

Factors undermining Sustainable water Coverage in Low –Income Settlement in Nairobi; A Case Study of Kibera Informal Settlement

ASSA 2023 Conference



By: Kent Alwaka Mukoya & Beldina Owade



Presentation Outline

1. Introduction and Background
2. Water Sector in Kenya
 - 2.1 Evolution of water sector
 - 2.2 Legal and institutional framework
 - 2.3 Overview of Nairobi City Water & Sewerage Company
3. Research Objective, Questions and Methods
4. Findings and Analysis
5. Conclusion
6. Recommendations



Introduction

- Access to fresh water was one of the key determinants that influenced human settlement.
- Over time, the relationship between human settlement and fresh water bodies has significantly changed.
- Technology has made it possible to purify and convey water through piped agility



Introduction

“Safe drinking water and adequate sanitation are crucial for poverty reduction, crucial for sustainable development, and crucial for achieving any and every one of the Millennium Development Goals” – UN Secretary-General, Ban Ki-moon



- Provision of water services has occupied a prominent position on global development agenda
 - UN water conference of 1977
 - International Drinking water Supply and Sanitation Decade 1981-1990
 - International Conference on water and environment 1992
 - MDG and now the SDG



BACKGROUND

Kenya has constantly evaluated its water sector policy primarily to;

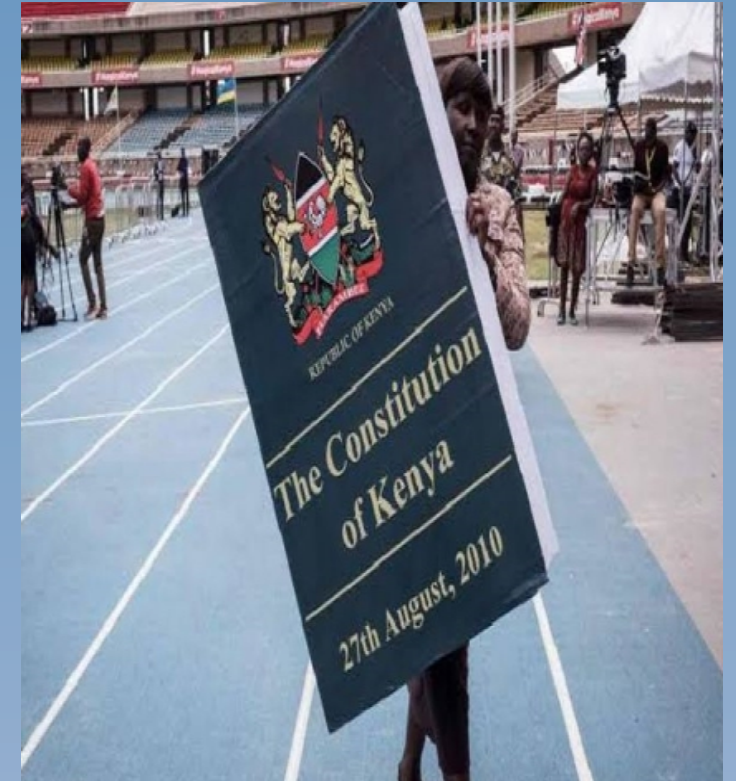
a). To address emerging domestic sector's policy challenges/gaps

b). Ensure the water policy framework resonates with global water sector's aspiration

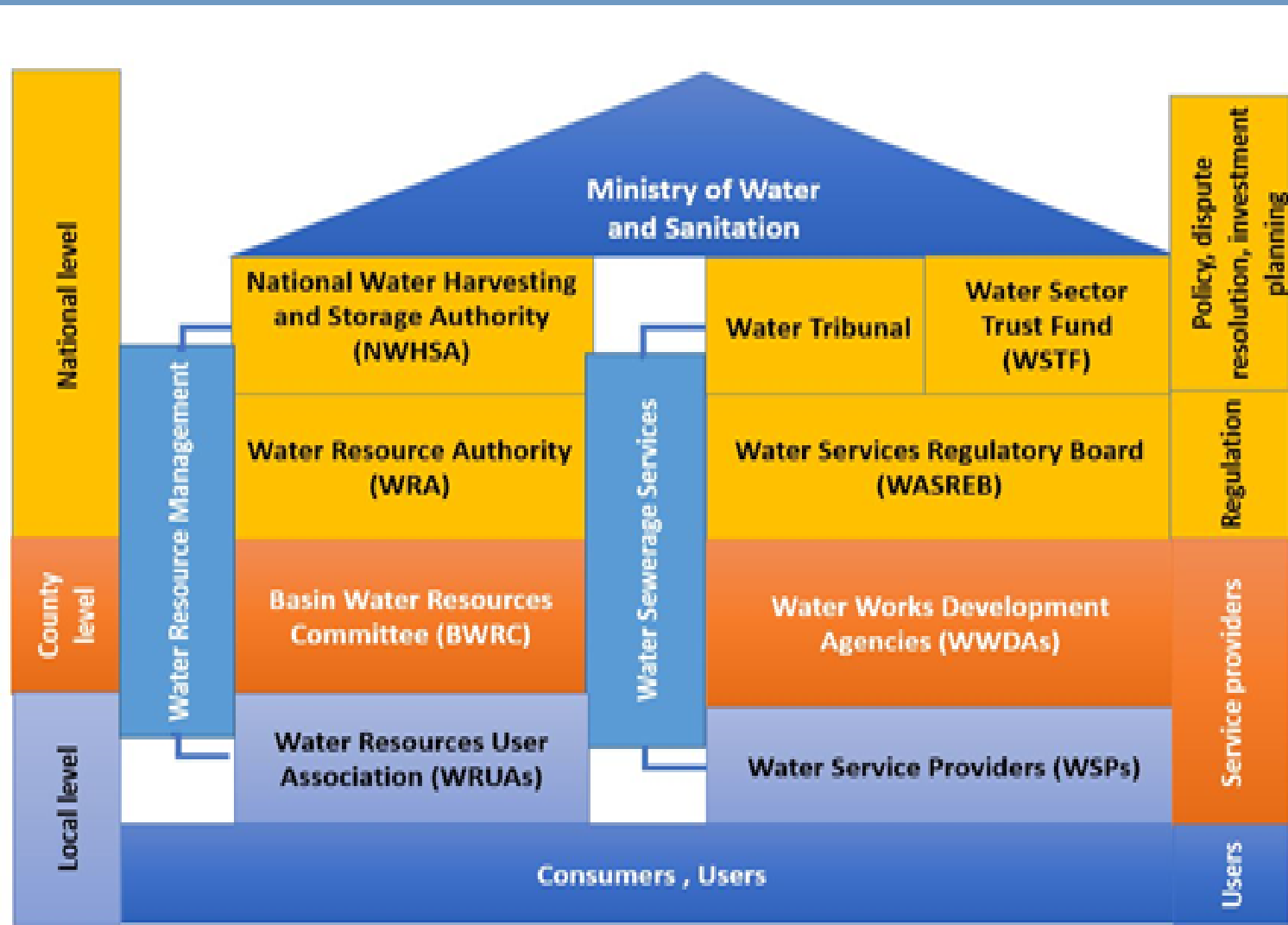


Water Sector in Kenya

- Kenya Water sector has been undergoing a metamorphosis largely to respond emerging global and domestic water obligations,
- Sessional paper No. 10, of 1962(acknowledged water as a social good to be either be provided for free or subsidized)
- Water reforms of 1990's which yielded the water Act 2002
- New Constitutional demands lead to update of water Act 2002 yielding to water Act 2016



Kenya Water Sector Legal and Institutional Framework



- Reforms created distinct institutions each with distinct roles.
- NCWSC, is one of the WSPs

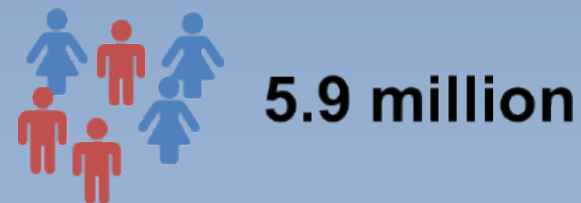


Overview of Nairobi City water & Sewerage Company

- Nairobi City Water and Sewerage Company (NCWSC) is a registered subsidiary wholly owned by Nairobi City County.
- NCWSC's mandate is to provide clean water and sewerage services to the residents in Nairobi County City.

**Population in NCWSC
Service Area as at 2019/20**

**Nairobi City projected population
by 2025/26**



Water demand in 2021/22

Water demand by 2025/26



Demand 790,000 M3/day (Optimal Design Capacity 525,600m3/d)

930,000M3/day

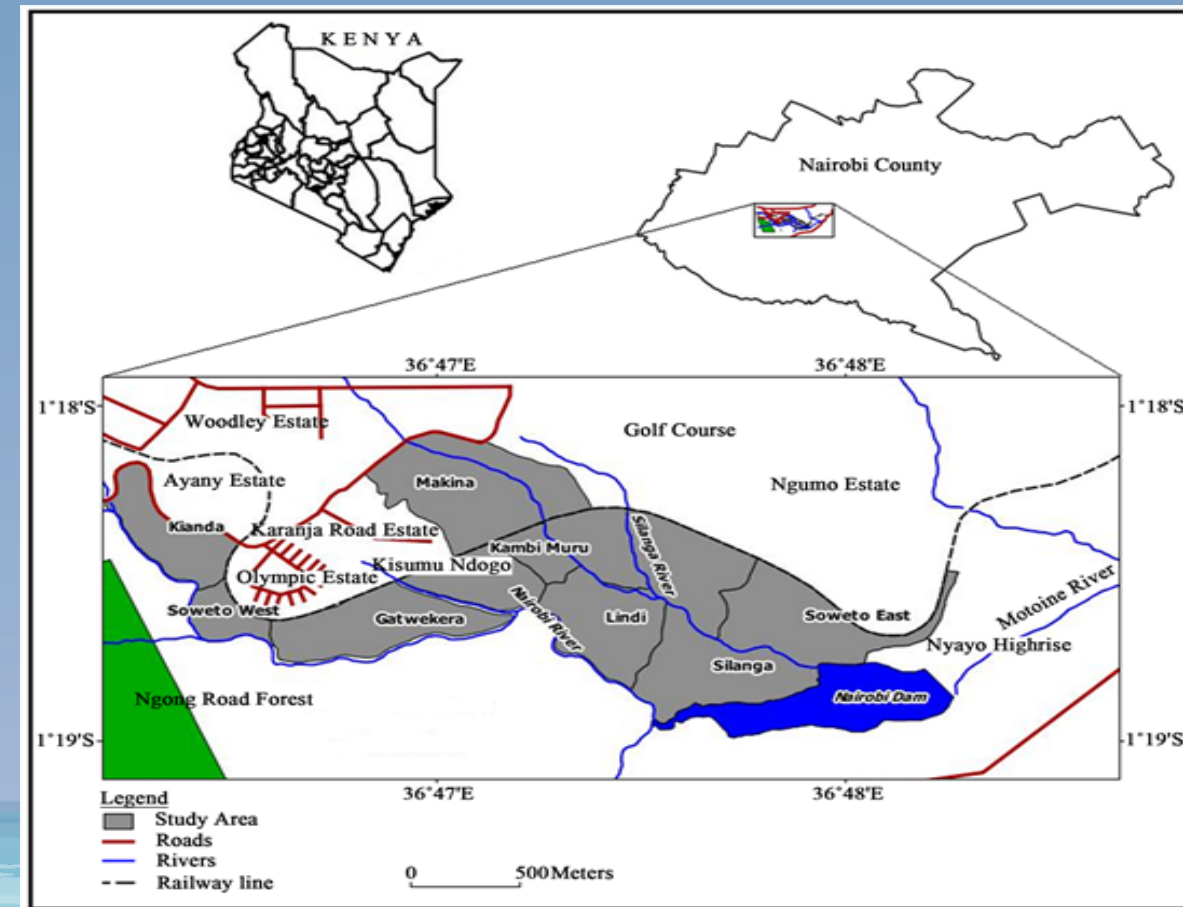
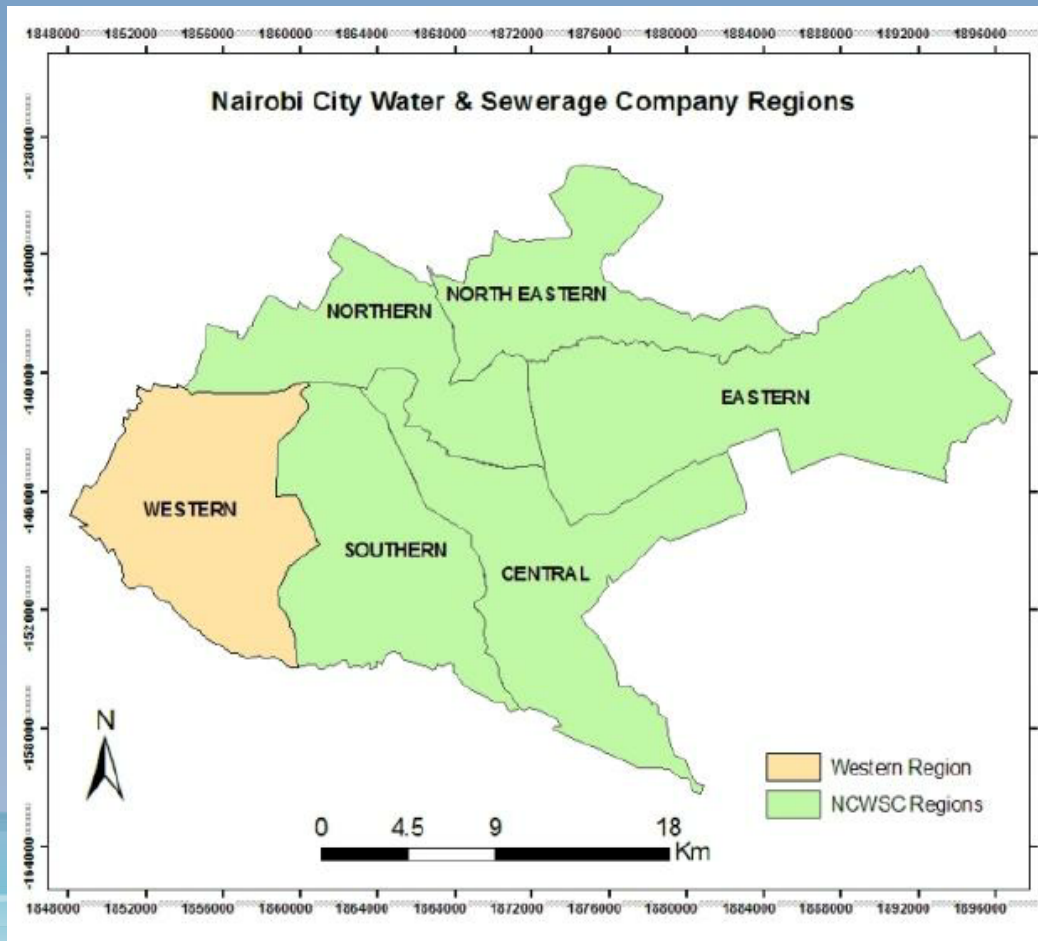


NCWSC Service Area



NCWSC has Seven Administrative Regions,

Kibera Informal Settlement Villages



Problem Statement



Despite efforts to improve water coverage in Kibera Informal Settlement, data indicates water coverage in the Settlement is 31.6% far below the country's water coverage target of 100% by the year 2030



RO1: To describe the current context of Kibera Informal Settlement.

- RQ 1.1: What are the characteristics that qualify Kibera as an Informal settlement?
- RQ 1.2 What is the overall situation regarding public infrastructure in Kibera informal settlement?

RO 2: To identify barriers influencing low water coverage in Kibera Informal settlement.

- RQ2.1: What are the main social barriers that are influencing water coverage in Kibera Informal Settlement?
- RQ2.2: What are the main political barriers that are influencing low water coverage kibera informal settlement?
- RQ2.3: What are the main economic barriers that are influencing low water coverage in Kibera Informal settlement?

Rational of the Study

- Unveil Challenges that impair sustainable water coverage in kibera Informal Settlement.
- Provide inputs as precursor of guiding and enriching water policy development.





Methods of data collection (primary)

	Respondents		No. of interviews (14-16 in total)	Data collection method
1. Nairobi City Water Company officials	Informal settlement Manager		1	Semi –structured interview
	Technical Coordinator		1	
	Zonal Officer		1	
2. CBOs/NGOs involved in water sector and Government officials	Area Administrative Chief		2	Semi – structured interview
	Constituency Fund manager		1	
	Member Of county Assembly	Sarangombe Ward	1	
		Makina Ward	1	
		Line Saba Ward	1	
3.Residents of Kibera Informal Settlement	Selective water consumers		6	Structured Questionnaire
Total			15	



Methods of data collection (secondary)

Sourced from text books, academic and professionally reviewed journal articles and water sector annual reports



Findings and Analysis



Research Question 1

Espouses on UN-habitant definition of Informal Settlement

Findings

- I. No security of tenure of land
- II. Most house units are randomly build
- III. Constructed with tined walls and roofs



Findings and Analysis

- Question 1.1: Provision of Public Infrastructure

Public infrastructure is essential for empowering communities.

Provision of infrastructure such as

1. Road network
2. Public Schools
3. Health facilities
4. Water

Findings

- No Public schools, health facilities and good road network exists
- Water services coverage was not adequate

Findings and Analysis, Social Barriers

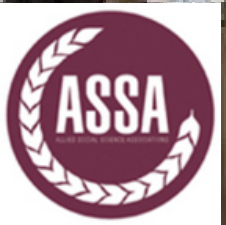


- There exist both formal and informal organizations.
- NCWSC leverages on the formal organizations to expand water coverage through a social connection policy.
- Biased gender representation
- Institutional discrimination
- Population growth
- Flourishing informal organizations (water cartels)

Findings and Analysis, Political Barriers



- Politics revolves on how resources are shared(Harold Lasswell-1936)
- Water legal and regulatory framework are political process
- Two level of government in Kenya
- Water is devolved function
- Water development agenda not sufficiently covered by political class



Findings and Analysis, Economic Barriers



- Production of water is capital intensive
- Global water financial budget estimate is US\$1.7 trillion(Hutton, 2016)
- Kenya annual water budget is estimated to be US\$ 340 million against the actual US\$ 130 million
- Nairobi County had no budget for water development
- NCWSC has budget deficits
- Lack of standard water connections workmanship



Conclusion

- Water Cartels is the major missing link in water coverage
- Political support lacking
- Low water sector budget
- Community involvement in expanded water coverage programmes



Recommendations

- Research based solution to handle water cartels menace
- Evaluate the effectiveness of the social connection policy
- Increase budgetary allocation to water sector
- Create awareness of increased political leadership collaboration between county, parliament and senate



Thanks You

Asante

