

BREAKING BARRIERS TO INCREASE THE PARTICIPATION OF WOMEN IN CYCLING IN NAIROBI CITY COUNTY

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(Presented by Lucy Kihonge)

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ABSTRACT

As the conversation to decarbonize the transport sector by 2050 is progressing, countries like Kenya are accelerating their investments in sustainable transport. Nairobi City County has adopted a Non-Motorized Transport Policy which commits to increasing NMT budgetary allocations from 2% to 20%. In 2020, a network of walking and cycling paths was constructed to encourage the uptake of NMT in the city. The presence of this infrastructure has however not translated to their full utilization by cyclists who comprise 1% of the modal share in Nairobi. Among these cyclists, 96.9% are male while women comprise only 3.6%.

Cycling offers an attractive and sustainable option for women to support their travel patterns and behaviours, which largely entail mobility of care. The purpose of this study is hence to explore the level of uptake of cycling within Nairobi County, the cycling motivations and challenges facing women cyclists, barriers limiting increased uptake of cycling among women and provide policy recommendations on how to promote the participation of women in the cycling as a sustainable and reliable mode of transport.

The methodology used comprised questionnaires and focus groups with female cyclists and non-cyclists, key informant interviews, and study tours to cycling events to understand the pain points of cyclists within Nairobi County. Results show that socio-cultural perceptions, safety and security concerns, lack of skills and access to affordable women-friendly bicycles, and infrastructural constraints are the main impediments to women's uptake of cycling.

The study concludes by providing policy directions on breaking negative socio-cultural perceptions through sustained public awareness and education, prevention of sexual harassment, promotion of safer roads, increasing access to affordable women-friendly bicycles through fiscal incentives, and collection of gender aggregated data on the cycling value chain, which will require robust stakeholder collaboration.

1. INTRODUCTION

1.1 Background

The transport sector contributes about 67% of energy-related greenhouse gas (GHG) emissions and 11% of total emissions in Kenya. These emissions are projected to increase to 15% by 2030 due to the increasing rates of motorisation and urbanisation. In this regard, there are global commitments to decarbonise the transport sector by 2050.

Kenya has also committed in its Nationally Determined Contributions (NDCs) to reduce its emissions by 32% by 2030, (Kenya National Bureau of Statistics,, 2015).

To realise these goals, Kenya is promoting the shift to sustainable consumption and production patterns through the Climate Change Act, of 2016. Sustainable mobility is one of the strategies that entails the adoption of mass transport and non-motorised transport (NMT) strategies. Nairobi City County, in particular, has been accelerating investments in non-motorised transport through the adoption of a Non-Motorised Transport Policy in 2017 and the construction of walkways and cycling lanes within the county, which is home to the capital city. However, these investments, particularly in cycling infrastructure, have not resulted in increased usage of cycling by women.

1.1.1 The Modal Share in Nairobi City County

The predominant modes of transport among Nairobi residents are public transport (46%) and walking (39%), while cycling is the least popular (1%) among the populace (Deutsche Gesellschaft für internationale Zusammenarbeit (GIZ), 2022), as illustrated in Figure 1 below.

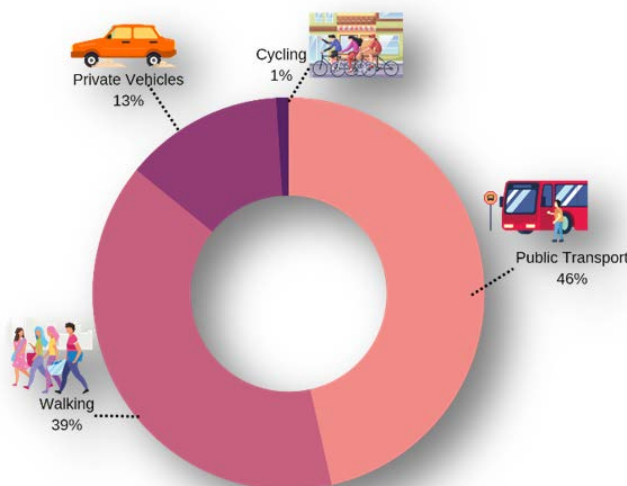
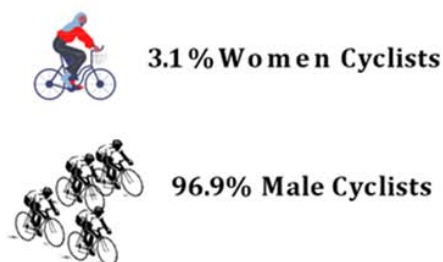


Figure 1: Modal share in the city

1.1.2 Cycling in Nairobi City County

A June 2021 newsletter by Climate and Development Knowledge Network (CDKN) further estimates that 1% of cycling modal share accounts for approximately 55,000 daily trips in the city, (Climate & Development Knowledge Network, 2021). Gender disaggregation of these cycling trips is indicated in Figure 2 as follows:



Notes:

The extensive gender gap in cycling within the county is evident, hence this study will help identify the factors contributing to the gap and provide recommendations to bridge them.

Source: Nairobi City County Government, 2014

Figure 2: Gender disaggregation on cycling in Nairobi City County

1.2 Aim of Paper

The main aim of this research study is to promote the uptake of cycling among women within Nairobi City County. The specific objectives of the research are to:

- Establish the level of women's uptake of cycling in Nairobi City County.
- Identify factors limiting the uptake of cycling among women in Nairobi City County.
- Establish the motivations and support for women's participation in cycling.
- Provide key recommendations to increase women's participation in cycling.

1.3 Scope of Paper

This study investigates the uptake level of cycling among women within Nairobi City County. The experiences and barriers of both female cyclists and non-cyclists within the City are explored in this study. The paper considers all forms of cycling for recreational or utilitarian purposes.

2. RESEARCH METHODOLOGY

2.1 Overview

To understand the factors influencing the uptake of cycling among women within Nairobi City County, female cyclists and non-cyclists from different parts of the City were selected due to the diversity of their experiences, ages, and livelihoods. A mixed methodology approach was adopted comprising quantitative and qualitative techniques as explained below.

2.2 Data Collection

The data collection methods entailed:

- **Desktop review** of the existing literature and global and local policy documents on cycling.
- **An online survey** was filled by 80 respondents: 58 female cyclists and 22 non-cyclists, which was circulated through social media (WhatsApp groups with female cyclists and non-cyclists); LinkedIn and Twitter.
- **Two facilitator-led Focus Group Discussions (FGD)** to complement the online survey findings and to gather valuable perceptions and insights on the experiences of female cyclists and non-cyclists on their uptake of cycling within Nairobi. The Focus Group comprised two separate sessions with ten female cyclists and ten non-cyclists who were drawn from cyclist groups in Nairobi and Fione Initiative's Women in Transport Database, respectively.
- **Key Informant Interviews (KIIs)** with local stakeholders to understand informants' perceptions of the uptake of cycling among women within Nairobi, the role they play in enhancing gender-inclusive cycling, and their views on how the current situation can be improved. These stakeholders included:
 - a. Institute for Transportation and Development Policy – Africa.
 - b. United Nations Environment Programme.
 - c. Baiskeli Centre – A bicycle parking facility in Nairobi.
 - d. Bicycle Retailers in Nairobi.

- **Participation in cycling events** such as Critical Mass Nairobi, Spin Kings, Dada Rides and Mama Cycling to gather data on the lived experiences of female cyclists. These events also helped in understanding the cyclists' pain points and attitudes towards cycling within Nairobi City County.

2.3 Study Limitations

The methodology, however, encountered some challenges in terms of securing interviews with some key transport stakeholders and female respondents due to their busy schedules. The online survey was skewed due to the disproportionately large number of male respondents; however, male respondents' data was omitted from the data analysis. Additionally, the online survey led to the exclusion of participants who do not have smartphones which impacted the socio-demographic profile of the respondents by attracting mainly those in the middle- and high-income class. To overcome this bias, the focus group discussion brought together women from the low- and middle-income demographic who had not responded to the online survey and were invited through word of mouth and referrals.

3. RESEARCH FINDINGS

3.1 Overall Uptake Level of Cycling Among Women

Cycling is most popular among women aged between 30 and 40 years. However, within this group, the numbers decrease as the older the women get. There was also no data gathered on female cyclists below the age of 20 as illustrated by Figure 3 below.

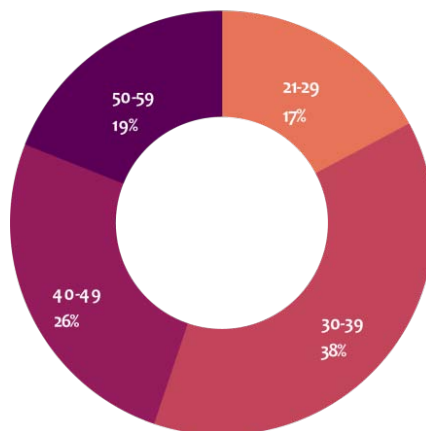


Figure 3: Age disaggregation of female cyclist respondents

Most of the cyclists (81%) cycle for recreational reasons, either weekly or monthly, in excursions organised by cycling groups. Only 4% of cyclists cycle either to commute to work or to run errands, while 15% cycle for both purposes as shown in Figure 4 below.

Recreational cycling was popular among the respondents because it gave them a sense of belonging to a community and guaranteed safety from harassment from other road users.

A female cyclist, FGD Participant commented *"I enjoy cycling in a group since I feel safer and can easily get help in case of a mechanical issue. You also encourage each other to cycle more and for longer distances. Before joining the cycling group, I could cycle only five kilometres, but now I can do forty kilometres."*

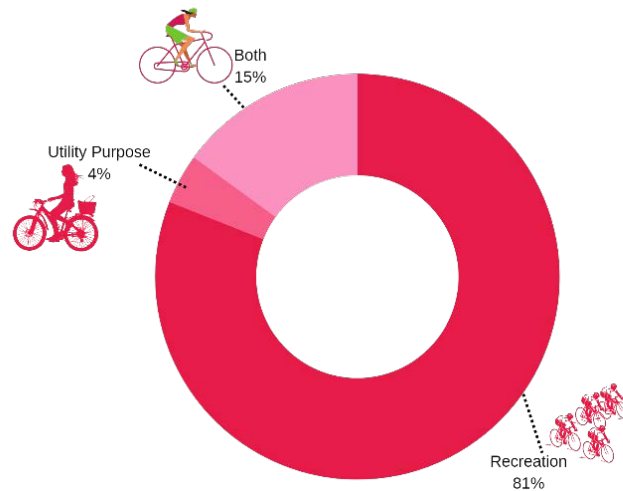


Figure 4: Purpose of cycling among female cyclists

These motivations for cycling are correlated to the frequency of cycling; 33% of the respondents cycle once a year, while 19% cycle once a month, mainly for recreational reasons. Only 2% cycle daily. This, therefore, points to the very low uptake level of cycling as a primary mode of transport among women in the city.

Female cyclists who cycle less than a kilometre do so mainly to carry out errands, such as shopping at a local supermarket. Those who cycle for more than 20 kilometres do so mainly for recreational reasons or daily commutes. The cyclists, however, pointed out that they would cycle longer distances and more frequently if the right infrastructure needs were met and their safety and security were guaranteed.

3.2 Interest in Taking up Cycling

The study found that 46% of the female non-cyclists had an interest in taking up cycling, 36% were unsure, and 18% responded that they were uninterested as illustrated in Figure 5 below. The reasons given by those interested were for fun or recreational purposes, running errands, as fitness or working out activity, it is an affordable and reliable mode of transport, helps in making shorter trips, and it is convenient compared to public transport.

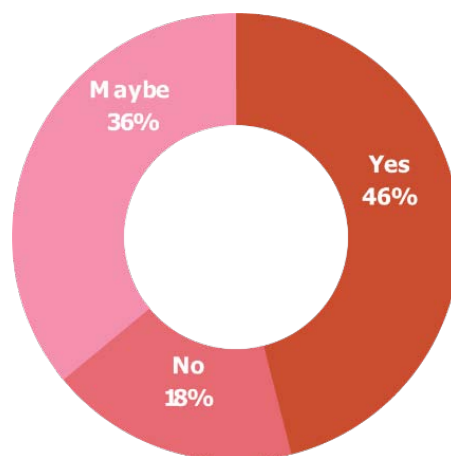


Figure 5: Interest in taking up cycling among female non-cyclists

3.3 Barriers and Challenges that Limit the Uptake of Cycling Among Women

3.3.1 *Socio-Cultural Perceptions*

The study revealed that the socialisation of girls from childhood shaped their perception and desire for cycling. This socialisation entailed the type of toys girls had access to, which were mainly dolls, whereas bicycles were associated with boys, hence creating minimal cycling interest among girls. For women who cycled as children, once they hit adolescence, they encountered disapproval and discouragement from peers and adults due to negative societal myths and misconceptions about women's involvement in cycling. Further, the male gaze and comments on their appearance in cycling gear have discouraged women from taking up cycling.

A comment from a Non-cyclist FGD participant, *"When I tried cycling as a young girl, an older man saw me and discouraged me by saying it would break my virginity. Those words were very demotivating and I stopped cycling. Though I later came to learn that it is a misconception."*

These negative socio-cultural perceptions were reported among both cycling and non-cycling respondents. However, the female cyclists see it as their role to challenge these stereotypes and hopefully to become role models to young upcoming female cyclists.

3.3.2 *The Safety of Cyclists on the Road is Not Guaranteed*

The lack of safety and security on the roads within the city was a major hindrance reported by both cyclists and non-cyclists. This lack of safety manifests through:

- a) **Sexual harassment** through obscene verbal commentary and non-consensual physical contact. About 45% of the female cyclist respondents reported having encountered sexual and physical harassment on the road within the past six months.

A Cyclist FGD participant commented that *"When I cycle alone, I prefer to wear long pants and long dresses to avoid harassment, but when I am in a group, I feel safer and free to cycle in shorts."*

- b) **Rogue treatment from other motorists**, such as being knocked down or pushed off the main road. Notably, the current traffic laws (Traffic Law Cap 407) do not recognise and provide regulations for cyclists as road users.

A Cyclist FGD participant remarked that *"Motorcycle riders have the habit of squeezing between and pushing cyclists off the road. Motorcycles have risky driving habits like overlapping and overtaking on bends that limit the safety of cyclists."*

- c) **Insecurity**. Cyclists fear being mugged or robbed of their personal belongings or the bicycle itself, hence fear cycling at night.

A Cyclist FGD participant made this comment, *"Insecurity is an issue since you can lose your valuables as you are vulnerable to attack, especially at night or when cycling alone in isolated places. The security of the bicycle is also a factor since good bikes are attractive to thieves."*

A Cyclist FGD participant commented that *"Sometimes you have several errands to run at different places and times and so if you get late at night, it may be unsafe and insecure to cycle."*

3.3.3 Women Lack Cycling Skills

Because of the way women and girls are socialised, they often lack the necessary skills to take up cycling. It was found that this was also attributed to the conditions within which training was conducted, which were not safe and conducive. Hence, most non-cyclists gave up on the first trial. Those who gained the skills reported not having the confidence to cycle on the road, particularly due to past traumatic cycling experiences and a lack of knowledge of the traffic rules.

A Non-cyclist FGD participant remarked that *“For my first bike training experience, my trainer let me ride down a hilly place on my own, which landed me into a garbage pit. I was done with cycling there and then.”*

3.3.4 Women Have Limited Access to Bicycles

Besides the lack of skills, it was found that women lack the knowledge of appropriate bicycles for different purposes. The availability of female-friendly bicycles within the market is also limited, whereby most bicycle shops are not sensitised to the needs of female users, hence do not consider this when stocking bicycles. Women prefer bicycles that have slanted tubes, also known as step-through frames. Such bicycles are easier to get on and off from and do not require the riders to raise their legs very high when they get on or off the cycle. They also have wide cushioning saddles, which are preferred by women and girls. The research found that the lack of female-friendly bikes may have contributed to the low demand for bicycles among women.

The affordability of bicycles is also a major limiting factor, particularly for women in low-income households. This is the reason why in Kenya cycling, especially in urban areas, is often associated with middle- and high-income earners, in sharp contrast to other developing countries, where it is viewed as a mode of transport for low-income earners. Based on the visits to bicycle retailers, a good quality bicycle costs an average of between Kshs 12,000 to Kshs 22,000 (USD 98 to USD 150), which is not affordable for a majority of the city's residents.

3.3.5 There Are Inadequate Supporting Cycling Facilities and Amenities

The lack of supporting cycling facilities and amenities was found to impede the uptake of cycling among women in the city. These facilities include bicycle parking facilities and showering amenities within public buildings.

The research found that there was only one bike parking facility within Nairobi City County Baiskeli Centre ([www.https://baiskeli-centre.business.site/](https://baiskeli-centre.business.site/)) located outside the city's Central Business District. The facility offers daily parking and changing facilities for both female and male cyclists. It was noted that the amenities allocated for female cyclists were often underutilised compared to those for male cyclists. Despite the facility offering state-of-the-art services, its location is not very accessible. Based on women's travel patterns and behaviours, the facility does not offer convenience since cyclists have to walk or use public transport from the facility to their places of work after parking their bikes.

The Owner of Baiskeli Centre commented that *“It was challenging to secure a building space in a convenient place within the city since most landlords cannot understand what value for money a bike parking facility brings. This is due to the minimal popularity of cycling within Nairobi. So, we had to settle for this space, which remains underutilised daily.”*

Bicycle parking and changing facilities are also non-existent in most public buildings within the city. Additionally, the Kenyan Draft National Building Code, 2020 fails to provide standards for such facilities, so tends to discourage women to take up cycling for their daily commute.

A Cyclist FGD participant noted that *"When you cycle to destinations of a formal nature, you are likely to arrive sweaty and you have to shower and change clothing. Showers and changing facilities are usually not provided in most buildings."*

3.3.6 Limited Availability of Cycling Interventions

A majority of the roads within the city lack cycling lanes, which are key to ensuring the safety of cyclists and encouraging more cycling in Nairobi City County. Female cyclists along major roads are confronted with the need to share the road carriageway with vehicles, which has the potential to compromise their safety. The available infrastructure is poorly designed, has physical barriers, is poorly maintained, and is often encroached upon by motorists and street vendors as illustrated in Photo 1 and 2 below. This illustrates the data gap on user needs during infrastructure planning for the city.

The research found that these infrastructural deficiencies were mainly in low- and middle-income neighbourhoods. Hence, women from such neighbourhoods do not feel motivated or safe to take up cycling. This evidence also points to the social inequalities in the provision of infrastructure within the city. Some new roads in the city come with cycling lanes and pavements, but these are mainly in affluent areas. They also tend to be under-utilised because high-income residents tend to cycle mainly for recreational purposes, not to commute.

A Cyclist FGD respondent commented that *"Cycle tracks end in abrupt curves, and you must dismount and carry your bike around the curve. There are cycle tracks that are paved with rough blocks, making it uncomfortable. Some have good cycle tracks, but cyclists feel unsafe when they meet the intersections."*



Source: International Transport Development Policy-Africa

Photo 1: Poorly marked and obstructed cycling tracks in the city



Source: International Transport Development Policy-Africa

Photo 2: Vehicles parked on or along cycling tracks in the city

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Conclusions

This study shows that negative socio-cultural perceptions of female cyclists and unsafe roads are the key limiting barriers that prevent women in Nairobi City County from taking up cycling. These are consistent themes for both cycling and non-cycling women. These shared factors provide insight to policymakers and city urban planners on key areas for intervention.

Additionally, it is evident that the required investments and solutions need to be gender-responsive and practical, and should provide significant benefits to the growing female population and society as a whole. These targeted and informed investments should also address negative and patriarchal socio-cultural structures and security concerns to reassure women of their freedom of mobility and to create greater access to opportunities for a stronger economy.

4.2 Recommendations

The key areas of intervention should include:

4.2.1 *Breaking Socio-Cultural Barriers*

Societal structures and perceptions play an integral role in shaping the behaviours and freedoms of women. To reduce the negative socio-cultural perceptions of female cyclists, sustained public awareness programmes should be carried out. This can be done through the dissemination of behavioural change messages in print and social media campaigns that not only normalise cycling for women but also market cycling as an alternative and sustainable mode of transport. Female cycling champions and religious and cultural leaders should be actively involved in driving this message.

In particular, men and boys should be included in such programmes to understand better and recognise the root causes of these negative socio-cultural behaviours.

4.2.2 Prevention of Sexual and Physical Harassment

A shift in the travel behaviours and preferences of women is essential. Women's safety concerns can be addressed through the utilisation of tools such as Report It! Stop It! (<https://floneinitiative.org/report-it-stop-it/>), which collects real-time data on women's experiences in public spaces to inform decision-makers in planning for safer spaces.

The provision of infrastructure that visibly enhances the security of women and society at large is essential. This could include proper street lighting, CCTV cameras, clear and continuous networks of cycle paths and the presence of other people on streets.

A facilitative and supportive reporting system should also be provided by Nairobi City County. This system would ensure fair and prompt legal action against the perpetrators of violence against female cyclists. The reporting system should have staff trained in gender sensitivity and in how to act in case of an incident.

4.2.3 Safer Roads

The limited knowledge of road users on traffic laws and the rights of different road users is a key contributor to the lack of safety on roads, hence the low cycling levels among women within Nairobi City County. To bridge this knowledge gap, public awareness campaigns on road etiquette that guide the interaction between cyclists and motorised road users, such as boda bodas (motorcycle taxi riders) and public service vehicle drivers, should be conducted.

Safety audits can be conducted to collect gender-disaggregated data on the safety status of roads within the city to help inform improvements that ensure safer journeys for everyone. Being the first of its kind, this study faced limitations in accessing data, hence the collection of gender-disaggregated data across the cycling value chain would be essential in informing future research studies.

The existing Traffic Act and related transport laws in Kenya are currently under review. Based on the findings of this research study, Flone Initiative can participate in the review process to provide a gender lens on the transport policymaking process to ensure that inclusive and equitable provisions are made.

4.2.4 Access to Cycling Opportunities

The research found that most non-cycling women have the desire to take up cycling but do not have access to opportunities to own a bicycle or learn how to use it. Creating a database comprising bicycle vendors, professional cycling trainers and institutions, lawmakers, mentors, and other stakeholders in the cycling industry will be instrumental in providing women with cycling opportunities.

Organising family-friendly cycling events that integrate adult and young family members would also encourage buy-in from family members on the uptake of cycling among women and girls. These events should also celebrate and recognise female cyclists to inspire and motivate female non-cyclists in Nairobi.

Developing a cycling training manual would also be instrumental in providing standards on ideal bike designs for different purposes, bicycle repair, sexual harassment offences and actions, and road safety.

To promote the uptake of cycling among women in Nairobi City County, collaboration and action between policymakers, institutions, private actors, and civil society groups will be imperative.

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