RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA, LUSAKA ZAMBIA

IMPLEMENTATION OF THE CITY RESILIENCE ACTION PLANNING TOOL

RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA, LUSAKA ZAMBIA

IMPLEMENTATION OF THE CITY RESILIENCE ACTION PLANNING TOOL

FOREWORD

Lusaka city has increasingly been affected by natural hazards, floods and droughts which has significantly affected the socio-economic development of the city and continue to threaten the wellbeing of the people. Floods in the city for example have become perennial and have often resulted in outbreak of many communicable diseases such as cholera, typhoid, dysentery, malaria and caused damages to infrastructure and losses of livelihood for the residents of the city. In some cases, there has been increase in government expenditure in times of disaster. Droughts on the other hand continue to threaten food security for the city which largely depends on food Supply from the small holder farms in the surrounding areas. The City has also been experiencing erratic water supply mainly due to drying-up of boreholes and low water level in the Kafue River. Considering the expected impacts of climate change, disasters are likely to increase in frequency and intensity in the coming years. Responding to the adverse effects of climate change requires concerted efforts and commitment from all stakeholders at all levels.

The city is in the times when there is need to increase city resilience. Climate change requires that cities brace themselves with capacity to understand,

Plan, Act and Manage overall sectorial actions that can progressively build the resilience of the city. It is gratifying to note that Lusaka city council and Kanyama constituency in particular, was identified to benefit from the support is among the selected cities in the sub Saharan Africa to implement CityRAP in collaboration with UN Habitat and the technical centre for disaster risk management, urban resilience and sustainability (DiMSUR.

The Resilience Framework for Action provides a platform or a basis for coordinated response to disaster risk reduction and resilience for Kanyama.

I am pleased to note that the RFA for Kanyama was formulated through a rigorous process that was highly consultative and participatory. The process involved consulting meetings with key stakeholders, municipal self-assessments, baseline assessment community mapping of Kanyama through meetings with all the three Ward Development Committees of the constituency.

The participatory approach in the formulation process served as a quality assurance mechanism to the aspirations contained in the document. It's my sincere hope that the dedication and commitment already demonstrated to this process by various players will be sustained.

The implementation of the RFA for Kanyama is a stepping stone to enhancing the state of resilience of the entire city. The City RAP process lends itself to being replicated in other wards to achieve city resilience.

I take this opportunity to truthfully offer my appreciation to all those who have contributed at the various stages of developing this resilience framework for action for Kanyama constituency.

Miles Bwalya Sampa

MAYOR

LUSAKA CITY COUNCIL

ACKNOWLEDGEMENTS

The Resilience framework for Action is a product of the advice, contributions and support of various institutions and individuals. The RFA was formulated through a process that was highly consultative and participatory that included representatives of government, the private sector, civil society, and academia, Ministry of Local Government, Ward Development Committees, UNDRR and UN Habitat. Comprehensive consultations with various stakeholders were held at consensus and create a sense of ownership. Lusaka City Council would like to take this opportunity to express its gratitude to all who contributed either directly or indirectly in producing the RFA.

First and foremost, Lusaka City Council wishes to acknowledge the valuable contributions of United Nations human settlements programme who made it possible for Lusaka city to be selected among the 31 cities in the sub Saharan Africa. UN habitat and DiMSUR further provided the much needed leadership and guidance to the process right from signing of project document to development of the RFA.

I further wish to acknowledge the United Nations Human Settlements Programme (UN Habitat), Technical Centre for Disaster Risk Management providing the technical support to the formulation of this RFA.

Lusaka City Council expresses gratitude to the contributions by various institutions during the consultation workshops and interviews such as Ministry of Local Government and Housing, Disaster Management Mitigation Unit, Meteorological Department, District Commissioners Office and Zambia Environmental Management Agency and Ward Development Committees from Kanyama constituencies in Lusaka.

Specifically, I wish to extend special and gratifying acknowledgements to the under listed who played appropriate roles and responsibilities in the development of the RFA:

UN Habitat National Technical Adviser in Zambia: Alexander Chileshe

Lead Facilitators: Katarina Rochell, Frausina Straus,

Intern: Selene Angelone

LCC focal points: Charity C. Kalombo, Mboyonga Kaputula, Seth Tenge and Vwambanji Namwelu.

Alex Mwansa

TOWN CLERK

CITY OF LUSAKA

TABLE OF CONTENTS

FOREWORD ii
ACKNOWLEDGEMENTS iv
TABLE OF CONTENTS vi
LIST OF FIGURES vii
LIST OF TABLES vii
LIST OF ACRONYMS vii
1.0 CITY RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA, CITY OF LUSAKA 1
1.1 Background 1
1.2 Urban resilience as new emerging concept 3
1.3 Participatory resilience planning as way forward 4
2.0 KANYAMA'S RESILIENCE PROFILE 7
2.1 Exposure to shocks and stresses 9
2.3 High sensitivity 10
2.4 Adaptive Capacity 10
3.0 KANYAMA'S CITYRAP PROCESS 12
4.0 RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA SETTLEMENT 17
4.1 Introduction 17
4.2 List of Objectives 18
4.3 List of Priority Actions 18
4.3.1 Priority Action 1: Solid Waste Management 20
4.3.2 Priority Action 2: Local Area Plan 24
4.3.3 Priority Action 3: Safe public spaces (High crime, drug and alcohol abuse) 26
4.3.4 Priority Action 4: Roads and drainage 29
4.3.5 Priority Action 5: Early Warning System 32
4.3.6 Priority Action 6: Sustainable financing 35
5.0 TIMELINE 37
6.0 ACTION MAP 38
8.0 CONCLUSION AND WAY FORWARD 41
9.0 BIBLIOGRAPHY 43

LIST OF FIGURES

Figure 1 Waste and Flooding in Kanyama Constituency 2
Figure 2 Location of Kanyama Constituency 5
Figure 3 Kanyama Constituency Risk Map 7
Figure 4 Kanyama Constituency Wards 8
Figure 5 Crush Course Participants and Focal Points Training at Grand Palace Hotel 12
Figure 6 During Community Mapping in Ward 10 13
Figure 7 Results from Baseline Assessment 16
Figure 8 List of Objectives and Problem Tree 19
Figure 9 Action Map for Kanyama Constituency 39

LIST OF TABLES

Table 1 Solid Waste Management 23
Table 2 Local Area Plan 25
Table 3 Public Spaces 28
Table 4 Roads and Drainage 31
Table 5 Early Warning Systems 35
Table 6 Financial Management 36
Table 7 Action Plan 38

LIST OF ACRONYMS

1. **CBE**-Community Based Enterprise
2. **CDO**-Community Development Office
3. **CITYRAP**-City Resilience Action Planning
4. **CSO**-Central Statistics Office
5. **DMMCC-**District Management Mitigating Coordinating Committee

6. **DEC-**Drug Enforcement Commission
7. **DHMT**-District Health Management Team
8. **DiMSUR**-Disaster Risk Management Sustainability and Urban Resilience
9. **DMMU**-Disaster Management and Mitigation Unit
10. **ECZ**-Environment Council of Zambia
11. **JICA**-Japanese International Corporation Agency
12. **LCC**-Lusaka City Council
13. **LWSC**-Lusaka Water and Sewerage Company
14. **MCDSS**-Ministry of Community Development and Social Services
15. **MLGH-**Ministry of Local Government and Housing
16. **NGO**-Non Governmental Organisation
17. **PHD**-Public Health Department
18. **RFA**-Resilience Framework for Action
19. **SADC**-Southern African Development Community
20. **SNPD**-Seventh National Development Plan
21. **SWM**-Solid Waste Management
22. **UNDESA**-United Nations Department of Economic and Social Affairs
23. **UNDP**-United Nations Development Programme
24. **UNDRR**-United Nations Disaster Risk Reduction
25. **UN-HABITAT**-United Nations Human Settlements Programme
26. **UN UNICEF**-United Nations International Children Emergency Fund
27. **WDC**-Ward Development Committee
28. **ZP**-Zambia Police
29. **ZVAC**- Zambia Vulnerability Assessment Committee

1.0 CITY RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA, CITY OF LUSAKA

1.1 Background

Zambia is a developing country with relatively vast land resources, measuring 752,618 km2 and with a rapidly expanding population. Like most sub-Saharan countries, unsustainable migration trends in Zambia have led to high population growth in the urban areas without the accompanying improvement in infrastructure for service provision. Zambia is experiencing one of the highest levels of urbanization in Africa; the population now stands at 17,730,890 million people (UN DESA 2018). Lusaka is the capital city of Zambia located in the southern part of Africa. The City lies at an altitude of 1280 meters above sea level and covers an area of 421 km² of mostly flat relief. It dominates the country's urban system and accounts for 32 percent of the total urban population in the country.

There are at least 37 unplanned settlements in Lusaka and Kanyama is the largest. The settlement covers an area of 81.3 km². The physical infrastructure and services in these informal urban areas are either missing or inadequate, and otherwise in poor condition. Currently the estimated population for Kanyama stands at 516,421(CSO 2018) inhabitants compared to the population in 2010 which was at 364,655 (CSO 2010). This depicts a population increase which entails that also the need for services provision increases, created mounting competition for land, both within the urban areas and in the informal settlements, especially for urban elites who seek land for suburban residential development. Land in the proximity of urban centres is slowly getting converted from residential and subsistence agriculture to industrial and commercial use. This entails that those that were occupying this land shift to other informal settlement nearby causing them to expand and increase the demand for service delivery, this has mounted pressure on the local authority to provide the required service. The result has been that the informal settlement continue to experience challenges which include poor water and sanitation, poor housing, inadequate access roads, poor solid waste

management, no early warning systems at community level and encroachments on public spaces resulting in increased crimes and alcohol abuse.

The City of Lusaka suffers from episodic flooding of its settlements, especially those in the informal settlements and un-planned areas. However, major floods events which caused widespread damage and destruction were experienced in 1977 and 1989. The 1989 floods left 50,000 people homeless in Lusaka. Settlements like Kanyama which was badly affected by the flood disaster of 1977 has continued to suffer from flooding nearly every rainy season. In the recent past, 2018 to be specific, Kanyama was an epicentre for cholera that lead to the closure of all schools in the country. Inadequacies in the official response to these floods and the failure to mitigate their impacts were observed. Integration of mitigation and reconstruction activities in development programmes were advocated for by stakeholders (Mulwanda, 1989).

Figure 1 Waste and Flooding in Kanyama Constituency

In many developing nations, the continued growth of informal settlements and the intractable problem of providing services such as housing, water, proper sanitation, electricity etc. has presented a challenge to many local authorities.

In particular Lusaka, the capital city, already has approximately 2, 706, 629 inhabitants (UNDESA, 2016) and is one of fastest population growth rate of the continent which is over 5% per annum (CSO 2010) It is greatly affected by recurrent flooding (ECZ, 2010). This shows that there is a clear linkage between unplanned and un-serviced informal settlements, the natural exposure of Lusaka to floods and the high degree of vulnerability of the urban poor. Importantly, despite having Lusaka City Council (LCC), Disaster Management and Mitigation Unit (DMMU), Lusaka Water and Sewerage Company (LWSC) and District Health Management Team (DHMT) dealing with various aspects of hazards, Lusaka City has an inter-sector disaster risk reduction plan, strategy or platform that looks at the cross-institutional linkages for building its resilience to natural hazards. The increase in demand for service provision coupled with the short-comings of the local authority in the recent past, has forced the Local Authority to put in place measures to involve the appropriate stakeholders and partnering with organisations to ensure that Kanyama is transformed into a resilient and sustainable settlement. However the city has embarked on development of a settlement resilient action framework that emphasizes on building capacity for the community to be able to build resilience and adapt to disasters.

1.2 Urban resilience as new emerging concept

The urban population growth in sub-Saharan Africa is expected to triple in absolute numbers between 2015 and 2050. Urban areas are expected to be equipped with this explosive population, this in turn is expected to double the amount of challenges being faced by cities today. It is imperative that cites and neighbourhoods prone to disasters are resilient - capable to withstand and recover quickly from any plausible shock or stress, and to transform by assuming a new position of equilibrium that fosters sustainable development. Any urban system can be impacted by global climate change, natural or human hazards. Consequently, the emerging concept of resilience becomes

fundamental. While there is common consensus about the need to build and enhance urban resilience, and the scientific community tackles resilience as new buzzword, cities often lack the capacity to bridge theory and practice in resilience planning.

1.3 Participatory resilience planning as way forward

The City Resilience Action Planning (CityRAP) tool, developed by the United Nations Human Settlements Programme (UN-Habitat) and the Technical Centre for Disaster Risk Management, Sustainability and Urban Resilience (DiMSUR), is a step by step process composed of a set of training workshops, participatory exercises and field activities that provide a path for urban resilience action planning. It enables local decision-makers, planners and local communities to convene, jointly plan and take action to build the resilience of their city. Its design is based on four main principles: (i) target small to intermediate cities or municipal districts within bigger cities; (ii) the local authority is leader of the process from day one; iii) local knowledge is leveraged through a highly participatory approach; iv) the outcome is a Resilience Framework for Action (RFA) that defines priority actions, tangible activities and projects in the short, medium and long term.

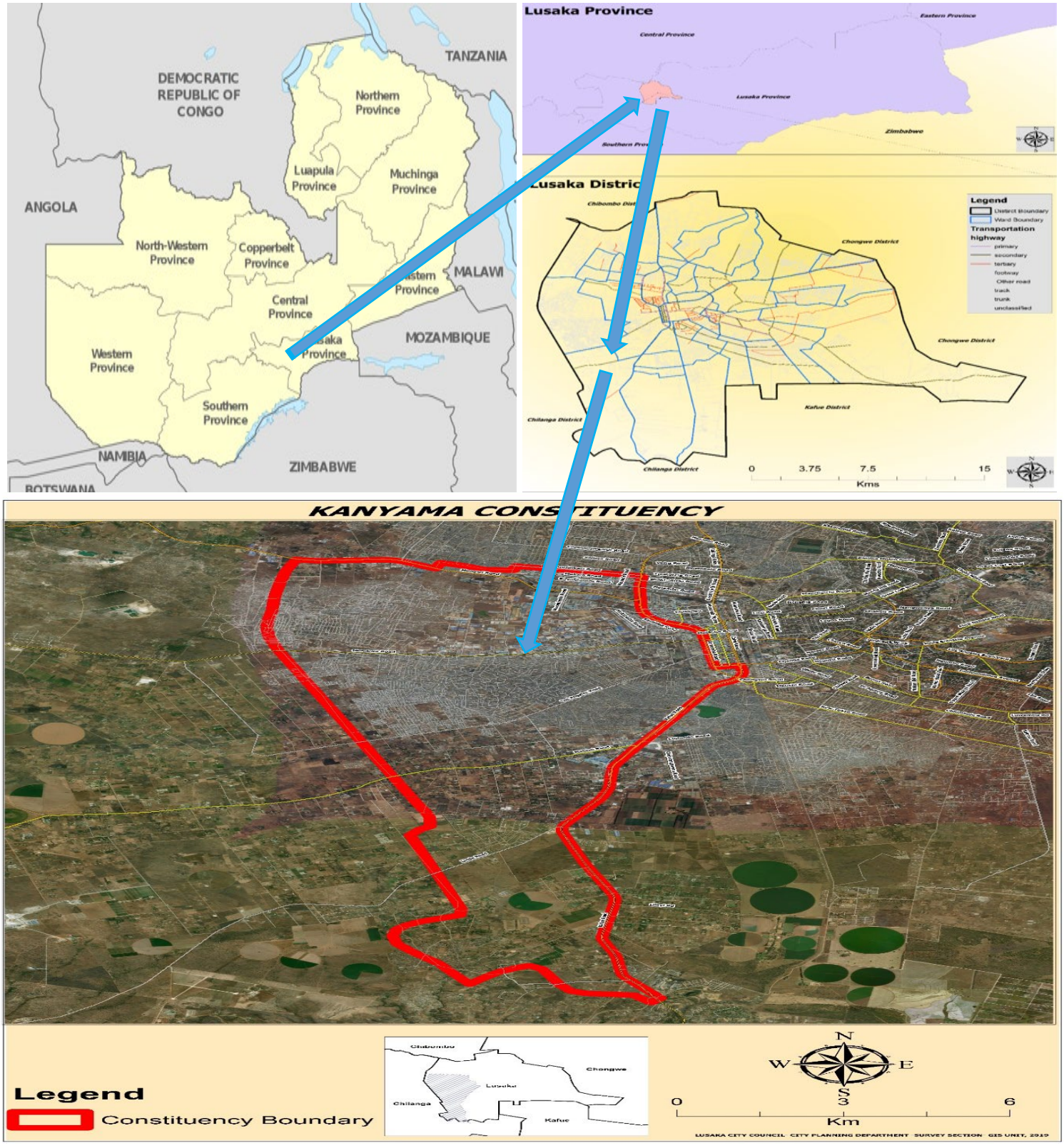


Figure 2 Location of Kanyama Constituency

The Figure above shows the location of Kanyama Constituency in the City of Lusaka. This large demographic entails that the settlement is prone to poor solid waste management, lack of a Local Area Plan, non-existent public spaces and recreational facilities, poor drainage and road system, poor water supply and waste disposal.

2.0 KANYAMA'S RESILIENCE PROFILE

Kanyama constituency is one of the seven constituencies of the city of Lusaka and it is located in the central part of the City. The constituency has a projected population of 516,421(CSO 2018) with an urbanization rate standing at 4 percent (CSO 2018).

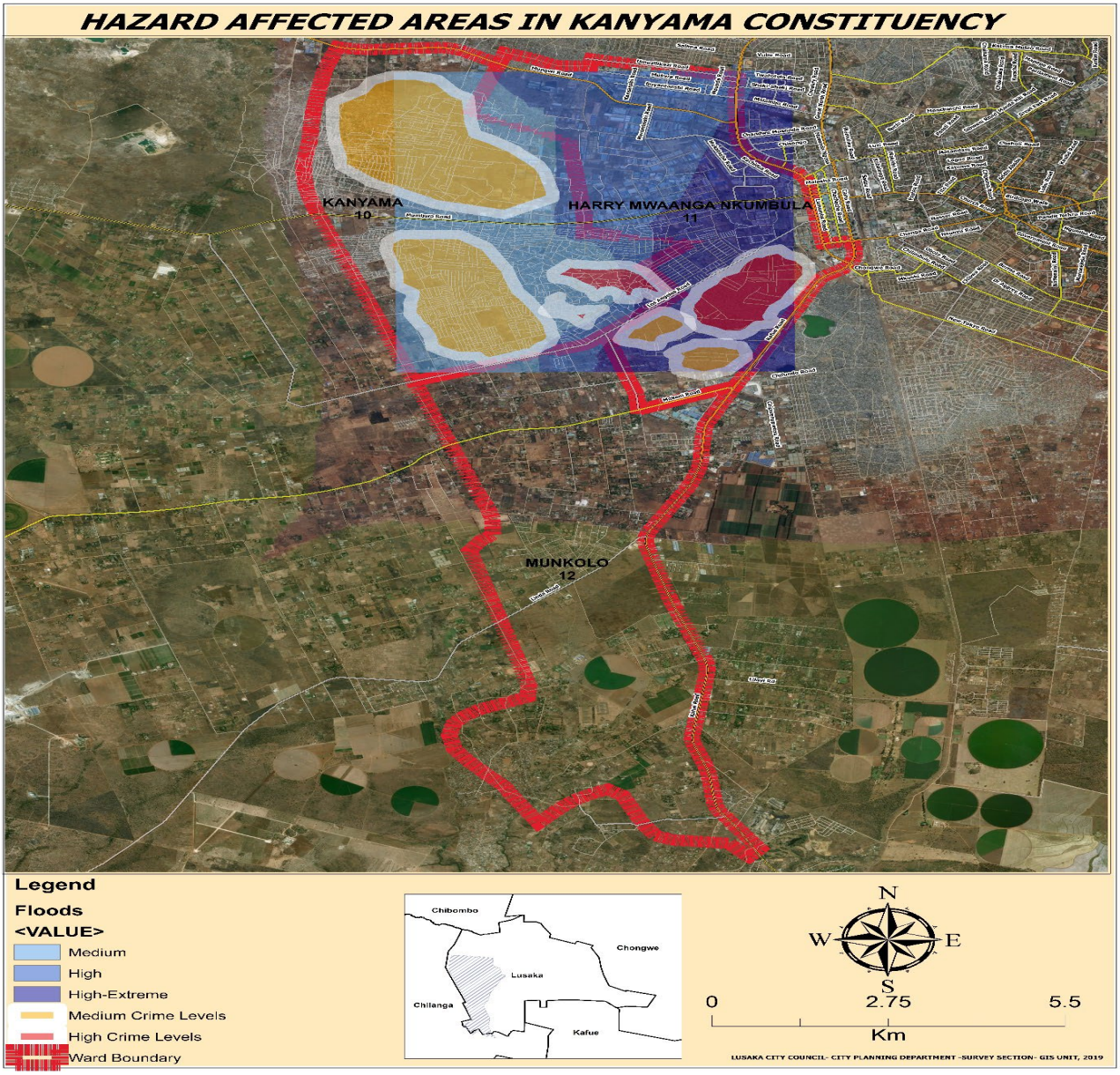


Figure 3 Kanyama Constituency Risk Map

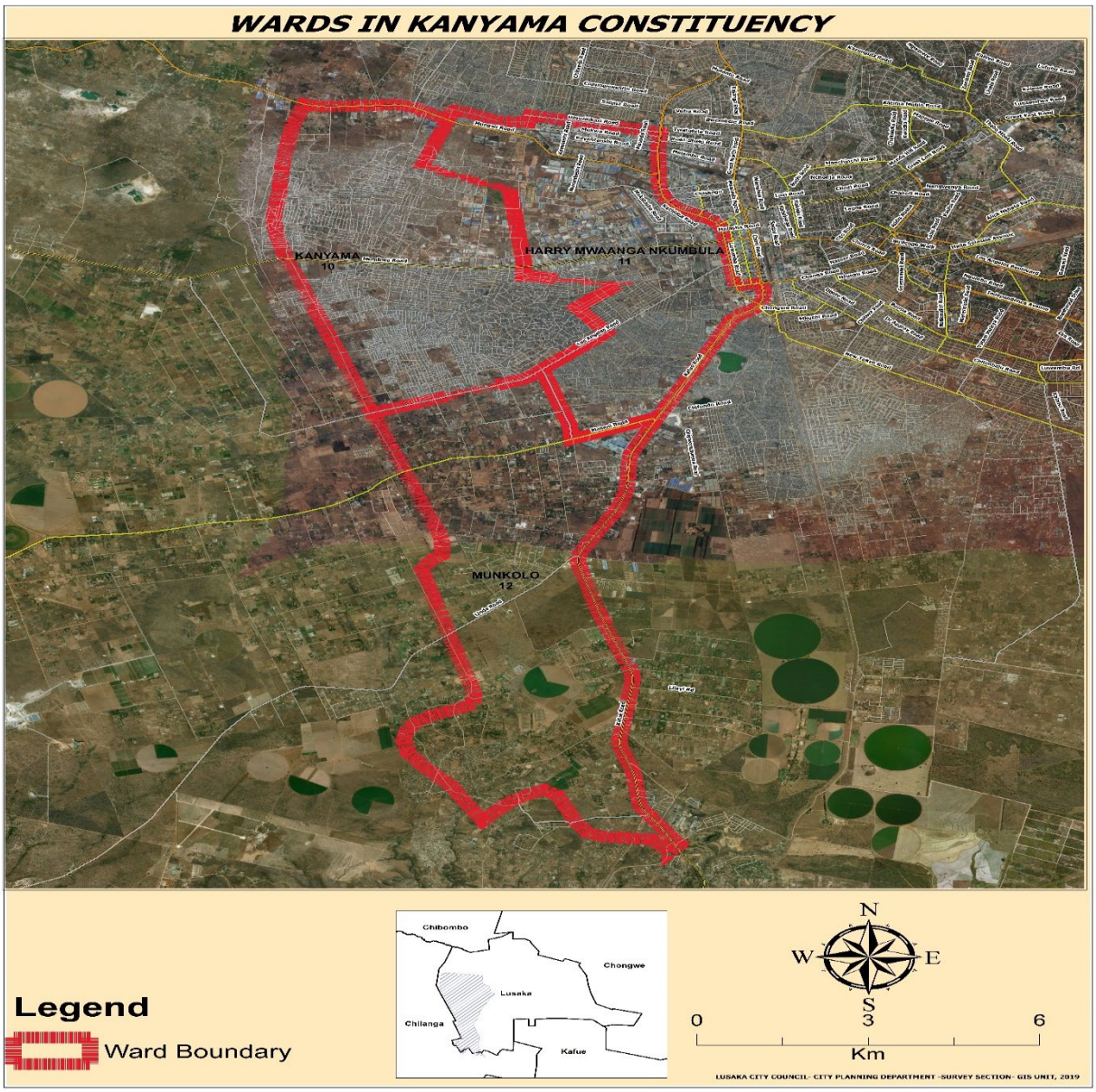


Figure 4 Kanyama Constituency Wards

Kanyama Constituency is divided into three wards namely: Kanyama ward 10, Harry Mwaanga ward 11 and Munkolo ward 12. These are depicted in the figure above. Each ward has an elected councilor responsible for bridging the gap between the residents of the ward and the local authority and government.

2.1 Exposure to shocks and stresses

Kanyama settlement is one of the prominent constituencies that has become a point of focus for disaster risk reduction. The focus group discussions revealed that Kanyama settlement is characterized by lack of access to basic services such as safe water and sanitation, poor roads and drainages systems, overcrowding, poor housing and poor waste collection and disposal. The settlement geology and hydrological characteristics of the dolomite rock have negatively contributed to flooding and outbreaks of water related diseases. This is due to a bedrock that makes water fail to silt through to the underground causing flooding in most parts of the city. The constituency is also characterised by pockets of crime and drug/alcohol abuse areas especially in Chibolya in ward 11. Community vulnerability and exposure to disaster risk has been attributed to the inability to contain and respond to shocks that come as a result of increased urbanization and most people in informal settlements are usually at risk. The community is characterised by people whose socio-economic status is based on entrepreneurship. This economic status is often disrupted during floods, according to ZVAC rapid assessment report (2010) Kanyama constituency had 565 completely damaged, 8423 partly damaged and 27,219 water logged houses, there were two clinics surrounded by water, 5 schools were also affected, roads were blocked or damaged (Olive Chisola: 2012). This trend has been going on for more than 30 years and indicates that the settlement exposure to shocks and stress have an impact on the livelihood of its people. There is overwhelming evidence of the impact of population activities on climate change and vice versa. For instance, overcrowding in informal settlements can lead to increased human activity including behaviour towards waste management, crime and alcohol abuse which in turn can cause stresses and shocks such as outbreaks of diseases. Additionally there is the ever looming risk of cholera as was recently experienced and cost the nation not only financially, but loss of lives that, with a proper proactive system, could have been mitigated or prevented.

2.3 High sensitivity

This relates to the fact that Kanyama is one of the largest informal settlement covering 81.3 square kilometers. It is the largest and one of the oldest peri-urban areas of 37 unplanned settlements that are in Lusaka. Physical infrastructure and services in these are either missing or inadequate, and otherwise in poor condition. As evidenced in these settlements, there is a linkage between unplanned and un-serviced informal settlements and natural exposure to flood hazard making it to be in high degree of vulnerability to disaster.

2.4 Adaptive Capacity

Adaptive capacity refers to the ability for the community to adjust to disasters. Communities usually have a way in which they deal with recurrent shocks. The community in Kanyama constituency has experienced different shocks like flooding, diseases outbreak such as cholera. This has made the community to adjust during the times they are faces with such crisis. During the community mapping it was noted that the settlement has no safe havens, poor drainage systems, high crime, inadequate public spaces and poor waste collection and disposal. Access roads are limited and the few that are in use are in a poor state. Apart from that, public transportation service is also poor owing to the fact that some areas within the same settlement are still not reachable. The community have engaged into ways of mitigating flooding such as unblocking of drainages. ZVAC Rapid Assessment Report (2010) stated that, "In order to cope with floods, the majority of the people of Kanyama constituency bought gumboots to protect their feet as they waded through floodwater. For the water surrounding houses, people used sand bags in order to block water from entering homes. However, this strategy was reported to have worked when floods were not heavy, and when it became impossible to cope, people either relocated as individual families, or the central government through the Disaster Management and Mitigation Unit (DMMU) in conjunction with other stakeholders such as the Red Cross Society of Zambia, UN and volunteers

assisted in relocation of affected people DMMU (2010)." Income levels for the community that is dependent on entrepreneurship can get affected in case of any disruption. Access to basic services such as water and sanitation become key in building resilience for any community. The need to enhance resilience to shocks and stresses is therefore more urgent than ever in Kanyama constituency.

3.0 KANYAMA'S CITYRAP PROCESS

The CityRAP tool process is structured in four phases. For Kanyama, the process was implemented within a period of 16 weeks. Through the process more than 200 people were directly involved. Participation ranged from local government, public institutions, and academia and community representatives to the private sector and media.

Figure 5 Crush Course Participants and Focal Points Training at Grand Palace Hotel

PHASE 1: CRASH COURSE

- 4-days workshop for building the understanding of key concepts of risk and resilience + understanding the tool methodology

PHASE 2: DATA COLLECTION AND ORGANIZATION

- Municipal self-assessment
- Participatory planning (Mapping) at neighbourhood level
- Data compilation and organization

Figure 6 During Community Mapping in Ward 10

PHASE 3: DATA ANALYSIS AND PRIORITIZATION WORKSHOP

- Focus group discussion and prioritisation of issues needing specific attention to build resilience

PHASE 4: PREPARATION, REVIEW AND VALIDATION OF THE RFA

- Drafting and reviewing the Resilience Framework for Action (RFA) by the municipality involving various stakeholders

Phase 1 - Crash course from 13th to 17th May, 2019 which aimed at promoting the understanding of the overall process and the key concepts of resilience and disaster risk management.

The crash course was conducted with the support of a team of experts from UN-Habitat and UNDRR. 40 participants were involved during the four days'

workshop. During the course, presentations, discussions and a range of exercises ensured understanding of the CityRAP process and the underlying concepts. Additionally, 5 focal points from the city council were identified and trained to lead the resilience planning process. The Focal Points were from the City Planning Department and Department of Housing and Social Services.

Phase 2 - Data collection and organization 17th May to 14th June, 2019, this involved the Municipal self-assessment and the community risk mapping. Questionnaires to assess the status of the Kanyama's resilience through the knowledge, opinions and perception of the municipal staff were distributed to the 7 departments of the Council. Questions covered five thematic pillars underlying the concept of resilience which the CityRAP tool refers to: urban governance, urban planning and environment, resilient infrastructure and basic services, urban economy and society and urban disaster risk management. Based on the compilation of the self-assessment of each council department, the focal points summarized the results into 5 matrices for analysis purposes. The goal of analyzing these matrices was to support the identification of areas that need most attention for building resilience. For each area the focal points were also tasked with mapping crucial issues, such as flood prone areas or places of common interest and to produce a risk map for the entire neighbourhood of Kanyama by integrating the information. The community risk mapping was participatory where all stakeholders at community level with interest in Kanyama were involved, community members proposed areas prone to disasters and suggested measure to mitigate them.

Phase 3 -Data analysis and prioritization workshop 20th June, 2019 included the analysis and discussion of results, which led to the identification of key priority issues.

Five focus group discussions were organized, one per thematic pillar. The focus group discussions comprised of stakeholder representatives from the municipality, community, NGOs and relevant government departments. Here, results from the self-assessment matrices were discussed in depth, and a list of identified issues and potential solutions was prepared. This was followed by a full day prioritization workshop where key local stakeholders convened. Based on the focus group discussion results they debated and decided upon the most adequate priorities to build urban resilience.

Six priority issues for Kanyama emerged from the discussion: Solid Waste Management, Public Spaces (High Crime, Drug and Alcohol Abuse), Roads and Drainages, Health, Education and Vocational Training, Water and Sanitation and Early Warning Systems.

Phase 4 – Development and review of the Resilience Framework for Action (RFA) 27th to 31st July, 2019 concludes the CityRAP process.

In this phase, the focal points conducted a baseline assessment per priority issue and analysed all relevant plans and policies at national, city and community level.

A baseline analysis was then conducted for each priority issue. The analysis focused on assessing institutional strength and gaps in relation to the priority issues and ability to reach the RFA objectives. The five components policies and legislation, urban plans, institutional setup, finance and current interventions were looked at during the baseline assessment and analysis.

	POLICIES AND LEGISLATION	URBAN PLANS	INSTITUTIONAL SET-UP	FINANCE	INTERVENTIONS
SOLID WASTE MANAGEMENT	3	1	2	1	1
PUBLIC SPACES (HIGH CRIME, DRUG AND ALCOHOL ABUSE)	3	1	2	1	1
ROADS AND DRAINAGE	3	2	2	1	1
HEALTH, EDUCATION AND VOCATIONAL TRAINING	3	3	3	1	2
WATER AND SANITATION	3	3	2	2	2
EARLY WARNING SYSTEMS	3	2	2	1	1

Figure 7 Results from Baseline Assessment

Areas characterized by lower scores (i.e. circles in figure 3) indicated areas of weakness. Based on the identified areas of weakness, specific goals were identified to specifically tackle the "weaknesses" raised by the matrix. For each goal a specific action, divided into tangible activities, was designed. The RFA was then developed. It defines priority actions that lead the path to enhanced urban resilience and outlines tangible activities and projects in the short, medium and long term. For Kanyama, projects were grouped into two categories, short term and long term.

4.0 RESILIENCE FRAMEWORK FOR ACTION OF KANYAMA SETTLEMENT

4.1 Introduction

The RFA represents the final output of the CityRAP tool implementation and it is a framework for action to enhance resilience of Kanyama settlement. It is result of a participatory process that involved both local authorities and community members and its goal is to provide guidance and support both the City administration and the community to strengthen Kanyama through a 10-years horizon action program. The priority actions are the core structure of the RFA as they sum up the participatory process that has been undertaken to build Kanyama's resilience.

The RFA comprises:

- A list of objectives
- A list of priority actions (Table from 1 to 6)
- A list of activities (Table from 1 to 6)
- A timeline
- An action map

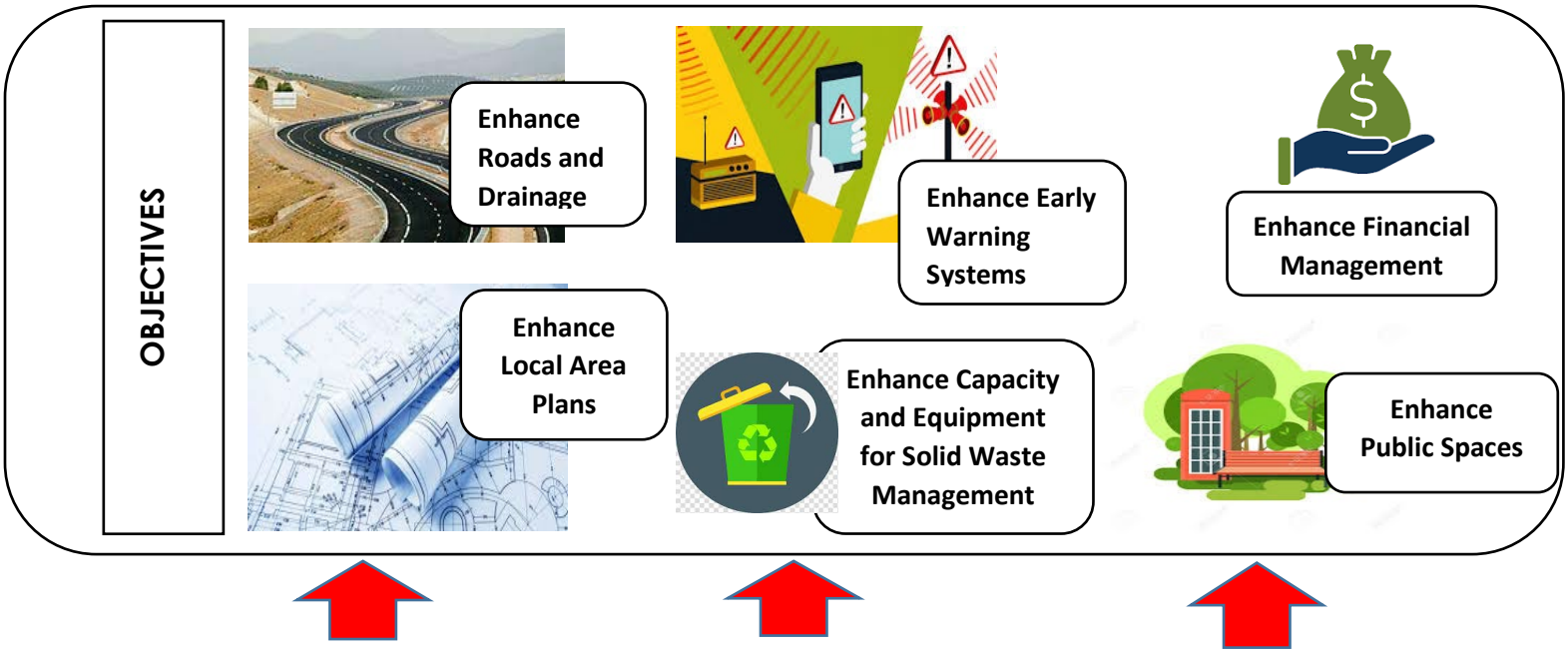
4.2 List of Objectives

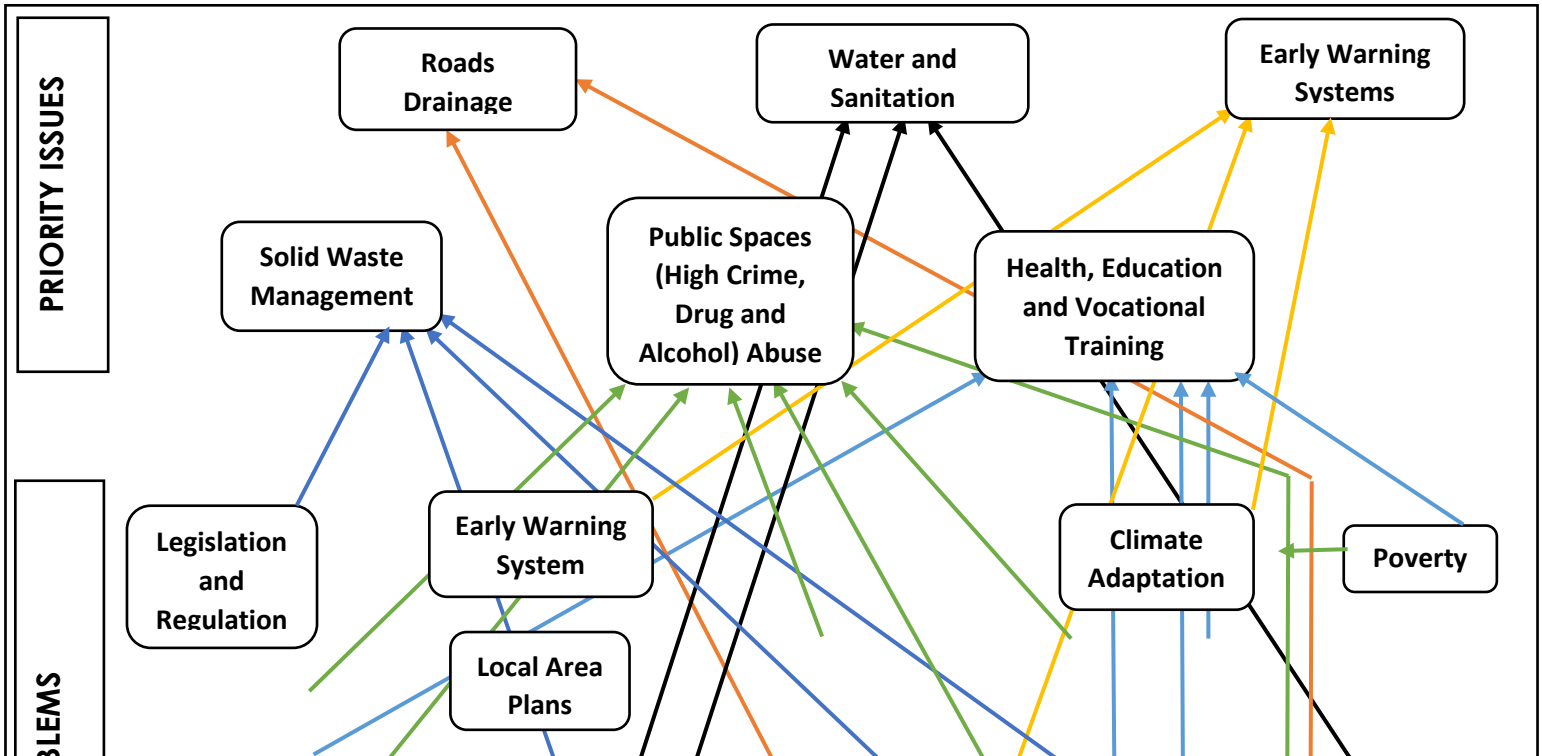
From the baseline assessment above, a set of vulnerabilities were highlighted (circles in Fig). To address such vulnerabilities, a list of six (6) objectives was developed (Fig. 4). Thus, the six (6) objectives of the RFA regard the enhancement of local area plans, access roads, drainage systems, crime/alcohol abuse public spaces as well as the capacity and equipment for solid waste management

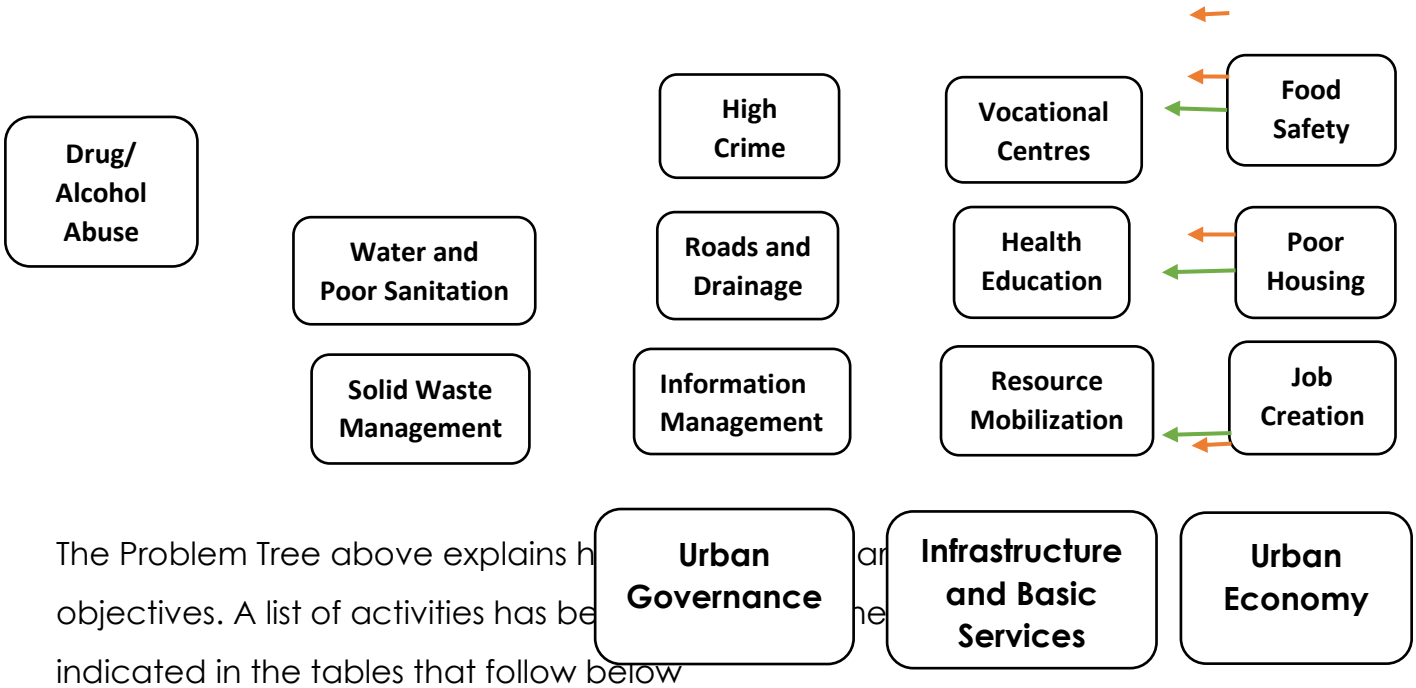
4.3 List of Priority Actions

During phase 4 of the CityRAP tool a set of 6 priority actions, one for each objective, was formulated. Tables from 1 to 6 present the six actions, detailed in terms of activities and responsibilities for the implementation. List of activities all actions presented in the tables (from 1 to 6) were broken down into sets of activities, to facilitate the implementation of the RFA. Background information on each priority action has been gathered to give a synopsis on the current situation on all actions identified in the RFA.

Figure 8 List of Objectives and Problem Tree







The Problem Tree above explains h ar objectives. A list of activities has be he indicated in the tables that follow below

4.3.1 Priority Action 1: Solid Waste Management

Develop and implement an innovative solid waste management strategy tailored to Kanyama, that enhances existing legislation, and is well coordinated and eco-friendly

Background of the Current situation

Solid waste management is a critical issue for the city of Lusaka and Kanyama constituency. Kanyama constituency is an informal settlement that has rapidly increased over the past years. Unplanned squatter settlements which are expanding faster accounts for 70% of the city's population. About 10% of the Lusaka's land area is occupied by informal settlements. This has given rise to a complex of development challenges which include indiscriminate solid waste disposal emanating from a range of factors. According to a report done by the University of Zambia, Department of Geography & Environmental Studies, Centre for Urban Research and Planning (CURP) as of 2017, the Lusaka City Council (LCC) indicates that the City of Lusaka generates approximately a million tons of waste annually and only about 30-40% of that is collected and taken to the dumpsite. When compared to waste management practices,

successes and pitfalls in the region, the City of Lusaka has a waste management crisis. Reliance on inappropriate technology that does not support efficient service delivery in a city that is largely informal with many areas being inaccessible due to settlement form that has many structures with no direct access by a proper road. Thus, the infrastructure and physical planning challenges are compounding the waste management issue in the city. Another major problem impacting waste management in Lusaka is uncoordinated and poorly organized institutional arrangements dealing with waste management in the city. While the mandate to manage solid waste falls on Lusaka City, the lack of autonomy in the Waste Management Unit at Lusaka City Council leaves more to be desired in the management of solid waste

Kanyama is one of the oldest settlements in Lusaka that has experienced flooding due to sporadic infrastructure and inadequate solid waste management measures put in place.

It appears that service delivery, city planning and urban design regulations and approaches do not engage critically with the changing urban environment that comes as a result of urban migration. With increasing population in these settlements, capacity for the community based enterprise (CBEs) collecting waste in the community has not matched with this increase. This situation has a direct bearing on livelihood and healthcare systems. The inadequate municipal service of waste collection and disposal that is provided by the CBEs has potential to result in the outbreak of water and sanitation related disease, damage and or disruptions in livelihood systems and cause increased suffering and deaths in the community. The concern of the community is the lack of coordinated and appropriate measures meant to reduce solid waste through preventative and socio-economically suitable responses. The other concern has been the need to have resilient infrastructure to deal with the issue of indiscriminate waste disposal and zero waste, encourage recycling, increase capacity of CBEs, incentivize solid waste management competition as well as regulate solid waste through a multi

stakeholder approach in the entire value chain. Response available has not considered the strategic role of communities to mitigate and adapt to the changing environments and how state and non-governmental actors could play a complementary role. Throughout the components of the RFA, the issue of solid waste management came out as one of the priorities that needed to be addressed in order to attain city resilience. The policies and regulations available on solid waste management are sufficient, what is lacking is enforcement and full implementation. Waste management in informal settlements present a myriad of challenges ranging from low subscription levels, lack of infrastructure to allow for easy accessibility and to sort the waste properly and Lack of financial capacity for CBEs to expand their businesses.

Internally, there are operational challenges affecting efficient management of solid waste in the city that range from political influences to institutional incapacities. The solid waste management Unit needs 'freedom' to operate and deliver results for the public. There still no clear mechanism in the City to ensure constituency in building a robust Solid Waste Management Unit (SWM) as the policies and regulations have not been localized to the City space, hence, implementation remains actualized. Chibinda (2016) in a study on 'Municipal Solid Waste in a Circular Economy Perspective: a case study of Lusaka', found incoherencies between polices and institutional organization, which in part were also explained by waste management policies that mainly focus on the public health dimension of waste management.

Definition of Priority Action and its Activities

The Table below describes the priority action on solid waste management as discussed during the RFA Process. Activities identified as per action are described below.

Table 1 Solid Waste Management

OBJECTIVE: ENHANCING SOLID WASTE MANAGEMENT		
ACTION 1:	**ACTIVITY:**	**RESPONSIBLE:**
To develop and implement an innovative solid waste management strategy tailored to Kanyama, that enhances existing legislation and is well coordinated and eco-friendly.	**ACTIVITY 1.1** Develop and implement an innovative solid waste management strategy that ensures an effective value chain and creates jobs	A selected team (Technical working group) within the department of public health, housing and city Planning
	ACTIVITY 1.2 Awareness in existing legislation	
	ACTIVITY 1.3 Awareness on impacts of littering in drainage systems and on the five (5) Rs	
	ACTIVITY 1.4 Engage stakeholders such as CBEs, community members to have an effective waste management system	
	ACTIVITY 1.5 Ensure CBEs employ a data base for all residents/ households in their catchment areas	
	ACTIVITY 1.6 Introduce a small levy on street vendors	
	ACTIVITY 1.7 Enhance community understanding on solid waste management legislation in order to improve compliance.	Technical working group
	ACTIVITY 1.8 Enhance coordination of solid waste management players and encourages ecofriendly innovations and mechanisms both at community and institution level such as recycling, reducing, re using and separation at source.	public health department-solid waste management unit
	A**CTIVITY 1.9**Develop a monitoring system of the CBEs in Kanyama to ensure effective collection, transportation and disposal of solid waste to designated areas.	Technical working group
	ACTIVITY 1.10 Set up waste bays in different zones for easy collection of waste by the CBEs	
	ACTIVITY 1.11 Establish public composting facilities in Markets and Community gardens	
	ACTIVITY:1.12 Set up a commercial waste management company that will only be focused on waste management	

4.3.2 Priority Action 2: Local Area Plan

Develop an integrated local area plan for Kanyama reflecting the priority issues highlighted: solid waste management, public space, high crime and substance abuse, roads and drainage and Early Warning System

Background of the Current Situation

The Ministry of Local Government and the local Authority have been advocating for squatter upgrading and lobbying for urban renewal. At national level a technical team has been set up to help promote greener settlements through urban renewal and upgrading through the creation of local Area plans. LCC in its strategic Plan has proposed slum upgrading in which new local area plans will be produced from 2019-2021. The participatory process of the CityRAP revealed that the solution to most of the urban challenges experienced in Kanyama could be resolved through an integrated local area plan that highlights the priority issues. Solid Waste management is not provided for in the Lusaka city master plan, however green open space for parks and recreation areas were planned for in the Lusaka land use 2030 plan. Despite the provision of green public spaces in the Lusaka comprehensive urban master Plan, very little is being done to implement them

Definition of the Priority Action and its Activities

The Table below describes the priority action on Integrated Local Area Plan as discussed during the RFA Process that the Local Area Plan would resolve most of the challenges causing stresses in Kanyama. Activities identified as per action are described below.

Table 2 Local Area Plan

OBJECTIVE: DEVELOP AN INTEGRATED LOCAL AREA PLAN		
ACTION 2	**ACTIVITY**	**RESPONSIBLE**
Develop an integrated local area plan for Kanyama reflecting the priority issues highlighted: solid waste management, public space, high crime and substance abuse, roads and drainage and Early Warning System.	**ACTIVITY 2.1**: A planning survey is conducted for Kanyama and a survey report prepared with respect to the priority issues identified for Kanyama	Department of City Planning and Housing
	ACTIVITY 2.2: A public and stakeholder consultation process is conducted for the formulation of the Local Area Plan for Kanyama	Department of City Planning and Housing
	ACTIVITY 2.3: Development framework addressing land use, environmental protection and other related social and economic development projects and policies is developed for Kanyama.	Department of City Planning and Housing
	ACTIVITY 2.4: An implementation programme for the Kanyama Local Area Plan is developed depicting a comprehensive financial plan and a proposal for monitoring and review of the plan including key performance indicator	Department of City Planning and Housing
	ACTIVITY 2.5: Drafting, Validation and Adoption of the local area plan for Kanyama	
	ACTIVITY 2.6 Review and update of the local area plan (every three years)	
	ACTIVITY 2.7 Participatory monitoring (quarterly) and evaluation of the local area plan after every two years	Department of City Planning and Housing

4.3.3 Priority Action 3: Safe public spaces (High crime, drug and alcohol abuse)

Set up and strengthening of the institutional framework for the effective management of crime at community level and through improved public spaces.

Background of the Current Situation

Public spaces are created and maintained for citizens. They are owned by the public, serve the public good and promote social cohesion, by definition they are accessible to all citizens, regards of their income and personal circumstances

Safety, particularly safety in public spaces, is an essential ingredient for the creation of liveable and prosperous cities: urban spaces and facilities need to be designed and managed in a way that makes citizens feel safe from violence and crime.

Public spaces are where people meet and interact; socialize and discover common passions; and where they affirm their shared rights to the city. In a people-centred city public space is central to the notion of a liveable and human environment. The space can become the ideal platform for building a sense of community and to move on to even more ambitious collective goals.

Public space can promote democratic values and any city or town needs to offer a substantive and accessible amount of quality public space, and accessible amenities that are useful its inhabitants. Public spaces however should not be restricted to roads, shopping malls and market places, it should include spaces designed and left for interaction within neighborhoods. This in turn can create a powerful instrument of social inclusion. People's mobility, quality of life, their participation in public life and in sustainable development greatly depends on the safety of public spaces.

Today, spatial policies rarely consider unplanned settlements as this is often overtaken by the overcrowding and the constant fight for space to construct affordable shelter. The so-called 'public space deficit' particularly affects peripheral lower income neighborhoods and especially informal settlements.

During the assessment and focus group discussions, it was clear that Kanyama needs physical spaces for citizens and communities to interact. There has generally been a lack of provision for such spaces where individuals can mingle to share different skills and engage in different sports. Over the last twenty years of democracy, many parks and other public spaces have fallen into disarray or are simply not accounted for. This is often both a result of and reason for a general perception that open public spaces are unsafe. There is a direct relation between safety and public space. Upgrading and increasing the quantity and quality of existing public open spaces can help improve urban safety. The goal is to enhance safety in public spaces as a way to reclaim public spaces and therefore resolve the impediments to people's movement.

Definition of the Priority Action and its Activities

According to the UN-Habitat public spaces are "a vital ingredient of successful cities" and the places in a city that build a sense of community, culture, social capital, and community revitalisation. Public spaces create liveable communities and facilitate the enjoyment of the higher-density neighbourhoods typically found in cities.

They play a key role in achieving safe, inclusive, resilient, and sustainable cities and have been identified as a specific target under SDG 11 and identified as Target 11.7 which has a defined objective: By 2030, provide universal access to safe, inclusive and accessible, green and public spaces, in particular for women and children, older persons and persons with disabilities

.

The Table below describes the priority action on public space (high crime, drug and alcohol abuse) as discussed during the RFA Process that public spaces should include recreational spaces and safeguard the public against sexual abuse and gender based violence (GBV). Public spaces should be safe for all. Activities identified as per action are described below.

Table 3 Public Spaces

OBJECTIVE: IMPROVE AND ENHANCE PUBLIC SPACES		
ACTION 3	**ACTIVITY**	**RESPONSIBLE**
Set up and strengthening of the institutional framework for the effective management of crime at community level and through improved public spaces.	**ACTIVITY 3.1**: Create safe public spaces and recreational facilities	Department of City Planning and Housing
	ACTIVITY 3.2: Rehabilitation of existing public spaces and recreational facilities	Department of City Planning ,Housing and Engineering
	ACTIVITY 3.3: To provide a platform for community engagement on crime and substance abuse prevention focusing more on the youth/ adolescents	Department of Housing , PHD , ZP, Drug Enforcement, MCDSS (Set up a TWG with all key departments)
	ACTIVITY 3.4: Strengthen the institutional framework for addressing crime and substance abuse	
	ACTIVITY 3.5 Construction of markets to promote income generation among the community	
	ACTIVITY 3.6 Formation of in WDC committee focusing on sports and public spaces	
	ACTIVITY 3.7 Identify and register public spaces and fence them for protection	
	ACTIVITY 3.8 Set up police booths in play parks	
	ACTIVITY 3.9 Establishment of youth friendly corners and neighbourhood watch groups	
	ACTIVITY 3.10 Construction of public entertainments centres and skills and vocational training centers	TWG on crime and substance abuse

4.3.4 Priority Action 4: Roads and drainage

Identification and operationalization of effective financing mechanisms for construction and maintenance of local roads and drainages.

Background of the Current Situation

Infrastructure development is a critical element in the process of improving the quality of life of the citizenry of any developing or developed City. The high increase in the population of the City of Lusaka owing to various factors such as migration and urbanization demand that there is sufficient infrastructure to support this growth in population. According to the Ministry of National Development Planning in the Seventh National Development plan "Inadequate levels and low quality of infrastructure development lead to low economic activity and high production costs which result in low competitiveness. Critical infrastructure, such as housing, electricity, feeder roads, rail, air and water transport and water supply and sanitation has not been adequate to facilitate the desired levels of economic transformation and leverage private investment".

The Lusaka City Council strategic plan of 2015 noted that there's a need to construct roads and drainages in unplanned settlement as a means of mitigating the challenge of floods and easier access to other parts of the City. According to JICA/LCC (2009) "there is a clear linkage between unplanned and un-serviced peri-urban settlements, the natural exposure to flood hazards. This is particularly true for the urban poor who are highly exposed to this type of hazard. This is attributable to a number of development issues which include:

- A fragile formal industrial sector and increasing urban poor
- Uncontrolled development and urban sprawl
- A poor urban living environment
- Increasing demand on limited urban infrastructure and social services (MLGH/LCC/JICA, 2009).

Majority of the settlements in Kanyama Constituency is unplanned. Hence, a well laid out schematic or transportation plan was never developed for the area (excluding the small holding agricultural area). This has led to difficulties in accessing particular areas of the constituency and has had a direct impact on the flow of storm water leading to floods. Though a number of access roads and drainages have been upgraded over the last 10 years by the Government through the local council and the Road Development Agency, issues of a properly functional and inclusive transportation system are yet to be resolved and flooding is still a major and seasonal occurrence in the constituency. Some of the development issues identified above are as a result of the current urban management capacity, including development control, land management, implementation capability and basic administrative capacity. Challenges do exist for local authorities, especially when their mandate is limited by policy issues. It is also necessary to strengthen the institutional capacity of LCC to discharge its functions in land development and public service delivery.

Definition of the Priority Action and its Activities

The Table below describes the priority action on roads and drainage as discussed during the RFA Process that roads and drains should be climate resilient. Activities identified as per action are described below.

Table 4 Roads and Drainage

OBJECTIVE: ENHANCE ROADS AND DRAINAGE		
ACTION 4:	**ACTIVITY:**	**RESPONSIBLE:**
Identification and operationalization of effective financing mechanisms for construction and maintenance of local roads and drainages.	**ACTIVITY 4.1**: Construct and upgrade roads and drainage to be climate friendly, accessible and functional for Kanyama and open up the community to the rest of the city. **Roads for upgrade:** Chibolya Police Road, Chipolopolo Road, Kampasa Road, Chishala Road, Eclipse Road, Chimupondo Road, Bapanapana Road, Chanda Castle Road, Lavaniah Road and Garden House Road	Department of City Planning and Engineering
	ACTIVITY 4.2: Improve existing drains to make them more climate friendly and resilient	Department of City Planning and Engineering
	ACTIVITY 4.3: public awareness and ownership is created for maintenance of drains in Kanyama	Department of Housing and public Health
	ACTIVITY 4.4:Upgrading of major roads and construction of storm drains	
	ACTIVITY 4.5 Create a platform for engagement of the private sector to participate in Public, Private Partnerships in roads and drainage maintenance and construction projects	
	ACTIVITY 4.6 Conduct a feasibility study for both drainage and road upgrade considering the terms of the DRM	
	ACTIVITY 4.7 Stock taking of Government plans for road upgrading	
	ACTIVITY 4.8 Ensure accessibility and evacuation options in times of disaster	
	ACTIVITY 4.9 Identify and open up roads in areas of improvement	Department of City Planning and Engineering

4.3.5 Priority Action 5: Early Warning System

Establish a decentralized Early Warning System in Kanyama and build capacity at the institutional and community level for its effective operationalization

Background of Current Situation

Zambia has been experiencing adverse impacts of climate change - including an increase in frequency and severity of seasonal droughts, occasional dry spells, and increased temperatures in valleys, flash floods and changes in the growing season (Zambia baseline Assessment Summary 2019).

Zambia has been negatively affected mainly by extreme floods that occurred during the heavy rainy seasons. These natural hazards have impacted its infrastructure, such as the telecommunications, roads, schools, homes, agriculture, water, sanitation and the health of the local population. Informal settlements have not been spared due to their nature. The first floods documented caused widespread damage and destruction were experienced in 1977 and 1989. In fact it is documented that the 1989 floods left 50,000 people homeless in Lusaka. Settlements like Kanyama which was also badly affected by the flood disaster of 1977 is prone to floods again and again each year.

The disaster management and mitigation unit is responsible for Early Warning Systems at national level while at district level the District Disaster Risk Management Committees were in charge of handling the Early warning systems. Other departments working with the institution were the local authority, Ministry of Health, Water Affairs, Ministry of Education, Forestry Department and Ministry of Infrastructure Development and the District Disaster Management Coordination Committee. Level of capacity of the stakeholders was rated to be high during the municipal self-assessment done in phase 2 of CityRAP. Civil Society organizations dealing with the priority issue

at community level included at this level: Food Agriculture Organization, UNICEF, UNDP-Climate Change, World Vision, Red Cross, European Union and SADC. There is a structure at national level for dealing with early warning system and at community level there was need to enhance contingency plans on early warning system: decentralizing the institution to service the community level in an urban setting.

For Kanyama constituency, the municipal assessment and the community mapping both revealed that disaster management and mitigation unit structures has not decentralized up to community level in order to improve and enhance early warning monitoring systems and tracking. I.e. the Satellite Disaster Managements Committees stated in the Disaster Management Act were not fully functional in the urban setting. The assessment also reviewed that there was insufficient technical, equipment and financial capacity to adequately deliver early warning system to the community level. This in turn affects the effectiveness of preparedness, risk knowledge, hazard monitoring and warning communication to be done.

Early Warning System at Community Level

To enhance the resilience, communities have different coping mechanisms to disasters depending on the re occurrence. For Kanyama constituency, the community mapping indicated that from the time they started experiencing flooding for example, they have used schools, community structures, churches to communicate messages on early warning. They have unblocked drains and put sand bags to protect their structures. This is evident that they have coping mechanisms in place which should be enhanced.

Definition of the Priority Action and its Activities

The Table below describes the priority action on Early Warning Systems as discussed during the RFA Process that there is no link of early warning at community and National level. Functions of Metrological Department in terms

of ESW, capacity needs to be supported, enhance coordination of disaster reduction and preparedness. Informal settlements need to be counted as part of the city in terms of early warning preparedness. Activities identified as per action are described below.

OBJECTIVE: Early Warning System		
ACTION 5:	**ACTIVITY:**	**RESPONSIBLE:**
Establish a decentralized Early Warning System in Kanyama and build capacity at the institutional and community level for its effective operationalization	**ACTIVITY 5.1**: An Early Warning System that is compatible with the city and national-level systems is specially designed for Kanyama, drawing on local knowledge and innovation, and is established in the neighborhood, including communications and transport elements.	DMMU to set up a technical working group including key departments that will oversee the setting up of the system especially designed for Kanyama
	ACTIVITY 5.2: Establish and train community structures to coordinate the issues of early warning systems and disaster risk management to promote decentralization	LCC - mayor's office
	ACTIVITY 5.3: Institutional structures to support the functioning of the EWS are established and/ or strengthened, and key staff are trained on how to use the system.	LCC_ department of housing and administration
	ACTIVITY 5.4: Training and resources are provided to first responders on using the EWS, including police, fire department, neighborhood watch, teachers, health workers, including religious leaders	DMMU, Department of Housing and city planning
	ACTIVITY 5.5: The Kanyama community is aware of the EWS, understands the different warning messages and know what appropriate actions to take.	LCC-Department of Housing , Community Development and Social Services, Planning and Public Health
	ACTIVITY 5.6 Periodic testing of water quality on all water sources utilization remote sensing and GIS techniques	
	ACTIVITY 5.7 Build institutional capacity on early warning systems through human resource training and procurement of equipment and tools for EWS	
	ACTIVITY 5.8 Develop a suitable communication system in relation to EWS (SMSs, radio, mobile phones, television adverts and PA systems.	

ACITIVY 5.9 Set up and establish safe havens in designated areas in all the three wards in Kanyama	
ACTIVITY 5.10 Establish and train rescue teams in times of disaster	

4.3.6 Priority Action 6: Sustainable financing

Enhancing capacity for effective financing mechanisms and management promoting city resilience.

Background on Current Situation

Sustainable finance refers to any form of financial service integrating environmental, social and governance criteria into the business or investment decisions for the lasting benefit of both clients and society at large.

Enhancing capacity for effective financing mechanisms and management promoting city resilience requires that both the municipality and the community understand their capabilities. Also establishing the gap that exists in managing sustainable projects that enhances city resilience. What has worked and what has not worked in the past. Why do we keep experiencing these shocks despite having invested in provision of basic services? Enhancing sustainable financing as a whole, contributes to sustainable development and value creation in economic, environmental and social terms. In other words, one that ensures and improves economic efficiency, prosperity, and economic competitiveness both today and in the long-term, while contributing to protecting and restoring ecological systems, and enhancing cultural diversity and social well-being. This could include, to name just a few, sustainable funds, green bonds, impact investing, microfinance, active ownership, credits for sustainable projects.

Both the community mapping and municipal assessment indicated that financing was a priority issue that needed to be addresses. The baseline

assessment indicated that the problem enhancing capacity on sustainable financing could resolve many of the identified issues in the problem tree.

Definition of the Priority Action and its Activities

The Table below describes the priority action on Sustainable Financial Management as discussed during the RFA Process that sustainable financing mechanisms are key in project implementation especially in urban planning. Activities identified as per action are described below.

Table 6 Financial Management

OBJECTIVE: ENHANCING FINANCIAL MANAGEMENT		
ACTION 6:	**ACTIVITY:**	**RESPONSIBLE:**
Enhancing capacity for effective financing mechanisms and management promoting city resilience.	**ACTIVITY 6.1**: enhanced institutional financial management capacity for promotion of resilience for all priority issues identified in the RFA.	Department of finance
	ACTIVITY 6.2: Elaborate a resource mobilization strategy with clear priorities based on the RFA	Department of City Planning and Housing
	ACTIVITY 6.3: Enhance Capacity for Internal audits	Department of administration
	ACTIVITY 6.4: Strengthen financial reporting systems	Department of administration, planning, public health and community development and services
	ACTIVITY 6.5: Community sensitization of importance of payment of tax and subscriptions for utilities and services	

5.0 TIMELINE

The RFA represents a 10-years horizon action program. The timeline (Table 7) presents six objectives of the RFA and related actions organized by priority and time needed for implementation. The priority of actions were determined though the baseline assessment (Table 7): the lowest the score from the baseline assessment for that specific priority issue and component, the highest the priority. Priority is expressed in a scale from 0 to 3, where 0 represent the highest priority for action. Concerning the time required, during phase 4, all actions were categorized into: short term, medium term and long term actions. Short term actions take around 1-2 years to be accomplished and long-term actions take more than 5 years.

Table 7 Action Plan

S/N	OBJECTIVE	ACTION	Priority 1 Short term (1-2)Years	Priority 2 Medium term (2-5)Years	Priority 3 Long term (5-10)Years
1	ENHANCING SOLID WASTE MANAGEMENT	To develop and implement an innovative solid waste management strategy tailored to Kanyama, that enhances existing legislation and is well coordinated and eco-friendly.			
2	DEVELOP AN INTEGRATED LOCAL AREA PLAN	Develop an integrated local area plan for Kanyama reflecting the priority issues			
3	IMPROVE AND ENHANCE PUBLIC SPACES	Set up and strengthening of the institutional framework for the effective management of crime at community level and through improved public spaces.			
4	ENHANCE ROADS AND DRAINAGE	Identification and operationalization of effective financing mechanisms for construction and maintenance of local roads and drainages.			
5	EARLY WARNING SYSTEMS	Establish a decentralized Early Warning System in Kanyama and build capacity at the institutional and community level for its effective operationalization			
6	ENHANCING FINANCIAL MANAGEMENT	Enhancing capacity for effective financing mechanisms and management promoting city resilience.			

LEGEND

SHORT TERM (**1-2 Years**)

LONG TERM (**> 5 -10 Years**)

MID TERM (**2-5 Years**)

6.0 ACTION MAP

The action map represents those actions implying a physical Intervention or an intervention that can be spatially localized. More specifically, such actions concern the plans and physical Interventions. Thus, this map shows which areas should be particularly considered when approaching actions

Insert Map indicating spatial location for action 1, 2, 3 4 and 5

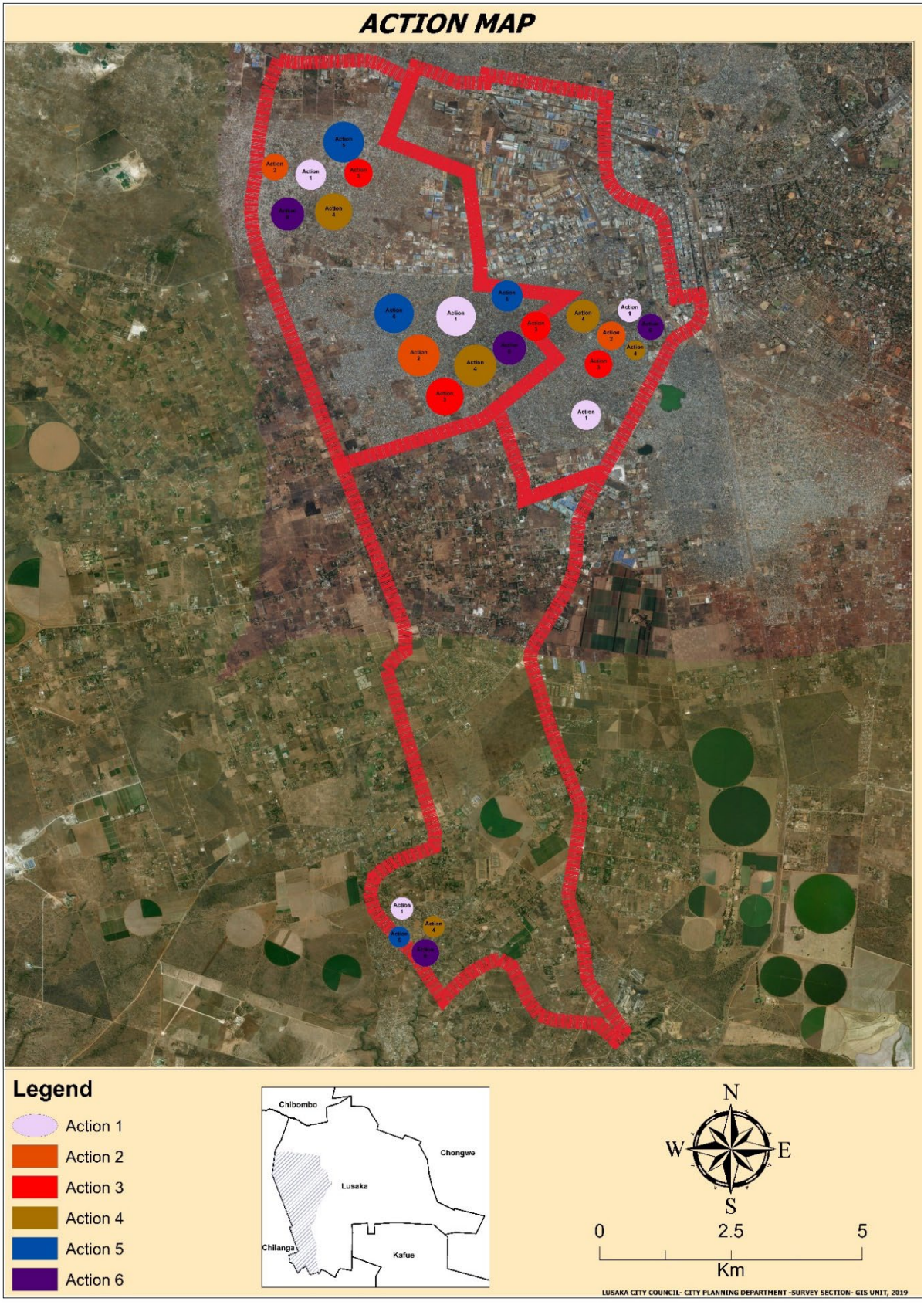


Figure 9 Action Map for Kanyama Constituency

7.0 MONITORING AND EVALUATION MECHANISM

Monitoring and Evaluation framework for the actions identified during the RFA will be developed according to each of the priority issues. This is intended to provide a robust and effective mechanism through which the progress and implementation of the RFA activities development in each concept note are going to be assessed. Capacity building of the community to co- monitor the progress of the identified actions. External evaluation will be part of the process to review and document lessons learnt in each of the priority issue in the RFA.

8.0 CONCLUSION AND WAY FORWARD

City resilience is generally threatened by lack of data and information that is collected in a participatory way to include those that are highly at risk. Involving the neighborhoods to be part of the solutions makes communities adapt and transform in the face of challenges experienced. Building resilience for neighborhoods requires looking at it holistically, understanding the makeup of the neighborhoods and the interdependency and risks they face. Kanyama constituency faces chronic stresses which include high unemployment, inefficient public transport systems, violence, and chronic food and water shortages. Acute shocks such as floods and disease outbreak have been experienced year in and out.

The municipal and baseline assessment conducted revealed that the lack of technical and financial capacity hinder city resilience.

In response to these gaps, the CityRAP tool reinforces capacity and transfers skills to municipal technicians through trainings, on-the-job exercises and group activities. It leverages local knowledge and information to kick start processes. Additionally, key gaps for future action are identified through the RFA. Last but not least, the RFA can be a powerful tool to mobilize and channel resources. Less than three months of work lead to tangible results in the development of the RFA for Kanyama. The development and validation of the RFA and mainstreamed knowledge and awareness about the resilience concept among the community and the Local Authority. The RFA represents a milestone in the prospect of urban resilience and, more in particular, regarding urban planning in the city of Lusaka. It is a promising start more than a simple goal, for both Kanyama and the entire city. The way forward lies in implementing the RFA. For Kanyama, there is need to transform the framework into action and, to pursue this purpose, concept notes have been drafted and this is a promising step forward towards urban resilience for the entire city.

9.0 BIBLIOGRAPHY

1. Japan International Cooperation Agency (JICA). 2009. Comprehensive Urban Development Plan Lusaka Final Summary Report.
2. Lusaka City Council Strategic Plan (2017-2021). Lusaka City Council, Lusaka.
3. Mulwanda P. M (1989) "Squatter nightmare: The Political Economy of Disaster and Disaster Response in Zambia". Disaster, Vol. 13, No. 4, Pages 345-350.
4. Disaster Risk Reduction Strategy for Lusaka City Zambia Vulnerability Assessment Committee (ZVAC) Strategic Plan (2014-2018). ZVAC/DMMU, Lusaka.
5. Lusaka Citywide Slum Upgrading and Prevention Strategy (2016). Lusaka City Council, Lusaka.
6. Seventh National Development Plan (2017). Ministry of Development Planning, Lusaka.
7. Mwalukanga, B. Dr Siame, G. Scott, D. Wolski, P. Kavonic, J., Ilunga, R. (2017). Report on Lusaka City Dialogue 1: *Lusaka Water Resources and Climate Change*. Lusaka, Zambia.
8. Census of Housing and Population (2010). National Analytical Report. Lusaka: Central Statistical Office
9. Chisola, O. (2012) *Vulnerability Reduction and building Resilience to Floods: Case study of Lusaka.* Submitted in partial fulfilment of the requirements for the Masters Disaster Risk Management in the Disaster Management Training and Education Centre for Africa. University of the Free State