

The Role of Women Towards a Gender-Responsive Transport Industry in Kenya

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11.1 Introduction

Scholars acknowledge that transport network is paramount to a country's economic development (Crespo-Sancho, 2015; Republic of Kenya, 2020a). As we delve into this topic, it is imperative to distinguish some of these terms that may be recurrent in this discussion, namely, transport systems, transport sector, transport industry and transport mode. Transport system is defined as "the combination of elements and their interactions, which produce the demand for travel within a given area and the supply of transportation services to satisfy this demand" (Cascetta, 2001, p.1). This study adopts the definition of Boyce (2001) that a transportation system is a scheme for moving persons and/or goods. This system includes: the equipment which is the vehicle – this moves people or goods or objects; the guideway – it enables the movement of equipment or vehicle and contains links, terminals, routes that together form a system or network; a set of procedures called the operations plan through which vehicles are moved over the guideway. For purposes of this study, transport modes will be means of achieving mobility for passengers as well as freight. However, a system entails more than just a mode. The transport sector comprises numerous industries that include airlines, air freight, road and rail, marine, and transportation infrastructure. Hence, transport infrastructure consists of the immobile installations, such as canals, roads waterways, pipelines, railways as well as terminals such as airports, bus stations, railway stations, trucking terminals, refuelling depots (Rodrigue, 2020).

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According to Rodrigue (2020), mobile transport, resources are land, water and air and that road transport has extended more than all the other modes in the last five decades. It is important to note that with increasing inequality and climate change, in recent years, emphasis on improving public transport has increased. An evaluation of World Bank transportation loaning in Africa between 1999 and 2009 has noted "steady focus on roads and traffic management, though with some road improvements meant to favor public transport" with BRT getting more focus recently (Mitric, 2013 p. 24; Klopp & Cavoli, 2019).

Whilst appreciating that a country's transport infrastructure generally centres on mobility and accessibility with the objective of bringing economic prosperity to a nation (Crespo-Sancho, 2015), there has been a realization that most transport systems are largely male-dominated (Queirós & Costa, 2012). Yet it has also been established that "women are responsible for a disproportionate share of the household's transport burden while at the same time having limited access to available means of transport" (Deike, 2001, p. 5; Republic of Kenya, 2020). Hence, women's underprivileged position in transport systems is seemingly global. Therefore, what does this imply given that other writers and researchers such as (Reeves, 2005, 2004) who assert that transport is a tool for men and women to live equally? We postulate that in the race to meet constitutional requirements, and the international gender equality obligations such as the SDG goal 5 on achieving gender equality and empowering all girls and women (ensure women participate fully and effectively with equal opportunities for leadership at all levels of decision-making in political, economic and public life), the management of transport systems will need to make progress in a gender-responsive direction. This would require an intentional inclusion of women and interdisciplinary approach to the planning and management of transport systems. This will include social, cultural, economic and technical aspects as opposed to emphasis on the technical dimensions as exemplified by the type of courses available in public universities in this line in Kenya.

In Africa and generally in the global south, women are mostly involved in the household activities as well as the labour of loading at household and community levels (Reeves, 2005). There is, therefore, an necessity to "balance the load," by reducing the time women spend on transport activities in the community (e.g. collecting, fetching water, trips to market centres, firewood health clinics, grinding mills among others) by ensuring a gendered transport investment. However, it is not easy to achieve this change without the women getting involved in the systems and influencing from within.

This chapter focuses on understanding the role of women in the transport sector in Kenya. Specifically, it explores the following questions: Why the focus on gender-responsive transport? Are women participating or not participating in planning and design of transport systems? What are the barriers to women's active participation in transport, planning and management? To what extent are women involved in the governance of transport systems? What are the opportunities to giving women a voice in the transport sector? How are women creating space for women and revolutionizing the sector? What are the experiences of women in the transport sector, and does the failure to ensure women participation in all aspects of transport

systems operations affect the progress of women in Kenya? We also delve into various dimensions of the transport sector including, design, planning and implementation, governance (policy), use and management bearing in mind the gender dimension.

11.2 Materials and Methods

Studies in the area of women and transport have been mostly quantitative focusing on how women and men travel. In this way, the experiences of women in the transport sector does not get its way into transport policy formulation. The current study utilized a qualitative approach to understand the experiences of women as users, owners and professionals in the transport sector in Kenya.

The main data collection tool was a key informant guide. It contained non-structured questions for a deeper appreciation of the experiences and challenges of women as owners, users and professionals/workers in the transport sector in Kenya. Using purposive sampling, the study identified and interviewed 12 key informants. The key informants were purposely selected based on the selected thematic areas: women users, women owners and women leaders/professionals. These participants provided in-depth information about the role of women in the transport industry.

In addition, the study utilized a synthesis of existing literature in the study area to enrich the discussions. Therefore, literature from other countries were searched using major electronic Social Science databases like JSTOR, ProQuest, EBSCOhost and Google Scholar.

Qualitative meta-analysis was used in conducting secondary qualitative analysis of primary qualitative data. This was in order to present a more inclusive description of the phenomenon. A qualitative meta-analysis allows a systematic review of qualitative studies in a more interpretive than aggregative manner (Hammersley, 2020). Consequently, primary data from the key informant interviews was transcribed and organized in themes and categories.

11.3 Results and Discussions

11.3.1 Women as User's Mobility and Accessibility

While women form a bigger percentage of public transport users, their needs are rarely factored in the transport policy or planning (ITF, 2019; Cresswell & Uteng, 2008). Literature indicates that transport is not gender neutral (Carvajal & Alam, 2018). There is evidence from empirical research that women walk more, rely more on public transport, and often travel at off-peak hours (Rosenbloom, 2006; McGuckin & Nakamoto, 2004; Shearmur, 2006). Because of their caretaker role, women travel accompanied by children; the sick; the elderly; baby, personal and shopping bags (OECD/ITF, 2018; McGuckin & Murakami, 1999). In addition, the updated Kenya Integrated National transport policy (KINTP) points out that the

transport burden is often taken up by women and girls who engage in walking and head or back loading (GOK, 2020).

It is often presumed that transport projects benefit both men and women in the same way. However, there is a substantial difference in the interaction of men and women with transport systems based on (1) their travel patterns, (2) modes of transport access and (3) how transport infrastructure and services are utilized (Asian Development Bank, 2013). It is therefore evident that transport sector is and has been gender-blind. This blindness has been recognized as being part of a systematic methodological fault, rising mainly from not taking a note of the inherent differences between the mobility patterns of men and women (Uteng & Priya, 2012; Levy, 2013; Deike, 2001). This study, therefore, postulates that the current expanded participation of women in the job market and the need for women to balance reproductive, productive and community roles imply a reliable transport system.

Majority of the women interviewed used *matatus* because of their availability. *Matatus* are privately owned minibuses, vans or other smaller vehicles used for public transport in both urban and rural zones (Salon & Gulyani. 2019). Transport literature in sub-Saharan Africa refer to these "group" of transport providers as paratransit. "Paratransit is a term conventionally used to describe a flexible mode of public passenger transportation that does not follow fixed schedules, typically in the form of small to medium sized buses" (Behrens et al., 2016 pg. 1). Some of the respondents commuted by walking while some used *boda bodas*, which refers to commercial motorcycles used for transporting passengers and goods at a fee. A few of the cases used trains, while some used private vehicles and airplanes occasionally.

Participants pointed out that women use different modes depending on the day's program. For example, in urban areas like Nairobi, even individuals with private vehicles may consider using a *matatu* or *boda boda* if they need to go to the market fast because of the difficulties associated with accessing parking spaces. If attending a conference, one might use e-hailing services like Uber so that they do not struggle looking and paying for parking services. A participant stated that although she often uses *matatus*, she prefers trains as they "are convenient, faster, cool and not crazy like the *matatus* not much pollution, well organized" (JK).

The means of transport one choses is also dictated by other factors. According to one participant,

What mode I use on any given day depend on several factors such as convenience, urgency and cost. When I need to do something urgently and conveniently, I would use personal car otherwise I use *matatu* because it is cheaper. (EO)

Most participants agreed that the day's program and cost of transport dictated their mode of transport for that day. Some indicated that when they had luggage they preferred *boda boda* which took them straight to their door steps as opposed to a *matatu* which leaves them at the bus stop far from home. This accessibility factor encouraged the use of *boda boda* for most women.

These responses show that mobility and access determine what women use as means of transport on different days. Levine and Garb (2002) distinguish "mobility

as ease of movement" from accessibility as "ease of reaching ones destination." Due to their gender roles, women face challenges in mobility and accessibility in both rural and urban areas (Sum4All, 2017). Sum4All further explains that compared to men, women make more trips and use transport services and infrastructure differently; they have more to carry and they make several errand stops before getting home. This means that transport planning and policies should be informed by women's travel patterns.

11.4 Challenges Women Experience as Users in the Transport Sector

11.4.1 Sexual Harassment

Sexual harassment in public transport is a global phenomenon (ITF, 2019; Uteng & Creswell, 2012). A study conducted by Flone (2018) found that sexual harassment was one of the main reasons why women in Kenya shy away from using public transport. Similarly, a study conducted by GeoPoll showed that 55% of Kenyans have experienced harassment by *matatu* crew. For one participant, "often, women are harassed by the touts especially when they are deemed to have dressed 'inappropriately'. There have also been instances where touts have made reports of women being raped in the *matatus*" (EO).

Notably, even women public service transport operators also face sexual harassment. A participant who is a conductor said: "One time I went to report sexual harassment incident to the police and was told 'hiyo kesi mmalizie huko, ongea mmalize huko' (That issue discuss it and finish it out there)" (EN). What saddened the participant was that she received that kind of a response from a female police officer. This shows that there is very little support on the issue of sexual harassment in the transport sector even by women who are in a position to act. The participant's (EN) experience concurs with the GeoPoll survey which found that 71% of individuals do not report sexual harassment cases to the police because they believe the police will not take any action.

The use of *boda bodas* also present challenges where passengers are sometimes raped. A study conducted in Kenya by National Crime Research Centre (2018) found rapes associated with *boda boda* was 17.2%. Flone Initiative (2018) pointed out that women users of public transport who experience sexual harassment have limited avenues for redress. A participant observed that "even the gender desk (a special reporting reception for Gender based violence in all police stations in Kenya) may not be of much help" (EO). However, there is hope that this situation will change. The updated Kenya National Integrated Transport (NTSA) Policy 2020–2025 indicates that passengers and crews who experience sexual violence can report to directly to the NTSA (Republic of Kenya, 2020b). There are also plans to have a gender desk dedicated to sexual harassment/assault complaints (GOK, 2020). We will wait to see whether this will help because currently all police stations have a gender desk for gender-based violence that seem not to be functional.

To avoid sexual harassment in public transport, those able financially would use the platform hailing services to get taxis like *Uber* or *Taxify* because they find such platforms relatively safe especially at night. Actually, the potential of calling a taxi could be a vital element to the women's safety net, particularly if they had to travel at night or in unfamiliar and potentially unsafe locations or places (Porter et al., 2018). Other respondents indicated that women travellers sometimes, if possible, buy their own personal cars to avoid the inconveniences and dangers inherent in the public transport sector (Jeekel & Martens, 2017).

Issues of safety and sexual harassment ultimately lead to inequitable mobility and variances in access to transport opportunities between women and men. When women are constrained in their ability to travel easily, this affects them significantly – because they are often the primary caregivers. Transport planners, however, rarely address these impacts, predominately because there is little data about how women travel or move and what they experience in the process (ITF, 2019).

Apart from sexual harassment, other issues mentioned by the participants were pollution and lack of enough *matatus* especially with the inception of lockdowns and curfew hours. In addition, there is hiking of fares during rainy seasons and peak hours as well as routing and sanitation facilities.

11.4.2 Route

According to one participant, routing is a challenge for women as users. A route is a path for traffic in a network or between or across multiple networks (Boyce, 2001). Routing as a challenge for women users is rarely understood. Public transport is linear and research conducted has shown that women do not do linear routes because they have a lot of errands to run.

Women for instance, will want to stop at the supermarket, take the child to the clinic, and attend a meeting or bible study. Basically women have so many things they want to do within a day and the fact that the transport system is linear, this becomes a challenge. (SO)

More often than not, the services that tend to be prioritized are those on peak commuter corridors, those on off-peak and peripheral transport routes that many women use and depend on are not prioritized. This may lead to women spending more time on travel than men and resulting to "time poverty" for most women.

11.4.3 Cost of Transport

Due to the inefficiency of rural and urban transport networks, transport costs are higher. Generally low-income urban workers find public transport costly and therefore resort to walking as well as head loading (mostly women). Some people, however, take the risk by using non-motorized means of transport like bicycles for which there is no proper infrastructure (Republic of Kenya, 2009). These non-motorized facilities share the road with fast-moving vehicles, which becomes a challenge in road safety (Nyachieo, 2018).

11.4.4 Nature of Buses and Stage Provisions

The way buses are designed is a challenge for women with luggage or small children. Even the location of the stages and how they operate pose a challenge to women using public transport as one participant pointed out: "Some matatus do not stop for people to board, they continue on transit and this also poses a great challenge to women who cannot run after the bus to board" (JK).

Such issues are never put into consideration in planning. There is the risk of being hurt in the highway as well as taking much time for boarding because one may have to wait until there is some semblance of order to board with luggage and or children. For one participant,

Female travellers carry a lot of luggage and sometimes their children are also with them. When the woman gets to the stage and she is being hurried, she cannot manage to board with all her luggage and children quickly and the conductor has no time to wait, then it becomes a challenge. The conductor does not care for the woman's special needs. (EO)

Literature indicates that women often withstand the worst of inadequate planning and transport services provision (Sietchiping et al., 2012). This is reflected in the experience of one of the participants below:

When it comes to accessing public transport, it is a challenge for women sometimes because in the event that the vehicles become limited and there is no order in boarding, people push and shove around. Since a woman has no muscle and her decency will not allow her to push, she is left behind until when the vehicles are enough. This becomes an even bigger challenge when the woman is pregnant or has luggage. The designs of the seats in the vehicles is also a challenge, the seats are not designed in such a way that they can accommodate, for instance, a 9-month pregnant woman. (EO)

11.4.5 Sanitation

Sanitation is also a challenge for women working as drivers or conductors as well as female travellers. The inadequacy of sanitation facilities that are women-friendly is an obstacle to the women's enjoyment of their travel or work experiences. Most bus stations/terminus do not have toilets, and if they do, they are in poor conditions due to lack of water or facilities to dispose used sanitary towels. The researchers were informed that an organization called *The WOW MOMs* was pushing for women spaces in public transport and working towards having baby changing rooms in all public places so that women who are travelling with babies do not have to struggle. As one of the participants reported,

I found this lady inside this toilet. She had panties and make-up for sale..... so I wondered a trader inside a toilet! So I asked her why this place? She told me she targets women and then I saw she had sanitary towels, a lot of them. She told me 'you know women can be caught up anywhere'. So for instance half through your journey, you need to use the toilet you don't have pads, you've messed your pants... women travelling have a lot of needs which nobody thinks about. (AK)

The above excerpt not only portrays the gaps in the transport sector in meeting the unique needs of women, but also shows that women are trying to bridge this gap, however little. The little known hawker's initiative is a timely innovation. The *WOW MUM's* initiative in advocacy is a call for action. The hope is that soon these efforts will be rewarded, accelerated and cascaded to translate to the much needed change.

11.5 Women Transport Operators and Owners of Transport Vehicles

The main reason that hinders women from engaging in public transport as owners or operators is the nature of the business and cost. Women find it very expensive to buy vehicles for public transport. Literature indicates that women, as compared to men, own fewer cars (Jeekel & Martens, 2017; Uteng & Creswell, 2012). Despite this drawback, women are still motivated to enter into this sector. In trying to establish the motivation of getting into the public transport sector, which is maledominated, two women shared the following experiences.

11.5.1 Dr Selina: UBABI Vanpooling the Story

Dr Selina has a doctorate in human nutrition. Her specialization is in human nutrition, public health and community nutrition. Professionally, she is a lecturer in human nutrition at a university. Dr Selina's motivation of getting into transport was from being stuck in traffic snarl-ups. Her story is documented below.

"As a young mother, I had many roles to play – had to waste a lot of time in commuting. I would spend up to 5 hours of my day caught up in traffic. I was also studying at that time and had so many deadlines to meet. It was so tiring for me and at the same time frustrating as a commuter. Having lived and travelled abroad and experienced the efficient transport systems there, coming back home I felt disappointed and wondered what the problem was. I thought that the time wasted could be used to do something more useful. I saw this challenge or frustration as an opportunity to bring some change – hence the birth of UBABI vanpooling in 2016. The Ubabi vanpooling is a car sharing concept. It is an initiative aimed at providing comfortable, convenient, safe and scheduled transport. One is picked and dropped off at work or any desirable destination. While on transit, one can up on work or just relax as the professionals do their work." (SO)

11.5.2 Elizabeth Njoki: Embassava 33-Seater Owner and Operator

Elizabeth Njoki is owner-operator with Embassava Sacco. Elizabeth co-owns a 33-seater minibus with her husband. She works as a conductor while the husband works as the driver. This is her story.

I was employed by a bus owner as a conductor. The owner had just acquired a new bus on loan. And in a span of 2 years, the loan was paid off using the income from the bus. He also bought another bus. This motivated me a lot. When a got a friend who was selling his minibus, I decided to buy it so I went for a loan but due to collateral I was not able to secure the loan (because I was working in the informal sector). So I withdrew my money and deposited it in a church Sacco. Later my brother in law approached us with the information of a bus being sold. It was going for 2milion so I took a SACCO loan and paid the initial deposit of Ksh 300,000. For the vehicle to start operating on a certain route, the owner has to pay a fee of Ksh 120,000 to join a route Sacco...so we had to use our brother in-laws name to operate to avoid paying the Ksh 120,000. (EN)

From the above two cases, it is clear that their motivations of getting into the transport sector were different. One wanted to solve a problem that she and others experienced as young mothers, the other saw it as a job opportunity that would translate to a livelihood.

11.5.3 Why Very Few Women Owners?

It is a well-known fact that car ownership is lower among women compared to men in Kenya. For instance, a study conducted in Uganda by Creswell and Uteng (2008) showed that more men own cars, *boda* and bicycles. According to the study, 5.9% of women respondents had cars as opposed to 15% of men; 0.8% of women respondents owned *boda* as opposed to 5.6% of men; 5.1% of women respondents had bicycles as opposed to 10.3% of men. According to this study, this situation can be attributed to a number of factors as reported by the participants. First, the venture is capital-intensive.

Money of course is a scarce resource, spending family money will need consultation and sometimes you may not get money because of other competing needs. In addition, you will be required to pay a minimum of Ksh 120,000(1200USD) as collateral to a SACCO to operate on a certain route.... how many women are able to afford all that? (SO)

For another participant,

It is also difficult to get partners who have the same passion to invest with you in the transport sector. Women particularly shy away from this business. They find it aggressive and dangerous. There are many cartels, high targets and a lot of competition that is not healthy for most women. (SO)

It is generally believed that it is difficult to penetrate the transport sector. This discourages any prospective partners, especially women. Cartels in the *matatu* industry are powerful illegal groups who extort money from matatu owners and operators. They control and dominate certain stages (*shimo* in street language) and routes. This drives away many women who then perceive the transport sector as risky and dangerous.

The cartels are like part of the establishment, so when you register your vehicle with a SACCO they know that you are coming in to work with them. There is no way that you can work around them and that is why they fight technology because with technology they do not see any money being transacted. (SO)

This is a clear indication that the cartel issue is a stumbling block for women entrepreneurs in the transport sector. This would need concerted efforts to address in order to advance gender responsiveness in the sector. Additionally, attitude is another factor that discourages women from this sector.

People do not understand how you can be well educated and still want to be in this chaotic sector. There is a negative attitude towards this business and this means less support. In addition, seeing a woman who wants to invest in the sector raises many questions like what would an educated woman be doing in transport sector? The belief is that the sector is a place for men. (SO)

Public transport in Kenya is known for its chaotic nature. Its culture includes a coded language that those who venture into such business have to get male relatives or colleagues to help them communicate with other fleet operators and to help run the business or manage their fleet. As explained by the respondents, majority of these challenges facing entrepreneurs and users can be attributed to policy. The government has not regulated the transport sector, and as a result, the cartels have captured the sector. Nevertheless, the sector needs women more than ever before to articulate the needs of women. Women mobility needs are unique and as one participant puts it,

If the government plans for women's needs, needs like picking kids from schools, taking the elderly to health care facilities, *mama mboga* needs etc, then they will be planning for the society at large. The government needs to come up with policies that take care of all people. (SO)

Another participant added that,

I am proud of every woman who work in the transport industry especially since the industry is not for the faint-hearted. When I started I could not understand why a woman would

decide to work in the sector, but after interacting with most of them I have come to learn that this sector is their life. Some are in the sector because they love their job and not just because they lack other options. However, there are those who are in the sector because they have no alternative, and who would quit as soon as another opportunity comes along. All in all, women participation in the transport sector is minimal due to challenges like harassment, lack of contractual agreement, odd working hours, lack of maternity leaves, lack of basic sanitary services and most of all stereotypes and discrimination. (MM)

Because participation in this sector has presented numerous challenges to women, there is need for more women involvement in this sector so that they can present their challenges and try coming up with solutions that take care of their transport and mobility needs.

11.6 Women in Transport Governance

"Women's place in the society often means that they are less involved in decision-making processes than men. This is particularly true in the mobility and transport sector, traditionally seen as a male sector, whether it be in terms of the design of infrastructure, equipment or services" (ITF, 2011 p12).

In the current study, not all women participants, as key informants, had transport as their primary course in the transport career. They got into transport by chance or developed an interest because of the challenges they encountered as users of transport services. For some, it was harassment and for some it was lack of provision for women's needs. One respondent, who is in academia, got interested in the transport sector while supervising students who were pursuing topics in the same field. This experience was shared by one of the participants:

I am a user of public transport and I once got harassed on public transport and thus the desire to understand the behavior of public transport crew. It has been an interesting journey and a learning and unlearning experience. There is also a gap in training on transport. Many tertiary institutions do not offer courses directly related to transport. This means that having professionals in this sector, especially women is a tall order. (MM)

This study also found out that women participation in transport governance is a concern with the glaring gender gap being advanced as the main cause behind the gender-irresponsive transport systems (Hamilton et al., 2000). Globally, the transport sector has continued to maintain a reputation as a Non-Traditional Occupation (NTO) for women, with women comprising a meagre 15% of the total workforce (ITF, 2019). Moreover, in the transport design and governance levels, the underrepresentation of women is persistent. For instance, the trade unions where issues affecting transport workers are discussed have a small proportion of women in the decision-making levels as explained by one of the respondents:

We have a number of ladies in transport workers' unions. A few women are employed and some are members of the union. At work, women occupy positions like office secretaries or treasurers. But, the contradiction is when there are union meetings, women mobilize very well. They are the mobilizers and not the leaders. There are actually more women who

attend the meetings than the men and they are not the leaders. So why are women the ones attending the meetings yet they are not the ones in leadership? We have a big issue, look at the banks, the *boda* association of Kenya, the digital *matatu* platforms and the *matatu* sector. Most of them are just men. Does it mean that women cannot be leaders? (AK)

Essentially, the decision-making levels in the transport sector, including the trade unions, are dominated by men. Women are either secretaries or treasurers because of the organizational architecture and hence women will mostly work in the front office of the Sacco, supporting clerks and accountants, but less often as Sacco managers. Apart from the fact that they are still underrepresented, women also suffer because they do not have the skills and the training to be represented. One respondent reiterated that "it is just the way the society is structured and because it is a 'mafia' sector then [sic] many women just shy away... so few women will want to struggle" (SO).

The researchers also learnt that the quest and aspiration to build careers within the sector by women is a taunting struggle: "As a woman in the field, even if in governance, you are also a woman. You have to work twice as hard to be listened to" (PN). Most often, because transport is considered a NTO for women, women entering the field find that they have to prove their worth as compared to their male counterparts. This was emphasized by one of the professionals in the industry:

One time when sitting in for my boss, I reported to the meeting but I was not called to the panel because for one, I was very young and probably being a woman I didn't look like I was qualified but later when I engaged in the discussion I was able to elicit great interest and I was later nominated to a task force on transport. (PN)

The participants indicated that in the society women carry a heavier burden of roles. The triple work load for women calls for extra effort on the part of women in order to excel in particularly governance levels. But also the work arrangement does not favour women on their roles because they have to work for six days sometimes seven days. This basically means that women are disadvantaged. This is also compounded by a general perception that women are timid, sceptical and silent. In fact, Hamilton et al., (2000) assert that there are three primary defects affecting the transport system: scarcity of women in decision-making positions in policy and transport planning; systematic failure to integrate the voices of women users in the discussion and planning of transport systems; and the growth of automobile-dependent societies indicating an intentional disregard of the mobility needs of women.

Therefore, it was the opinion of the respondents that in a bid to ensure that transport plans and designs take on board gender concerns so as to promote gender equality in the transport sector women participation in policy formulation is central. In fact, countries that have integrated measures in national transport policies to reduce gender inequality and improve the socio-economic and political status of women have often included women and other vulnerable groups as part of the governments' taskforce to oversee gender and transport policy coordination (World Bank, 2010).

Scholars have correctly pointed out that transport is a traditionally male-dominated sector, both from the employment point of view and for the values that are embedded in it (ECE, 2009). This view is supported by the European Parliament (2006) that "normal" transport research and transport policies emerge to be androcentric. Men's travel patterns are the ones which are represented in transport policy reports and decision-making as "common" and seem to be its focus, in spite of significant gender differences, that are relevant to transport operations, management and decision-making.

Appreciating gender differences would make transport policy more responsive to the needs of women and lead to developing structured approaches in line with women's needs, identify instruments to address those needs and establish an appropriate policy framework for the realization of women's needs. It also requires that women are represented at each step of the planning and design process of transport investments (Queirós & Costa, 2012).

Towards this direction, some scholars have proposed strategies for mainstreaming gender in transport policies (Reeves & Greed, 2003; World back, 2013). In this regard, gender mainstreaming has been defined as a systematic integration of gender into all systems and structures of government policies, programs, processes and projects, into ways of seeing and doing, into cultures and organizations (Greene & Kirton, 2003). According to Reeves (2005), since planning policy and practice has empirically been shown not to prioritize women's needs, it is likely that a result of applying impartial gender mainstreaming technique would be that the needs of women would be better recognized and acted upon in policy and practice.

The lack of policy in reference to gender and transport issues has been noted as a major barrier in addressing gender inequalities in the transport sector. In Kenya, for instance, this is aggravated by a lack of clear data that can support policy formulation (Flone Initiative, 2018). This anomaly, according to Flone Initiative (2018), is felt where women users of public transport who experience harassment are limited on avenues for seeking redress. In fact, a better understanding of women's travel patterns should guide transport planning and related policies. This would emanate from improved and differentiated knowledge of travel behaviour of women and accompanying needs assessment. New data sources could help to develop that knowledge base and help avert biases that have become ingrained in past and current transport policies. Looking at the Kenya transport policy, the vision is stated clearly and inclusively: "A world-class integrated transport system responsive to the needs of people and industry" (RoK, 2010). However, in practice there is no indication of how to actualize this as far as gender is concerned.

At the operational level, it has been proposed that the transport sector needs more women in transport-based jobs in order to design transport systems that fully consider women's needs when travelling (ITF, 2019). The number of women with skills and interest to engage in the sector at the core levels or senior levels is still low. Yet organizations with ideas on incentives to upscale women representation through capacity building have ran into challenges such as lack of resources as testified by one of the respondents:

FLONE initiative is one that should be heavily funded, I would even imagine that funders will be running to FLONE giving them money and asking them what they want to do because they have the ideas. They may not be good in writing the proposals but they have very good ideas. They know what they want with women and they have demonstrated but you still want to subject them to write proposals and compete internationally. (AK)

According to the participants, women venturing into the transport sector will play a key role in the campaign for the position of women in the sector. They understand very well the struggle that women experience daily while using public transport. Therefore, they stand a better chance of coming up with interventions and solutions targeted at addressing the challenges their fellow women go through. Despite the aforementioned obstacles, the respondents also insinuated emphasized that the situation is improving.

11.6.1 Trends and Progress in Women Participation in the Transport Sector

The research showed that there is a positive trend emerging characterized by increasing entry into the field by women:

So we are seeing more and more women entering the sector, whether the *matatu* sector or the digital platforms, we also have a few in the motorcycles. Generally, what you will find is still, as much as we have women in the sector, maybe only one in about ten work as managers. Most women are working as conductors, maybe two will be drivers or what we call stage mangers and Sacco workers. They are still not in the core. (AK)

As more women develop interest in the sector, they are also participating in exploring innovative ways of designing need-based responsive systems.

We are pushing for an agenda of a socially just transport. In 2019, we came up with what we consider socially just transport pillars. So, in our case for example, we think that a socially just transport should be first and foremost available, accessible and affordable. It is inclusive for persons with disability, and should cater for the vulnerable. It should also embrace human rights elements because it is a basic right. (AK)

Participants also felt that women have a role in research within the transport sector, to find out ways that the sector can be made more accommodative for both female entrepreneurs and users. Women who are already in the sector, whether as leaders or entrepreneurs, also need to push for policies that make the sector favourable for women to invest in. The policies should not only encourage female entrepreneurs but also protect female users from harassment when using public transport as well as putting into consideration their special needs.

I think the major and the biggest achievement has been just coming out and saying that women are there. Even go to the city center, you will find a woman touting and to me it is a big step. That there are some of them as drivers, whether as Uber drivers or whatever it is they are doing. I think the coming out of women and getting into the public space, for me,

is a real success. Of course this is more of an urban thing, because in the rural areas you will not find women in those village towns doing this. (AK)

In summary, transport systems are important in providing access to opportunities and resources such as employment, health care, education and child care (Turner & Fouracre, 1995). Being socially and geographically mobile is generally seen as one of the central aspects of women's well-being. Alongside health, education and political participation, mobility is indispensable in order for women to reach their goals (Uteng & Creswell, 2012). Therefore, disregard to gender concerns in transport infrastructure and services would facilitate gender-based inequalities which would slow down economic growth and poverty reduction (World Bank, 2010).

11.7 Conclusions

The findings, in this chapter, have showed that transport is fundamental for the proper running of the economy. It is also important in ensuring social well-being of the people. Therefore, sufficient infrastructure is vital for any society because it makes mobility possible and is a major enabler to development. Transport infrastructure and services are most of the time considered "gender neutral" because it is assumed that transport projects equally benefit men and women. However, evidence has showed a significant difference in the interaction of men and women with transport systems based on (1) their travel patterns, (2) modes of transport access and (3) how transport infrastructure and services are utilized. This notwithstanding, most often infrastructure has been modelled without due consideration to women's needs. This poses a challenge to their mobility.

A good understanding of women's travel patterns should inform transport planners and transport policies. This would stem from improved and differentiated knowledge of travel behaviour of women and needs assessment. It was a general finding, of this chapter, that public transport system is not good enough to ensure that it takes care of the needs of everybody.

Women representation in decision-making, transport design and planning was found to be minimal. Based on the respondents' views, it can be deduced that that there is need for a systematic effort to capacitate women with skills, exposure and awareness to enable them penetrate the sector. In addition, innovative technologies to improve gender responsiveness in the sector should be encouraged and adequately financed.

Finally, based on the general opinion of the respondents and literature review, the researchers conclude that gender equality in the transport sector is changing positively and one of the major and the biggest achievements has been that women are making an entry into the sector. This is considered a big step. The fact that there are some women taxi drivers, road engineers, entrepreneurs, mechanics, researchers, policy influencers, activists, innovators or trade unionists is commendable and is a real success towards gender equality. This positive change, even though noticeable in urban than rural settings, is a sign of growing women empowerment and progress towards achieving a more gender-responsive transport sector.

11.8 Recommendations

11.8.1 Implications for Further Research

Lack of data is one of the reasons why transport planning and development does not address the needs of different social groups (Hasson & Polevoy, 2011). There is need for gender disaggregated data that clearly indicates the needs of men and women to inform policy, planning and design of transport (World Bank, 2010).

Apart from women roles as primary caregivers, women's travel patterns are also influenced by other barriers that can be technological, physical or environmental which impede access to public transportation (Chadha & Ramprasad, 2017). It is therefore important that investigations are done on how technological and environmental changes affect the needs of both men and women and appropriate policies formulated.

In addition, even among women there are other more vulnerable groups like women living with disabilities. As it emerged from the study, some of the disabled women are never able to commute at a time of their choice because of the peak hour crises. So they have to wait until the rush for public transport eases so that they can access transport. Most often these are late hours which also pose a security risk to them. It would therefore be useful to have researchers delving into these areas so that designers, policy makers, and planners can be informed of the various dynamics in public transport and how the various needs could be accommodated in transport infrastructure. It was also noted that documentation of success cases, especially in the developing world, has not been very good and thus it did emerge from this study that this an area that needs improvement. The number of innovations coming up to zeal the gender gaps should be documented, upscaled and applied for benchmarking.

11.8.2 Implications for Practice and Policy

Traditionally, transport planning and design has been built to suit the males with the assumption of gender neutrality. The work arrangement in the sector is also blind to the female gender and does not favour women in their roles. For instance, the 24/7 schedule is extremely hard for women workers who also bear reproductive social roles. Transport industry will need to adopt gender integration into its policies to ensure that all its functions and systems are sensitive to the needs of women and men alike. There is need to inculcate flexible working hours to enable women cope with employment as well their reproductive roles.

Moreover, the government and actors in the industry need to encourage women to seek skills in various core areas of the transport industry. It was noted that in many instances women do not even have the basic skills to work as drivers. There are few agencies such as FLONE initiative trying to build capacity of women so that they can fit into various levels of the sector but the level of effort is still low because of resource constraints. It is important that such initiatives are financed by the government.

Deliberate measures to promote women participation in the sector through capacity building is here encouraged. This ought to start from basic education to tertiary level whereby incentives to girls to consider STEM subjects should be enhanced. This will lead to availability of a resource pool women skilled in areas such as engineering are ready to take up jobs in the industry.

Moreover, actors and policy makers in the industry need to embrace a sensitization strategy to demystify some of the traditional perceptions that create stigma responsible for curtailing women participation in the transport sector. Many unemployed women would benefit from jobs in the sector if it were not for stereotype and stigma. Women shy away from possible ridicule as some of the jobs are considered male jobs.

In terms of infrastructure design, an inclusive design ought to be implemented. It has been stated in this study that women make more trips than men; they travel with children, luggage and physiologically have unique needs compared to men. For example, a woman can be caught up in such emergencies as child birth but transport facilities are not designed to accommodate such scenarios. Therefore, transport facilities need to be designed to have inclusive facilities.

On security, women and children are vulnerable. It is a wonder that even as many African countries invest in modern highways, they continue to neglect the loopholes that pose security risks. A case in point is the rampant installations of flyover passes for pedestrians without paying much regard to the safety of all pedestrians, particularly criminals who prey on lone women travellers. The study recommends a revamp of road transport security system.

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