



A f R E S
AFRICAN REAL ESTATE SOCIETY



ZIVS

AFRICAN REAL ESTATE SOCIETY (AfRES) 23RD ANNUAL CONFERENCE

Smart Cities in Africa for the 21st Century

Keynote Address on

'A tale of an African Woman'



Suma Mwaitenda QS (T). Arb. (T).

Prologue

Meet Khadija Mulenga , a 35 year old woman from Mpulungu, a village that lies 1,074 kilometers from Lusaka, Zambia and 1,073 kilometers away from the shores of Lake Tanganyika, bordering Tanzania. A near high school dropout.

She had a dream to be a Systems Administrator as her first job – with a diploma in IT she lives alone with her single mother raising her 2 kids in Mpulungu.

Khadija looks forward to success and progression in life, at any means to win.

The best paying jobs are in Lusaka, whilst the nearest bordering country village on the shores of Lake Tanganyika 'Kigoma' has similar situation as Mpulungu, fartherst from the main city and no better paying jobs.

Khadija travels long distance by rough road to access basic ammenities, when she can access tarmaced roads the buses are not as comfortable and hygienic. There is no railways in Mpulungu.

Khadija uses firewood and charcoal as sourse of energy, she cannot afford gas or electricity with her current economic status, even then there are no insfrastructure for elecriciy of gas where she lives.

With her basic IT training she is able to work remotely, however internet is another hurdle to overcome in Mpulungu.

Khadija believes that her future lies in her hands and that she will surely make it in life, but currently the bright future is nowhere on sight. For here and now, Khadija is just another jobless young woman trying to makes ends meet.

She has no idea however, on how her predicamet started, if it will be resolved, what caused it and if it will ever end.

.....

Prologue

INCLUSIVE INFRASTRUCTURE

Inclusive infrastructure is simply development that enhances positive outcomes in social inclusivity and ensures no individual, community, or social group is left behind or prevented from benefiting from improved infrastructure. How, then, do we come about to have integrated, reliable, and affordable transport, water, energy, and information & communications infrastructure?

(how do we help khadija Mulenga?).



At this AfRES 23rd Annual International Conference, which is a forum for leaders, researchers, practitioners, and stakeholders in Real Estate, Over the years, you have discussed, evaluated, and devised ways of maximizing the benefits of development across the sector and achieved outputs to inform policy and broader development goals.

My question is, *are we winning?*



This keynote objectively paints a picture of inclusion at three stakeholder levels: the industry, policymakers, and the woman herself. At a time when technology and innovation are booming and the world seems to be as connected as ever, mega infrastructure projects across Africa, capacity building and development initiatives, and sustainability initiatives are everywhere.

Can we finally tell a tale of triumph?

Or hope to live to tell of it?



1.0 INTRODUCTION

INFRASTRUCTURE

Infrastructure serves as the bedrock for development in Africa, significantly contributing to economic growth, poverty reduction, and achieving sustainable development goals. Women face a history of being underrepresented across the infrastructure value chain despite what is known now that inclusion leads to increased performance, innovation, business reputation, and profitability.

Further, it is indisputable that integrating women's needs in the management and design of infrastructures leads to increased service usage, resilience, sustainability, consumer satisfaction, and economic opportunities for all.

Similarly, well-thought-out improvements to infrastructure services should improve the lives of women and girls. Providing better water and sanitation services, for example, can reduce women and girls' time fetching water, freeing their time for educational or economic pursuits. This does not mean that men and boys do not suffer if it is otherwise, but this is a woman's tale.

Figure 1: Women in Leadership across sectors



2.0 The industry

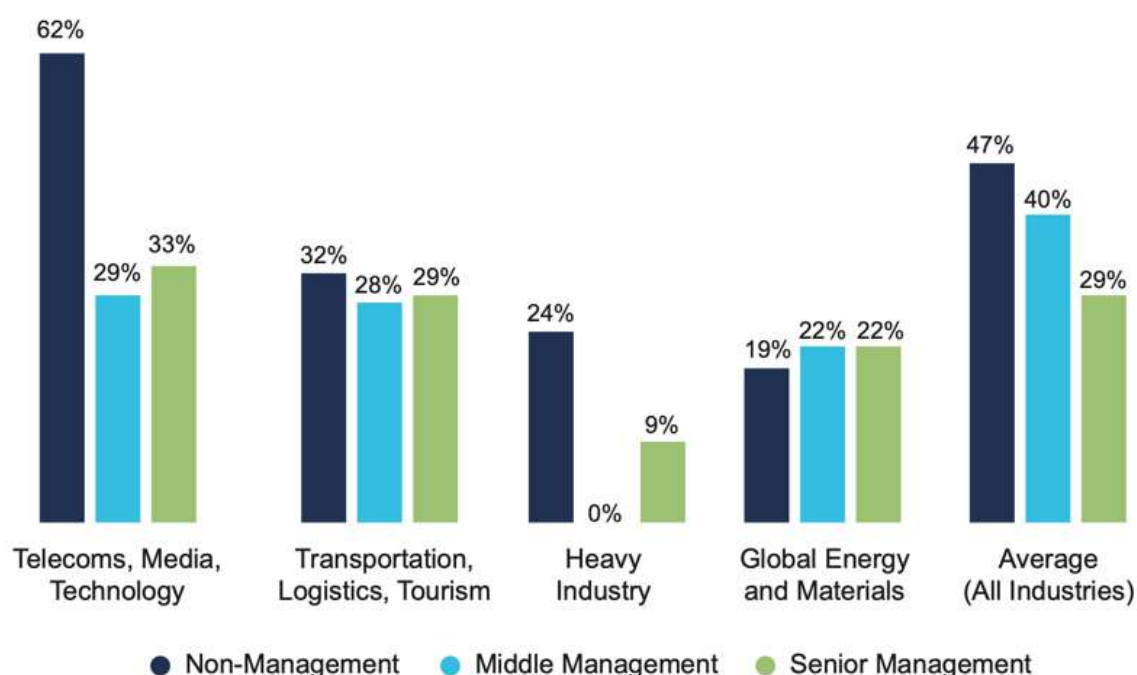
In the infrastructure sector, the global share of the female workforce is very low: 2% of CEOs are women, and women occupy 9% of senior roles, 13% of mid-level roles, and 22% of junior roles. The same holds for utility companies, with 22% of all utility workers being women.

Table 1. Women's Percentage Share in the Infrastructure Workforce, by Industry

Industry Group	CEO	Board Members	Senior Level	Mid Level	Junior Level	Line Role	Staff Role
Basic Infrastructure	2	35	9	13	22	14	20
Energy	0	32	11	19	24	19	22
ICT	5	19	11	21	32	23	33
Monility	9	17	13	21	28	25	34
Industries Overall	9	28	15	24	33	30	35

World Economic Forum

Figure 2: Women's Representation in Selected Infrastructure Industries in 14 African Countries



Source: Moodley et al 2016.

2.1 If we can ask ourselves...

- ★ Are the job design and specifications designed for men? If not, What do we do?
- ★ What are we training compared to demand? What are they studying in school?
- ★ What about enrollment as well? The numbers?
 - o ▪
- ★ What does our 23rd-year reflection have to say about this? What about our research?



3.0 Policy Makers

3.1 Women Heads of State/ Executive Government

- As of 1 June 2024, there are 27 countries where 28 women serve as Heads of State and/or Government. (13%)
- Just 18 countries have a woman Head of State, and 15 countries have a woman Head of Government. (9.2% and 7.6%)

Note: Number of countries used = 195

3.2 Cabinet - Ministries

- Data compiled by UN Women show that women represent 23.3 percent of cabinet members heading ministries, leading a policy area as of 1 January 2024.
- There are only 15 countries in which women hold 50 percent or more of the positions of Cabinet Ministers leading policy areas.
- Women Cabinet Ministers' five most commonly held portfolios are Women and Gender Equality, followed by Family and Children Affairs, Social Inclusion and Development, Social Protection and Social Security, and Indigenous and minority affairs.

3.3 Parliament

- ▶ Only 26.9 percent of parliamentarians in single or lower houses are women, up from 11 percent in 1995.

● 3.4 Policy implication as to why inclusive infrastructure is vital

Compared to men, women are likely to:-

- **3.4.1 Transport :**
 - ▶ Manage multiple household chores, child care, and work responsibilities.
 - ▶ Less likely to be able to afford motorized private transport (Clarke, 2010).
 - ▶ They are more likely to have flexible or part-time jobs due to childcare responsibilities.
 - ▶ Use public transport or travel on foot (Clarke, 2010)

3.4 2 Energy

- ★ Procure and manage traditional and modern fuels for cooking and heating (Ko'hlin et al. 2011).
- ★ More vulnerable to health risks due to smoke inhalation (Okello, Devereux, and Semple, 2018).
- ★ More are engaged in energy-dependent small-scale businesses, such as the informal food sector (IFS) (de Groot et al. 2017).
- ★ Use energy to reduce competitive advantages in cooking and heating (de Groot et al., 2017).
- ★ Reap health-related benefits from the provision of modern fuels, such as LPG, for domestic use.



3.4.3 Water

- ★ Responsible for fetching and managing household water.
- ★ More affected by lack of access to hygiene and sanitation because of menstruation (Das 2017).
- ★ More involvement in caregiving is needed when children are affected by waterborne diseases (Das 2017).
- ★ They are more hesitant to use public toilets because of menstruation and the threat of sexual harassment (Mahon and Fernandes, 2010).
- ★ Use water in multiple ways – for productive chores (as co-farmers, managers of livestock, and homesteads) and household chores (cooking, washing) (Zwarteveen, 1997).
- ★ Prefer private toilets instead of public or open ones.



3.4 4 ICT

- Encounter a competitive disadvantage in conducting business through a traditional, face-to-face mode of interaction due to mobility constraints and lack of access to financial services and capital. (Sicat et al., 2020).
- Access to ICTs will allow them to manage and operate businesses from home and access financial services (Sicat et al., 2020).



4.0 The Woman herself: Six key arguments

- **1.** Numerous barriers exist that prevent women from meaningfully participating in the infrastructure sector, referring to the exemplified few key infrastructure leadership positions currently held by women, including in relevant government ministries.



- **3.** Rooted in gender stereotypes is the falsely held notion that women are better suited for office jobs as opposed to working on construction sites, which hampers them from accessing equal opportunity within infrastructure fields.



- **5.** Due to societally imposed gender roles, inadequate infrastructure is a major contributor to African women's poverty, poor health, and lack of safety.



- **2.** Many girls who opt to study infrastructure-related subjects do not enter related careers. Those who do often leave these careers due to dissatisfaction with the workplace culture, the lack of advancement opportunities, or the challenges of work-life balance and other issue.



- **4.** Furthermore, the lack of access to financial, social, and human capital is a deterrent to women who are set on launching and growing their infrastructure businesses. The absence of gender-responsive procurement policies or resistance to their implementation makes it difficult for women-owned businesses to win tenders.



- **6.** Women are disproportionately responsible for fetching water and cooking fuels, particularly in rural areas. Traditional biomass cooking results in respiratory illnesses. Lack of electrification and inadequacy of transport cause insecurity and limit women's access to vital services like healthcare. The unavailability or unreliability of communication services exacerbates women's exclusion.

5.0 Conclusion

A Smart City



It is an urban area where technology and data collection help improve the quality of life and the sustainability and efficiency of city operations. Technologies used include **information and communication technologies (ICT)** and the **Internet of Things (IoT)**.

Key factors of a smart city?

- Communications
- Infrastructure
- Economic Development.

Key elements of a Smart City

- Smart Infrastructure
- Smart Governance and Citizen Engagement
- Open Data and Interconnectivity
- Smart Mobility and Transportation
- Smart Environment and Sustainability
- **Innovation and Entrepreneurship**



Quoting Her Excellence Dr Amani Abou-Zeid, African Union Commissioner for Infrastructure and Energy,

"Infrastructure is the foundation upon which we will build The Africa We Want. If we summon the collective will and perseverance to transform ambitious plans into concrete realities, the coming decade will be remembered as the era we turned words into action". Close quote

Today's combined efforts on this AfRES platform will go down in history as opening new pathways and solidifying the foundations for a bright future. Therefore, let us celebrate the progress in the 23 years made thus far and recommit ourselves to the monumental task that lies ahead. Together, we will awaken the sleeping giant 'Africa's' full potential and shape a prosperous, **inclusive**, and **sustainable future** for all of us.



Epilogue

And this is my story too.....

A woman in her 40s living on the 4th floor of an apartment within the CBD (Central Business District) in the most developed city in my country. I make an allowance of 1 hour to reach my workplace in the morning and 2 hours to get back due to traffic in the evening. There are constant power and water outages. I spend considerable money on alternative means of water and energy to power the house (light, cooking, etc).

For the nature of my work, I need a constant connection to the internet, and the monthly data charges are very high in my country. I pay for the garbage collection, car park, compound cleaning, and rent. I suffer from noise pollution as it is a CBD. At face value, I seem to have all the advantages that Khadija Mulenga appears to lack at a very high cost.

*Is it a tale of two Cities, then, or just one, a tale?
And what about ' Smart Cities..... can we speak of it?*

Ladies and gentlemen, distinguished delegates, authors, students, and my fellow keynote speakers, this is a tale of an African Woman that I hope I have earned the privilege of sharing with you on this 23rd AfRES platform.

Thank you!.

Suma Mwaitenda QS (T). Arb. (T).

President - Women in African Sustainable Infrastructure Mobility (ASIM)

Vice President - Tanzania Institute of Quantity Surveyors

Board Member - Contractors Registration Board

Board Member - Tanzania Olympic Committee

✉ sumamwaitenda@gmail.com;

☎ +255724 300003, +2764 0763461