAPs information on the Project;
- f) To provide information for the compilation of an objective Resettlement Action Plan (RAP) report. The main goal of a RAP report is to present an entitlement compensation package, put together and, consisting of a set of provisions to be funded by WaSSIP, with an aim of adequately re-installing the PAPs. This is undertaken with the overall intent of minimising and reversing effects of compulsory land acquisition and, where it has occurred, displacement;
- g) To obtain the opinion and suggestions of the PAPs and relevant secondary stakeholders operating in the Project area. This is useful in customising the RAP report to local reality, thus ensuring that PAPs are adequately re-installed; and,
- h) To provide reference for independent monitoring of the impact of the Project on PAPs.

	Water and Sanitation Service Improvement Project (WaSSIP) Resettlement Action Plan for Matopeni Informal Settlement								
Fu	11 N	James of Respondent:							
Ph	one	Number(s) of Respondent:							
I.D	I.D. Number of Respondent:								
Fu	11 N	lames of Interviewer:							
		Number(s) of Interviewer:							
Da	te o	of Interview (dd/mm/yyyy):							
Α.	BA	ACKGROUND INFORMATION							
1.	Ph	aysical location of the parcel of land affected by the Project:							
		Name of County:							
	2.	Name of Constituency:							
	3.	Name of Administrative District:							
	4.	Name of Administrative Division:							
	5.								
	6.								
	7.	Name of Settlement (where applicable):							
	8.	Name of Village or Estate or Centre (circle [or tick] which and g	ive the nan	ne):					
	9.	Status of the physical location (tick or circle which is appropriate):						
		1. Urban Area 2. Rural Area							
2.		ategory of Project Affected Person on this parcel of land (cir tegory)	cle or tick	the appropriate					
	1.	Property owner Tenant	3.	Business					
2. (us	sing	Residential tenant the land)	4.	Encroacher					
3.	Na	ationality of the Project Affected Person							
	1.	Kenyan 2. Other (specify)							
4.	Fu	ıll names, identification and contact details of the Project Affect	ed Persos	n					
	1.	Full Names:							
	2.	I.D. Number:							
	3.	Phone Number(s):							

4. Personal Identification Number (PIN):

6. Bank Account Details: Bank Name:

5. Postal Address: _____

Branch & Account No:

[Question 5 preferably to be administered to ACTUAL OWNER of affected parcel of land]

5. Full names, identification and contact details of the **ACTUAL OWNER** of this parcel of land affected by the Project

Des	scription		Government ion records	of	Kenya	(GoK)	land	Any Comments on the information given
1.	Full Names:							
2.	I.D. Number:							
3.	Phone Number (s):							
4.	Personal Identification Number (PIN):							
5.	Postal Address:							
6.	E-mail address:							
7.	Bank Account Details:							
	a) Bank Name:							
	b) Branch:							
	c) Account Number:							
8.	Land Registration (LR) Number:							
9.	Plot Number:							
10.	Total size of land owned (<i>circle</i> the appropriate measurement: Acres, m^2 , Km^2 , Ha , ft^2)							
11.	Owner's reservation price for the p	oarcel of la	and (Ksh).					

B. ACTUAL LAND OWNERSHIP

[Questions 6 to 9 preferably to be administered to ACTUAL OWNER of parcel of land targeted for use by the Project]

6	From the engineering designs, is part or whole of this parcel of land targeted for use by the Project? (<i>Tick or circle as appropriate</i>)
1.	Yes 2. No
7	If YES , what size of the parcel of land is targeted towards effective implementation of the Project:
	(circle/indicate the appropriate measurement: Acres, m², Km², Ha, ft²)
8	What type of OFFICIAL RECORD do you the owner of this parcel of land have to prove ownership of the parcel of land (<i>If possible, obtain a copy of the official record proving ownership of the parcel of land</i>)
	1. None
	2. Title deed (LR. Number:)
	3. Sale agreement
	4. Allotment letter (LR. Number:)
	5. Other (<i>specify</i>)
9	If there is NO OFFICIAL RECORD , what method are you the owner of this parcel of land using to claim legitimate ownership of the parcel of land? (<i>Explain and include what sources the Project can be use to verify claim</i>)

Land Tenure System and Use

- 10 What land tenure system does the parcel of land affected by the Project fall under [tick or circle appropriate answer(s)]
 - 1. Customary land tenure (where ownership practices of the parcel of land fall under customary law)
 - 2. Freehold tenure (where absolute right of ownership or possession of land is conferred to the owner of the parcel of land for an indefinite period of time. Land is governed by the Registered Land Act Cap 300 of the laws of Kenya)
 - 3. Leasehold tenure (where right of ownership is conferred to the owner of the parcel of land for a definite period (or term) of years. The right of ownership may have been granted by the government, local authority or freeholder, and is likely subject to the payment of a fee or rent)
 - 4. Public tenure (land is owned by the government for her own purpose and is administered under the Government Land Act Cap 280)
- 11 What is the actual predominant land use of the parcel of land affected by the Project?

Agriculture 2. Ranching 3. Residential 4.
 Other (specify) _______

Details of Structures on the Parcel of Land Targeted by the Project towards Effective Implementation of the Project

12	2 Are there structures on the parcel of land targeted for use towards effective in No	nplementation of the Project? 1. Yes	es 2.
13	3 If YES, specify the type of structures on the parcel of land targeted towards e	ffective implementation of the Project:	
	1. Structures for housing 2. Structures for commercial use 3. Structures	ctures for both housing and commercial use	
4.	Structures for religious use (specify)5. C	Other (specify)	

14 Description of the structure(s) affected by the Project

Element – Type of Structure on the parcel of land affected by the Project	Classification of structure: 1. Temporary 2. Semi-permanent 3. Permanent	make the structure 1. Iron Sheets 2.	f type of constructure (STATE FO) Grass/reeds 3.2 6. Concrete/Stone ROOF	R WALL, ROOF A Mud/Earth/Clay	Owner's reservation price for the identified structure (Ksh.)
1.					
2.					
3.					
4.					
5.					
6.					

Element – Type of Structure on the parcel of land affected by the Project	Classification of structure: 1. Temporary 2. Semi-permanent 3. Permanent	Description of make the structure. 1. Iron Sheets 2. 5. Tiles (specify) WALL	Owner's reservation price for the identified structure (Ksh.)			
7.						
8.						
9.						
10.						
11.						
12.						
13.						
TOTALS OF OWNER	'S RESERVA	L TION PR	ICE (KSH.)		

15	Is the ACTUAL	OWNER	OF THE	AFFECTED	PARCEL C	F LAND) also the	ACTUAL	OWNER	OF THE	E STRUCTUI	RE(S) (ON T	ГНЕ
	AFFECTED PAR	RCEL OF I	LAND?											

1.	Yes	2. No
1.	168	Z. INO

[Question 16 preferably to be administered to STRUCTURE OWNER]

16 Full names, identification and contact details of the ACTUAL OWNER OF THE STRUCTURE(S) on the land targeted by the Project towards effective implementation of the Project

Des	scription	 Any Comments on the information given
1.	Full Names:	
2.	I.D. Number:	
3.	Phone Number (s):	
4.	Personal Identification Number (PIN):	
5.	Postal Address:	
6.	E-mail address:	
7.	Bank Account Details:	
	a) Bank Name:	
	b) Branch:	
	c) Account Number:	
8.	Plot Number:	
9.	Ballot Number:	
10.	Land Registration (LR) Number:	
11.	House Number:	

17	7 What is the main source of water for the structures on the parcel of land affected by the Project?							
	1.	Rainwater collection/roof catchment	10. Borehole without pump					
	2.	Seasonal river/stream	11. Water vendor					
	3.	Permanent river	12. Water kiosk					
	4.	Pond/pan/dam	13. Public tap					
	5.	Protected spring	14. Piped water into plot/yard					
	6.	Unprotected spring	15. Piped water into dwelling					
	7.	Protected dug well	16. Bottled water					
	8.	Unprotected dug well	17. Other (specify)					
	9.	Borehole with pump	999. N/A					
18		nat is the main mode of human waste dispo ected by the Project?	sal for the structures on the parcel of land					
	1.	Bush/flying toilet						
	2.	Bucket						
	3.	Traditional Pit latrine						
	4.	Ventilated Improve Pit (VIP) Latrine						
	5.	Cess Pool						
	6.	Septic Tank						
	7.	Main Sewer						
	8.	Other (specify)						
999). N	/A						
19		nat is the main type of lighting fuel for the set Project? (<i>Tick or circle as appropriate</i>)	structures on the parcel of land affected by					
	1.	Electricity						
	2.	Pressure Lamp						
	3.	Lantern						
	4.	Tin Lamp						
	5.	Gas Lamp						
	6.	Solar						
	7.	Other (specify)						
999). N	/A						

Details of Plants on the Parcel of Land Targeted by the Project towards Effective Implementation of the Project

20 Are there perennial crops (e.g. mango trees etc) on the parcel of land targeted towards effective implementation of the Project?

1. Yes 2. No

21 If **YES** please provide details of the perennial crops grown on this parcel of land (fill the table below)

Type of perennial crops on the parcel of land targeted by the Project towards effective implementation of the Project	Age (in years)	Number	Owner's reservation price (Ksh)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
TOTALS OF ESTIMATED OWNER'S RESERVATION PRICE	E (KSH.)		

22	Are there other trees (e.g.	eucalyptus trees etc)	on the parcel of land	targeted by the Proje	ect towards effective implementa	ation of the Project?
----	-----------------------------	-----------------------	-----------------------	-----------------------	----------------------------------	-----------------------

1. Yes 2. No

23 If **YES** please provide details of the other trees grown on this parcel of land (*fill the table below*)

Type of other trees growing on the parcel of land targeted by the Project towards effective implementation of the Project		Number	Owner's reservation price (Ksh)
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
TOTALS OF ESTIMATED OWNER'S RESERVATION PRICE	E (KSH.)		

24	Are annual crops (e.g.	. maize etc) gro	wn on the pa	arcel of land	d targeted b	v the Pro	iect towards	effective im	plementation of	of the !	Proiec	t?
		. · · O ·				0	,					-)	

1. Yes 2. No

25 If YES, please provide details of the annual crops grown on this parcel (fill the table below)

Type of annual crops grown on the parcel of land targeted by the Project towards effective implementation of the Project	Size under (acres)	of the	land crop	Estimated yield the crop per acre	of	Owner's reservation price (Ksh)
1.						
2.						
3.						
4.						
5.						
6.						
7.						
8.						
9.						
10.						
11.						
12.						
TOTALS OF ESTIMATED OWNER'S RESERVATION P	RICE (KSE	I.)			

Details of Livestock on the Parcel of Land Affected by the Project

- 26 Is there livestock on the parcel of land targeted by the Project towards effective implementation of the Project?
- 1. Yes 2. No
- 27 If **YES**, please provide details of the livestock found on this parcel of land (*fill the table below*)

Type of livestock found on the parcel of land affected by the Project	,	ck on the t box	Number
	Yes	No	
1. Cattle			
2. Sheep			
3. Goats			
4. Camels			
5. Donkeys			
6. Pigs			
7. Chicken			
8. Bee hives			
9. Other (specify)			
10. Other (specify)			
11. Other (specify)			
12. Other (specify)			
13. Other (specify)			
14. Other (specify)			
15. Other (specify)			

Details of Other Assets on the Parcel of Land Targeted by the Project towards Effective Implementation of the Project

28 Are there other assets on the parcel of land targeted by the Project and are not mentioned above (specify document in the table below)?

1. Yes 2. No

29 If **YES**, please provide details of these other assets found on this parcel of land targeted by the Project and are not mentioned above (*fill the table below*)

Type of asset on the parcel of land affected by the Project	Description	Owner's reservation price (Ksh)
1.		
2.		
3.		
4.		
5.		
6.		
7.		

Type of asset on the parcel of land affected by the Project	Description	Owner's price (Ksh)	reservation
8.			
9.			
10.			
11.			
12.			
13.			
TOTALS OF ESTIMATED OWNER'S RESE	RVATION PRICE (KSH.)		

[Question 30 & 31 to be administered to ONLY those that mention STRUCTURES FOR HOUSING in Question 13]

Bio-Data - Households Only

30 What is the number of persons that live in of the Project?	n the structure for housing located on the parcel of	of land targeted towards effective implementation
Adults (18 years & above)	Children (below 18 years of age)	Total number of household members:
04 17 11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		

31 Table A: Full name, age, sex and position of household member

HM I.D No.	Household member's full names	household member			Position of the household member in the household (e.g. husband,
		(dd/mm/yyyy)	Male Fo	emale	wife, child, house help etc)
1.					
2.					
3.					
4.					
5.					
6.					
7.					
8.					

Det	ail	s on rent	
32	Do	you rent this property? (Circle the appropriate answ	er)
1. \	es/	2. No	
33	If ?	YES, how much is the rent per month in Kenyan Sh	nillings?
C.	FU	JLL DETAILS OF BUSINESS OWNER(S)/TE	NANT(S)
<u>[O</u>	<u>ue</u>	stions 34 & 42 to be administered ON	NLY to Business Owners or
<u>Te1</u>	<u>ıa</u>	<u>nts</u>	
34	Bu	siness Address	
i.	Na	me of company/business:	
ii.	Pe	rsonal Identification Number (PIN):	
iii.	Te	lephone (mobile):	
iv.	Te	lephone (landline): :	
v.	Po	stal Address:	
vi.	E-1	nail address:	
35	Co	ntact Person (s):	
	F	Full Names of Contact Person(s)	Designation/Title
1.			
2.			
3.			
36	Bu	siness type:	
		te of establishment (month and year):	
38	Is t	the business registered? 1. Yes 2. No	
39	If I	REGISTERED, what is the legal status of the firm?	
	1.	Sole proprietorship	
	2.	Partnership	
	3.	Private limited company	
	4.	Public limited company	
	5.	Other (specify)	
999.	N	/A	
40	Μα	onth that financial year starts:	

11	How many	12 040 040	040	0000	122221	in	+h~	harrin	~~~?
41	HOW HIAHV	Dersons	are	emm	IOVEG	111	\square	DUSIN	255

Status	Total number of employees by sex						
	Male	Female	Total				
Permanent							
Temporary							
Total							

Temporary							
Total							
42 On average, how muc	h is your ne	et business inco	me (profit) p	er montl	n?	
Ksh		_					
43 In the last year, what w	was your ne	et business inco	me (profit) in	Kenyar	n Shillings?	
Ksh							
D. COMPENSATION	PREFERE	NCE					
44 Do you accept to be co	mpensated	?					
				1. Yes	Signa	ture of respo	ndent
				2. No			
1. The TENANT accept	to be comp	ensated?					
2. The LAND OWNER	accept to be	e compensated?					
The STRUCTURE compensated?	OWNER	accept to	be				
45 How would you like t a. Tenant:	o be compe	nsated?					
b. Land owner:							
							

	on Plan for Ma			
Structure own	er:			
·		 		
NY OTHER CO	OMMENTS			

8.4 Manna Estate: Register of Plot Owners and Plot Numbers



OFFICE OF THE PRESIDENT PROVINCIAL ADMINISTRATION

When replying please quote



THE DISTRICT COMMISSIONER. NIBR. DISTRIC 1. P. O. Boy 30124 - 00100. NAIROBL

25TH JUNE.2010

NJR/LND.9/11

THE DIRECTOR
HOUSING DEVELOPMENT DEPARTMENT
NAIROBI

RE: MANNA JUA KALI RESETTLEMENT SCHEME SELF HELP GROUP

This is to confirm that manna jua kali scheme self help group has met all the condition to facilitate formalization of the project.

Records in our office confirm the following are the bonafide office bearers-

Chairperson
Vice chairman
Secretary
Vice Secretary
Treasurer
Trustee

Kindly assist

A.O. AYUKU

NURU DISTRICT COMMISSIONER

Mary Wambui Robert Muthuku Boniface muii Mary Nyambura

Ephantus Muchiri Hossen Ibrahim MANNA JUA KALI PROJECT P. O. Box 835 - 00518, NAIROBI

MANINA JUA KALL PROJECT P.O. Box 835 - 80518, NAIROBI

6.000 Kayole 5,278 C3-328 34. Kayole C3-284 14,318 35. Kayole 10,200 C3-144 36. Kayole C3-124 37. Kayole C5-403 10.074 38 Kayole 12,008 C6-111 39 Kayolc D2-367 40. Kayole 4.200 D2-302 41. Kayole 12.702 D2-306 42. Kayole C4-257 43. Kavoic C6-338

He recommended that authority be granted for repossessi and re-allocation of the said plots.

Resolved:

To recommend to Finance Committee that the Recommendation of the Director of Housing Development be Action : approved.

Director of Housing Develor and City Treas.

Formalization of Saika.

A request had been received from Embakasi Youth Kali Self Help Group requesting for formalization of Saika West Estate.

Resolved:

That the request be accepted, subject to evaluation by Technicai Officers. Action 387

Director of Housing Develor-

Formalization of Umoja II Community service scheme.

A request had been received from the Area Councille: Umoja II Ward requesting for formalization of Umoja II Community Markets, stalls as they were still under the site a

Market Stalls.

Resolved:

a area de parte.

That the request be accepted, subject to evaluation by Technical Officers.

Director of Housing Development

E. she seededum. tion of Manna Jua Kali Project.

A request had been received from the Area Councille. for Kayole Morth recesting for termunization of tenture in Kali Project



MANNA JUA KALI PROJECT P. O. Box 835 - 00518, NAIROBI

Date

Republic of Kenya

MINISTRY OF GENDER, CHILDREN & SOCIAL DEVELOPMENT

Certificate of Registration of Self-help Group/Project

This is to Certify that

J 1	Group Nam	DGSD/EMB/5/4/09/(11)
KAYOLE		Registration No.
Sub-location / Ward		Registration 140:
Saffed and and		
KAYOLE		第
Location		· ·
		TOWERD A YEAR OF
EMBAKASI		EMBAKASI
Division		Constituency

Is registered with the office of the District Gender & Social Development Officer (DGSDO) as a Self-Help Group/ Project

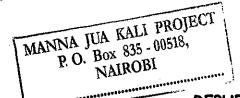
Serial No. A. M. 36368

VINCENT O. OKETCH

District Gender & Social Development Officer

EMBAKASI DISTRICT





IN THE MATTER FOR MATHS AND STATUTORY DECLARATIONS ACT
CHAPTER 15 LAWS OF KENYA

AFFIDAVIT

We MARY KIGURU, BONIFACE MULI MUTUNGA AND EPHANTUS BUNDI MUCHIRI all of Post Box Number 835-00518 KAYOLE within the Republic of Kenya do hereby make Oath and state as follows:-

- 1. THAT we are adults of sound mind holders of National Identity Card Numbers 3353579, 22233555 and 10648718 respectively hence competent to swear this Affidavit.
- 2. THAT we are the officials of MANNA JUA KALI SELF HELP GROUP which is registered with the Ministry of Gender, Children and Social Development Registration Number DGSD/EM3/5/4/09/(11) dated 12th November 2009.
- 3. THAT MANNA JUA KALI SELF HELP GROUP Project Parcel was allocated to us by the Government Administration (Chief, District Officer and District Commissioner) between 1998 and 2000.
- 4. THAT the project comprises of members who are allocated individual plots most of which are fully developed as is evident from the documents forwarded to the City Council of Nairobi.
- 5. THAT we are desirous to have the project formalised by the City Council of Nairobi and essential services for accommodation thereof provided.
- 6. THAT we have forwarded a Survey Plan, Land Reference Number, the register of the members and the Certificate of Registration to the City Council of Nairobi for consideration in the formalisation exercise.
- 7. THAT we hereby affirm that the allocations of the plots to the project members has been conducted by ourselves and any such irregularities as such shall be our responsibility to normalise.
- 8. THAT we shall be responsible for any erroneous information given to the formalising authority (body) towards the formalisation exercise.

- 9. THAT the allocation and the managing committee of the project has been sanctioned by the area Chief, District Officer and District Commissioner who have endorsed their respective stamps and signatures on the management Committee register.
- 10. THAT we swear this Affidavit in support of the formalisation exercise to be undertaken.
- 11. THAT what is deponed to herein above is true and correct save what is specifically stated.

SWORN at Nairobi

This O day of June 2010

By the said

- 1. MARY KIGURU
- 2. BONIFACE MULI MUTUNGA)
- 3. EPHANTUS BUNDI MUCHIRI)

Mannos

DEPONENTS

BEFORE MEGI & CONTROL OF THE PROPERTY OF THE P

COMMISSIONER FOR OATHS

8.6 Matopeni Informal Settlement: Plot Formalisation Process

Resolved:

To recommend to the Finance Committee that the request of the Director of Investigations and Information Analysis be approved.

Action by:

City Treasurer and Director of Investigations and Information Analysis.

Investigations and Information Analysis Department Standing Orders' and Internal Investigations Approval.

The Director of Investigations and Information Analysis 11. reported that the department had developed standing orders to govern the conduct of enforcement/investigation officers in the department in line with regulations of all disciplined/ uniformed officers in Kenya. He stated that this was also in line with the department's mandate and on the other hand, witnesses were at times required to provide recorded evidence in form of statements and were required to be notified through an investigation summon.

He therefore sought authority for the following:-

- Approval for the use of the Standing Orders as disciplinary (i) tool for all enforcement/investigation officers in the department
- Approval of an official standard investigation summons for (ii) both witnesses and subjects.

Resolved:

To recommend to the Finance Committee that the request of Director of Investigations and Information Analysis be approved.

Action by: City Treasurer and

Director of Investigations and Information Analysis.

Regularization of Informal Settlements in Niiru, Kayole, Savannah,

Kariobangi

Councillors for Njiru, Kayole, Savannah, Mihango 12. and Kariobangi South Wards tabled a motion on the floor on the regularization of informal settlements in Njiru, Kayole, Savannah, Mihango and Kariobangi South Ward. They sought for nullification of any earlier commitments on the said parcels of lands in form of PDP's Survey plans, released Deep Plans, Letters of Allotment, Assignments and Titles and requested that all the Mihango and schemes in the quoted areas be recognized as Informal/Squatter Settlements for formalization under the Council formalization South Ward. policy. It was therefore;

cur

Resolved:

To recommend to the Finance Committee that:

- (i) The regularization of the above informal settlements be approved subject to availability of the settled land in.
- (ii) That a detailed list of all the informal/squatter settlement schemes/mirandi's be tabled for adaption in the next Finance Committee.

Action by:
Town Clerk,
Director of Housing Development,
Director of City Planning and
City Treasurer.

The meeting ended at 13.10 hours.

assideration of the following items was deferred

- (i) Collateral for borrowing -To remain deferred The City Treasurer did not report.
- (ii) City Council of Nairobi to Mohammed S Saroya –
 209/4300/138 Pangani To remain deferred for the area
 to be clarified whether the plot is a public utility).
- (iii) Reversal of Approval Extension of Lease Plot LR.
 Nos. 209/4401/7381 and LR No. 209/131-133 –
 Makadara Estate.
 (Deferred for Director of Legal Affairs to avail details on the court case)
- (iv) Allocation of Plot LR No. 219/109 Mathare, Off Juja Road – (Deferred by the area Councillor for more details to be availed).

Instructions were given for the following items to be deleted from the agenda:-

(i) Agreement for Lease – Joseph K M Maina – Plot A – Ziwani Shopping Centre

COUNCIL OF NAMES

TOWN CLERK

FAX: 2217704

TELEPHONE: 2224281

Web: www.citycouncilofnairobi.go.ke

4020

CITY HALL P.O. BOX 30075 - 00100 NAIROBI KENYA.

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-/\ +.			
	CPIN	I ና/በብ:	ロクタムち

17^{тн} AUGUST, 2012

Ref No.....

The Commissioner of lands Ardhi House P.O. Box 30089 NAIROBI

RE: LR. NOS. 18609-18661 FORMERLY PART OF 11344, F/R NO. 241/58

The above matter refers.

Reference is made to my letter ref. No. CP&ARCH/18/5/46 dated 1st November 2000 on the above mentioned matter, which was a request to have the Land Registration Numbers quoted above to be cancelled following the decision of the City Council of Nairobi to that effect.

We are yet to receive your response to this request, and this has affected the Councils' development programmes on this land.

The reason for this request for cancellation is because of other commitments by the City Council of Nairobi, which have resulted in an existing settlement consisting of:-

- 1. A Police station;
- 2. A Primary School which has been an examination centre for the last four years;
- 3. 2No. mosques;
- 4. 7No. Churches;
- 5. A squatter settlement of over 6,000 people.

In view of this, we hereby make this appeal for your necessary action to enable the Council provide for an orderly development programme for this land and to manage the Squatter problem that is getting worse because of the increasing population.

Attached please find the letter referred above for ease of reference.

Kindly expedite.

FOR: TOWN CLERK

www.nairobicity.go.ke

Part
Development
Plan—
Kayole Njiru
Police Station.

23. The Director of City Planning and Architecture reported that an application had been received from the residents of Kayole and Njiru Estates requesting to be considered for allocation of Plot for construction of a Police Station in the area. A site which was partly occupied by squatters had been identified for the purpose and a PDP had been prepared.

He recommended that the PDP be approved to accommodate the Police station and the remaining area be used to resettle the squatters.

Resolved:

That the recommendation of the Director of City Planning and Architecture be approved.

Action by: Town Clerk and Director of City Planning and Architecture.

The meeting ended at 17,30 hours.

Consideration of the following items was deferred:—

- (i) Approval of the following Building Plans:
 - (a) Plot L.R. No. 209/12925—Off Munius Road—Nairobi South: Deferred at the request of Councillor J. M. Mwai.
 - (b) Plot L.R. No. 209/10345/5—Brookside Drive (Westlands): Deferred at the request of councillor R. O. Onyango.
 - (c) Plot L.R. No. 75/1058—Mumias South Road (Buru Buru): Deferred at the request of Councillor R. O. Onyango.
 - (d) Plot L.R. No. 136/1/108—Jamuma Road (Eastleigh): Deferred at the request of Councillor R. O. Onyango.
 - (e) Plot L.R. No. 209/8618—Nanyuki Road (Industrial Area): Deferred at the request of Councillor B. M. Uvyu.
 - (f) Blk. 110/920—Off Thikn Road—(Windsor View): Deferred at the request of Councillor R. K. Mwaniki.
 - (g) Plot L.R. No. 4166—Naivasha Road (Dagoretti/Riruta): Deferred at the request of Councillor E. M. Mbogo.
 - (h) Dag./Riruta S227—Off Kinyanjui Road (Riruta): Deferred at the request of Councillor E. M. Mbogo,
- (ii) Extension of Leases:
 - (a) Plot L.R. No. 1879/IV/135-Westlands.
 - (b) Plot L.R. No. 1870/IV/29—Westlands: Deferred at the request of Councillor R. O. Onyango.
- (iii) Registration of Unaided School—Immaculate Primary School—Plot L.R. No. 6345/10—Off Kangundo Road: Deferred for the Director of City Planning and Architecture and the Director of City Education to report the owner of the school and plot.

Under minute 23 of the meeting of this Committee held on 21st failury, 2000 (p. 1549), approval was given for a PDP to accommodate a police station and resettlement of squatters on plot L.R. No. 11344/R (Pdf)), Block Z, Kangundo Road, Kayole. The Director of City Planning and Architecture indicated that the plan for the scheme had now been approved by the Commissioner of Lands and the survey plans had also been approved by the Director of Survey. The Deed Plans had been drawn applicated for registration.

the further indicated that the developments were impending the process of replanning the area for resettlement of the squatters and creation of some public facilities as per the above resolution.

He, therefore recommended:---

- Nullification of any earlier commitments on the said land in form of the above referred PDP survey plans, the released deed plans as well as letters of allotment.
- (ii) The site be replanned to resettle Squatters and amenities as resolved by the meeting referred to above.

Resolved:

That the recommendation of the Director of City-Planning and Applitecture be approved.

Action by:

Director of City Planning and Architecture

The meeting ended at 17.00 hours.

Consideration of the following items was deferred:--

- (i) Sub-division—Plot L.R. No. 209/13436—Off Langata Road: Deferred at the request of Councillor M. N. Waweru.
- (ii) Building Plan—Plot L.R. No. 20857/87—Off Thila Road (Clayworks):
 Deferred at the request of Councillor M. N. Waweru.
- (iii) Building Plan—Plot L.R. No. 13886—Kasarani Road (Kasarani): Deferred at the request of Councillor M. N. Waweru.
- (iv) Building Plan—Plot 18116—Off Kasarani Rond (Kasarani): Deferred at the request of Councillor M. N. Waweru.
- (v) Sub-division—Plot L.R. No. 12/122/203 Off Thika Road—Garden Estate—Next to Roasters: Deferred at the request of Councillor R. K. Mwaniki.
 - Claringe of the from Weddentiel to Petrol Service Station Shors and Restaurant—Plot L.R. No. 5/46—Watyakt Way—Westlands—LeaseBolds—Deferred at the request of the Chairman of this Committee.

Councillor G. M. Wanjohi indicated that if all the Section Heads were honest, they would submit the statistics required. Councillor L. G. Ngacha stated that in addition to the physical head count, there was need for an independent firm to double check the figures.

Conneillor 1, M. Thayu reported that a request had been made to have officers receive their salaries from established banks and those who received their salaries from Susa and Equity Banks be requested to choose other banks where their salaries would be deposited.

After further discussion, it was

Resolved:

- (i) To recommend to the Emance Committee that the recommendation of the Town (Jerk be approved.
- (ii) The proposal, by the members be approved.

Action by: Town Clerk and City Treasurer.

Esercification of Parall Keyets let rest Settlemen choose,

42. The Town Clerk reported that it had been noted with concern that people were withing or Ruai and Kayole areas in a haphazard mainer and the schemes were life is to turn into slums. In order to arrest the circultion. he recommended the comments be given for the Council to formalize the two informal settlement schemes, subject to the approval of the Minister

H.W. the Mayor proposed that the informal settlement in Umoja be also formelised. Councillor D. W. Mbugua proposed that letters of ellocation be issued to the allowers.

Resofred:

That the recommendation of the Town Clerk and the proposal by H.W. the Mayor be approved, subject to the approval of the Minister for Local

> Action by: Town Clerk and Director of City Planning and Architecture.

For $\Gamma \in \Sigma_{m_1}$ 297 15456-Land acception Martin dutie: Principle Scient.

15 One of manage I of the meeting of this Committee held on 12th Opinher, 2000 (pp. 317/9), authority was given for negotiations to be field between Maladara Community and the developer of plot L.R. No. 209/10466 which was next to Martin Luther Primary School.

The Conneil direct d the Town Clerkmand the City Treasure: to negotiate on the level of compensation on highaif of the Council,

Maria Contraction of the contrac

AG. THE CIOR ARCHITECTUAL

TO. : ASSISTANT DERECTOR (FP)

nΛH

2351 AUGUST, 2000

PLE : PORTOR KAYOFF
MAROPENE POLICE STATION AND
SQUATTERS RESETTLEMENT:

Astsing from Min. 23 of the Town Planning Committee monting to the on 21st January 2000, you may now finalise the layout flag to recommendation to the next Town Planning Committee for apprecial

AG THRECTOR
LITY PLANHING & ARCHITECTURE
LPAARCH/M/4346/JSK/cmm

Town Clerk
AD/P15 - to ensure It is the agenda

4. .

150.

7154

1276 AUCHAL 5/5796 1711/2000

P.O. SOX JOSE NAROBI

RE: L/R NOS 18609 - 18661 (FORA)FRLY PART OF

The above referenced plots were created following survey based on Schools on Schools on

Schrebi City Connell in its Tewn Planning Committee meeting held on Jame, hence the approved Part Development Plan, survey plans and

The purpose of this letter is to request you to incilitate the cancellation.

(SOLP) J.S. KIGERA

AG. DIRECTOR - CITY PLANNING & ACCHITECTURE

site a Town Clerk

Chief Land Surveyor

Del-100



MANNA JUA KALI PROJECT P. O. Box 835 - 00518, NAIROBI

Republic of Kenya

MINISTRY OF GENDER, CHILDREN & SOCIAL DEVELOPMENT

Certificate of Registration of Self-help Group/Project

This is to Certify that

KAYOLE		DGSD/EMB/5/4/09/(11)
Sub-location /- Ward		Registration No.
KAYOLE		
Location	*********	* /
EMBAKASI		EMBAKASI
Division		Constituency

Is registered with the office of the District Gender & Social Development Officer (DGSDO) as a Self-Help Group/ Project

Serial No. **April 1** 36368

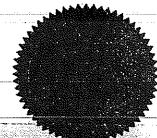
12.11.2009

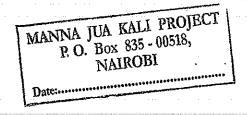
VINCENT O. OKETCH

District Gender & Social Development Officer

EMBAKASI DISTRICT

District





OFFICE OF THE PRESIDENT PROVINCIAL ADMINISTRATION

Telephone: Nairobi 346845: 341666

When replying please quote



THE DISTRICT COMMISSIONLI NHRU DISTRICT. P. O. Boy 30124 - 00100, NAIROBE.

NJR/LND.9/11

25TH JUNE.2010

THE DIRECTOR
HOUSING DEVELOPMENT DEPARTMENT
NAIROBI

RE: MANNA JUA KALI RESETTLEMENT SCHEME SELF HELP GROUP

This is to confirm that manna jua kali scheme self help group has met all the condition to facilitate formalization of the project.

Records in our office confirm the following are the bonafide office bearers-

Chairperson
Vice chairman
Secretary
Vice Secretary
Treasurer
Trustee

Mary Wambui Robert Muthuku Boniface muii Mary Nyambura Ephantus Mučhiri Hossen Ibrahim

Kindly assist.

A.O. AYUKU

FUN DISTRICT COMMISSIONER

NURU DISTRICT

MANNA JUA KALI PROJECT P.O. Box 835 - 00518, NAIROBI Date:....

NAIROBI

MANNA JUN KALL PROJECT P.O. Box 835 - 00518,

Kayole C3-328 5,278 Kayole C3-284 35. 14,318 Kayole C3-144 36. 10,200 Kayole C3-124 37. 7,43.1 C5-403 Kayole 38 10.03 Kayole C6-111 39 12,068 Kayolc D2-367 40. 9.14 Kayole D2-302 41. 4,200 Kayole D2-306 42. 12.7 Kayole C4-257 43. Kazole" C6-338 44.

He recommended that authority be granted for repossess: and re-allocation of the said plots.

Resolved:

To recommend to Finance Committee that the Recommendation of the Director of Housing Development be approved.

Action :

Director of Housing Development and City Treasmin

Formalization of Saika.

A request had been received from Embakasi Youth Kali Self Help Group requesting for formalization of Saika West Estate.

Resolved:

That the request be accepted, subject to evaluation by Technicai Officers.

Action 387

Director of Housing Develo-

Formalization of

A request had been received from the Area Councille: Umoja II Ward requesting for formalization of Umoja II Community Markets, stalls as they were still under the site a

Umoja II Community service scheme.

Market

Stalls.

Resolved:

- 100 pt 1981 1981

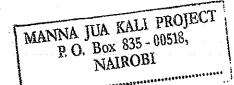
That the request be accepted, subject to evaluation in Technical Officers.

Director of Housing Develor

tion of

A request had been received from the Area Councille. for Kayole florth reucsting for remainization of leman, in-Kali Project

Manna Jua Kali Project.



REPUBLIC OF KENYA

IN THE MATTER FOR GATHS AND STATUTORY DECLARATIONS ACT

CHAPTER 15 LAWS OF KENYA

AFFIDAVIT

We MARY KIGURU, BONIFACE MULI MUTUNGA AND EPHANTUS BUNDI MUCHIRI all of Post Box Number 835-00518 KAYOLE within the Republic of Kenya do hereby make Oath and state as follows:-

- 1. THAT we are adults of sound mind holders of National Identity Card Numbers 3353579, 22233555 and 10648718 respectively hence competent to swear this Affidavit.
- 2. THAT we are the officials of MANNA JUA KALI SELF HELP GROUP which is registered with the Ministry of Gender, Children and Social Development Registration Number DGSD/EM3/5/4/09/(11) dated 12th November 2009.
- 3. THAT MANNA JUA KALI SELF HELP GROUP Project Parcel was allocated to us by the Government Administration (Chief, District Officer and District Commissioner) between 1998 and 2000.
- 4. THAT the project comprises of members who are allocated individual plots most of which are fully developed as is evident from the documents forwarded to the City Council of Nairobi.
- 5. THAT we are desirous to have the project formalised by the City Council of Nairobi and essential services for accommodation thereof provided.
- 6. THAT we have forwarded a Survey Plan, Land Reference Number, the register of the members and the Certificate of Registration to the City Council of Nairobi for consideration in the formalisation exercise.
- 7. THAT we hereby affirm that the allocations of the plots to the project members has been conducted by ourselves and any such irregularities as such shall be our responsibility to normalise.
- 8. THAT we shall be responsible for any erroneous information given to the formalising authority (body) towards the formalisation exercise.

- 9. THAT the allocation and the managing committee of the project has been sanctioned by the area Chief, District Officer and District Commissioner who have endorsed their respective stamps and signatures on the management Committee register.
- 10. THAT we swear this Affidavit in support of the formalisation exercise to be undertaken.
- 11. THAT what is deponed to herein above is true and correct save what is specifically stated.

SWORN at Nairobi

This q day of June 2010)

By the said

- 1. MARY KIGURU
- 2. BONIFACE MULI MUTUNGA)
- 3. EPHANTUS BUNDI MUCHIRI)

Magen

DEPONENTS

BEFORE WELL &

COMMISSIONER FOR OATHS

8.7 Report of a Community Meeting On the Project - Matopeni Informal Settlement

TITLE: REPORT ON RESEARCH AND FINDING ABOUT INSTALLATION OF
SEWER SYSTEM CARRIED OUT IN MATOPENI/ SPRING VALLEY AREA OF
NJIRU DISTRICT, KAYOLE NORTH IN EMBAKASI CENTRAL
CONSTITUENCY BETWEEN NOVEMBER 2012-MAY 2013

NAME

MACHARIA KIGO

RANK

CHAIRMAN (COMMUNITY)

LOCATION DEV. COMMITTEE (L.D.C)

LOCATION NAME:

KAYOLE NORTH

WARD

MATOPENI/SPRINGVALLEY

This is actual compilation of the above report on the challenges, findings and recommendation of the community in relation to research carried out by Runji & Consultants.

TABLE OF CONTENTS:

1. Introduction:-

It is with sincere gratitude, concern and pleasure to have been earmarked as a beneficiary of government project of upgrading slums through strategic implementation of sewerage system in the country. In relation to, Runji & Consultants, who were to carryout research on the affected person of the project in compensation strategy. Thus, as community members as the affected and beneficiary of the project, passionately and unconditionally support the implementation process. Hence, as the main stakeholders take sole responsibility to humbly submit the following recommendation, challenges, findings and mitigation procedures for the success of the project.

The content therein was overwhelming agreed upon by all members of the community and will automatically supersede the individual information given on the mode of compensation to Runji & Consultants. In attendance of said consensus meeting were:-

- a) Community Members (both the Affected & Beneficiaries)
- b) Area Chief
- c) Area County Representative
- d) Community Elders
- e) Community organization (Christian & Muslims)

Attached to this report are signatures and proof of all in attendance in order authenticate its mandate.

2. Purpose of the research;

The purpose of the research was to agree on compensation procedures, fact finding mission, advocacy and facilitate smooth implementation of the project in Springvalley and Matopeni area. This was necessitated by the challenges faced by the Research Company Contracted to provide information of the affected person on the ground. Most affected persons of community weren't willing to provide the proper mechanism to address the issue. The

questionnaire required the residence to fill their personal information such as A/C Details, KRA Pin, Plot No.'s and personal registration No.s which were abit sensitive to provide.

This encourage community leaders and elders to intervene inorder to create awareness through engaging the community in informative forum to address the thorny issue and harness smooth implementation process of the project. Thus, effective survey done by Runji & Consultants establishing the cost of the structures, verandahs and septic tank incurred by respective affected persons.

Hence, as the beneficiary and main stakeholders of this project, in support of effective procedures herein provide substantial information on our findings, challenges, mode of compensation and mitigation procedures for long term success of the project.

3. FINDING

- a) Poor drainage system
- b) Settlement along the sloppy region near riverbank
- c) Availability of septic tank and pit latrines
- d) Temporary business structures along main rd targeted by the project
- e) Availability of temporary sewer line within the locality

4. CHALLENGES

a) Poor drainage system:-

During rainy season some part of Matopeni especially within the depression area are frequently flooded with rain water. Thus, most houses are rendered inhabitable forcing the tenant to seek refuge in other safer areas.

The availability of septic tank with human waste and stagnant water in the area makes it prone to water borne diseases. Also conducive environment for breeding of mosquitoes hence frequent outbreak of Malaria Disease.

b) Settlement along the sloppy region of Matopeni Area:-

In Matopeni area, some plots are located on the sloppy part or rather steep sloppy that stretches towards the rivers. This area with population estimated at 4500 has not been earmarked in your implementation plan due to it's geographical situation and accessibility mode to the main sewer line.

c) Septic tank, sewerline and pit latrine:

Most of the plots in Matopeni area developed to cater and accommodate tenants on rental basis. Hence, most of these plot have constructed either septic tank, toilet or pit latrine as a way of human waste disposal. Most of the septic tank and pit latrine have been either constructed in the plots or on the outer part of the plot. Thus, pose dangerous health hazard to the community especially the children. Whereas, some plots through joint venture have installed sewer system for temporary use which do not meet the required standard of such sewerage drainage system.

d) Temporary business structures:

In the area, we have temporary structures along the main road reserves targeted by the projects. This structure have been erected by tenants to conduct small scale business inorder to earn a living. Though illegal structures and have no much value attach to them but sustains lives, but serves as a sole way of earning a living to quite a number of residence.

CHALLENGES

The main challenges that we face as community are as follows:-

(a) Poor drainage: - we have poor drainage system due to geographical features of the area.

The area interior land surface of earth is barely covered with hard rocks varying in depth from 3fts of the plateau land and 0fts of the rocky basement as it stretches towards river bank.

This physical feature makes it hard for small scale to drill effective and efficient drainage system. The flood makes habitation impossible due to water borne diseases and a breeding zone for mosquitoes.

This area has water level near the surface of the earth. The existence of surface water close to the surface and rocky land surface makes it harder for absorption.

- (b) The mass population living on the sloppy side of Matopeni will be forced out due to non existence of proper human waste disposal. As the population increase in the area, most of the available septic tank & pit latrine with the availability of service water will not sufficiently support the waste products. The population living will not be able to the cost of draining its content frequently. Hence, exposure of the population to health hazard materials occasionally and pose serious threat to human life.
- (c) The plot owners and tenants who are majority in the area have constructed temporally structures, away from where they live. During the research carried out Runji & Contractors majority of them have not been captured. Hence the project poses serious threat to their small scale business which will affect many families economically.

MEASURES TAKEN TO MITIGATE CHALLENGES

The following are recommendation and mitigation procedures to address all the above challenges which will automatically facilitate the success of the project.

- a) To establish proper drainage system within the area:- The implementation of sewerage system may address properly the drainage especially within the affected areas.
- b) The area on the sloppy side of Matopeni area which is not currently targeted for implementation of the sewer i.e. (i) Ujimii
 - (ii) Njiru youth
 - (iii) Wazee hukumbuka
 - (iv) Cobra

We as the community members propose that this population should benefit through construction of public toilets at strategic points. We agree at least eight public for each of the community named above at least ease the tension and will automatically support the existing septic tank and latrines.

- c) Our proposal for tenants who are affected should also be considered for compensation inorder for every individual member feel part and parcel of the project.
- d) Majority of the affected person have agreed upon that the individual cost of the properties or assets targeted for compensation after valuation should be done following way:
 - i) Deduct the sewer connection fee & facilitate immediate connection during implementation.
 - ii) Send the remaining amount of money after deduction to respective a/c provided on the questionnaire.

SUMMARY:

We will be glad if the recommendation of this report is fully implemented and wish to guarantee your office of maximum co-operation in the process.

Report Compiled By	:	Ibrahim Mohamme	ed Bukuri		
Date	:	28 th May, 2013			
Signature	:	000141	Brahim Hassan 'Y Rep	1	
Confirmed By: County Rep:		MATOPEI Sign Date.义)	NI/SPRINGWALLEY W	CHIEF	
Area Chief HOTP! Chairman: Machai			Sign: Militi	New Distric	
Community Member:			Sign: Sign:	20124 : 0010	O. W. S.
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