HIGH VOLUME TRANSPORT
APPLIED RESEARCH

FINAL REPORT: GAINING OR LOSING GROUND: ENSURING THAT POST-COVID-19 TRANSPORTATION SERVES THE NEEDS OF WOMEN IN LOW-INCOME SUB-SAHARAN AFRICAN CITIES

COVID-19 Response & Recovery Transport Research Fund

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Abstract	
This research looks at the unforeseen risks and impacts of the rapid responses in Sub-Saharan African cities due to the COVID-19 pandemic that affected, and will continue to affect urban women with low incomes, and makes suggestions on short- and longer-term ways forward to drive gender equity goals and impacts.	

Cover image: Oxford Policy Management (OPM) Nigeria

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APPENDICES

ACRONYMS

BRT	Bus Rapid Transit
CAN	Cape Town Community Action Network
COVID-19	Novel Coronavirus 2019
FCDO	Foreign, Commonwealth & Development Office
GBV	Gender-based violence
HVT	High Volume Transport Applied Research Programme
IMC	IMC Worldwide Ltd
INTALInC	International Network for Transport and Accessibility in Low Income Communities
LIC	Low-income country
NGO	Non-Government Organisation
SDG	Sustainable Development Goals
SSA	Sub-Saharan Africa

GLOSSARY

Lockdown	According to Collins Dictionary 2020, lockdown is defined as 'the imposition of stringent restrictions on travel, social interaction, and access to public spaces'.
NGO	Non-government organisation: a non-profit organisation that operates independently of any government, typically one whose purpose is to address a social or political issue.
Physical distancing	As defined by the World Health Organisation (WHO) uses the term physical distancing and provides several guidance scenarios: • protect yourself and others from COVID-19 – physical distancing, wearing a mask, keeping rooms well ventilated, avoiding crowds, cleaning your hands, coughing into a bent elbow or tissue. • what to do keep yourself and other safe from COVID-19: maintain a distance of at least 1-metre; make wearing a mask a normal part of being around other people. • how to make your environment safer: avoid the 3Cs – spaces that are closed, crowed of involve close contact. • don't forget the basics of good hygiene – hand washing, touching your eyes, nose and mouth, clean and disinfect surfaces.
SDG	Sustainable Development Goals: Sustainable Development Goal 11 (Inclusive Cities) states that by 2030 all cities should provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older person. In addition, sustainable and safe

transport plays a major role in achieving many others that refer to equity, equality and poverty reduction indirectly. (8)

EXECUTIVE SUMMARY

Purpose

A large body of scholarly work (including for example 1–3) describes the particular mobility patterns and constraints of women in developing countries: compared to the 'male norm' (2:5), women's travels are 'multi-purpose' and 'resource-constrained', and access to health, education, and employment opportunities are limited due to various social, physical, and economic reasons. In addition to having less access to all means of transport, women also assume greater shares of the household travel burden and make more frequent and shorter trips associated with health, food, and caring responsibilities. (4,5) Poor transport stifles women's entrepreneurship and prevents women from fulfilling their own potential and making economic contributions to growth and prosperity at household, regional, and national levels. Women are more at physical risk than are men when travelling and in public spaces; women suffer disproportionally high losses of employment opportunities when relocated or evicted; and cultural restrictions placed on mobility influence the way in which women are able to move, for how long they may be away from home, and where they may travel. (2) The cost of transport restricts women further, and affordability limits women's access to income sources and services. (2)

The economic and social outcomes of gendered disadvantage in Sub-Saharan Africa (SSA) have been 'glaringly evident' (1) for quite some time , which Lucas et al (4) describe as 'the systematic process of almost complete "lock-out" from resources, rights, and opportunities.'

By and large, post-disaster rehabilitation measures in the developing economies – such as post-conflict or in response to natural disasters – focus on establishing immediate control rather than 'pre-mediated rehabilitation decisions with long-term consequences'. (2:9)

COVID-19 emerged into this inequitable environment, where women already lived with gender-based transport disadvantage and its implications. Further, given the historic focus on immediate control (above), rather than visionary planning, our hypothesis was that COVID-19 constraints were likely to follow suit.

This research therefore looks at the unforeseen risks and impacts of the rapid responses, especially in relation to urban transport due to the COVID-19 pandemic that affected the mobility of urban women with low income. In line with UKAID priorities, the geographic focus is on low-income countries, or women with low-income in middle-income countries, particularly within Sub-Saharan Africa (SSA). The research has focused on Lagos and Abuja (Nigeria), Johannesburg and Cape Town (South Africa), Nairobi and Kisumu (Kenya), and Kampala (Uganda).

The research also makes suggestions on short- and longer-term interventions to drive gender equity goals and impacts.

Method

This report combines a literature scan of journal papers as well as policy reports, newspaper articles, and institutional reports and findings, complemented by observations and insights provided from key-informant interviews from the public, private, and civil-society sector. The key informants in each country were chosen for their ability to provide the insights and other information needed and to be representative of a wide group of women. A list of interviewees cited (identified by initials only, for purposes of confidentiality) by sector and country is included as Appendix A; and the interview guide is included as Appendix B. Not all interviewees are cited.

Key findings

It is evident from the research that the immediate effects of COVID-19 deepened and widened the existing fault lines of transport, economic, and social inequity, entrenching transport-disadvantage, poverty, and social exclusion; this has impacted women more than men. Women's needs and rights were largely overlooked in transport planning and investments even before the pandemic, and there was no evident change in the rapid responses in the countries studied.

This research shows women's development and progress in terms of the Sustainable Development Goals (SDGs) for example, is likely to be compromised. An overarching response from interviewees was that, in their

view and experience, women had been particularly disadvantaged during 2020 due to the pandemic responses. Both economic and social impacts were consistently mentioned, including that women were more likely to have lost their jobs and livelihoods (compared to men in similar circumstances), and this was compounded by increased levels of care and family duties. The combination of these two aspects suggests that many women will struggle to return to previous – yet already precarious – levels of financial and societal independence within the foreseeable future. All governments and decision-makers would do well to be concerned. The impacts will not only impact commitments to the SDGs but will spill over and deepen many societal challenges that will compromise progress towards inclusiveness and equity.

Findings are described under the themes of:

- economic impact;
- transport availability and cost;
- essential workers and transport vulnerability;
- domestic responsibility;
- women who work in transport;
- loss of agency;
- personal security, harassment and violence;
- access to physical and mental healthcare;
- education;
- walking;
- cycling; and
- participation in decision making.

Each theme is discussed in terms of its intersection with transport, access, and mobility, and recommendations are drawn from the interview findings.

Recommendations are based on the level of agreement and the frequent comments by interviewees. A key finding of interest is that the answers to gender-sensitive transport planning are in many cases are known, but rarely implemented; thus, recommendations are not always COVID-19 specific, nor are they necessarily novel, but they are nonetheless valid. Recommendations were developed by the authors based on the interviewees responses to the following questions:

- If we were planning lockdown transport restrictions today, what would you suggest was done differently?
- What key risks can be identified to alert decision-makers to ensure that the notion of 'build back better' gives women and those who may today be transport disadvantaged access to more just and green options.
- What do you think planners and decision makers need to take into account to serve women's needs better?
- If we were planning new transport services in general, what would you suggest we do differently?

Key Recommendations

Short-term actions during immediate COVID-19 emergence and recovery

- Invest in routes to food security;
- Increase access for, and to, essential workers and health-care workers;
- Provide physical and digital access to education; and
- Ensure that gender-based violence (GBV) services are accessible.

Ongoing actions for enduring gender-sensitive transportation

- Recognise the multiple ways in which women move;

- Ask women what their needs are – and listen to what they say;
- Empower women and girls through transport;
- Revisit ways in which to provide subsidised services;
- Concentrate on making transport safe for women; and
- Plan for everyone.

1. Introduction

1.1 Aims and objectives

This report describes how current typical COVID-19 transportation responses have a gendered impact, and the extent to which these responses have disproportionately impacted women and increased the risk of women in low-income not being able to re-enter economies and re-build their income sources. It makes suggestions and recommendations on short- and longer-term interventions to drive gender equity goals and impacts.

1.2 Scope

In line with UKAID priorities, the geographic focus is on low-income countries, or women with low-incomes in middle-income countries, particularly within Sub-Saharan Africa (SSA). The research has focused on Lagos and Abuja (Nigeria), Johannesburg and Cape Town (South Africa), Nairobi and Kisumu (Kenya), and Kampala (Uganda).

The study focussed on the experiences and impacts on women in mostly primary cities, considering passenger transport and trip purposes (micro-freight, health-care, food provisions, and livelihoods). This report uses the term 'transport' to refer to all travel modes, from walking and cycling, individual and collective public and private motorised journeys.

1.3 Limitations

The purpose of the UKAID COVID-19 Response & Recovery Transport Research Fund (C-19RRTRF) is to deliver a rapid response to COVID-19 in transport recovery. For this reason, time-frames for research are short (for this project, one month from inception to draft delivery), and neither budgets nor time permit extensive or representative in-person research. Nonetheless, despite the rapid nature of this research, findings show remarkable similarity across countries and interviewees (saturation). The authors are confident that the findings reflect the lived experiences of women, respond adequately to the research questions, and indicate a number of pathways for the future.

1.4 Method and approach

Knowledge and insight regarding the intersection between gender, mobility, and poverty is not only found in the domain of academic literature but also in published reports, policy briefs, and the media. Given the timescale between journal-submission to publication, at the time of research and writing there was not yet a large body of peer-reviewed work that covers this area of interest, particularly in SSA.

This report combines a literature scan of journal papers as well as policy reports, newspaper articles, and institutional reports and findings, complemented by observations and insights provided from key-informant interviews from the public, private, and civil-society sector. The key informants in each country were chosen for their ability to provide the insights and other information needed and to be representative of a wide group of women. A list of interviewees cited (identified by initials only, for purposes of confidentiality) by sector and country is included as Appendix A; and the interview guide is included as Appendix B. Not all interviewees have been cited.

1.4.1 Research questions

The review and interviews were guided by the following research questions:

- What are the specific aspects of COVID-19 that particularly affect women's mobility?
- What setbacks, brought about by the mobility constraints caused or deepened by the COVID-19 pandemic, have been particular to women, in terms of loss of agency; interruption of empowerment and increase in poverty; disruption of education and skills, re-traditionalisation of caring; and impact on family cohesion and children (increased domestic violence or public sexual harassment and Gender Based Violence (GBV)?
- How have local or national responses in SSA had unforeseen consequences on low-income women's mobility (further reducing or improving rebound options)?

- Does a renewed reliance on walking (especially due to COVID-19) over motorised modes/public transport perpetuate and/or increase women's risks of personal safety, reduced opportunities, road safety, and time-poverty?

- To what extent have the needs of women been included in the responses by authorities?

- Have the direct or indirect impacts of transport measures pre and post COVID-19 furthered or reduced any progress in female equality, equity and empowerment in the African context?

2. Background and context

Transport and its infrastructure are not gender neutral. (1, 2) Although the transport arena is highly gendered across the world, it is particularly evident in Sub-Saharan Africa (SSA) where women's resources (including access to mobility resources) are more constrained due to a 'mix of entrenched social-cultural… factors' and male dominance in the transport sector. (1)

A large body of scholarly work (including for example 1–3) describes the particular mobility patterns and constraints of women in developing countries: compared to the 'male norm' (2:5), women's travels are multi-purpose and resource-constrained, and access to health, education, and employment opportunities are limited due to various social, physical, and economic reasons. In addition to having less access to all means of transport, women also assume greater shares of the household travel burden and make more frequent and shorter trips associated with health, food, and caring responsibilities. (4, 5) Poor transport stifles women's entrepreneurship and prevents women from fulfilling their own potential and making economic contributions to growth and prosperity at household, regional, and national levels. Women are more at physical risk than are men when travelling and in public spaces; women suffer disproportionally high losses of employment opportunities when relocated or evicted; and cultural restrictions placed on mobility influence the way in which women are able to move, for how long they may be away from home, and where they may travel. (2) The cost of transport restricts women further, and affordability limits women's access to income sources and services. (2)

In the counties under this study, women mostly work in the informal sector or within their households, some distance from formal sources of employment. Their multiple reproductive and productive roles in society, attending to household chores, caring for children and the sick, and accompanying those in their care on trips, means they have travel patterns different and more complex to men in formal employment. (6)

Researchers have made well-argued links between transport, mobility constraints, and poverty in SSA. (2, 3) Among the outcomes of these links is a gender-based transport-disadvantage or transport-related social exclusion. Transport-disadvantage is a concept more often underpinned by an understanding of financial poverty, (1) but when combined with gender-based mobility constraints, the transport-disadvantage outcomes become more evident. Transport disadvantage has been associated with an inability to access the goods and services necessary to live one's daily life, and the many consequences include ill-health, maternal mortality, high infant mortality rates; unemployment, poverty or inability to earn a living wage, long and tiring travel patterns, exposure to crime, noise, pollutants; poor education achievement, and inadequate access to healthy, affordable food. (7)

The economic and social outcomes of this gendered disadvantage in SSA have been 'glaringly evident' (1) for quite some time, which Lucas et al (4) describe as 'the systematic process of almost complete "lock-out" from resources, rights, and opportunities.'

By and large, in the developing economies most post-disaster rehabilitation measures – post-conflict or in response to natural disasters – focus on establishing immediate control rather than 'pre-mediated rehabilitation decisions with long-term consequences'. (2:9)

COVID-19 emerged into this already inequitable environment, where women already lived with gender-based transport disadvantage and its implications. Further, given the historic focus on immediate control (above), rather than visionary planning, our hypothesis was that COVID-19 constraints were likely to follow suit. This research therefore looks at the unforeseen risks and impacts of the rapid responses in Sub-Saharan African cities due to the COVID-19 pandemic that affected, and will continue to affect, low-income urban women.

With 2020's lockdowns, this description, above, is prescient – and the focus of this report is the way in which existing social exclusion and transport disadvantage were exacerbated by COVID-19 containment processes, and whether the precarious gains women might have made in terms of the Sustainable Development Goals (SDGs) have been lost.

Sustainable Development Goal 11 (Inclusive Cities) states that by 2030 all cities should provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children,

persons with disabilities and older person. In addition, sustainable and safe transport plays a major role in achieving many others that refer to equity, equality and poverty reduction indirectly. (8)

Transport restrictions were implemented almost universally as part of lockdown measures. Many SSA countries banned all motorised movements by public, private, and commercial transport, while in others there were different tiers of restrictions. In most countries in this study, travel by all types of personal and public transport (scheduled and unscheduled) was prohibited other than for essential trips and during restricted hours; walking and cycling were encouraged in Uganda, but other countries exhibited a more ambivalent approach. (9) Further measures included shutting markets, schools, encouraging home working and implementing curfews. All countries studied implemented a total ban on interstate and international travel especially in initial lockdown phases. The private sector also closed offices and government bodies shifted to home work. Only stores selling what were deemed essential items and providing essential services were permitted to remain open. Health and other key workers were either housed at their place of work (hospitals or clinics) or provided with special passes so they could travel to and from work and their residences.

There emerged in the last few months of 2020 a number of research outputs describing the gendered impact of COVID-19 containment, particularly in terms of health impacts, job-losses, and gender-based-violence.[1] 'The implications of these effects for women and their households are likely to be dire … [with additional] pressure on women's economic wellbeing as well as their physical and mental health'. (6, 17) There is broad consensus that 'the current crisis is really worsening enormous existing inequalities, in addition to creating new ones' (10, 11, 13) and is 'a disaster for women's empowerment, as it will push women out of the job market and down the ladder after decades of incremental improvement'. (11) Increased domestic violence has been noted globally and this is also the case in several African countries. The Nigerian government declared a state of emergency following a sharp spike in cases of femicide and rape, with one women's shelter reported a 700% increase in cases of violence since lockdown. (12)

The COVID-19 pandemic affected women, refugees and people with particular vulnerabilities disproportionately, and is likely to exacerbate existing inequalities. (13–16) The McKinsey Institute's study of the effects of the pandemic (17) states that the economic fallout has had a regressive effect on gender equality. The Institute calculated that women's jobs are 1.8 times more vulnerable to this crisis than men's. In addition, there are clear implications for health and wellbeing, with maternal and child health at the forefront. For example, poor health-care practices and inadequate maternal health reported in Kenya and Uganda is associated with poor transport. (18, 19) Similar impacts have been observed due to deficient transport among refugees – and others who are vulnerable in terms of race, gender, socio-economic status and nationality. (19)

However, the Institute also indicates that, conversely, if steps are taken to redress this early enough, the social and economic outcomes for millions of women globally could be improved, and at the same time help boost economic growth within the dream of 'build back better'.

2.1 Gendered characteristics of mobility in SSA

As in much of the world, women's needs are rarely included in transport planning. (20) Transport planning typically focuses on work-commute trips, which does not attend to the many trips taken by women. While documents such as South Africa's National Transport Master Plan (21) recognises the centrality of transport to social and economic development, little is actually done to include any gendered needs. Research conducted in 2019 by INTALInC, the International Network for Transport and Accessibility in Low Income Countries, found that 'all modes of transport are less sensitive to the specific travel needs of women … and particularly women are faced with a number of constraints which excludes them from use of the city's services'. (22)

Walking is a major mode of transport in SSA cities, not only for women, and mostly not by choice, (1) but due to cost constraints or lack of alternatives. Because women are more likely to be poor than are men, and have less access to financial resources, they are also less likely to be car owners than are men and subsequently are more dependent on walking and public transport than men. (1) In almost all African cities, walking infrastructure

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[1] These are referenced during the course of this report.

is poor quality or non-existent. (23) Cycling is not yet widely accepted as a form of urban transport for women, and in almost all African cities the infrastructure for both is poor-quality or non-existent. (23)

Public transport is dominated by privately operated vehicles (paratransit), with a range of mid-sized city buses, minibuses, vans, motorcycles, motorised tricycles and bicycles taxis. (24) Bus Rapid Transit (BRT) services are available in South Africa and Nigeria, with local (poor quality) rail services in South Africa and a new light rail system in Abuja, Nigeria. Water transport is sometimes available (as in Lagos, Nigeria).

Women tend to use all forms of paratransit, boda bodas (motorcycle taxis), and rail (when it is a cheap, safe option). Women disproportionately bear the burden of travel costs: where they travel with goods and those for whom they care, they pay extra for baggage or their charges. Furthermore, without any form of integrated ticketing, each trip in the trip chain is paid for separately. Thus, as they pay for each trip separately, they also disproportionately bear the burden of travel costs. Travellers typically (60%) spend up to 51% of their income on daily commutes. (11)

E-hailing services are expanding across SSA with local start-ups providing competition to global brands such as Uber. (1, 24) Many of these services are an adaptation of existing private modes such as okadas (motorcycle taxis in Lagos). As suggested by Giddy (26), e-hailing services have started to transform the mobility of users with access to technology across cities, specifically because of their ease of use and perceived safety features. Another service includes a shuttle service started by three women entrepreneurs in Nigeria who provide door-to-door shared service with onboard WIFI for working commuters. (27) Though this last service tends to cater to the middle classes, there is some evidence that e-hailing services are often preferred even by low-income users who ride together and split fares. (26)

In addition, women suffer from sexual harassment in the public space and while using public transport, which constrains their ability to move and access opportunities. (5)

Also as in much of the world (3), the transport industry is male-dominated, with few women drivers and conductors. Of the women working in transport surveyed in Kenya on the impact of COVID-19, 52% had lost employment and 83% had experienced a reduction in income in the sector. (28) Women in this instance worked as drivers, conductors, booking clerks and, in one instance, a mechanic. In Uganda, COVID-related job losses translated into an opportunity for some women who started a women-only taxi company called Diva Taxis, where unemployed women could take advantage of their vehicles to provide transport services. (29)

While women do not necessarily make up the majority of workers the transport industry itself, much informal trading (of whom the majority of traders are women) are dependent on footfall, street-side trade, and transport interchanges. The decrease in economic activity in cities combined with increases in food costs hit these women hard. Street trading and hawking are not possible remotely, but also they depend on footfall, now reduced as the customers were themselves working remotely. (30)

3. Country impacts of COVID-19 mobility constraints

3.1 Kenya

In Kenya a total shutdown was declared by President Uhuru from 8 April 2020 for an initial period of 21 days. This shut down focused specifically on stopping movement in and out of areas that had recorded infections, namely Nairobi, Kilifi, Kwale and Mombasa. Movement of essential goods was allowed under police supervision, but people were not allowed to travel in or out of these districts, and public transport in and out of these areas was shut down. During this time a general national curfew was imposed from 7pm to 5am each day. Schools, institutions of higher learning, clubs, restaurants and non-essential businesses were all closed with work from home guidelines. No specific trade restrictions were announced, but trade was subject to sanitation protocols and physical distancing of one metre. Though President Uhuru praised a local state for opening their sports stadium as a market to facilitate safe, outdoor trading, the knock-on impact of the shutting of the majority of markets on informal traders, especially those used to trading around transport hubs, has been devastating.

This total shutdown was extended three times before 7 September. Within infected areas, public transport could operate subject to certain measures, namely: 50% capacity in all vehicles; only one passenger on boda bodas and tuk-tuks and the wearing of masks. In addition, any public place, including public transport ranks requires the wearing of masks, physical distancing of one metre and sanitation measures.

The impacts of the loss of livelihoods among women due to COVID restrictions included not being able to afford school fees, defaulting on loans, and attempting to reduce living costs however they can. In addition, male workers were reported as trying to coerce women into performing 'sexual favours' in order to access scarce work. (31) The harassment common on public transport before COVID-19 (36), both sexual and otherwise, continued throughout the year on matatus. (32)

Women reported that while generally their physical health was 'okay', mental health had been badly impacted 'as a result of the loss of jobs, fear of contracting COVID-19, inability to provide food for their families, lack of access to clean water, inability to pay rent, presence of children at home and fear of being caught outside during curfew hours'. (33) With regards to the fear of being caught outside during curfew hours, police brutality in response to curfew violations has been widely reported and caught on video. (34) Other impacts particular to women who are low income relate to COVID-19 prevention. In informal settlements, water is often provided by private vendors. Reduced incomes mean that water for frequent handwashing, or sanitiser may not be affordable. (33)

School feeding schemes were not accessible, so food resources at home were more stretched. In addition, childcare was not available, and so women needed to ask favours of neighbours if they were out looking for work. Internet and data costs are an added burden for children whose schools have moved online. Some women 'have sent their children to rural areas to live with relatives to ease the pressure that comes with keeping them in town'. (33)

The risk of maternal and infant mortality for women who went into labour during curfew time was widely reported as a concern, because of the lack of access to transport to get to health facilities, and the fear of heavy handed enforcement of regulations by police officials (34,35). One response, for example, 'Wheels for Life', started in Nyeri in order to provide pregnant mothers who needed emergency transport to access healthcare, especially during curfew. (36,37)

3.2 Nigeria

A range of measures were implemented to contain the spread of the virus, including closure of international airports, public and private schools, universities, stores and markets, and suspension of public and religious gatherings and a lockdown in Abuja, Lagos, and Ogun states.

With the first confirmed cases of COVID-19 in late February, the Federal Government started announcing prevention measures, but specific measures related to public transport and shared taxis were not initially specified. (11) The Federal Government went on to announce an initial two week complete lockdown on 30 March 2020, and extended this for a further two weeks. (12) During this time only essential workers were allowed to travel to work, but there was no public transport.

Lockdown was relaxed on 4 May 2020. Transport restrictions were put in place including limiting passenger capacity to 60%. Operators tried to compensate for the loss in capacity by increasing fares, sometimes by 100% or more. As this further reduced the possibility for people to use the system these capacity limitations, physical distancing and sanitation requirements were systematically flouted by many of the informal transport providers. Despite police arrests for violations this did not stop. (38)

Relief funds for informal transport were released to support operators for losses to compensate for COVID-19 related losses, but these were either not able to be accessed due to the complicated paperwork, or because much of the informal sector had incomplete operating licences. Women drivers in particular did not apply, as the time needed to make the application was too long, and they were constrained with family duties (EO, Nigeria).

As children were not able to attend school, women who still shouldered the majority of domestic and childcare work were largely unable to return to work at all. (12) The same source noted the high rate of job loss in the service industry (especially restaurants, hotels and catering) affected women more severely, as they occupied many of these roles. This compounded the mental and physical stress of increased household burdens for women, and the increase in gender-based violence reported in March and April during the total lockdown.

3.3 South Africa

In South Africa Lockdown Alert Level 5 was in place from midnight 26 March until 31 April 2020. Movement was severely curtailed: individuals were not permitted to leave home except under strictly controlled circumstances, such as to seek medical care; buy food, medicine and other supplies; or collect a social grant. All long-distance and inter-provincial public transport was prohibited; public transport operations were prohibited except for transporting essential workers, and then only between 05:00 and 10:00 and 16:00 and 20:00. Vehicles were not permitted to carry more than 50% of their licensed seating capacity. Exercise outside of the home was prohibited.

Alert Level 4, from 1 to 31 May 2020, permitted public transport services between 05:00 and 19:00, with a grace period of until 20:00 to drop off passengers. Loading capacity remained at 70% for minibus-taxis, and 50% for e-hailing and metered taxis. An increasing number of goods were deemed essential, and travel demand increased. Exercise was permitted outdoors between the hours of 06:00 and 09:00. 1 June 2020 saw minibus-taxis and buses permitted to resume operations at all hours (still at 70% loading capacity), whereas e-hailing and metered taxis could operate at 50% capacity. Train services were still not operating. On 12 July 2020, the decision was announced that minibus-taxis could be fully loaded for short distances, on condition that risk-mitigation protocols related to masks, vehicle sanitising and open windows were followed. By Alert Level 2 (18 August to 20 September 2020), all road-based transport was permitted to operate at full capacity, and trains could carry a maximum of 70% capacity.

Spaza shops (informal convenience stores often run from home) were permitted to trade – if they had permits. As these were not always easy to obtain, some 80% of local spaza shops closed during this time. Street traders were not permitted to operate. When permission was again granted, many such operations could not no longer function, as their limited capital was depleted. Among the consequences of the restricted local food trade – mostly plied by, and frequented by, women in low-income – were longer travel distances to purchase food, longer walking trips, increased cost of travel, and increased cost of food. (39)

Overall, during COVID-19 lockdown in South Africa, where job losses occurred, women suffered more, lost their jobs more quickly. and where job gains were made, benefited less – these losses were greatest among the more vulnerable groups of women. This is contrary to previous recessions, where men have tended to suffer greater job losses. Closure of schools and childcare facilities was key to this disruption of care work and increase in unpaid work. (40)

The poorest 50% of workers in the country were affected ten times worse than the richest in terms of lost income, unemployment, and significant damage was done to access to existing health programmes such as those attending to TB, HIV, primary care, and maternal health (41). By mid-July 2020, a net loss of three million jobs in South Africa was reported – with two million of those being women who lost their livelihoods.

(11) A 22% decline in the share of women employed compared to a 10% decline in the share of men employed was reported between February and April. (42)

Almost half of households responding to a Coronavirus Rapid Mobile Survey said they had run out of money to buy food. The researchers who published the National Income Dynamics Study (NIDS) noted that: 'employment has declined substantially and that the effects of this are largest for the most disadvantaged. Inequalities along traditional lines of race, gender, occupation, earnings, location and education have all grown significantly. An already unequal national situation has been made much worse'. (11) This narrative is a common one in the literature in South Africa – that 'the current crisis is really worsening enormous existing inequalities, in addition to creating new ones'. (10) Public Transport also suffered losses in South Africa – see for example (43–46) although it was one of the African countries that managed to stabilise fares.

South African women have been more severely affected than men during COVID-19 lockdowns and are likely to continue to bear the brunt of job losses, lower incomes, and disproportionate increases in unpaid childcare. This uneven impact of the crisis is likely to exacerbate existing vulnerabilities and inequalities. (39–41)

3.4 Uganda

Uganda was among the last countries in Africa to confirm cases of COVID-19 (in March 2020). Lockdown started on 22 March 2020, and included closing education facilities for a month, suspension of public transport (buses, matatus and boda boda) for 14 days, closure of non-essential businesses, and a night curfew from 7pm to 6am. Food markets and outlets were permitted to stay open, and vendors were encouraged to sleep at markets and venues to avoid travel. Boda bodas (cycle and motorbike taxis) were banned from carrying passengers but could transport cargo/luggage. So, people walked to buy food, and if they had to either walk a long way or bought more than they could easily carry, they had to find 'trustworthy' drivers to take their goods back to where they lived.

When public transport was permitted to return, in June 2020, not only were capacities limited to 50%, but the relevant government authority had attempted to take the opportunity to regulate the mode, with registration requirements, new, rationalised routes, and permits – this left many passengers stranded with fewer vehicles, and at times fare prices had doubled. Even ride-hailing was prohibited, and essential workers were expected to use cars; only when that was deemed unfeasible did the government start providing transport (AN, Uganda).

As in all countries under discussion, the lockdowns and subsequent restriction had a disproportionate effect on vulnerable groups. (47) Already, women with low- incomes, children, and other vulnerable people faced challenges getting to work and accessing critical social and health facilities, and experienced low levels of mobility in both rural and urban. (48) For example, a declining use of health-care services because of restricted mobility , and antenatal care and family planning were not considered emergencies. (49)

A formal Civil Society response, in the form of an Open Letter to the World Bank, had noted that 'the COVID-19 response plan was launched in Uganda without an effective plan to ensure that Ugandans with emergency health needs, particularly pregnant women, new-borns, and other vulnerable communities, would be able to continue obtaining health services …'. (50) 'Bans of movement and unreasonable movement restrictions on people who have urgent health needs increases the risk of preventable death and suffering… People are stranded in the communities, unable to reach health facilities on time … The proposed mechanisms for use of government vehicles and ambulances are not effective for meeting the needs of the most vulnerable who need urgent care,' the Open Letter warned.

4. Key findings from interviews

Somehow it seems to be easier for men to adapt to what is available, and to change - as for women there are so many other things to factor in, whether it is safety, load, connections, traders, children, space, all these other factors. I as a woman don't have the flexibility in this way, which renders me immobile when I take everything into consideration. (NM, South Africa)

Interviews with at least four key informants per country, each able to share insights from a much larger grouping of women, were conducted between 26 October and 10 November 2020. The interviewees were selected based on their knowledge and work within gender, transport, and social development in either the research, practitioner, or advocacy/activist sector. This selection was made based on the authors' knowledge and understanding of the field, and in consultation with Jeff Turner, technical lead on the project.

One focus group in Cape Town was conducted in mid-November 2020 with women who are foundational to the Cape Town Community Action Network (Cape Town CAN), established as a response within low-income communities to COVID-19 restrictions in March 2020. At this focus group, findings from elsewhere in SSA were shared, and the experiences of women in Cape Town will be compared to establish common ground as well as possible differences. These insights are included in the findings.

Interviewees responses were captured and tabulated according to the questions provoked by the research topic areas. A list of initial themes based on research questions and researcher observations formed the basis for initial engagement with, and organisation of the data. These initial themes were expanded to include themes emerging from interviewees, and in a second round of analysis and writing, the relationships between themes demanded some merges, and some re-organisation. The final themes as detailed below include the economic impact; transport availability and cost; essential workers and transport vulnerability; domestic responsibility; women who work in transport; loss of agency; personal security, harassment and violence; access to physical and mental healthcare; education; walking; cycling; and participation in decision making. Each theme is discussed in terms of its intersection with transport, access, and mobility, and recommendations are drawn from these interview findings.

Interviewees have been identified by their initials and countries. Not all interviewees have been cited.

4.1 Economic impact

As a key area that intersects with many of the other negative impacts of COVID-19 related transport restrictions, the economic impact has been extensive. Our interviewees described a range of ways in which these impacts were experienced by women with (already) low income, and those who fell in low income during this time.

For many women who were involved in small businesses selling goods, transport restrictions had negative impacts. RD (South Africa) mentioned that buyers could not access ATMS or transfer the money to the women selling goods, especially during the hard lockdown in South Africa. In Nigeria, AX raised the issue that women were more likely to sell perishable goods, and in Kenya, HK painted a comprehensive picture of the experiences of women traders:

Women who are mostly 'petty traders' in informal settlements, who trade in agricultural products, clothes, food, were dramatically more affected. They usually have to travel to collect their goods to sell, as they source their goods elsewhere, then bring them back to their structures...The capacity limits had a particular impact – for example, they would usually take a tuk-tuk, which would carry five people; but now that it can only carry three, they have to make up the fare. In this way, the cost of travel went up. Likewise, if you travel in a matatu, not only does your own fare go up, but so does the fare of your goods... Boda boda prices were not affected as much, but this is a more dangerous mode. The 'distancing' requirements also affected women traders, as there had to be fewer traders in the markets.

NM (South Africa) and FA (Nigeria) also noted that many women food sellers' customers no longer travelled to or from work, so those who relied on supplying commuters at taxi ranks, or regular passers-by, were not able to earn. This situation has improved as people have gone back to work, but more people are walking so the transport hubs are not as profitable as before. Reference group participants confirmed this, and added a

dimension that in Cape Town, selling goods on the trains was one of the ways women tried to make a living, and that this option has been shut down with the train closures.

Domestic work is a sector dominated by women with low income. This sector saw many job losses, especially in Kenya and South Africa according to our interviewees. This was partly because domestic workers rely primarily on public transport, which employers saw as a COVID-19 infection vector, thus domestic workers became 'undesirable' even once they were permitted to return to work (LS, South Africa). As women with higher incomes stayed home, or lost their own income, the knock on effect was to retrench or not pay domestic workers (MW, South Africa, NM, Kenya). Those who were retained in more wealthy households required the workers not to use public transport, and the employers preferred to transport them to and from work.

For those who were or became unemployed, there was little money for transport to seek jobs, and walking to get to interviews meant people were dismissed before being considered, for 'not looking fresh' (MW, South Africa). KQ (Reference group, South Africa) agreed, she used a bicycle, but could not access modelling work even with her bicycle because she would not arrive looking good.

For women who had lost their jobs and who had private vehicles of their own, one respondent raised the example of women turning to operating illegal transport operations as a way of meeting needs, as well as generating income for themselves, though they often faced intimidation from police, and had to keep money on hand to pay bribes.

From the interviews in Nigeria and Uganda, observations were shared about the ability of women to re-enter the employment market. Low-income women who had little or no assets in some cases were able to be more flexible in what they did; if they had sold food before, they may be able shift to another service such as water sales, or change selling location. Women who may previously have held part time or administrative jobs had great difficulty finding a replacement job or adapting to a more entrepreneurial option. Of course, those with very young or more children with no childcare were at a greater disadvantage to make such changes.

4.2 Impact on women transport users

4.2.1 Public transport availability and cost

We asked interviewees to talk about the transport restrictions and changes, and how these impacted generally on the lives of women who have low incomes, as well as their personal experiences. There was no direct exclusion of women in terms of denying them access to the transport available, and usually restrictions were circumstantial. Fare increases, fewer options, and long waits were consistently mentioned, as well as personal concerns about other passengers wearing or not wearing masks and the cleanliness of the vehicles. As the transport used by women with low income is predominately private-sector transport (matatus, minibus-taxis, danfo), they were significantly impacted by the large fare increases, lower capacity (resulting in longer waiting times) and a greater fear about contracting the virus by using public transport. These services are largely unsubsidised or uncontrolled by government; therefore, government has little capacity to ensure that fares do not increase. These increases were considered to have had the most significant impact on mobility.

In South Africa, where there are public subsidised buses and trains, buses were subject to the same restrictions (or more restricted) than paratransit, and rail was shut down entirely. Lagos BRT also has to adhere more strongly to the rules than the minibus-taxis in the cities in terms of restrictions on capacity and new cleaning regimes.

Restrictions on capacity and physical distancing requirements led to paratransit operators requiring children to be paid for separately, where women used to be able to carry children on their laps (AK, Kenya; FA, Nigeria). FA (Nigeria) also mentioned that if women tried to negotiate lower fares for their children, they may get left behind. Not only did children cost extra, but women were more likely to be travelling with children, as schools were closed and women were reluctant to leave their children at home with older siblings alone, or with a neighbour. These findings were confirmed by the reference group.

Long wait times for fewer vehicles across many contexts were mentioned. NK (Uganda) provides a good example of this: 'It became more usual to have to wait two hours at a stage waiting for the taxi, which was twice the price when it came, so many women just stayed at or near home.'

Even when lockdown regulations eased and public transport became available, increased fares, considerations about family and childcare, expenses and other limitations meant that public transport use decreased. Few women drive or own their own private vehicles, bicycles, or motorbikes; for women, an independent, personal mode means walking. AN (Uganda) offered an analysis about the overall transport landscape in Uganda which could be applied across contexts: 'It has basically deepened the fault lines that already existed with an imbalance between supply and demand, and now supply is halved and demand is the same or maybe a little lower, as people are moving less or have rejected public transport if they have the choice.'

The times at which public transport was available – designed for commuters and essential workers – was a challenge for women who are not only used to making more frequent and shorter trips associated with their caring responsibilities, but became a greater challenge during lockdowns.

As NM (Kenya) describes it: 'women's travel patterns and needs are still very different from that of men and hence restrictions like curfew do not consider that women's travel needs are centred on care responsibilities.'

Again, HK (Kenya), painted a vivid picture of the need for off-peak services even during lockdowns:

> ' I leave in the morning early, and you'll find more taxis, more people travelling. But picture this lady who has her children back home, they are not in school. When they are in school, she would prepare them and they would leave together. But now the children are home, she can't leave as early as they would have. Now, she has to prepare these children, and the meals before, and clean the house, and by the time she has done all these things, your mode of transport has by now reduced. The readily available ones are boda boda, with the safety and other concerns. And then again, she has to quickly make sure that she comes back home in good time to prepare the children again…

4.2.2 Walking

Many women described walking being a sometimes necessary part of travel due to routes being shut down, according to NM (South Africa), but also as an alternative to public transport – if women left the home at all. 'In many instances, women simply didn't move from home, and chose to reduce mobility rather than walk' (AK, Kenya). Walking as a mode of transport has its limitations in distance and time (this is especially difficult for women who are already time poor, and frequently need to travel with small children). In addition, they usually walk for a purpose – mainly shopping – so this plus the children need to be carried back home.

In Uganda, AN pointed out the shortcoming of urban planning with so many people living so far from their places of work. Relying on walking only limits 'what you can and cannot access' as a result. As EO (Nigeria) phrased it: 'Many women just stopped travelling beyond where they could walk.' One potential implication for women was that they needed to rely on the more expensive local suppliers for food, finding bargains often involved trips on public transport before. And as noted above, for many women providing food is their responsibility. In order to decrease these costs, AWA and FN (Uganda) would walk to the local market, and then find a trustworthy boda-boda driver to carry her goods home while she walked back. She said the drivers were keen to make money this way as they had fewer passengers. In addition, FN (Uganda) added that the curfew for 'vehicles starts at 9pm but boda bodas can only drive until 7 pm. This means that women have been told to get off and walk if the driver does not think he will get back to his house in time for the curfew and this is very dangerous for the women walking in the dark and they can be picked on'.

AWA (Uganda) noted that 'walking was explicitly encouraged, but it is a challenge to walk when you are carrying goods, and are accompanied by children as you cannot leave them at home. It was usually too expensive to take public transport.' NM also makes the link between the burden of domestic responsibilities and walking for women as opposed to men: 'Definitely – women have been most affected by "household austerity measures;" they try to strategise around saving money, and it comes down to walking. Men do the same though – they'll skip the first taxi and only take the second, for a 2-3 km walk.' She interviewed workers about walking in Cape Town during COVID-19, and the refrain 'I don't want to walk, I hate walking. I do it

because I have to' emerged in her research. An example of this was raised by MW (South Africa), who spoke of the long distances parents would walk with their children to get them to school safely.

Walking as a primary mobility measure also had an impact on time poverty: 'I think it's time, three hours because of travelling time impacts on other responsibility' (EA, Nigeria). NM echoed the issue of time poverty, and raised the additional aspect that in Kenya, women had to do careful planning around when they could be out walking because of the threat of police brutality after curfew.

The threat of crime (SS1, Nigeria), sexual violence (EO, LGG, Nigeria, GO, South Africa) and in South Africa a rise in rates of kidnapping (RD, South Africa) were also raised as reasons women would not want to walk. In addition, a number of references were made to the lack of safe walking areas on the road, women in particular were not happy to walk in the dark as the infrastructure is poor and lighting bad. 'You can fall down a pothole or into a storm drain if you are not careful.' The interview with URRENO, Kampala, a road-safety advocacy group, highlighted the increased risk of road traffic incidents as there were more people walking and many of them had little grasp of the basic rules of the road, such as keeping to the side areas and not weaving in and out of traffic. At present there are still less vehicles on the road but this is increasing to pre COVID-19 levels.

While pop-up pedestrian spaces were high-profile responses in many European, Latin American, and United States' cities, these interventions did not feature in SSA cities. Interviewees did not express particular interest in these interventions (except in Uganda where there was a clear increase in interest in cycling), nor did they consider that they would resolve the key challenges faced by pedestrians during the pandemic: threats to personal security, sexual violence, walking distance, time-paucity, and comfort.

At the same time, a few respondents spoke about walking as a positive effect of transport restrictions. It was spoken about as good exercise (BA, Nigeria; GO, South Africa); for some it was a time to get away from home and domestic responsibilities (RD, South Africa); and good for mental health (GO, South Africa). One person even said it was safer than taking public transport (LK, Nigeria). Others felt that even if it took longer they were sure to arrive, compared to waiting for the bus and 'not being sure if you would be able to get on'.

4.2.3 Cycling

AN, CB and NK from Uganda offered insights specifically relating to cycling as an alternative to public transport, and their observations about the impact of COVID-19 related transport restrictions for women.

AN noted: '*A lot of people (men and women) took out their bikes having not used them for years. But many women had never ridden a bike and could not, or they tried and found that it was so unsafe on the poor infrastructure even without the cars that they stopped.*'

NK, a cycling activist, shared that they had never had so much interest in cycling. She was involved with other organisations in the writing of an open letter to the Prime Minister, as he had recommended people should take up cycling and walking in a number of addresses to the nation. However, as noted by AN, nothing has been done to improve the safe cycling space to date, although city authorities are now considering how to integrate walking and cycling in their planning processes with more effort and enthusiasm than before.

NK noted that women who could ride and who were already used to cycling were more empowered than those that weren't. According to her, other women saw this and became more interested in cycling. Indeed all the bikes that they had on offer were taken up. She also noted that cycling was one way of beating the 'time poverty' of walking. She felt that men were more likely to keep cycling, and was less convinced that women would do so. In addition, they have a successful programme encouraging boys and girls to cycle to school in the outskirts of the city of Jinja (a second tier city). This was also mentioned by CB, who expanded that in the lead-up to the distribution of the bikes, 60% of the students signed up for the programme were girls. But when the bikes were actually claimed only 40% stepped forward. It is evident that there are still barriers to overcome to get women and girls cycling, many of which are social and not economic.

KQ is a cycling activist who took part in our reference group, stated that she relied on her bicycle to access groceries when transport was shut down. However, she echoed the Ugandan participants that bicycles were not readily available, or too expensive for many people in lower-income townships. In addition, there is no 'culture of cycling', she said, pointing to how many older African women would not ever consider cycling as an option.

4.3 Impact on women working

4.3.1 Women who work in transport

There were very specific impacts for women who worked in the transport sector, especially in privately owned and more informal modes. As noted by HK (Kenya): 'For me, it's clear that somehow men control transport. So you find that when it comes to the matatus, the boda bodas, they are owned by men.. so men manage to control the transport sector, yet women are more affected.'

In Kenya specifically, there were multiple job losses for women working in the matatu industry. Women were mostly conductors, and these were the first people to be let go as operators 'rationalised' in response to lower overall incomes due to the restrictions (AK, Kenya). According to NM (Kenya), women who did retain their jobs feared either catching COVID-19 or spreading it to their families, as they were in close contact with so many people every day, handling cash and regulations were not always kept well by operators or passengers.

EO (Nigeria) runs the women's section of a driver's association. She pointed out that 'many women drivers had their vehicles taken away by the owners because they could not pay for the rent of the vehicle and the fuel due with the increased price, lower capacity and cost of cleaning'. The women keep to the government guidelines but they 'paid the price' because they could cover their outgoings 'to make ends meet'. Many of those driving for private hire (men and women) lost jobs but they are more hopeful that some will come back if their employers get their own jobs back, but many may not at private sector is also cutting jobs.' FA (Nigeria) also pointed out that in the north, women often owned the vehicles (buses and motorcycles) that they rented to men to operate. Some have had to give back the vehicle as they cannot pay the loan or sell the vehicle on. These include bank loans in some cases but more frequently from community lending schemes, that were banned from functioning during the lockdown.

Despite examples in the literature of women focussed e-hailing services, it was only KQ (reference group, South Africa) who mentioned women starting their own transport services. She referenced the story of Asiphe Mkhefa who started her own women-only e-hailing service in [a low-income area], 'but she was now hiding for her life because the taxi drivers were coming for her.'

4.3.2 Essential workers and transport vulnerability

During periods of complete lockdown, essential workers across all countries were still required to work, often with little attention given to the consideration of transport requirements or the increased domestic requirements at home. In Nigeria, FA said government provided essential transport, but other interviewees in the country say they didn't (EA). During the lockdown many healthcare workers had to stay at the place of work. This was due to no transport and the curfew. SS1 (Nigeria) mentioned the difficulties for healthcare workers specifically: 'No special transport for medical /health workers [was available], which meant that if they were working shifts it was really difficult for them to get to work and also with less services they often had to walk more so they got to work tired.'

As a result, sometimes essential workers made arrangements to put their public transport money together toward hiring a minivan together (RD, South Africa), and those with vehicles organised lift clubs which they charged for (GO, South Africa). In Uganda even ride-hailing was prohibited, and essential workers were expected to use cars; only when that was deemed unfeasible did the government start providing transport (AN, Uganda).

In Uganda, market vendors were required to sleep at their market stalls, for the same reason as the health-care workers. Obviously, the impact for women who had families to care for was immense.

4.3.3 Unpaid care and domestic responsibilities

Women experienced increased pressure in terms of domestic responsibilities in the face of lowered income, closure of schools, and not being able to rely on extended networks for help with care and support. What is not often evident in the literature is the impact of limited mobility on having to fulfil these traditional roles. As CO (Kenya) pointed out, 'at home, men still expected them to provide these services [of providing food] but movements were restricted. So they had to go to places closer to their homes, which sometimes were more expensive.'

Family food supply was a preoccupation in many of our interviews. In Nigeria, market opening times were reduced and mobile markets (markets that took place in different locations according to the day of the week) were temporarily banned: '*Many markets closed and also as women could not get to the market early (either they had to walk or try to get on a minibus taxi when they were running) it meant that all the "good stuff" had gone or maybe what they wanted /needed to buy was sold ou*t' (EO, Nigeria). SS1 (Nigeria) concurred: '*food was also sometimes in short supply and it was more expensive so women who had no income (daily) really found it difficult to feed the family as this is still women's work in our culture*.' FA (Nigeria) said that women would resort to selling their assets in order to feed their family, while men would just leave if the children were crying because of hunger.

Where transport was used to try and meet family's needs, poor implementation of sanitation measures, and lack of conforming to distancing protocols and mask-wearing places women who use public transport at risk of being infected or carrying infection. When using public transport as one person noted: 'There is also clear evidence of a power-differential – you [a woman] can't TELL a taxi-owner to open the window, or keep to the 70% capacity limits…' (LS, South Africa).

In addition, as women were often unable to rely on their usual networks of support, they would have to take their children with them if they went anywhere: 'It's hard to be in a society where you already feel like you can't move around, and then it's more enforced on you by these small things. You can't easily change, you can't send your child to the next house, you can't take them with you either as there is the cost of carrying an extra body…' (NM, South Africa).

In Kenya and Nigeria examples were raised of families either moving wholesale, or sending their children 'home' to rural areas as a way of dealing with economic hardships. This was not only restricted to children and many adults also returned to their villages. FA (Nigeria) said that this was risky, as 'all interstate transport was restricted or even prohibited travelling back to the villages was also difficult and the minibuses travelled at night using small back roads to avoid the main roads where there were police roadblocks and checks. This was almost impossible for single women with families' so they were also left stranded in urban areas with no transport, reduced options for earning an income and a reduced social network for assisting with child care or moral support.'

Childcare and home-schooling were mentioned as additional pressures which required more resources, in situations where economic resources had decreased. Schools and universities are not open everywhere, yet distance learning required both the hardware (phones, tablets and computers) as well as strong Internet connections, and the added cost of data streaming.

Reduced income also meant making difficult choices across apportioning money to food, transport, school fees and dealing with increased domestic expenses, with additional costs relating to COVID-19 prevention, such as water, sanitisers, and masks. Children home from schools with feeding schemes meant household food budgets would have to increase, and higher data costs for home schooling, as well as trying to access online forms for any kind of social relief. Though challenges for women around schooling being closed were raised by some respondents, this was not consistent across all respondents. One person indicated that with the cost of transport, not as many children will be able to return to school after restrictions ease: 'Younger girls may not be able to go back to school now as the cost of transport is too high for families to send the same number of children to school as before – and so the girls stay home as they can be useful to the mothers while the boys are not' (FA, Nigeria).

EA (Nigeria) also differentiated between the impact in urban and rural areas, saying that holding girl-children back from school was less prevalent in urban settings. Though prevalent in the literature, strong indications of this impact were not often raised in our interviews, and our reference group said that boy and girl children were treated equally in terms of educational access in their experience.

4.4 Impact of mobility changes on women's quality of life

4.4.1 Loss of agency

Not always explicit, but a theme throughout the interviews was the constraints placed on women in relation to their agency. Already constrained in many cases by cultural expectations about their roles and responsibilities, exacerbated by lockdown and lack of access, or means to access transport, women's agency

was dramatically reduced. SS and LGG (Nigeria) both noted that with less money, women have less say compared to men in their families.

Some more explicit examples were offered in the South African context. RD, as a regular public transport user, said transport restrictions 'impacted much, cause I could just get in a taxi and go, and now I can't, because why, only a certain amount of people is allowed to be in a taxi, and it can only go to a certain place, and either they get pulled over by traffic cops or law enforcement so. I can't just make boss moves.' PS (Reference group, South Africa) added: 'I think the lockdown changed everyone, it took your freedom away, it took your choices away. Everything was taken away. It showed us a different type of world where we're not in charge.'

MW (South Africa) spoke extensively of the constraint domestic workers faced, especially those forced to live on the property of their employers: 'I have a lot of [trade union] members in [a wealthy area in Cape Town]. It was the worst thing for them because in the afternoon they used to go to [local supermarket], they used to go to, but all of a sudden they have to rely on the employer to buy them a loaf of bread. You know you don't like the food that they make, its fancy food, so then they have to tell the employer buy me… then they have to tell the employer if you go out. So the domestic worker that was staying in the house was like a prisoner.'

'It goes across the board,' said NM (South Africa). 'Whether you have your own vehicle or predominantly have to rely on public transport, women were put on the back end when it was time to decide who moves around outside the house. Home care fell on women, and you had that loss of agency was because of your family structure. ... When decisions have to be made, that is how the patriarchy works...'

4.4.2 Levels of sexual harassment and violence

Related to loss of agency, violence or the threat of violence is often an implicit constraint for women's sense of agency, and mobility. High reported rates of increase of domestic gender-based violence during lockdown had multiple dimensions.

The potential of facing sexual harassment and violence whilst using transport has long been an issue for women everywhere. RD (South Africa) relayed that before lockdown, she would only get into taxis of drivers she knew, and always make sure she was not the last female passenger on board. As restrictions eased, long waits meant that some women would use taxis they weren't sure of out of desperation, and speculated that with limited number of people on board, women essential workers may have faced more sexual violence during the strict lockdown.

In Nigeria, EO – representing an association of women drivers – said that before COVID-19, women drivers often faced sexual harassment by male passengers. Usually, conductors would manage this by ensuring passengers in the front seat were women. This was also highlighted in Uganda, with the country's first female on-demand taxi drivers Taxi Divas was launched in October 2020. The drivers are specifically trained in self-protection to address sexual harassment from clients. (29)

It was not clear from the interviews if people felt that sexual harassment had increased or not since lockdown. BM (Nigeria) noted an increase in sexual harassment on public transport from male passengers and conductors, while a number of other interviewees stated that with less overcrowding and more fear of police there was possibly less sexual harassment than pre COVID-19 (AN, Uganda; SS1, Nigeria). With fewer people generally on the streets, some interviewees felt safer (CB, Uganda) and as there were more police and security agents patrolling, they felt that people could walk more safely. It was even mentioned that a policeman had accompanied a women (third party report) back home as she was out near curfew time and was frightened. On the other hand, in particular in Nigeria, there is a heightened feeling of fear generally about travelling and being in public space (SS1, Nigeria; FN, Uganda). Anxiety about crime, the possibility of civil unrest were mentioned in particular. Further indications of a lack of trust in the authorities including the government was highest in Nigeria.

Children of domestic workers in South Africa are often enrolled at schools close to their employers, and travel with their mothers on public transport. As domestic workers lost their jobs, and schools opened up, more children travelled independently, which left them more vulnerable to the rising numbers of kidnapping and sexual violence (MW, South Africa).

Multiple mentions of the high rates of gender based violence were raised by our interviewees (especially LGG, FN, UR, Nigeria and Uganda), and they shared common sentiments with the literature about the reasons for

these. All over the world there has been an increase in domestic violence (heterosexual and in the LGBTQ communities). However, what is not taken into account is how the women experiencing physical and emotional violations were constrained from seeking help due to transport limitations. Many were unable to go out of the home especially due to curfews, nor could they call hot lines or call centres. According to Karen Cogill at Rape Crisis Cape Town Trust (South Africa), they saw a huge uptake of their WhatsApp counselling service, clients often could not find a private place to talk, and often Rape Crisis carried the burden of costs for calls and data. The inability of clients to come and speak to counsellors face to face had a detrimental impact on their recovery. In addition, although movement was allowed for sexual violence survivors to access relevant police and health services during the hard lockdown, not everyone was aware of this.

The issue of women's safety in relation to transport was one of the first issues raised in the reference group, and in response to a very general query about whether women's needs are considered in thinking about mobility. PS (South Africa) offered this insight:

> *In South Africa transport wise nothing is made for me as a woman. I am subjected to a male driver who I don't trust. We have no female drivers. If a woman wants to be in this industry she is intimidated. So government doesn't hear our voices. My cousin was raped in a normal taxi. Every time you enter a taxi, alone with driver, nothing is ever safe. My daughter went a three minute taxi, thirteen years old, if she's not back in the time, I am worried. At least with Uber I can track where she's going, with a taxi I can't track. We are always in danger transport wise. Even when lockdown happened, women are the breadwinners in our community, even if a woman is not working, women is the one who hustles to get things done. So when lockdown was happening and transport were shifting up and down, as a woman wanting to support my family I had to wait for taxis. I don't feel like there is space for women, safety or otherwise.*

Uganda Country Director of CARE International, Apollo Gabazira, described further how the power dynamics of increased poverty place women and girls in a position of subservience, which means they suffer the most in times of crisis. (47) The impact on trade and travel meant that women were unable to maintain financial independence, which exposed them to further abuse: 'women [were] at the abusive partner's mercy'. (51) Media reported, too, that 'a transport ban in Uganda means women are trapped at home with their abusers.' (52) Increased domestic violence/GBV was widely considered to have increased dramatically – see (11) – exacerbated by the fact that women could not move after curfew or travel to seek help.

4.4.3 Access to physical and mental healthcare

Women making difficult choices with limited resources in conjunction with rising transport costs and restrictions led some women to neglect taking their children to access required healthcare. For example, LGG (Nigeria) said: 'Mothers did not take children to the clinics and had no money for medicine if you needed it.' This was also true for immunisations, which may have a longer-term impact for disease prevention and of especial importance for the healthy development of young children.

Transport restrictions with long waits also meant leaving home to get medicines, especially if there were people at home to care for was difficult:

> *Anything, I mean even when you want to get medicine or what, there's no transport. You have to stand there for at least an hour wait for taxi to get you to Vangate Mall or wherever. You can't go out to get food, you can't go out to get medication, you can't go out even if you look after a child in the house...So that's difficult because she has to wait for the taxi to come because there's only a certain amount of taxis that could be on the road, and so she can't walk the distance and things like that, so when it comes to females, it's more like being able to provide for their homes, like be it for food, or for medication, the basics. (RD, South Africa)*

Our reference group confirmed that access to healthcare and chronic medication was limited because of lockdown restrictions, and limited and more expensive transport (when it was available).

Specific challenges around pregnant women reflected issues raised in the literature. For example, HK (Kenya) relays this information:

> *There were a number of instances where maternal health was a challenge, when women started labour after curfew time. What happened is that government came down so hard, at 7pm we had the*

police out there, beating us. There was so much fear. And if you call your boda boda guy, he says "no, I can't go out". But eventually these issues were addressed formally, and the pregnant and sick were allowed to get a permit to go out after curfew. But when it started it was not good – the police were not interested in hearing from you, and women were more at risk. The police were out to do the rules, not to help people understand that this was for public health reasons.

4.4.4 Communication and participation in decision-making

There were some examples given of the way in which women were either represented or included in regulatory responses to COVID, for example FA (Nigeria) raised the special funds for women in small and medium enterprises, and EO (Nigeria) mentioned that the federal COVID response team included the Minister for Women. These were often not transport related, though. Within the transport industry, RD (South Africa) noted that many women drivers fought alongside their male counterparts for the restrictions on minibus-taxis to be eased, and NM (Kenya) likewise stated that transport organisations focussed on women working in transport, not necessarily the needs of women users.

CO (Nigeria) pointed out that although there were no deliberate inclusions or exclusions of the consideration of women transport users in the regulations, there was often inadvertent discrimination against women, as evidenced with the impacts demonstrated above. In Kenya, for example, the negative impact on pregnant women seeking healthcare access during curfew times was taken up by various organisations, which forced concessions from the government as well as private taxi drivers themselves (AK, NM, Kenya).

On the other hand in Uganda (and in Nigeria as mentioned by FA), URRENO reported the suspension of informal financial/saving groups such as Village Savings and Loans Association (VSLAs). This has affected women in particular, as they constitute the majority of members. Banks are still less likely to loan money to women as they have less collateral to put against the risk, while these groups provide ways for them to take out short term loans and to save when they could.

The National Union of Women with Disabilities of Uganda noted that that the response to COVID-19 was not 'inclusive', and 'has exacerbated the challenges faced by persons with disabilities and especially women with respect to those in need of medical assistance, and with health centres distant from resident areas. (13, 53) Likewise, researchers working among refugee women in Uganda raised the concern early on, by May 2020, that the Ugandan government seemed unaware of the 'essential needs that will necessitate public access and movement for women' (54), particularly regarding the ability to access maternal and family planning healthcare. (55) The deaths of pregnant women were reported, as well as the deaths of children who had to be transported by foot to health-care facilities, due to restricted motorised transport. (56) Although people were permitted to travel with approval from resident district commissioners for medical emergencies, this approval was not easy to obtain – in part, precisely because of travel restrictions.

CO (Kenya) pointed out that although there were no deliberate inclusions or exclusions of the consideration of women transport users in the regulations, there was often inadvertent discrimination against women. A number of interviewees also mentioned that women were less well informed than men and mentioned a lack of access to information resulting in women missing out on 'hand outs' – either because they did not know that they were eligible (i.e. that they could get something e.g. food donations), or because the applications were too complicated, time consuming or because they could not wait long enough in line. Men tended to be 'out on the streets' more and could hear about such opportunities. This affected single mothers most. It was also compounded with a lack of access to the internet so they could not access online forms for any kind of social relief.

5. Reflections and recommendations for recovery

This report has described how typical COVID-19 responses have a gendered impact, and explicitly links these impacts to the countries' transport restrictions and limitations. Low-carbon, affordable and safe transport has an obvious role to play in addressing recovery, and now is the time that governments need to take action.

The discourse around transport recovery in Nigeria emphasised sustainability, but women or gender were not in the foreground (57); in Uganda and Kenya, where gender was a focus, this was mostly in relation to socio-economic and public health measures. (58) Research undertaken in Johannesburg (South Africa) and Accra (Ghana) (59), on the other hand, reflected that reduced mobility was not a significant source of anxiety among survey respondents, when compared to concerns around health, income, and food. This suggests that not only are the well-established links between poverty, access and inequity not made routinely by decision-makers (resulting in unintended consequences), but transport users themselves don't necessarily connect mobility constraints with lack of access to health, income, and food.

This report has reflected on this interdependence between the numerous direct and indirect impacts of mobility options and restrictions on women. Our study confirms the precariousness of women in Sub-Saharan Africa, and adds to existing knowledge, in that it is also situated within the transport disadvantage and transport justice discourses. It makes explicit the links between COVID-19 containment impacts and prevailing transport-related disadvantages and social exclusion experienced by especially women with low incomes.

It is evident from the research presented above that the immediate effects of COVID-19 have deepened and widened the existing fault lines of transport, economic, and social inequity, entrenching transport-disadvantage and social exclusion among women.

Women's needs and rights had been largely overlooked in transport planning and investments even before the pandemic. This research shows that women's development and progress in terms of the SDGs, for example, is likely to be compromised. The vision and ambition of the SDGs are linked to achieving the agreed targets by 2030, aiming to increase rather than decrease efforts towards ensuring women and girls have equal and comparable rights, and are able to access equivalent levels of opportunities as boys and men.

An overarching response from interviewees was that, in their view and experience, women had been particularly disadvantaged during 2020 as a direct result of COVID-19 restrictions. Both economic and social impacts were consistently mentioned, including that women were more likely to have lost their jobs and livelihoods (compared to men in similar circumstances), and this was further compounded by increased levels of care and family duties (and the increase in domestic violence). This combination suggests that many women will struggle to return to previous – already disadvantaged – levels of financial and societal independence within the foreseeable future. All governments and decision-makers would do well to be concerned, if commitments to the SDGs to be achieved.

5.1 Short-term actions during immediate COVID-19 emergence and recovery

5.1.1 Invest in routes to food security

Pre-COVID-19, many men with low incomes worked in transport, and although fewer women are directly employed, many of them rely indirectly on transport for their livelihoods as small-scale traders. Most markets and street selling (food and non-perishable goods) occur in the high footfall zones around or near transport hubs and interchanges. Prior to COVID-19, numerous families with low income relied directly and indirectly on transport to provide the incomes for both parents and extended families, allowing the family to survive from day to day.

People with low-incomes generally do not have the means to purchase in bulk ahead of time (especially fresh food). During the lockdown periods, the provision of food became a daily preoccupation for people with all levels of income. Many were obliged to use local, but more expensive stores to which they could walk, further pushing families into precarity. In the countries studied, women are still predominantly responsible for food provision, and so this stress fell squarely on their shoulders. Many were obliged to sell their meagre assets in order to overcome this, removing their financial resilience.

The supply of fresh food is a basic need and relates to how a city functions. Women play a key role in the African context across the whole logistics chain, from growing, selling and buying. Programmes to improve the

organisation, sustainability and resilience of getting produce to markets would build in affordable food supply chains that would benefit everyone but in particular the poor who would have access to better quality and more affordable food (FN, Uganda). In addition, PS (South Africa) suggested that the South African government focus on community kitchens.

5.1.2 Address access to markets, water, and micro-freight

The closure of markets, businesses and key trading routes especially affected the low paid, insecure jobs in the informal sector, which tend to be held by women. Informal jobs tend to be spread across cities rather than in one area such as a central business district. Thus, informal transport often services these needs. Cargo bikes and three-wheelers are not yet extensively explored or provided in African cities yet offer substantial opportunities for small-scale traders as mobile market stalls, as well as micro-freight vehicles and 'passenger' vehicles for women with children. In Uganda there are successful programmes for men to rent cargo bikes, and this experience could provide useful insights in developing this intervention for women (especially traders) or as market suppliers.

The pandemic has considerably increased demand and need for water (e.g. hand and clothing washing as a precaution as well as more general domestic cleaning). Women and girls now spend even more time on water collection, especially in informal settlements (UR, Uganda). Ensuring that there is affordable and safe transport, whether public or non-motorised, would ease their access to water.

5.1.3 Increase access for, and to, essential workers and health-care workers

Transport for health workers was a challenge everywhere, especially in respect to shift work and adhering to the curfews (morning and night). In South Africa, the Western Cape Government formed a partnership with a minibus-taxi association to create the Red Dot and Red Dot Lite taxi service, to transport healthcare workers safely during lockdown. By September 2020, the service has completed around 47 000 trips for healthcare workers, driving over 730 000 km and servicing 25 health facilities across the province. The service also provided more than 8 600 trips for people who required temporary accommodation at quarantine and isolation facilities to reduce the risk of further infections.

There is an evident need for countries to develop comprehensive plans for the access needs of essential and health workers beyond the pandemic, and to provide for access to essential services and health-care for all women, children, and other groups in vulnerable circumstances at all times. Such a service could be extended to provide free access to primary health-care services for women and children, and to emergency health-care; in addition to improved services of delivering home-based care.

5.1.4 Provide physical and digital access to education

The education of this generation of girls, and the next, has taken on a new dimension. Much of the progress in female literacy and empowerment with higher levels of education made in the past decade is at risk. Here the role of transport is clear; there is already evidence that girls are most likely to drop out of school, and with increased fares and lower capacity of public transport, this has become more probable.

Financial and mobility independence are closely linked, and both have a positive impact on female empowerment. As before COVID-19, sexual harassment already constrained women's movements, restricting their access to opportunities; it is also clear that efforts need to be made to ensure that this does not continue as women attempt to regain financial and personal independence.

Ensuring that girls are able to return to schools and colleges, when they open, will be crucial for their quality of life later. It is already clear that this is in jeopardy; here immediately providing affordable (or free), safe and convenient public and scholar transport is key.

Data is expensive in most of Africa, yet much of the schooling during lockdowns and throughout 2020 relied on internet access; and this affected low income families, especially those with several children. Financial programmes providing support to access hardware and the cost of data streaming should be part of government support in any similar situation. Indeed this may also allow girls to study at home even after the schools have opened if the families cannot afford the transport, or in respect to the high number of unplanned pregnancies (AN, FN, Uganda) (pregnant girls or young mothers are usually banned from attending schools and in some places higher education). Interviewees regularly noted that burden of data costs,

highlighting that access (to education, to health-information, etc) need not necessarily require transport or mobility: 'Data is a problem. When libraries are closed, when schools are closed, we stress out education. People of privilege could have their kids study, but [for others], data should be free' (PS, South Africa).

5.1.5 Ensure that gender-based violence (GBV) services are accessible

There is a large body of work linking financial stress and domestic violence, and the pandemic has brought this to the forefront again. Lockdowns and mobility restrictions exacerbated gender-based violence and reduced the capacity of service providers to respond. It is essential that appropriate responses are put in place, with free, and confidential where necessary, transport to safe houses where women and children could obtain counselling and support.

A hot line or text-based service is both helpful and useful, but at times women need to leave the home or area in order to be safe.

Perhaps a service such as the free transport for women accessing maternal healthcare in Kenya could be an option during times of crisis, for women who need to access health and criminal justice services in relation to GBV (including blanket communication as to where and how to access this support).

5.2 Ongoing actions for enduring gender-sensitive transportation

'If I look at the transport, and where we are now with transport, it's not just the COVID-19 that has created this transport problem. It has been here for a long time… Going forward, we need to continue to strive to "do the right thing": spatial transformation, walking and cycling, modern rail, micro-mobility, decentralisation, reducing trips and paying attention to safety and personal security'. It all comes back to the "ordinary" solutions that we know already…' (LS, South Africa).

This section highlights recommendations for specific mobility and accessibility focused interventions that would be more permanent and enduring, addressing (or reiterating) what actions are needed but are still not taken. It is based on the frequent comments by interviewees that the answers to gender-sensitive transport planning are in many cases are known, but rarely implemented; thus, these recommendations are neither COVID-19 specific nor novel, but were raised by interviewees in response to the following questions:

- What do you think planners and decision makers need to take into account to serve women's needs better?
- If we were planning new transport services in general, what would you suggest we do differently?

5.2.1 Recognise the multiple ways in which women move

'We have to have a system that's going to understand women. Not because we want to be special, but because of the burden we carry.' (MW, South Africa)

This research has echoed the knowledge, among researchers, that women travel differently, making shorter, more frequent trips, and during non-peak hours. Yet a concerning outcome of COVID-19 is the 'massive blow to public transport (LS, South Africa): 'In transport planning, everything is based on the peak – and it's no longer clear whether public transport is viable without a peak.'

Women move differently largely because of their child-care and elder-care roles – AK (Kenya) highlights this in asking for greater investment from government to protect users travelling with children: 'there should be a system that enables people to move with children without it being punitive. Men don't travel with kids, it's the women who take them to hospital; women will take on that extra burden of mobility for the family.'

That these are largely unpaid roles affects the way in which women's travel patterns are valued: 'Our needs are centred around the roles we play as women, and they are as crucial as those who are to be bringing in the big monies, the macro-economics…' (AWA, Uganda).

Likewise, walking facilities need to plan for the sociable nature of walking, not merely the 'mobility' aspect but the way in which women engage with space: resting, selling, talking, waiting. 'We rest, take we take a moment to breathe, plan for safety, we look for lighting', says NM (South Africa) 'Planning seems to be for men who are simply bypassing all the time. [Ask me] for my lived experience – [I know] lived experience is not the be-all and end-all, but I know the small details, I know how I experience space.' PS (South Africa), from our

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reference group echoes this: 'I need a space to sit and breastfeed my child, change a nappy, rest before I keep walking'.

5.2.2 Ask women what their needs are – and listen to what they say

If transport decision-makers 'paid attention to the type of input we are already giving,' says AWA (Uganda), 'providing a social lens into infrastructure and facilities development,' then women's needs would begin to be met. Her work involves, for example, working to develop indicators so that infrastructure is not evaluated based on how many kilometres are paved, for example, but 'the impact of those kilometres, the role infrastructure plays in livelihoods, and how it improves access to social services, schools, health-care and markets.' FN (Uganda) was also clear in her message: 'They should ask women what they need – this is basic 'A guy sitting in an air-conditioned office in a city does not know how a women in Jinja trying to get on a bus with three young children feels even if he thinks he does.'

In the words of PS (Reference group, South Africa)

> *It's what I always say to these government officials. These people need to speak to us. Have a panel and ask people what we want. Start coming up with ideas of what we want and what works for people. Like now sit down and find ideas from people, you go and implement these ideas. It's not going to cost you anything to sit down and talk to people whereby you hire a consultant to consult, you pay them millions to consult when people can tell you for free how to fix our country. That is just crazy.*

This perspective is echoed by CO, who notes that in Kenya, there are few 'transport planners' but 'civil engineers' to whom 'we entrust the whole transport system, but they cannot describe the concepts of mobility.' To CO, 'mobility is ease of access: 'how easy it is for me to get to what I need, maybe even not needing to move.' She describes simple needs that are almost entirely unmet in transport facilities, that reduce this ease: 'If I were planning something, I would pay attention to ablution facilities for women public transport operators and women travellers – we cannot hold our pees for an entire journey, we cannot hide behind a tree, we need to wash babies, breastfeed, be safe and modest and clean.'

Understanding what women travellers need simply comes by asking them, says NM (Kenya): 'Engage and involve different women, including the elderly, women with disabilities, women with children, women from different classes, women as users and transport workers, from the planning stages onward, so as to get their input.'

Likewise says MW (South Africa): '[a transport system] controlled by women will understand our vulnerability.'

5.2.3 Empower women and girls through non-motorised transport

Transportation is a significant enabler, but for many women and girls it is a challenge. It is essential that this changes, if women are to experience the advantages access and mobility can bring. A relatively unexplored mode for women and girls in African cities is bicycle travel. The legacy narrative is that girls and women do not ride bicycles, for a variety of given, traditional, or cultural reasons (CB, Uganda; CO, Kenya). Yet cycling mobility could play a strong future role in short trips; programmes that teach both girls and women to ride are becoming more widespread, and developing such initiatives with NGOS and Civil Society would no doubt be fruitful.

Even identifying and supporting women who are encouraging cycling, such as OL and NK (Nigeria), and like KQ (South Africa), whose mission is to 'get more black girls on bicycles,' could be helpful. It is clear from this research that with sufficient advocacy and motivation, women and girls do see the value in cycling; with enough support, transport authorities will do so too.

5.2.4 Revisit ways in which to provide subsidised services

The affordability of transport is a core component of poverty alleviation, linking people with goods and services. This has been brought into sharp focus during the pandemic. As each group of women interviewed noted, paratransit operators were able to increase fares because they are profit-focused. As HK, Kenya, put it: 'The problem is that the transport sector is not controlled by the government, it's private. So it's very hard to impose to laws; this is my business, you cannot control me.'

It is a clear dereliction of duty that 'the state was not in a position to enforce safe public transport,' is the position of LS (South Africa), while MW (also South Africa) believes that 'government should provide safe and affordable transport for women and children … separate transport services with space for bags and shopping and seats for everyone. Most of the roads are very bad so it is very dangerous and uncomfortable to travel standing with a baby or small child.' Our reference group concurred, saying 'we need choices.'

The paratransit sector in South Africa, although powerful, was unable to raise fares – although threats of doing so solicited a billion-rand relief package and the promise of subsidisation in 2021.

Each country in this study has made attempts, with various degrees of success, to regulate the paratransit sector more tightly, and provide transport such as Bus Rapid Transit services. There is clear merit in renewing and accelerating discussions and negotiations with the paratransit sector to ensure that the vast majority of passengers are protected from the vacillations and needs of a private sector industry.

5.2.5 Concentrate on making transport safe for women

The rise in private enterprise to provide safe transport options for women points to the dire need for attention on the intersection between GBV and mobility. A general strengthening of systemic changes in policing and criminal justice systems to effectively police and prosecute perpetrators of GBV is imperative across SSA, and as suggested by a Kenyan interviewee, specific interventions for transport systems need attention too.

Improved security and policing may be one intervention, while another is the strengthening and support for women working in the transport sector, either in public services or in private consortiums. This could be in the form of explicit criteria for inclusion, for example the South African relief package to paratransit operators could include conditions to increase the numbers of women operating at all levels in the sector. It could also be in the support and mentorship of women who are operating in the sector already.

5.2.6 Plan for everyone

If you plan for the most vulnerable, you have planned for everyone – that is the basic principle of Universal Design. 'But we don't do that in African cities,' says CO (Kenya). 'We plan for someone who can run across a 3-km road, with no pedestrian crossings, no safe amenities. We plan for people who can dodge cars and jump potholes. God forbid. And now we have footbridges, we are told these are to making walking more attractive, more safe. But there is no way I can climb those stairs, even if I wanted to: I've had my share of experience trying to convince city governments that they don't need footbridges, they think if it works [elsewhere] it will work here. Here we have a woman walking with 10 children and a load on her head.'

Universal Design guidance exists for many SSA cities, and in most instances, country transport policies commit themselves to paying attention to the needs of people with mobility challenges and vulnerabilities. Yet success in transport planning is by and large still measured by Levels of Service for motorised vehicles, kilometres of roads sealed or built, or other indicators for efficiency, return-on-investment, speed, or free-flow. Only when equity, access, safety, and ease are key success indicators, and when people's needs for simple, everyday livelihoods and living, are central to transport interventions and decision, will transport be for everyone. It is our intention that the recommendations in this research paper will go some way to reminding decision-makers of the ways in which transport, access, and mobility are inextricably linked to a substantial set of the 'big picture' Sustainable Development Goals, and that the solutions to questions of provision are in many instances already known, could be found by asking users what they need.

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APPENDIX A: INTERVIEWEES CITED IN THE TEXT

	Organisation	Country Represented
FA	Usmanu Danfodiyo University, Sokoto and Head of NANA NGO	Nigeria (Abuja & Kano)
LGG	Director International Women Communication Center (IWCC)	Nigeria (Abuja)
SS1	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
EO	First Female Drivers Association of Nigeria	Nigeria
IA	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
AE	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
LX	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
BA	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
ME	Lagos Metropolitan Area Transport Authority (LAMATA)	Nigeria
OL	Urban planner	Nigeria
AW	Ministry Works and Transport	Uganda
SS	Transport planner	Uganda
AN	Urban Planner	Uganda
NK	First African Bicycle Information Organisation	Uganda
CO	Activist	Kenya
HK	Gender activist	Kenya
NM1	Flone Initiative	Kenya
AK	University of Nairobi	Kenya
MW	SADSAWU (Domestic Workers Union)	South Africa
LS	Labour Council	South Africa
MV	University of Cape Town	South Africa
GO	Rape Crisis Cape Town Trust	South Africa

	Organisation	Country Represented
RD	Rape Crisis Cape Town Trust	South Africa
NM	National Business Initiative	South Africa
KC	Rape Crisis Cape Town Trust	South Africa

	Organisation	Country Represented
RD	Rape Crisis Cape Town Trust	South Africa

APPENDIX B: INTERVIEW GUIDELINE

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Interviewer

Date

Sector represented

Interviewee

Country /city

Community represented

Agree to be quoted

Confidentiality statement

We are conducting research toward understanding the impact on Covid-19 mobility limitations and constrictions have had on women's livelihoods and access, and in gaining ground toward greater equity and empowerment. We will therefore be asking questions that relate to movement and mobility restrictions and impacts.

The choice to participate in our research yours alone. If you choose not to participate, there will be no negative consequence. If you choose to participate, but wish to withdraw your consent at any time, you will be free to do so without negative consequence.

There is no direct benefit to you as a participant, and no payment or reimbursement is available for this research. We do not anticipate that there is any risk of harm to you in participating in this research. The contribution of this research, however, may interest you, as it will be shared with decision-makers in your country and beyond, to help to ensure that any setbacks for women during Covid-19 do not become permanent.

This study complies with international best practice on data collection and protection, the data will be treated according to international guidelines and best practice for personal data protection and not sold to third parties. Identifying data will be destroyed at project end.

Unless you have indicated that we may quote you by name/organisation, your answers remain confidential despite us asking you to identify yourself. This is only to ensure that we are collecting responses from a number of different sectors and perspectives.

We estimate that the interview should take no longer than 30 minutes. We are looking for your personal opinions and there may be questions that are not relevant to you.

Do you agree that we can use the information you give us for the preparation of our research reports, and other publications?

Would you agree for us to use your name, and/or the name of your organisation in our research report and other publications if we get your approval for the text that we intend to use?

Introductory questions

- Can you tell me briefly about what you do?
- (only for users not all interviewees)
- How close to your work/activity do you live?
- What kind of transport do you usually use?

Research question	Interview questions
What are the specific aspects of COVID-19 that particularly affect women's mobility?	When did your country start placing restrictions in relation to COVID-19?
	What kind of movement and transport restrictions happened at this first stage of restrictions?
	How do you think these changes made a difference to women's mobility?
	What kind of transport restrictions were implemented that changed the way in which you could access or purchase food?
	What types of jobs or ways of making a living were prohibited? Did these affect women more than men?
	What were the transport restrictions? What happened with public transport?
	Briefly, what was put in place where you live, and nationally to keep transport going?
	How did this change over the last eight months?
	What do you think the changes have been in terms of women being able to move easily or not?
What setbacks brought about by the mobility constraints caused or deepened by the COVID-19 pandemic have been particular to women, in terms of loss of agency; interruption of empowerment and increase in poverty; disruption of education and skills, re-traditionalisation of caring; and impact on family cohesion and children (increased domestic violence or public sexual harassment and GBV)?	If women couldn't easily move around using transport, what do you think the impacts on their lives were? Did you see these same impacts on men?
	What particular impacts have you seen on:
	Access to empowerment and other opportunities
	Income / work
	Levels of poverty
	Agency/Easily make their own choices
	School or education
	Doing the work to look after family and homes
	Domestic violence
	Sexual harassment and gender based violence (when travelling)
	Any other aspect?
	Have you heard of/experienced situations when women have had to give up their chance to travel (who would travel in normal times) because someone else in the household had to do so either as a result of less household income or explicitly from COVID restrictions on mobility? If yes, could you provide some more information?

Research question	Interview questions
	Have you heard of / experienced situations where women had to give up their place in a public transport vehicle because of reduced capacities/frequencies, and men were given priority? If yes, could you provide some more information?
How have local or national responses in SSA had unforeseen consequences on low-income women's mobility (further reduced or improved rebound options)?	Attended to above
Does a renewed reliance on walking (especially due to COVID-19) over motorized modes/public transport perpetuate and/or increased women's risks of personal safety, reduced opportunities, road safety, and time-poverty?	Do you think women have had to walk rather than take public transport more often during COVID times? Yes/No What kind of impact do you think that has on women?
To what extent have the needs of women been included in responses, and are there key groups (such as trade unions) who have specifically included or excluded women in their COVID-19 responses?	If transport restrictions changed during COVID, do you think the needs of women were included in the thinking and implementation? Were there groups of people such as trade unions, or transport organisations, that specifically included or excluded women in their COVID-19 responses? If they have, which particular women (probe, small traders, key workers, food shopping, access to healthcare?
What key risks can be identified to alert decision-makers to ensure that the notion of 'build back better' gives women and those who may today be transport disadvantaged access to more just and green options.	What do you think planners and decision makers need to take into account to serve women's needs better? If we were planning lockdown transport restrictions today, what would you suggest was done differently? If we were planning new transport services in general, what would you suggest we do differently? Anything else you thought of that we have not spoken about?

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