



# Transport and Communications Bulletin for Asia and the Pacific

No. 91

**Gender and social dimensions of transport**

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## **THE ESCAP SECRETARIAT SUPPORTS INCLUSIVE, RESILIENT AND SUSTAINABLE DEVELOPMENT IN THE ASIA-PACIFIC REGION**

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## Editorial Statement

The *Transport and Communication Bulletin for Asia and the Pacific* is a peer-reviewed journal that is published once a year by the Transport Division of the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP). The Bulletin is a medium in which knowledge, experience, ideas, policy options and information on the development of transport infrastructure and services in the Asia-Pacific region is shared. The main objectives to these are to stimulate policy-oriented research and to increase awareness on the policy issues and responses of the transport industry. The Bulletin attempts to widen and deepen the debate on the issues of interest and concern in the transport sector. For the 91st issue, the Bulletin focuses on the theme of “Gender and Social Dimension”.

Women are largest users of public transport and their transport needs are different. The Asia-Pacific population is ageing rapidly, and the region has an estimated 690 million persons with disabilities. Addressing gender and social dimensions of transport is vital for socio-economic development as well as building inclusive and barrier free communities.

Yet gender and social concerns are not adequately reflected in transport policies and projects. Lack of disaggregated gender data, limited opportunity to transport jobs for women, lack of knowledge to mainstream gender and issues of vulnerable transport users are hindering development of gender inclusive and accessible transport system.

Transport policy makers, planners and stakeholders from the region need to address gender and social dimensions of transport to ensure universal accessibility, inclusiveness and security of transport systems and services. There remains greater opportunity to address different transport needs of women, differently abled and aged population while formulating transport policies and provide opportunities for women to join transport sector as policy makers, workers, or users.

Each of the five papers selected for this issue contribute to different aspects and novel perspectives on the theme of gender and social inclusion in transport. They present various approaches and case studies from the region and beyond in addressing gender and social issues in transport.

The first article by Swamy, Shalini, Hari, and Dennis present on how two Indian cities, Kochi, and Surat, have successfully framed and implemented gender sensitive transport policies and programme in improving urban mobility. This article emphasizes that the projects are understood to have scalable and transferable impact by prioritising the regulatory measures thereby ensuring the safety and security of women. However, the need for national level law enactment and institutional integration has pivotal role for better empowerment of women in transport.

The second article by Ansu examines the historical development of key policies of trail bridge development in Nepal and shows how incremental gendered changes are more readily accepted and institutionalized by government institutions and that learnings from development projects can guide policy formulation by demonstrating tangible outputs. This article encourages to build upon the achievements and start redressing structural changes for women participation and empowerment. The article also illustrates the success of improving rural accessibility, development of norms and standards and in influencing participatory approaches.

The third article by Alicia and Rewa argue that transport systems need to be more inclusive by addressing diverse and complex mobilities based on the review of the transport policies in the cities of Windhoek, Namibia and Delhi, India to determine whether they address the diverse needs of women and trans and gender-diverse people. This article emphasizes that most interventions are focused on gender within a binary construct. However, the aim is to understand how policies respond to overlapping and diverse needs. They conclude with an argument for diversity mainstreaming as an approach for achieving inclusive transport systems.

The fourth article by Kajal and Jithin discusses the bottlenecks at key transport and trade infrastructure in the South Asia’s Bangladesh, Bhutan, India, Nepal (BBIN) sub-region that restricts women’s participation and put forward suggestions to formulate gender inclusive trade and transport system in the sub-region. Currently the transport policies of the BBIN countries assumes that the impact of such policies is gender neutral. This article states that the BBIN region’s border ecosystem is not women-

friendly and at some places not even trade friendly. However, the region has an opportunity to become proactive in fostering inclusive transport and trade by minimising the violence and “men versus women work” perception and increasing safe working conditions and training and development.

The fifth article by Aakriti and Krati examines the present legal and policy framework for public transport in India via a gender lens in light of the constitutional mandates and highlights the importance of gender-responsive public transport planning. The paper argues that accelerating the pace of advancing gender equality in all spheres of society leads to a more rapid increase in progress towards achieving the 2030 Agenda. This article emphasizes the significant benefits women can gain from transport investments build with gender aspects in mind. The authors conclude by reminding the importance of giving women a voice in planning urban transport.

The Bulletin encourages analytical discussion on topics that are at the forefront of transport development in the region, as well as policy analysis and best practices. Articles should be based on original research and have an in-depth analytical process. Articles should be empirically based and emphasize policy implication emerging from such analysis. Book reviews are also welcomed.

**Further inquiries should be addressed to:**

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## Gender Sensitive Mobility Policies: Case Studies from Two Indian Cities, Kochi, and Surat

*H. M. Shivanand Swamy, Shalini Sinha, G.P. Hari, and Dennis Jose*

### ABSTRACT

*Women constitute 48.5 per cent and the transgender community constitutes 0.04 per cent of the general population of India (Census, 2011). Due to various socio-cultural factors, their participation in outdoor work and other socio-economic activities is limited. Inadequate access to education, social gatherings and travel, and lack of family support are some of the well-known factors that restrict women to their homes. The situation is evolving with diverse job market and technological advancements, but still, the involvement of women in the workforce is limited and needs a fillip through policies to encourage their participation.*

*The interventions in the transport sector are expected to enhance the participation of women by providing safe and affordable access and catalyse the impact on women's empowerment. Transport is often considered to be a gender-neutral service that benefits all equally. Transport services as well as its workplaces are designed without the inclusion of adequate requirements of women and the transgender community—due to this, the objectives of gender sensitiveness are not achievable. The aim of this paper is to fill this gap by presenting how two Indian cities, Kochi, and Surat, have successfully framed, and implemented gender sensitive transport policies and programmes. The challenges faced and efforts made towards sustainability will also be articulated.*

**Keywords:** Women, Gender, Transport System, Mobility

### 1. INTRODUCTION

Gender is described as the characteristics of women and men that are socially constructed (WHO, 2021) and the paper articulates the gender terminology from the perspective of women and the transgender community. Women constitute 48.5 per cent and the transgender community constitutes 0.04 per cent of the general population of India (Census, 2011). Due to various socio-cultural factors, their participation in outdoor work and other activities has been limited. Traditionally, the community has been allocating the work area based on gender—ergo, women have been restricted mainly to household work. In India, the overall Female Labour Force Participation Rate (FLFPR) for the age group 15 and above status (Principal status + Subsidiary status<sup>1</sup>) for 2020-21 is 24.6 per cent in rural areas as compared to 20.4 per cent in urban areas (MoLE, 2021). The FLFPR observed a decrease of 25 per cent in rural areas and 4 per cent in urban areas compared to the 2004-05 levels (MoLE, 2005). The overall unemployment rate of females is 5.6 per cent, wherein the unemployment rate of females in rural areas is 3.8 per cent and 10.8 per cent in urban areas (MoLE, 2021). Mostly, women contribute to the family-owned production economy without receiving any income in return and lack adequate working conditions, favourable social protection, and formal work arrangements. The descent in women's workforce participation is mostly attributed to the lack of accessibility to better education, livelihood, and social opportunities, thereby restricting them to their homes. The transport sector has the potential to enhance the participation of women by providing safe and affordable access and has a huge bearing on women's empowerment.

Women's mobility choices are unique compared to that of men and act as the fulcrum connecting women to social and economic independence (Bandagi, 2021). The travel patterns of women are characterised by multiple shorter trip lengths, with high dependency on public and non-motorised transport, restricted travel times and more social trips (SMART-SUT, 2021). The mobility choices are attributed to safety, affordability, information, faster system, better comfort, and reliability (Regmi & Yamamoto, 2021). Infrastructure elements such as design of access to the system, terminal stations, and mode of mobility,

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<sup>1</sup> If a person has engaged in any economic activity for a period of 30 days or more during the preceding 365 days to the date of survey, a person is considered as employed under the Principal Status+ Subsidiary Status approach.



hinders the mobility of women in society, blurring the possible livelihood and education opportunities. Factors like mobility patterns, infrastructural provisions, and the nature of the choice of system by women define the need for a shift from gender neutral to gender sensitive mobility systems.

The transport system has various mobility actors, leading to serve the purpose of derived demand of people. Mobility actors could be gender divided and classified based on the work area within the organisation. Women in transport have been evolving from idea generators to front-runners of mobility management in many cities. However, the efforts on these lines are still limited, given the under-representation of women in technical jobs within the mobility sector. Education, access to jobs, retention and leadership could be the four pillars necessary to advance the role of women in transport (APEC Women in Transportation Forum, 2012). Globally, women represent less than 15 per cent of the public transport workforce, while the majority of the passengers are women (Suciu, Sadoux, & Gonzál, 2019). This does not include informal transport workers, who represent a significant portion of employment in the transport sector in some cities (Suciu, Sadoux, & Gonzál, 2019).

Currently, both transport services and transport workplaces are not designed keeping in mind the requirements of women and the transgender community, resulting in not achieving the gender sensitiveness objective. The transport systems for women are expected to be better delivered with more women's participation in the mobility sector, providing better perspectives for gender sensitive mobility planning for the cities. The paper articulates the approaches followed by two Indian cities, namely Kochi in the state of Kerala and Surat in the state of Gujarat, for better women's participation in the mobility sector, thereby highlighting the initiatives and replicability potential.

## 2. LITERATURE REVIEW

*"The difficulties faced by women with regard to their mobility are a form of social exclusion which affects all aspects of their lives and in particular hinders their economic output and health"* (Duchene, 2011).

With better access to transport systems, the presence and participation of women in public places and events have increased over time but it is still limited in offering equal and safe access to urban streets and spaces (Sameera, Sankar, Shilpa, & Ranade, 2010). Gender mainstreaming is an urgent need, given that for cities such as Mumbai, housing a population of 22 million, only one-third of the approximately 11,000 pay-to-use public toilets are accessible to women (Mishra, 2016). Henri Lefebvre defines the right to the city as a right of no exclusion of urban society from qualities and benefits of urban life (Lefebvre, 1968). The design of cities with the concept of invisible women constrains the transport system, limits access to opportunities and hinders mobility. Women have a sustainable attitude of mobility like use of energy efficient choice of modes, promoting public transport systems, predominantly choosing walking as the first and last mile access to system. With a long-term vision for the system, it could be mainly attributed to the plethora of activities undertaken by them in society (Maffii, Malgieri, & Bartolo, 2020).

Women's travel is characterised by trip chaining, i.e., combining multiple destinations within a trip (National Academies of Sciences, Engineering, and Medicine, 2004). Women make shorter and more trips, which often require them to change, divert and break their journeys to pick up children, run errands, shop, or take on other family obligations (Allen & Vanderschuren, 2016). This trip chaining directly impacts the mode choice considering the affordability of system and the system is gauged with the safety parameter to initiate the commute. Worldwide, women dedicate an average of 4.5 hours a day to unpaid work, much of which occurs outside the home, such as grocery shopping and it is more than double the number of hours men spend on such work (Khanna, 2020). About 84 per cent of women's trips are by walking, cycling or public transport (Census, 2011). More than 60 per cent of rural and urban households use the bus as their main mode of public transport, followed by auto-rickshaw, taxi, railway, and cycle rickshaw (NSSO, 2016). Women are more dependent on public transport systems than men and especially when they are from lower-income groups. In Mumbai, women made 45 per cent more trips by bus than by train, which increased to 67 per cent for households with incomes less than INR<sup>2</sup> 5000 per month (World Bank, 2011).

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<sup>2</sup> Indian Rupee (INR)

The greater dependence of women on the public transport mode has also made the cases of sexual violence predominant, which acts as the major deterrent in using the system. Sexual harassment reduces the confidence of women in the system, increases the dependency on others and finally restricts their access to work, education, and social opportunities. The forced immobility faced by women, which is caused by several factors, including, but not limited to, economic poverty, time poverty, social norms and the perception of safety also reduces the trust in the mobility system (Bandagi, 2021). While there are occurrences of gruesome and violent crimes, the defining characteristic of violence against women is its normalisation and ordinary and continuous nature (Viswanath, 2013).

In 2015, the Government of India (GoI) allotted INR 2000 crores as Nirbhaya Fund to improve women's safety in public transport and this has been a key project to create a national vehicle security and tracking system in 32 cities in India with a population of over one million (Kaul, 2016). Under this project, public transport vehicles in the 32 selected cities were required to have CCTV cameras (if the vehicle capacity is more than 23 passengers), GPS devices and panic buttons. These electronic devices will be connected to a Central Control Room and will be controlled by the respective City Police Department (Shah, Viswanath, Vyas, & Gadepalli, 2017).

### **3. LEARNINGS FROM BEST PRACTICES OF GENDER INCLUSIVENESS**

The City of Vienna has taken a proactive approach to advance gender equality over 30 years by practising gender mainstreaming in city building and policy making (Wood, 2020). Introduction of more women in the architectural design had impacted the design of buildings to low height to ensure eyes upon the streets; infrastructural provisions such as wider footpaths, ramps for bikes and prams, better lighting facilities have reduced the anxiety for mobility; and gender budgeting has improved the access to the city (Hunt, 2019). An interesting initiative in transport service is the inclusion of gender-balanced public signages such as female pictograms on the pedestrian crossing and road worker signages (Peters, 2013).

In the city of London, Transport for London (TfL) uses big data analytics and perception survey to analyse customer travel patterns and issues faced by users of different communities, based on which actions targeted towards safety and security, accessibility, affordability, workforce participation, and information and communication have been taken (TfL, 2012). TfL has also developed internship programmes with advertisements targeted to different communities and releases an annual workforce diversity report which captures data on women's employment (SMART-SUT, 2021).

In the City of Bolzano, Italy, the Time and Schedules Plan has been initiated with 'Taxi Rosa' (Pink Taxi) which is a dedicated taxi service available to all women in the evening and night hours at a discounted rate when public transport is less frequent while 'Parcheggi Rosa' (Pink Parking) are reserved for women around the city at easily accessible, well-lit and near exit garages (Maffii, Malgieri, & Bartolo, 2020). In India, as part of the Cycles 4 Change Challenge, the core working team of 52 cities included women members to better address the needs of women for a safer cycling experience. The perception survey brought out an important concern of one out of every five women who said that they fear eve-teasing while cycling on the streets (Balanagendran, 2020). As part of the challenge, Vadodara has appointed an 'inclusivity manager' to understand the challenges faced by women cyclists (Balanagendran, 2020). The Capital Region Urban Transport (CRUT), Bhubaneswar, India, collects gender disaggregated tickets to take evidence-based decisions. The E-ride initiative in the city has its entire staff of drivers as women and transgender (Mahapatro, 2021). Impact of the informed decisions in the city bus system has led to 63 per cent of women users rating the system as safe and affordable, 85 per cent women are highly satisfied with the availability of the priority seats, 98 per cent of the elderly city bus users have rated ease of boarding and alighting as very good, and 57 per cent of the passengers have shifted from other modes to the city bus system (Mahapatro, 2021).

Perception surveys and safety audits on the transport infrastructure have been carried out to increase the customer experience and gender inclusiveness by creating an accessible system, level boarding and alighting stations, providing real time information through journey planners and redesigning bus stops, interchanges, and terminals. Disaggregated data, better women's participation in the mobility sector and gender sensitive infrastructure upgradations could be the agents of change in defining a gender inclusive transport system.

#### 4. OBJECTIVES

To enhance women's accessibility to livelihood, education and social opportunities, the following objectives have been derived:

- To understand the gender sensitive transport approaches by two Indian case cities.
- To discern the effectiveness of the gender sensitive transport approaches in achieving safety, security, and empowerment of women in transport.
- To identify whether the gender sensitive transport approaches are scalable and transferable.

#### 5. CASE CITIES

##### ***Kochi, Kerala***

The state of Kerala has been implementing measures to ensure women's security, equality, and empowerment over the past few decades. The Department of Social Justice, Government of Kerala (GoK) had approved a Gender Equality and Women Empowerment Policy as per G.O. (M.S) 27/2015/SJD dated 16-04-2015. This policy aims to lay down a basis for the harmonious co-existence of all genders. It aims to do so within a framework of mutual respect, for the equal access of women and men to economic, social, and political opportunities, resources, and benefits (GoK, 2017). The Kerala Police Department has taken initiatives such as Vanitha Police (Women Police), Women Cell (women and child friendly police stations), Pink Patrols and control room, and installation of CCTV cameras, which focus on the inclusion of women and improvement in surveillance coverage of public areas. The Kerala State Road Transport Corporation (KSRTC) had opened the position of conductors and drivers for women candidates in 1992. KSRTC and MVD (Motor Vehicles Department) are developing a *Suraksha-Mitra* command and control centre, with real time tracking of buses and with provision of panic buttons in them. Even when the initiatives are in place, women's participation has been very miniscule, with only 6.3 per cent of Kerala's police personnel as women and a trend of ever-decreasing women conductors within the KSRTC (Paliath, 2020). The decreasing trend of women's participation within the transport sector could be attributed to unsafe working conditions, operational tiredness, differing working hours and lack of supporting infrastructure within organisations.

Kochi is known as the commercial capital of Kerala and it accounts for 2 million passenger trips per day (CMP, 2017). The study area comprises the Greater Cochin Development Authority (GCDA) and the Goshree Islands Development Authority (GIDA) area of 632 sq. km with a population of 2.1 million (Census, 2011; CMP, 2017). The public transport modes present in the city are private cum state-run buses, ferry system and metro system. The motorised trip rate is 0.86 and the average trip length for the public transport system is 10.64km (CMP, 2017). The demand for public transport is 8.87 lakh passenger trips per day. The average trip cost of public transport in Kochi is INR 16.98 (CMP, 2017).

The study area has a male workforce participation rate of 51.5 per cent, while the female workforce participation rate is 17.2 per cent (Census, 2011). Among the women workforce, 45 per cent do not commute to work and prefer to work in places near their home or at home, mainly due to the dual role of women at home and in the workplace (Census, 2011). This is more prevalent in rural than in urban areas. The major share of the passengers is catered to by the bus system in Kochi, which accounts for 94.6 per cent of total boarding in a day. It is also observed that the share of women passengers in all the trips to the city from urban agglomerations is nearly 60 per cent (Antony, 2021). The high dependency on the public and non-motorised transport modes for commuting could be mainly due to the inaccessibility of private modes or due to the larger commuting distance in Kochi. The purpose of the trip is mainly work, education and social opportunities at city centres. The trip timing is mostly scattered among the morning peak, off-peak and the evening off-peak hours.

The study has employed focus group discussions and stakeholder consultations for assessing the gender sensitive approaches in the city. Some of the stakeholders consulted were:

1. Kochi Metropolitan Transport Authority (KMTA)
2. Motor Vehicles Department (MVD)
3. Kochi Metro Rail Limited (KMRL)
4. Kochi Smart Bus Limited (KSBL)
5. Ernakulam Jilla Auto Drivers Cooperative Society (EJADCS)

## 6. Better Kochi Response Group (BKRG) – Community Collective

Some of the approaches followed by the Kochi city to have better women's participation have been articulated below.

### *Kochi Metro Rail Limited (KMRL)*

Kochi Metro Rail Limited (KMRL) undertakes the operation of metro system in Kochi. Established in 2017, the metro system has been operational for over 25 kms with 22 stations. KMRL is the only organisation in the mobility arena of Kochi to undertake a better women-centric approach in its functioning and systems operation from inception.

### *Kudumbashree Community*

Launched in 1998, Kudumbashree is a women's empowerment and poverty reduction project of the Government of Kerala (GoK). It focuses on the empowerment of women through supporting women's self-help groups. Kudumbashree functions under the Local Self-Government Department and is one of the largest projects in India aimed at empowering women. The programme has 3.7 million members and covers more than 50 per cent of the households in Kerala (KSUDP, 2016). Kudumbashree works primarily with women living below the poverty line.

Kudumbashree community undertakes ticketing to housekeeping works of the KMRL at 22 stations and office buildings. The community also runs the canteen for the office staff. A total workforce of 640 community women works for the KMRL. The commuter experience on the metro system had more than 85 per cent of commuters choosing cleanliness as one of the prime factors for choosing the system, and the credit goes to the Kudumbashree community (CPPR, 2019).

A 23-member transgender group is part of the Kudumbashree community since the initiation of the project in 2017. The KMRL became the first government-owned company in India to formally appoint transgenders. The community believes that the opportunity has enabled a change in the attitude of society towards them and has instilled a belief that they can also do any job like any other person. The pandemic has been a hard time for them as the strength of the group has reduced to 11, with constraints on salary and higher accommodation costs within the city (Varghese, 2020).

### *KMRL Technical and Office Staff Community*

KMRL, from its inception, has 16 per cent of its staff as women. They are working under different domains, from senior managers to architects to pilots in trains. Currently, there are seven women pilots among a total of 39 pilots running the metro. The women-centric approach of KMRL is also evident in the customer satisfaction of commuters, with more than 80 per cent of the people stating safety, security, comfort, and reliability to be the best characteristics of the metro system in the city (CPPR, 2019).

Women commuters comprise 34 per cent of Kochi 1 Transit Card users. The perception of the metro women passengers was that the stations are very well lit during the operational hours and the security officers at the boarding have instilled a sense of security among the commuters. The separate entry gates for women and the infrastructural provisions of mother care rooms and clean toilets with napkin vending machines have ensured comfort of travel in the metro system. The reliability of the system, with commuters having to spend less time in one mode, is also found to be a feature of interest to attract women passengers. Level boarding at stations has also been preferred by all the commuters, as it allows faster boarding and alighting, thereby reducing the dwell time. The universally accessible approach roads to the metro stations were also mentioned by the stakeholders as a positive stride towards the development path. It was understood from the metro passenger survey that 58 per cent of the metro commuters have shifted from the bus system, considering the safety, comfort, and reliability parameters (CPPR, 2019). The hindrance parameter of the metro system and the higher patronage of the bus system are attributed to the affordability and better coverage of the system (Jose & Swamy, 2018).

### *KLeen Smart Bus Limited (KSBL)*

KLeen Smart Bus Limited (KSBL) was formed in 2020, aggregating the bus owners under seven bus

operating LLPs (Limited Liability Partnerships) in Kochi. The private buses in Kochi constitute more than 94 per cent of the bus share and have been historically operating under individual operators having independent operational characteristics (Jose & Swamy, 2018). Efforts were made by the Urban Transport Division of the KMRL to unite them under one umbrella body of operations. The operators have found it to be a better choice, with benefits such as single procurement of spare parts, increased non-fare revenue and fuel expenditure payment discounts. The elements of the smart city bus system are: National Common Mobility Card (NCMC) based ticketing system, passenger information system (PIS), two night-vision surveillance cameras per bus, women ticket checkers, five panic buttons per bus and an online operator monitoring app. The panic button system has been linked with the *SURAKSHA-MITRA* command and control centre of the Kerala state. The buses operating under the smart bus programme were awarded the 'Best City Bus System' in Urban Mobility India (UMI) Conference 2019. The women checkers in smart bus are 10 in number for the 100 buses under the KSBL.

The KSBL, with the safety and security measures and incorporating women in bus mobility, has increased the confidence that the widely used bus system is a gender sensitive one. There are 1380 buses running in Kochi including both state and private run buses, and the initiative can be taken as an approach for better service delivery in the future.

The perceptions of the women bus passengers were mostly on the infrastructural provisions of the system including poorly maintained bus shelters, interchanges, and terminals, little or no provision for comfort zones and greater chances of harassment with overcrowding during peak hours. The approach by the KSBL, coupled with gender sensitive infrastructure, could sustain, and attract more bus commuters in the city.

### ***Ernakulam Jilla Auto Rickshaw Drivers Cooperative Society (EJADCS)***

The Ernakulam Jilla Auto Rickshaw Drivers Cooperative Society (EJADCS) was registered in 2019 under the Kerala State Co-operative Societies Act, 1969. The EJADCS was formed with the basic purpose of functioning as a support structure for the benefit of the side-lined auto-rickshaw drivers, without considering political or other interests, and to deliver standardised services to the customers. The society now comprises nearly 3000 drivers of the total 15,000 drivers in the Ernakulam district (Antony, 2021). Among the society, 10 women drivers have been registered till date. The society had initiated the auto ambulance service during the pandemic and had one women driver of the total 16 drivers who had come up for the service. Women's participation in the service, even though less, has already received great feedback from the passengers for its increased safety and affordability.

Seamless Mobility in Kochi was one of the flagship projects of the Transport Department, GoK, wherein a common ticketing system, integrated fare and institutional integration were identified as the prime focal points of change. The institutional integration approach has been initiated with India's first Metropolitan Transport Authority (MTA) constituted by a legislative enactment named the Kochi Metropolitan Transport Authority (KMTA) on 1<sup>st</sup> November 2020. The fare integration is expected to increase the metro patronage with competitive prices (Jose & Swamy, 2018) and increase the comfort cum reliability of the bus system in the city.

With some of the approaches in place, the KMTA believes that some of the following proposed initiatives are a necessity to increase women's representation in the mobility sector. They are:

- Need for gender disaggregated commuter data: it is expected to help in better planning of the policies for women. Demand driven mobility planning, considering gender sensitivity will be possible with the disaggregated commuter data.
- Monitoring of surveillance cameras: the constant monitoring of the system would encourage more women commuters to take night trips and would thereby reduce the hesitancy to work in distant work centres.
- Discounted women commuters: the gender disaggregated data would ensure the discount amount possible for the women commuters and integrated ticketing would ensure that more people would use the system. Discounting the women commuters would also encourage the family members to undertake the journey in public transport system thereby increasing the overall patronage and reducing the dependency on private motorised modes and its externalities of congestion, accidents, and pollution.
- Transit Police: the metro system had initiated the idea of metro police; wherein dedicated

members of the Kerala Police were assigned to work in the metro system. Transit police shall ensure the safety of commuters in transit with frequent checking in public transport modes and ensure enforcement of best practices in the mobility system.

- Unified Redressal Mechanism: it was found during the interviews that most of the women's harassment complaints appear in the social media platforms in Kochi due to the lack of a unified redressal mechanism for the mobility sector. The redressal mechanism is also expected to increase the confidence of women commuters in travelling in public and non-motorised transit modes.

### **Surat, Gujarat**

Surat is the second-largest city in Gujarat state both in terms of area and population. It is one of India's most dynamic cities, with a decadal population growth rate of 63.3 per cent between 2001 and 2011 (Census, 2011). The city is home to about 41.76 lakh migrant labourers (from 21 states of India and 33 districts of Gujarat), constituting about 58 per cent of its total population (Patel & Behera, 2020). They work in textile manufacturing, dyeing, and printing, power loom, embroidery, cutting and packing of cloth, construction, diamond cutting, packing, and polishing; among these, about 60 per cent of the migrants work as contractual labourers and daily wagers.

The women workforce participation in Surat city was nine per cent (Saha, Gandhi, Devi, & Sinha, 2013) in 2001 and had slightly increased to 10.7 per cent in 2011 (Census, 2011). In Surat city, shared auto rickshaw is the most prominent form of public transport and has a motorised mode share of 17 per cent (CEPT University, 2018). Thus, the predominant mode used by women commuters was shared auto before the introduction of the public transport system in 2014. With the implementation of integrated public transport system, women have started using the bus service for their daily commute due to the availability of seats or space to stand in the bus. Women feel safe and secure while travelling by bus compared to the shared auto rickshaw services.

As per the safety audit in Surat city, 893 dark spots with no streetlights, 690 audit points with no existing footpath, 1329 vendors were mapped, improving visibility on streets and among the 494 bus stops audited 196 were under poor lighting and 206 under poor footpath accessibility conditions (Safetipin, 2021). The safety audit clearly defined the need for better gender sensitive infrastructural planning and improved accessibility of the public transport system.

Surat city had inaugurated Bus Rapid Transport System (BRTS) in January 2014 and the City bus service in November 2016 under the leadership of Surat Municipal Corporation (SMC). Various departments and companies have been involved in the successful implementation of the public transport system and the same has been instrumental in daily bus operations. The various departments involved in the daily bus operations are as below.

- BRTS and Traffic Department, SMC
- Surat Sitilink Limited, SMC
- Traffic Police Department
- Intelligent Transport System Management Agency
- Automatic Fare Collection System Agency
- Bus Operator and Driver Agency
- Conductor Agency
- Security and Housekeeping Agency
- Admin Staff

All the above listed departments or agencies have a combined women's worker participation of eight per cent. The conductor, housekeeping, and administrative agency fare well in terms of women's participation, with almost 90 per cent of women workers compared to other agencies. In 2018, the city prepared a Comprehensive Mobility Plan 2046 for Surat city. The plan has been prepared with the vision to have a 'Safe Accessible Reliable Advance and Low Carbon Mobility' in Surat (CEPT University, 2018). One of the strategic goals has been to focus on improving the quality of life of the people and providing a safe and sustainable transport system that focuses on women's safety and empowerment in the public transport system.

### *Pink Auto Project*

The Urban Community Development (UCD) department under the SMC has been actively implementing various government schemes to reduce poverty and vulnerable poor households by enabling them to access self-employment and skilled wage employment opportunities. The department has been very active for women's empowerment in the city and tries to involve women in all possible sectors where they can earn comparatively more than household work.

On 28 November 2016, during a regular meeting with the representatives of the area in the SMC, the idea of 'women as drivers in the public transport system' emerged and subsequently 'Woman as an Auto Rickshaw Driver' emerged after detailed discussion about the sector and benefits to the women. After discussions with the municipal commissioner and board members on the government's role, finance details and flexible timings, everyone praised and supported the Pink Auto project and enabled it to be converted into reality on 2<sup>nd</sup> June 2017. This project has been implemented with all stakeholders' support, including the SMC, Training Centre - Bank of Baroda - Rural Self-Employment Training Institutes (BOB-RSETIs), beneficiaries and family, bank, Regional Transport Office (RTO), and Auto Rickshaw Agency.

The aim of the Pink Auto project is 'For the Women, By the Women' (Jariwala, 2021). This project aims to employ women through Pink Auto driving, safe alternatives for women, and safe transport services for school children. Currently, there are 50 Pink Auto rickshaws on the road to cater to the requirement of women and children of Surat city, and more than 80 women drivers have displayed their eagerness to join the crew (Aashishbhai, 2021). The UCD department had set up meetings with various schools and parents to make them aware of the Pink Auto project and its benefits. The parents of school children have started using the Pink Auto service for their children's school pick-up and drop-off. It has created a fixed income of INR 8000 to 10,000 per month for the drivers. The UCD department has also helped Pink Auto beneficiaries to connect with aggregator service providers, thereby enhancing the lean period demand of the system.

Initially, there were very few passengers per day as people were not aware of this project and due to the limited number of autos; women drivers found it difficult to stand and wait for passengers near other auto drivers. The beneficiaries then decided to stand at major locations in group. This change made the people aware about the project and women passengers from major locations such as railway station, Gujarat State Road Transport Corporation (GSRTC) bus depots, major BRTS stations and other market areas started using the system. The SMC also banned other auto rickshaws except Pink Auto rickshaws in the old city area (Rajpath Road) to reduce traffic congestion during the morning and evening peak hours. The Rajpath road connects the major market area and the railway station. This also led to increased awareness about the project in the city and increased the passenger demand during peak hours. As per passenger responses, they feel safe and secure while they are travelling in Pink Auto, and they are now able to travel even late at night. After launching the Pink Auto project, various social organisations have even tried to adequately patronise, support, and motivate these beneficiaries by honouring them at various public functions.

The major challenges faced in the process of implementing the project were:

- a) Traditional mind-set of family members – Auto driving by a woman is perceived to be a tough, challenging, and insecure profession by the family members. Several one-to-one meetings with beneficiaries and their families, effectively dispelled any doubts that emerged.
- b) Licencing for auto rickshaw – The computer skills to acquire the license were found to be a challenge for the applicants by the department. The Bank of Baroda had set up the Rural Self-Employment Training Institutes (BOB-RSETIs), intending to impart training to unemployed youths, particularly from rural and semi-urban areas, to engage them to be in self-employment enterprises (Aashishbhai, 2021). The SMC had tied up with BOB-RSETI for women's training.
- c) Training women to drive auto rickshaw – Each one of the beneficiaries was trained to drive the auto rickshaw at the training programme organised by the UCD department. Most women were able to drive the auto rickshaw confidently within 10 days. The women were also given the opportunity to train other beneficiaries, improving their overall skillset.
- d) Loan for auto rickshaw – The women who were approached for the Pink Auto project belonged to the economically backward class, and they did not have enough money to buy auto rickshaw. After several meetings with banks and detailed discussions, the Bank of Baroda showed its

willingness to provide loans to beneficiaries under this project with a seven per cent interest rate on 95 per cent of the vehicle cost, i.e., INR 1.7 lakh approved for the loan. The auto rickshaw agencies also supported this project and agreed to take the down payment in instalments.

Some of the major findings from the interview of Pink Auto beneficiaries were:

- Before joining the project, they were earning a maximum of INR 8000 per month after a 10-hour work every day. After becoming Pink Auto Rickshaw driver, they are earning INR 18,000 per month and have flexibility in working hours.
- The flexibility in working hours is the major factor for all the women and it allows them to handle household work and earn by working during peak hours.

The firm determination of the SMC officials and administrators has steered this project to take off. The project has opened opportunities for socially backward women to better livelihood, education facilities and social well-being. The project has acted as a catalyst for women to work in the public transport sector as conductors, ticket checkers and in vigilance teams. With the two shift timings, women can handle household as well as work responsibilities. This has made women commuters feel safe in the public transport system. The approach by the city is, however, small considering the area of the city and the project has the potential for scalability.

The UCD department is planning to develop exclusive Pink Auto stoppages at active locations such as railway stations, schools, colleges, airports, and hospitals. The department is also identifying the possibility of the system to act as a feeder to BRTS in the city. The talks are in progress with the government to purchase Electric Auto rickshaws in collaboration with the Gujarat CSR Authority with a vision to Sustainable Urban Mobility through E-mobility. Gujarat CSR Authority is expected to provide 20–30 per cent of the financial assistance to beneficiaries for the procurement of E-Rickshaw. Under this project, E-autos will also be provided on daily rent to the urban poor who are not able to purchase the auto.

## 6. DISCUSSION

The case cities—Kochi and Surat—have been discussed based on the effectiveness, scalability, and transferability of the gender sensitive initiatives.

Kochi has observed an inclusivity of women and transgender community within the work force of the metro system. The inclusion of women in different work domains has been able to instil belief among the public that the work is not divided based on gender. The metro system in Kochi has empowered 640 women under Kudumbashree community and has 16 per cent of the staff as women which has a direct impact on the user perspective of the system. The cleanliness of the metro system was considered by 85 per cent of the commuters as the key factor to choose the system and the travel characteristics such as safety, security, comfort, and reliability have been attributed by 80 per cent of commuters for customer satisfaction. The widely used bus system in Kochi, was understood to command ridership, given the affordable and wider network connectivity of the system (Jose & Swamy, 2018) and the user perspective is improving with the induction of women as ticket checkers in the system. The infrastructural constraints such as poorly maintained bus shelters, interchanges, terminals, and lack of comfort zones have kept the captive riders in the bus system, whereas better infrastructural amenities in the metro system have attracted the choice riders to it.

Surat has empowered eight per cent of women in the different mobility departments with almost 90 per cent of them working as conductor, housekeeping staff and at the administrative agency. The Pink Auto project has been preferred by parents for school trips, defining the safety and security instilled within the system. The initiative has also been found to be preferred by young boys and girls, considering the behaviour and safe driving nature of women. Before joining the project, women were earning a maximum of INR 8000 per month after 10-hour work every day but now they are earning INR 18,000 per month and have flexibility about the working hours, enabling them to undertake multiple trips within a day. The amenities for the women in the project have been found to be constrained, with little or no parking space for the rickshaws and lack of access to public toilets.

The scalability of the initiatives in Kochi has been understood from the future plans derived under the legislatively enacted Kochi Metropolitan Transport Authority (KMTA). The integration of the mobility



actors with the KMTA shall be able to generate gender disaggregated data thereby enabling demand driven planning; installation of surveillance cameras at identified dark spots; discounted rides for women commuters which in turn shall enable increased empowerment and also encourage other family members to choose public transport system as a commuter mode; the concept of transit police which shall assure enforcement of safety and security and create a unified redressal mechanism to enact on the issues of commuters. Nearly 68 more women drivers were interested to join the Pink Auto project, in addition to the existing 50 drivers, indicating the impact and scalability potential of the project in Surat. The UCD department has also initiated procurement of Electric Auto rickshaws and has preferred women drivers for the programme. The infrastructural provisions such as designated parking locations and improved access to public toilets will influence the scalability of the women in transport in Surat.

The informed decisions from the disaggregated data collected at CRUT, Bhubaneswar within the city bus system has 63 per cent of women users rating the system as safe and affordable, 85 per cent women are highly satisfied with the availability of the priority seats, 98 per cent of the elderly city bus users have rated ease of boarding and alighting as very good; and 57 per cent of the passengers have shifted from other modes to the city bus system (Mahapatro, 2021). The increasing driver participation of the Bangalore Pink Taxi and the user perspectives of safe and secure service are some of the transferability cases in India. The replicable initiatives have been run mostly on pilot phase and thereby have no greater impact at the macro-level of the cities. Transferable initiatives have also enlightened the need for better gender sensitive law enactment at the national level thereby having an impact on the enforcement activities.

## 7. CONCLUSIONS

Developing gender sensitive projects has been found to be effective in both the case cities, both at the transport and the city environment levels. The projects are also understood to have scalable and transferable impact by prioritising the regulatory measures thereby ensuring the safety and security of women. The Motor Vehicle Act, 1988 (Amendment in 2019) has been understood not to be gender sensitive with the increased cumbersomeness for obtaining the driving license. This directly implies the need for national level law enactment for better empowerment of women in transport. Infrastructural constraints have been understood from the case cities as the major deterrent for women's participation in the transport workforce, wherein it is hoped that the initiatives such as smart toilets under smart city mission of the Ministry of Housing and Urban Affairs (MoHUA) will create an expansive network, enabling access to public toilets. Institutional integration will have a pivotal role in determining gender sensitive mobility planning in cities and shall ensure access to safe mobility choices thereby achieving transport justice for the commuters.

## REFERENCES

- Aashishbhai (2021). Urban Community Department (UCD). Interview by Jignesh Panchal on Gender Sensitive Approach in Public Transport. Surat, 12 May.
- Allen, H., & Vanderschuren, M. (2016). *Safe and Sound International Research on Women's Personal Safety on Public Transport*. Cape Town: Research Series Fair Mobility.
- Antony, B. (2021). Interview by Dennis Jose on Gender Sensitive Approach in Public Transport. Kochi, 20 May.
- APEC Women in Transportation Forum. (2012). *Discussion Group Summary*. U.S.: Department of Transportation.
- Balanagendran. (2020). *ITDP - India*. Retrieved from India Pedals to a Green Recovery from COVID-19, 15 July. Available from <https://www.itdp.in/india-pedals-to-a-green-recovery-from-covid-19/>
- Bandagi, A. (2021). *idr*. Retrieved from We Need a Gender-Sensitive Public Transport System, 10 February. Available from <https://idronline.org/why-india-needs-a-gender-sensitive-public-transport-system/>
- Centre for Public Policy Research. (2019). *Kochi Metro Ridership Improvement Survey*. Kochi: Kochi Metro Rail Limited (KMRL).

- CEPT University. (2018). *Comprehensive Mobility Plan 2046*. Surat: Surat Municipal Corporation (SMC).
- CMP, UMTC. (2017). *Comprehensive Mobility Plan for Greater Kochi Region, Volume 1*. Kochi: KMRL.
- Duchene, C. (2011). *Gender and Transport*. Leipzig: The International Transport Forum on Transport for Society.
- Gol. (2011). *Census of India*. New Delhi: Office of the Registrar General & Census Commissioner, MoHUA, Gol.
- GoK. (2017). *Women - Empowering Women in the Society*. Retrieved from Department of Women and Child Development. Available from [http://wcd.kerala.gov.in/beneficiary-info.php?benef\\_sl=MWRXOG5xUyN2eQ==](http://wcd.kerala.gov.in/beneficiary-info.php?benef_sl=MWRXOG5xUyN2eQ==)
- Hunt, E. (2019). City with a Female Face: How Modern Vienna was Shaped by Women. The Guardian, online edition, 14 May. Available from <http://www.theguardian.com/cities/2019/may/14/city-with-a-female-face-how-modern-vienna-was-shaped-by-women>
- Jariwala, G. (2021). Deputy Municipal Commissioner, SMC. Interview by Jignesh Panchal on Gender Sensitive Approach in Public Transport. Surat, 12 May.
- Jose, D., & Swamy, H. (2019). *Integrated Transit System: Case of Kochi*. Ahmedabad: CEPT University. Paper presented at the Thredbo16 Conference. NTU-Singapore, August.
- Kaul, K. (2016). *Budget 2016: Nirbhaya Fund is a Dud; Jaitley Should Urgently Find Ways to Utilise It*. Retrieved from Featured Opinions, 22 February. Available from <https://www.cbgaindia.org/opinion/budget-2016-nirbhaya-fund-is-a-dud-jaitley-should-urgently-find-ways-to-utilise-it/>
- Khanna, M. (2020). *Mind the Gender Gap*. Retrieved from American Planning Association, February. Available from <https://www.planning.org/planning/2020/feb/mind-the-gender-gap/>
- KSUDP. (2016). *Gender Mainstreaming Case Study - Kerala*. Kerala: Kerala Sustainable Urban Development Project, Asia Development Bank (ADB).
- Lefebvre, H. (1968). *The Right to the City*. Paris: Ellipses.
- Regmi, Madan, B., & Yamamoto, J. (2021). *UNESCAP - Expert Opinions and Stories*. Retrieved from Gender Mainstreaming in Transport - A Long Route to Transport Equality, 04 March. Available from <https://www.unescap.org/blog/gender-mainstreaming-transport-long-route-transport-equality>
- Maffii, S., Malgieri, P., & Bartolo, C. (2020). *Smart Choices for Cities - Gender Equality and Mobility: Mind the Gap!* CIVITAS.
- Mahapatro, D. (2021). *Gender and Mobility*. Statement to the SMART-SUT Mobilogues Series – GIZ 2021. Bhubaneshwar, 06 September.
- Mishra, V. (2016). *Engenderings*. Retrieved from The London School of Economics and Political Science, 05 December. Available from <https://blogs.lse.ac.uk/gender/2016/12/05/engendering-indias-burgeoning-cities/>
- MoLE. (2005). *Annual Report 2004-05*. New Delhi: Ministry of Labour and Employment, Gol.
- MoLE. (2021). *Annual Report 2020-21*. New Delhi: Ministry of Labour and Employment, Gol.
- National Academies of Sciences, Engineering, and Medicine. (2004). Research on Women's Issues in Transportation. *Volume 1: Conference Overview and Plenary* (p. 75). Illinois: Transportation Research Board.

- National Sample Survey Office. (2016). *Key Indicators of Household Expenditure on Services and Durable Goods*. New Delhi: Ministry of Statistics and Programme Implementation - MoSPI.
- Paliath, S. (2020). *Law Enforcement*. Retrieved from Scroll.in, 10 March. Available from <https://scroll.in/article/953406/women-comprise-only-6-3-of-keralas-police-force-comprises-women-and-it-might-be-affecting-justic>
- Patel, D., & Behera, K. (2020). *Indian Institute of Management Bangalore*. Retrieved from IIMB, 19 May. Available from [https://www.iimb.ac.in/turn\\_turn/diamond-city-surat-informal-labour-market.php](https://www.iimb.ac.in/turn_turn/diamond-city-surat-informal-labour-market.php)
- Peters, D. (2013). *Gender and Sustainable Urban Mobility*. Nairobi: Global Report on Human Settlements.
- Safetipin. (2021). *Safety Audits in Surat*. Surat: Unicef and Safetipin.
- Saha, P., Gandhi, A., Devi, K., & Sinha, S. (2013). *Low Female Employment in a Period of High Growth: Insights from Primary Survey in Uttar Pradesh and Gujarat*. New Delhi: Institute of Applied Manpower Research, Planning Commission, Government of India.
- Sameera, K., Sankar, Shilpa, P., & Ranade, S. (2010). *Why Loiter? Women and Risk on Mumbai Streets*. Mumbai: Penguin Random House, India.
- Shah, S., Viswanath, K., Vyas, S., & Gadepalli, S. (2017). *Women and Transport in Indian Cities*. New Delhi: ITDP and SAFETIPIN.
- SMART-SUT. (2021). *Gender Sensitive Reforms in Public Transport - A Case of Kerala*. Kochi: GIZ India Transport.
- Suciu, E., Sadoux, C., & Gonzál, D. (2019). *More Women in Transport Can Only Mean Better Connectivity*. Paris: International Association of Public Transport.
- TfL. (2012). *Transport for Everyone: An Action Plan to Promote Equality*. London: Department for Transport.
- Varghese, A. (2020). Transgender Staff of Kochi Metro Struggle to Keep Life on Track. *The New Indian Express*, online edition, 06 March. Available from <https://www.newindianexpress.com/cities/kochi/2020/mar/06/transgender-staff-of-kochi-metro-struggle-to-keep-life-on-track-2112888.html>
- Viswanath, K. (2013). *Planning Cities As If Women Matter*. Paper presented at the Seminar 648. New Delhi, August.
- WHO. (2021). *Gender*. Retrieved from Gender and Health, 09 June. Available from [https://www.who.int/health-topics/gender#tab=tab\\_1](https://www.who.int/health-topics/gender#tab=tab_1)
- Wood, E. (2020). *Designing a City for Women: Lessons from Vienna*. Vienna: Committee for Sydney.
- World Bank. (2011). *A Gender Assessment of Mumbai's Public Transport*. Washington D.C.: World Bank Group.

## Mainstreaming Gender in the Trail Bridge Sub-Sector in Nepal: Tracing the Development of Policy Changes

Ansu Tumbahangfe

### ABSTRACT

*The Government of Nepal's Trail Bridge Sector Wide Approach Framework-III, which guides the trail bridge sub-sector, includes gender responsive considerations amongst its core principles. The framework is in line with the new Constitution and reinforces many positive gender provisions, which have been accepted by the newly established institutions. However, it falls short of including elements that could bring transformative changes for women, such as facilitation with male family members for redistribution of care-work, and skills training for women.*

*By examining the historical development of key policies, the paper traces the processes and priorities leading to their development. It shows how incremental gendered changes are more readily accepted and institutionalized by government institutions and that learnings from development projects can guide policy formulation by demonstrating tangible outputs. Finally, the paper encourages policy makers to build upon the achievements and start redressing structural changes, within the programme's scope.*

**Key words:** Gender, Transport, Policy, Inclusion, Exclusion

### 1. INTRODUCTION

Over 9,000 pedestrian bridges along foot trails have been constructed in Nepal (PMIS, 2021), and a further 2,000 are planned to meet demand by 2022 (MoFAGA, 2019b). Every year 350-450 of these bridges, which are commonly referred to as "trail bridges", are built across the country along foot trails for rural travel (MoFAGA, 2010, 2019a). Most are constructed through the government's Trail Bridge Sub-Sector Programme, which is guided by the Trail Bridge Sector Wide Approach (TBSSP) Framework-III (2019-2022).

This policy document includes several provisions to strengthen women's (and other indigenous groups') leadership and employment opportunities. The framework is in line with international conventions, such as Convention on the Elimination of all forms of Discrimination against Women (CEDAW) and is geared towards the achievements of the Sustainable Development Goals (SDGs), particularly Target 5.5, which seeks to "ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life"<sup>3</sup>.

Since its implementation, the policy measures have been accepted and institutionalized into the new three-sphere federal structure of the country, and records show that they are being realized. However, one criticism is that it stops short of providing concrete measures for stronger gender empowerment to bring transformative change. This is particularly conspicuous considering the new Constitution of Nepal (2015), which provides a strong base to arrange for women's empowerment, including placing an economic value on labour contribution of women with regards to family care.

By taking a wide historical lens, this paper looks to the past to illustrate how Framework-III was formulated, specifically in relation to gender concerns. This includes examining the context and priorities of key policy actors that have shaped Framework-III and its predecessors. The objective is therefore not to investigate the impact of the policies, but rather, to trace mechanisms and issues behind them, leading to their creation. Analysis is on the sequence of events, occurring over decades, where actors position themselves and dominant views continue to be passed down and guide policy formulation.

### 2. METHODOLOGY

This paper adopts a case study approach, where key actors are identified, their interests and priorities are analysed, and causal mechanisms which affect policy decisions are mapped (George and Bennet, 2005).

<sup>3</sup> <https://www.un.org/sustainabledevelopment/gender-equality>

Semi-structured interviews with six men, who were instrumental in drafting of the policy documents, are the primary source of information. From the government, no women were involved in the drafting, while from the implementing project, the author was the only woman who participated in the two latter frameworks. Consequently, the author drew from her own experiences and has sought to provide related context and explanations where necessary. The study approach can therefore be characterized as following a constructivist method (Adom et al., 2017).

Meanwhile, the interviewees included past and present government officials and project implementation staff<sup>4</sup>. Analysis relied heavily on their viewpoints and willingness to discuss their interests surrounding the *process* of policymaking. Consequently, there is the possibility that contentious issues were not disclosed. Fortunately, most of the respondents, especially those involved in the drafting of the earlier policy documents had already retired and were known to the author and so were found to be less reluctant than envisioned. Secondary sources of information, specifically evaluation reports, concept papers and annual progress reports were also reviewed for analysis.

### 3. THEORETICAL FRAMEWORK

This study takes a pluralistic approach by utilizing various theoretical concepts to examine how gender concerns have been incorporated into policy documents. So rather than one grand theory, three theoretical concepts have been applied.

#### *Policy as a process*

Policy is viewed as a *process* where a “set of decisions are made” (Grindle and Thomas, 1991) by actors to develop goals and the means of achieving them within a specific situation (Grindle and Thomas, 1991; Juma and Clarke, 1995; Hännien, 2014). Here the process is understood to be influenced by “politics of policy”, where common or contested interests vie with each other in a messy process to shape its direction (ibid). Contrary to the “linear model”, where decisions are made rationally to solve a particular problem after analysing all possibilities (Grindle and Thomas, 1990), making of policies is viewed as a chaotic procedure, which is dominated by actors that set the agenda, identify alternatives and ultimately the selection of the most favourable option.

Another model is the “incrementalistic model” – where policymaking is a series of small changes, which does not drastically “rock the boat” (Sutton, 1999). Viewing policy as a process also allows one to trace how shifting trends in international discourse and its effect on domestic policy decision-making. This is particularly pertinent to this study as it seeks to understand the historical context in which the policies under study were developed. Sutton (1999) points out that “development narratives” or “received wisdom” narrows down complex situations into simple, easily understood phrases, that take the status of conventional wisdom and often get used by policymakers to guide their decisions. He argues that these narratives are often embedded in socio-cultural roots and though they may mislead or are too simple, they are still pervasive and widely used. This can also be applied to the institutions that one “lives in”, where through socialization and shared beliefs, ideas and perspectives are developed and reproduced.

#### *Aid and policy dialogue*

Influence of development partners (DP) on recipient countries has long been acknowledged and studied (De Haan, 2009; Fraser and Whitfield, 2009). The “donor-centred policy” process differs from the classical “state- and society-centred process”, where the latter assumes the existence of sovereign states, within which policies are decided (Grindle and Thomas, 1990). Amongst the many instruments utilized by DPs, policy dialogue is a tool applied to “encourage” the right behaviour amongst recipient countries where focus is on changing the “adverse political environments” (World Bank, 1989).

According to Fraser and Whitfield (2009), the ideas behind policy dialogue are however contradictory – on one hand the aim is for the governments to write their “own” policies, but at the other end, the product needs to be one that is agreeable to them. They point out that while “ownership” is emphasized, the influence that DPs have over the policymaking process indicates that they (DPs) do not actually have

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<sup>4</sup> Trail Bridge Support Unit/HELVETAS is the implementing project on behalf of Swiss Agency for Development and Cooperation (SDC)

confidence in the governments to do so (ibid). Development partners, through the “best practice” approach have also argued that, since their development projects provide context-specific operational level experiences, the issues raised have more value and so need to be incorporated into the development/updating of polices (De Haan, 2009).

### *Gender in transport*

While it is generally assumed that transport infrastructure is gender-neutral, with men and women benefiting equally, recent studies have shown that mobility patterns differ and that the benefits accrued vary due to their assigned gender roles (ADB, 2011; Ghimire, 2002). Beginning with the ratification of international conventions, such as the Beijing Platform for Action (1995), scrutiny in the sector through a gendered lens demonstrated how programmes/projects isolate women as “target groups” and integrate them into development programmes, sometimes reinforcing existing structures (Kabeer, 2005). Emergence of the Gender and Development (GAD) approach further contributed towards understanding the different contexts for men and women, and the need to challenge structures that have discriminated them, especially, as women tend to bear a disproportionate share of transport burdens to fulfil their domestic, social, and economic roles (World Bank, 2012).

Institutions have increasingly sought to mainstream gender into their transport programmes/projects, by including gender-specific activities or affirmative actions, where women and men, or both, are at a disadvantage or face discrimination. This was primarily as a response to being labelled “gender blind” and to address structural causes of inequality, leading to the rise of gender mainstreaming strategies and tool kits (Tanzarn, 2018; World Bank, 2005).

Targeted representation of women within development groups for community-led development (roads, irrigation, bridges) is one such strategy that has been widely implemented in Nepal (Jha et al., 2009; Hogley and Paudyal, 2008). Focus is on “social mobilization” - to organize people to accomplish specific goals. According to Jha et al. (2009), most development projects/programmes fall within a continuum between – “*transactional approaches*” where people are organized into groups to deliver services (e.g., constructing a road) and managing assets (e.g., irrigation scheme); and “*transformational processes*” which instead focuses on building agency, voices, confidence to make decisions, ask questions and ultimately changing formal/informal “rules of the game”. For the latter, the authors argue that *process* is the focus, where sufficient time is devoted (through weekly discussions) by trained facilitators who educate them on their rights and support them to act (ibid).

Studies have also shown that when women are a part of development groups, they are likely to experience “time poverty” and have the added pressure of juggling several tasks, which ultimately limits her ability to benefit (ADB, 2011; Casabonne et al., 2015). Conversely, when well-designed systems are implemented, they can facilitate women’s ability to balance household chores and access services and employment opportunities (ADB, 2011).

## **4. CONTEXT**

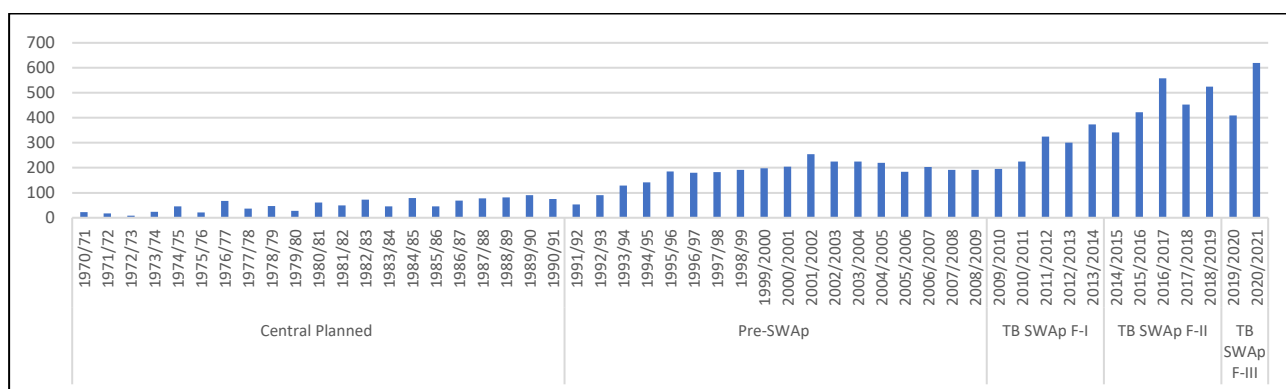
This section briefly discusses the key features of the trail bridge sub-sector, particularly its significance in Nepal; involvement of DP; and key actors responsible for policymaking.

### *Trail bridge building in Nepal: A government priority*

Trail bridge building is regarded as a Priority-1 programme by the government of Nepal and is one of the few programmes that is implemented across the entire country. The demand for these types of bridges is high in Nepal due to the large number of rivers (over 6,000) which criss-cross the country; the predominance of travel on foot trails in rural areas; low road density of 47 km road/100 sq. km (DoR, 2018); and the relative lower cost of the bridges. Currently, the programme goal is to provide safe river crossings, so that citizens do not have to take a detour of more than 1-hour to access public services (HMG, 2006).

Outputs have risen dramatically since 1960s, when 20-25 bridges were completed annually, to 450 bridges between 2015-2021 (Figure 1). This is one reason why the government considers the sub-sector a success and has allocated funds to meet the growing demand, with 700-800 bridges planned yearly (MoFAGA, 2020).

**Figure 1: Trail bridge constructed in Nepal 1970-2021**



Source: Annual Progress Reports

There are two approaches to bridge building based upon their span/length - Short Span Trail Bridges (SSTB), which have a length up to 120 meters, and Long Span Trail Bridges (LSTB), which are more than 120 meters (HMG, 2006). SSTBs are constructed through users’ committees (UCs) following the “community- approach”. These bridges are designed with relatively low engineering input and are largely constructed through UCs and are the main thrust of social inclusion provisions. LSTBs meanwhile require higher technical expertise due to their complex designs and are therefore, built by private contractors and only have limited gender provisions.

Users’ committees are formed by organizing local beneficiaries (7-11 individuals), which are responsible for day-to-day construction management - collection of construction materials, mobilizing local labour, keeping records of income and expenditure (Sherpa et al., 2019). The UCs are supported on technical aspects and social mobilization by local NGOs, who are hired by local governments, and need to follow steps identified in the Social Organization Support manual which is focused on strengthening local communities’ capacities to construct bridges, including women in the UCs. The overall process is overseen by government engineers/sub-engineers and quality assurance is provided by Swiss technical assistance (TA).

Presently, 95 per cent of all trail bridges built in Nepal are short span bridges (Bridge Record, 2021). While, according to contribution costs, 93.5 per cent of bridges are funded by the government, with the remaining 6.5 per cent by donor funding under technical assistance (TA) MoFAGA, 2019a). The latter is responsible for quality assurance, TA and strengthening newly established government bodies to plan, budget, execute and maintain bridges (MoFAGA, 2019b). Material grants (wire ropes, bulldog-grips) are also supported by the donor (SDC). Between 2001- 2014, other multi-lateral aid agencies (World Bank, Asian Development Bank) and bi-lateral donors (UKAID) had also been attracted and funded bridges through their respective development projects.

Table 1 below traces the evolution of the sub-sector and the Gender Equality and Social Inclusion (GESI) provisions.

**Table 1: Evolution of trail bridge building and integration of social inclusion provisions**

	Projects and Programmes*	Integration of GESI in Trail Bridge Policy Frameworks	Key National GESI related Frameworks
1950s	<b>United States Operation Mission (1958-1964):</b> First trail bridge programme initiated outside of government.		
1960-1970s	<b>Suspension Bridge Division (SBD) 1964 - present:</b> Central/Federal government project.		
	<b>Suspension Bridge Project (1972-1989):</b> SDC funded. Constructed trail bridges along main trails, advisory support to SBD.		

1980s	<b>Local Bridge Support Programme (1980-1984):</b> Joint project between government and SDC. Built bridges using local technologies.		
	<b>Bridge Building at Local Level (1989-2001):</b> SDC funded. Piloted and developed new technology, standards and “community-approach”. 100-150 bridges built annually.		
1990s			<b>Local Self-Governance Act 1990:</b> Empowers local bodies to formulate plans by engaging local people; Target women representation: at least 20 per cent
			<b>Nepal ratifies CEDAW</b> in 1991
2000-2009	<b>Trail Bridge Sub-Sector Programme Phase I (2001-2006) and Phase II (2006-2009):</b> SDC funded. Project provided funds and TA support to government and donor projects for construction. 200 bridges built annually. SSTB and SOS Manuals published. Initiated representation (30 per cent) of women in UCs.	<b>Trail Bridge Strategy 2006:</b> Targeted women’s representation in UCs: at least 30 per cent; Equal work for equal pay	<b>Local Infrastructure Development Policy 2004:</b> Promotes participatory inclusive development in infrastructure
	<b>Trail Bridge Sub-Sector Programme Phase III (2009-2015):</b> SDC funded. Provided funds and TA to government. 280 bridges built annually. Introduced quota of at least one key position for discriminatory groups in UCs.	<b>Trail Bridge Sector Wide Approach Framework-I (2009-2014):</b> Targeted women’s representation in UCs: at least 33 per cent; Reserved at least one key position in UCs from discriminated groups; Equal work for equal pay	
2010-2019	<b>Trail Bridge Sub-Sector Programme Phase IV (2014-2019):</b> SDC funded. Provided TA and material support to government to construct bridges. 460 bridges built annually	<b>Trail Bridge Sector Wide Approach Framework-II (2014-2019):</b> Targeted women representation in UCs: at least 40 per cent; Reserved at least one key position in UCs from discriminated group; Equal work for equal pay	<b>New Constitution of Nepal 2015:</b> Ensures equal rights and opportunities. Women have right to participate in the new state structures
	<b>Trail Bridge Sub-Sector Programme Phase V (2019-2023):</b> SDC funded. Provides TA and material support to construct bridges. 514 bridges built annually	<b>Trail Bridge Sector Wide Approach Framework-III (2019-2022):</b> Target of women representation in UCs: at least 50 per cent; Reservation of at least one key position in users’ committee for a woman; Employment target: at least 30 per cent for women; Equal work for equal pay	

Note: \*Includes dedicated projects/programmes which were exclusively building trail bridges. Other projects which funded trail bridge construction, but, as one component amongst many and of less number have not been included.

Source: MoLD, 2009; MoFAGA, 2019b; HMG, 1996; HMG and SDC, 2002; SATA, 1981

#### *Institutions and key policy actors*

This section focuses on the two key policy actors – bureaucrats and the key aid agency in the sub-sector. Politicians and UCs have not been included, as their role was marginal in the development of policies under discussion.



### *Local Bridge Section/ Department of Local Infrastructure*

As per the Constitution and Local Governance Operation Act 2074, rural and urban municipalities, within the three-sphere federal system (federal, province, municipality), have exclusive rights for trail bridge execution. Federal government meanwhile has jurisdiction over policy formulation and strategic guidance (MoFAGA, 2019b) and is the focus of this study. Specifically, the Local Bridge Section (LBS) within the Department of Local Infrastructure (DoLI)<sup>5</sup>, which lies within Ministry of Federal Affairs and General Administration (ibid)<sup>6</sup> is responsible for trail bridges. The LBS was established in 2001 to coordinate trail bridge programme nationally by developing strategies, standards, and norms along with the enhancement of local capabilities. It therefore took the lead in the development of the policy documents.

Historically, the Suspension Bridge Division (SBD) was the first central government unit dedicated for trail bridge building. It was initiated in 1964 and still exists to the present day, but without permanent status in the current set-up. SBD is now *not* regarded as a key player in policy decisions as its focus is limited towards the construction of international, strategic, and technically challenging long bridges, numbering 50-80 per year. This contrasts with the earlier years (1964-2006), when the donor had technically and financially supported SBD to develop, construct and maintain trail bridges (HMG, 1996). Through this partnership, new ideas and technologies were developed, including the “SBD standards” (later referred to as LSTB standards). Since the establishment of LBS however, the influence of SBD has waned and instead, LBS, which has a permanent status within the government structure, has taken the lead in policy formulation.

### *Donor engagement in trail bridge building: longstanding partnership*

The government of Switzerland's support to trail bridge building began in 1972, with financial, technical, and material support to SBD through the Suspension Bridge Programme (SBP), which acted as a counterpart for technical advice. Over the past five decades, assistance has evolved from piloting and standardizing technologies, direct construction to technical assistance (TA) and an advisory role. Currently, TA is aligned with the devolved provisions and spirit of the new Constitution, focusing on strengthening the new institutions to deliver trail bridges as per their mandates (MoFAGA, 2019b).

Through this engagement, development of the “community-approach” is widely acknowledged as a watershed moment, as it led to the dramatic rise in bridge outputs while also establishing principles of participation, through local management of resources and decision-making. The approach was initiated through the SDC supported Bridge Building at Local Level (BBLL) project, in the 1990s, to find alternative technologies and approaches to build bridges to meet high demands, which were not being met through SBD. According to project documents, before the “community-approach” was initiated, SBD was not interested in “local technologies” as it was “not glamorous” and SBD’s “...existing human resources were already occupied, and funds were available to build high standard bridges from the government” (SATA 1981:41). This opened the way for BBLL to pilot alternative bridge designs, which addressed the massive volume of trail bridge demand - at lesser costs<sup>7</sup>.

Later in 2001, SBD and BBLL, two of the SDC projects were merged into the Trail Bridge Sub Sector Project (TBSSP). The project was successful in incorporating the “community-approach” within government systems and structures; along with NGOs and UCs (HMG<sup>8</sup>, SDC and HELVETAS, 2004:11). There was also a further increase in trail bridge outputs, with 200-250 bridges built annually.

These tangible outputs along with the development of new technologies, standards and norms led to SDC to be regarded as a “pioneer” amongst DPs in trail bridge building. This narrative is still prevalent and recognized by government representatives interviewed for this study. Support to the sub-sector has also continued through successive projects through TA, accounting for 6.5 per cent of the total NRs 3.5 billion (equivalent to USD 29.4 million) programme cost in 2020 (MoFAGA, 2020). Significantly, with respect to

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<sup>5</sup> Previously, the Department of Local Infrastructure Development and Agricultural Roads

<sup>6</sup> Previously referred as the Ministry of Local Development

<sup>7</sup> The per meter cost of SSTBs is 50 per cent of LSTBs (HELVETAS 2007).

<sup>8</sup> His Majesty's Government

policy dialogue, SDC has also been able to occupy a unique position, whereby it is the only DP which is a member of the Steering Committee<sup>9</sup> (MoFAGA, 2019b).

## 5. ANALYSIS

### *Gender mainstreaming in transport sector: Legal provisions and practices*

Article 38 in the Constitution of Nepal 2015 states that women have the right to participate in all bodies of the state. It guarantees women's rights to positive discrimination and the right to obtain special opportunities in employment. Furthermore, Article 253 designates the National Women Commission to be responsible for ensuring gender mainstreaming in different sectors – including transport. The line ministry for trail bridges also has a GESI policy that aims to mainstream gender.

Other national policies, such as the Local Self Governance Act (LSGA) 1999, aims at empowering local bodies by enhancing their participation in development activities. This was also the first legislative document which specifically set targets for discriminated groups (e.g., 20 per cent women in development works). Likewise, the Local Infrastructure Development Policy 2004 advocates for special attention to be provided for gender equality in the formulation, implementation, and operation of local infrastructure.

Within the transport sector, gender mainstreaming has also been influenced by wider discourses, and with DP support, inclusion of women through participation and employment opportunities has become the norm, rather than the exception (Hada, 2020; Sherpa et al., 2019). Studies show that incorporation of gender in rural infrastructure has had positive impacts – primarily in improving livelihoods, self-confidence and in increasing women's representation in management (Sherpa et al., 2019). However, others also point out that women continue to be overshadowed and side-lined by their male counterparts when it comes to decision-making (Priya and Turner, 2019; Sherpa et al., 2019) and that in many cases, “tokenism” of women's participation is widely prevalent, with women physically present in committees but “strategically absent” (Tanzarn, 2018).

### *Trail Bridge Strategy 2006: Beginning of GESI mainstreaming*

The Trail Bridge Strategy promulgated in 2006 is the guiding policy document for the sub-sector. Drafting was led by the then Department of Local Infrastructure and Development Agricultural Roads (DoLIDAR), now referred as DoLI, through LBS with consultation with SBD, and supported by SDC<sup>10</sup>. When discussions began in 2005 to formulate the strategy, there were two main concerns - institutionalizing the two (short and long) parallel trail bridge designs and approaches, and addressing the influence on the selection of bridges, which till then was open to political pressure<sup>11</sup>.

According to government officials, social inclusion concerns were acknowledged to be important, but “not a major concern” in an infrastructure project and were not heavily debated<sup>12</sup>. Consensus was to follow existing government policies – the LSGA 1999 and the LIDP 2004, which advocate for decentralization and participation of discriminated communities in development works. People-centred development projects were already being widely implemented internationally (and in Nepal), with most justified as being efficient (for achieving outputs/outcomes) and effective (empowering and bring equity; Cleaver, 1999). Meanwhile, within the trail bridge programme, the experiences and “lessons learnt” through the “community-approach” were put forward by SDC as successful examples to guide the sub-sector on participation. For example, the project had already started introducing quotas for women (30 per cent in UCs) to “...give voice to groups that are otherwise excluded through structural barriers” (HMG, SDC and HELVETAS, 2004:6).

Within DoLIDAR, there was however some resistance from a few individuals. Questions were raised on involving local communities as well as the need to include women and discriminated groups, mostly by engineers, in what they viewed as a purely technical and male activity<sup>13</sup>. Interviews revealed that officials

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<sup>9</sup> Provides policy support and strategic guidance (MoFAGA 2019b:19).

<sup>10</sup> Interview with ex-high-level official on 11 June 2021.

<sup>11</sup> Interview with ex-high-level official on 10 and 11 June 2021.

<sup>12</sup> Interview with ex-high-level official on 11 June 2021.

<sup>13</sup> Interview with TBSSP project staff on 4 June 2021.

within SBD had already felt threatened with the establishment of LBS, and with the importance given to the community-approach, the feeling was that “their share of bridge building” would be further curtailed<sup>14</sup>.

TBSSP project staff recall that despite the arguments against the community approach - the significant rise in trail bridge outputs at lesser costs, compared to those of SBD was undeniable<sup>15</sup>. One way in which they sought to persuade the government was to point out that the high demand for bridges would not be met through SBD’s low outputs. By then, norms and standards had already been standardized in manuals<sup>16</sup>, which further bolstered their argument. Likewise, community mobilization (including women’s participation) had also already been formalized in a manual. All these aspects came together and finally, there was agreement to institutionalise the community approach. This led to the demarcation of bridges according to their span - with shorter bridges up to 120 m and longer bridges more than 120 m.

With regards to engendering the strategy, interviews indicate that once the “community approach” was accepted, they readily agreed to the prevailing provisions and experiences of the Swiss projects. This included women’s representation in management roles (Users’ Committees), targeted for 30 per cent, similar to the project’s log frame target.

Government officials revealed that quotas were regarded as the “most pragmatic” way to provide space to discriminated groups in bridge building. It was also the easiest way to monitor and report. Quotas for employment opportunities were however not included. When asked why not, government officials shared that at that time they did not think that large number of women would be attracted or could take part in the physically demanding construction works. Equal pay for equal work for men and women was, however, included. Reports show that questions were already being raised with regards to cases of women being paid less than men during construction (HMG, SDC and HELVETAS, 2004:20). The number of women involved were low, but, according to government officials, it was publicly sensitive and so they readily accepted and included it as a working principle.

Prioritizing bridge selection was another pivotal component. Till then, political pressure to construct bridges were not uncommon and to address this issue different approaches were deliberated<sup>17</sup>. Amongst them, the suspension bridge project had already been operationalizing a prioritization criterion<sup>18</sup>. This method was deemed to be the most neutral and was incorporated. Looking back, government officials note that the criteria provided them with a reason to push back on politically motivated bridge demands, instead of outright rejecting them. And whilst not all demands could be repelled, they acknowledge that there was a definite reduction.

#### *Trail bridge SWAp Framework-I (2009-2014): Incremental GESI provisions*

As the name suggests, the aim of the next key policy document - Trail Bridge Sector Wide Approach Framework-I (2009-2014) was to implement the programme through a sector-wide approach (SWAp). In Nepal, DPs had already started discussing aid effectiveness in 2000 and after the endorsement of the Paris Declaration on Effectiveness in 2005, there was renewed impetus to coordinate development efforts, under a common policy, to “harmonize aid practices”, led by the government. Within this discourse, the Ministry had begun consultations with seven DPs<sup>19</sup> in 2007 to conceptualize<sup>20</sup> a sector-wide approach and a Statement of Intent (Sol) was signed in 2008 (MoLD, 2009).

During the drafting process, government officials recall that, from their perspective GESI provisions established by the Strategy had been effective in ensuring representational space. Especially, as records

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<sup>14</sup> Interview with ex-high-level official on 11 June 2021.

<sup>15</sup> Interview with TBSSP project staff on 4 June 2021.

<sup>16</sup> Altogether 16 manuals (technical design, standards; social mobilization, training, and maintenance) were developed and published.

<sup>17</sup> One ex-government official recalled how difficult it was to reject even technically unfeasible or redundant bridges

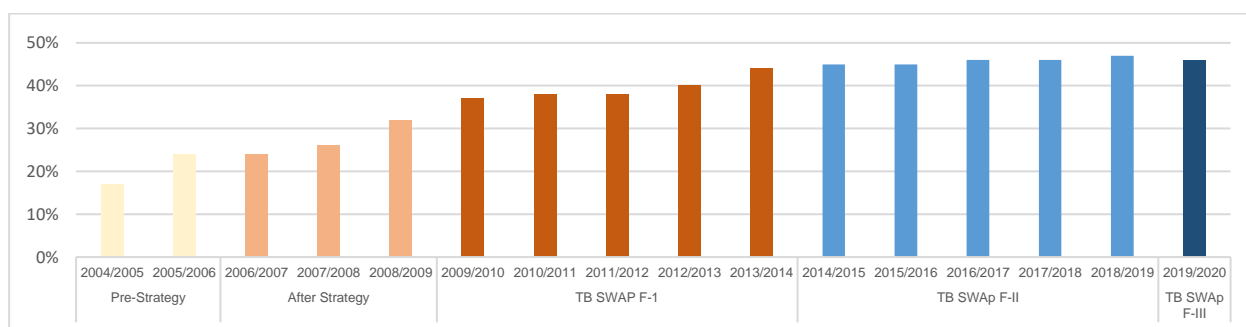
<sup>18</sup> 1. Distance gained: time saved if a bridge were to be constructed; 2. River type: number of months that a river is fordable; 3. Risk factor: deaths occurred due to lack of a bridge, 4. Beneficiary population, 5. Discriminated groups

<sup>19</sup> SDC, WB, ADB, DFID, GTZ, JICA and WFP

<sup>20</sup> This involved a detailed assessment of the sub-sector and recommendations.

showed that the number of women involved in the committees had increased from less than 20 per cent (pre-strategy) to above 30 per cent (by 2009; Figure 2).

**Figure 2: Women’s representation in users’ committees (2004-2020)**



Source: Annual Progress Reports

Within the government, there were however mixed views towards women’s engagement in bridge building. Some regarded the participation of women encouragingly and shared anecdotal cases of where they saw successful cases of women in committees constructing bridges. They were eager to build upon the achievements by introducing new provisions. While others were still sceptical and thought that the programme was already doing enough. One ex-official noted that, “...*targets are not ceilings for participation (for women). They can increase their involvement if they want*”<sup>21</sup>.

Interviews revealed that policy makers were aware of the criticism of “tokenism” (Tanzarn, 2018) directed towards the programme, but instead of delving deeper into why and how women were engaging in the programme, the consensus was to “play it safe”. New provision of reserving at least one key position<sup>22</sup> for an individual from a discriminated group (including women) was introduced with the reasoning that by ensuring a decision-making position, discriminated groups would have greater control over resources. However, it can be argued that it did not necessarily address the underlying concern that even when women were part of the committees, they were so in name only. At the implementation level, project staff shared that considerations were made when arranging committee meetings around women’s household chores and training NGO facilitators to ensure discriminated groups were not side-lined during meetings. They also point out that the project was fully committed towards ensuring work-force-diversity within their staff structure, so that higher number of women are employed. But, at the policy level, the policymakers were content to continue with quotas for women, with increasing targets (e.g., representation of women in committees was increased to 33 per cent from 30 per cent). Two additional provisions, already being practiced within the donor supported project, were also introduced - proportionate representation of discriminated groups, as per the beneficiary population, in the committees, and targeting of employment opportunities (50 per cent) for discriminated groups. For the latter, targets specifically for women were, however, still not deemed necessary.

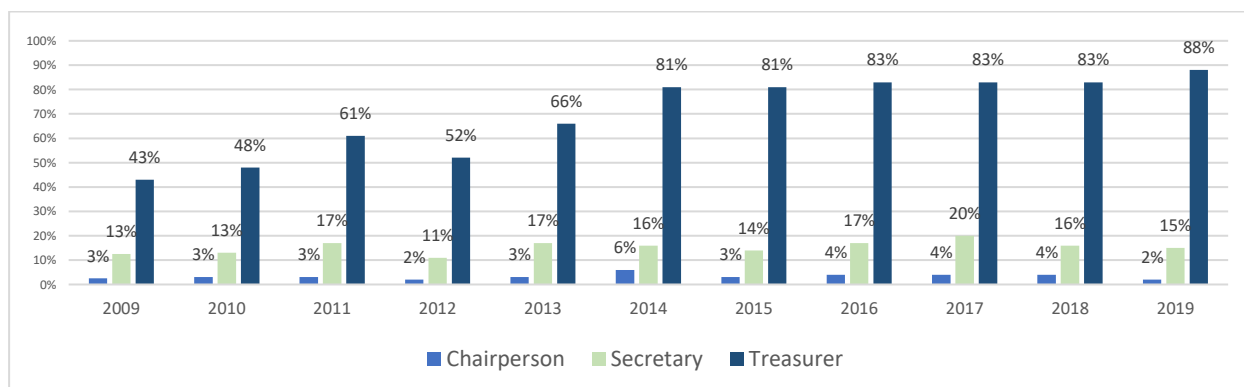
#### *Trail Bridge SWAp Framework-II (2014-2019): Consolidation of GESI provisions*

After disaggregated data on bridge committees, including key positions, started to be monitored/reported after Framework-I, data showed that more women were elected to the treasurer position than others (Figure 3). In the minds of many, this confirmed the narrative that locally “women are more trustworthy than men”<sup>23</sup>. Whether it is true or not would be a topic for further research, but at the bridge sites the dominant view was that “women were less likely to misappropriate funds”. Alternatively, a few also voiced the opinion that women could be self-excluding themselves from the chairperson and secretary position, as it would require them to travel away from their homes for bridge related activities, and so were instead only agreeing to the treasurer role.

<sup>21</sup> Interview with ex-high-level official on 11 June 2021.

<sup>22</sup> Three key positions include – Chairperson, Secretary and Treasurer

<sup>23</sup> Interview with ex-high-level official on 18 June 2021.

**Figure 3: Women representation in key position in users' committees**

Note: Some UCs have more than 1 women in key positions

Source: Trail Bridge Strategy Information System

For the policy makers, however, the overall rise in women representation in the committees (Figure 2 and 3) along with the successes achieved in raising the outputs (up to 200 bridges) through the “community approach” indicated that the previous framework was effective. They were pleased with the progress and during the interviews revealed that they did not want to “rock the boat” and ask reasons why the proportion was so high, and instead favoured the continuation of existing provisions, with increments in the targets.

#### *Trail Bridge SWAp Framework-III (2019-2022): Continuation of accommodative measures*

Nepal was undergoing dramatic changes when the next framework was being drafted. The promulgation of the new Constitution in 2015 had ended the centralistic unitary system of government and in its place re-structured the country into a three-sphere system, with a federal government and new autonomous sub-national governments at the provincial and municipality levels<sup>24</sup>. Overall focus of the new framework was on institutionalizing the trail bridge programme within the new structures, especially the sub-national units, which had been given the mandate for trail bridge construction by the Local Government Operation Act 2017. From the DP perspective the gains achieved through the “community approach” had to be embedded in the new institutions (vis-à-vis the contracting approach) from the beginning.

Prior to the drafting of the framework, a study on trail bridge policies and practices in 2019, had concluded that the past policies were more “gender responsive” than “gender transformative” and that the implementation of policies tended to fall within the “gender accommodative” spectrum (Sherpa et al., 2019). The key gap identified was “...the lack of attempt to minimise (the) increase in women’s workload caused by participation in trail bridge construction” (Sherpa et al., 2019:41). Particularly, when women were nominated to committees, because of time constraints due to care work or due to socio-cultural hierarchies, they were unable to perform their roles or were impeded from voicing opinions. One key recommendation was to redistribute care work, by encouraging support of male family members and improving facilitation by local NGOs. Masonry trainings for women, to qualify for high skill work and wages, and child-care provisions at the bridge construction sites were also recommended.

From the author perspective, the underlying expectation was that through engagement in the programme, women would become more empowered (able to mobilize their capacities and act upon their needs), become social actors and bring change to their lives (and communities) – i.e., “*transformational*” change (Jha et al., 2009). Government and project staff instead viewed women’s (and other groups) engagement from a more “*transactional approach*” where, the main goal was to construct a bridge effectively and efficiently. “Participation” was viewed through a much narrower lens, whereby engagement and decision over trail bridge activities was regarded to be sufficient. This is a view that can be traced right back to the designing of the Strategy and has remained the dominant view amongst policymakers.

While the degree of sensitivity differed, the common opinion amongst government and project staff was that a single trail bridge programme cannot change social structures. Furthermore, it was argued that while there is room for improvement for more “meaningful participation” of women in the committees, they

<sup>24</sup> Nepal was re-structured into 7 Provinces and 753 municipalities

rejected the idea of introducing provisions for engagement with family members beyond trail bridge building activities. Project staff feared that by focusing on “transformational” change, the thrust of the programme, which had been effectively delivering significant outputs (400 bridges annually), would get disrupted by changing the focus of the programme, especially, at a critical juncture in the country’s history when new institutions were being established and trail bridge building needed to be established at different government levels.

Instead, it was argued that separate projects (e.g., REFELCT<sup>25</sup> processes), which explicitly focuses on raising issues through trained facilitators with continuous engagement (and not merely during trail bridge construction milestones) would be more effective, particularly, to change minds, attitudes, and behaviours. Similarly, recommendations for childcare, were also deemed to be impractical from a management perspective, due to the nature of construction works, where the number of labourers working at the bridge sites fluctuate<sup>26</sup> depending upon the stage of construction (unlike road building). Consequently, when the Framework-III was being drafted, the recommendations were viewed to be not within the scope of the programme.

As with the previous frameworks, the consensus was to favour incremental changes, such as increasing the target of women’s representation in users’ committees to 50 per cent. Realizing that women are and want to be engaged in bridge construction, targets were, however, introduced for employment opportunities (targeted of at least 30 per cent at all the bridge sites; MoFAGA, 2019b).

## 6. CONCLUSIONS

By tracing the historical context and processes which have led to the formulation of the policy documents, the paper shows how incremental GESI provisions can gain widespread acceptance and become institutionalized within transport infrastructure programmes and government executing agencies, which are historically known for being “gender blind”. The case study of the trail bridge programme demonstrates that while there are differing views on gender within the government, the tendency is to build a consensus and select provisions which are easier to monitor and record, and that there is a reluctance for more drastic ones, even though an enabling environment has been created by the gender-sensitive new Constitution. One reason for the latter, can be attributed towards the “transactional approach” underlying the participation of women in trail bridge building, where they are seen as actors for the effective delivery of bridges, rather than catalysts for transformational change. The agency and leadership are encouraged and supported through affirmative reservations, but active attempts to challenge societal structures, such as encouraging men’s involvement in care work, are deemed to be beyond the scope of the trail bridge programme.

This study also illustrates that the donor involvement in the sub-sector has been successful in influencing participatory approaches. Explicit targets and provisions for women, practiced in SDC supported projects, filtered into the trail bridge programme, and are now accepted throughout the entire country. This influence is founded on a long and successful partnership, which led to important developments on norms, standards and the “community-approach”, which transformed the sub-sector. The programme has been able to continuously achieve high outputs and has enabled the State to meet the needs of its citizens effectively. And whilst participatory approaches may have stemmed and filtered into Nepal from global discourses, it has successfully been realized in the country to meet its unique need.

## 7. RECOMMENDATION

Policymakers need to build upon the past achievements and seek to redress the inequalities at the bridge sites, within the trail bridge programme’s scope. Widening access to employment for women is one such possible area where the programme can target, specifically in terms of providing masonry trainings, so that they can earn as skilled labourers. This is in line with SDG target 8 which promotes inclusive,

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<sup>25</sup> Regenerated Freirean Literacy through Empowering Community Technique, which is used for empowerment, social action, where discriminated groups are brought together to identify, analyze and act on issues that affect them (Jha et al 2009).

<sup>26</sup> The highest number of labourers (50-80 persons) is required cable pulling, but it is for only 1 day. Similarly, during concreting up to 10 labourers are required, for 3 days. The longest period that labourers are engaged is during stone masonry works for 30 days, when up to 5 labourers are engaged.

productive employment and decent work for all. It was also one of the recommendations of the study on trail bridge practices, which indicated that women are keen to earn more, but are limited due to the lack of trainings. This would be within the scope of the trail bridge programme, and similar to the past, piloting of the approach, could provide the necessary learnings for implementation nationally. Already, during implementation, at least 1 woman from each bridge site is included in Demonstration Model Bridge Trainings, where bridge-craft-persons are trained on construction<sup>27</sup> and committee members are oriented on record keeping. To date, women participants are limited to the latter (bookkeeping), but there is scope for the programme to widen its objective and start providing construction related trainings to women who are keen to learn the skill.

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### REFERENCES

- Asian Development Bank (2011). *Empowering women through rural infrastructure: Mainstreaming gender in transport*. Asian Development Bank.
- Adom, D., Yeboah, A. and Ankrah, K. (2016). Constructivism Philosophical Paradigm: Implication for Research, Teaching and Learning. *Global Journal of Arts Humanities and Social Sciences*. Vol 4, pp. 1-9.
- Bridge Record (2020). Bridge Record Database. Available from [www.dbr.helvetas.org.np/?id=dbr](http://www.dbr.helvetas.org.np/?id=dbr). Accessed on 4 June 2021.
- Casabonne, U., Jiminez, B., and Mueller, M. (2015). *Roads to agency: effects of enhancing women's participation in rural roads projects on women's agency - a comparative assessment of rural transport projects in Argentina, Nicaragua, and Peru*. World Bank.
- Cleaver, F. (1999). Paradoxes of Participation: Questioning Participatory Approaches to Development. *Journal of International Development*, vol. 11, pp. 597-612.
- De Haan, A. (2009). *Aid: The Drama, the Fiction, and Does it Work?* Institute of Social Studies, Working Papers- General Series. 488. 10.1177/0973703020100202
- Department of Roads (2018). *Strategic Road Network of Nepal*. Department of Roads. Nepal. Kathmandu
- Fraser, A. and Whitfield, L. (2009). Understanding Contemporary Aid Relationships. In *The Politics of Aid. African Strategies for Dealing with Donors*, L. Whitfield eds. Oxford University Press.
- Ghimire, G. (2002). Transport in the mountains and the Terai: Kushiya Damrang and Shivpur, Nepal. In Fernando, P. and Porter, G (eds). *Balancing the load: Gender, Women and Transport*. Zed Books. London.
- George, A.L., and Bennet, A. (2005). *Case Studies and Theory Development in the Social Sciences*. Cambridge.
- Grindle, M. and Thomas, J. (1990). After the Decision: Implementing Policy Reforms in Development Countries. *World Development*. Vol 18(8).

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<sup>27</sup> Includes preparation of construction materials

- \_\_\_\_\_ (1991). *Public Choices and Policy Change: The Political Economy of Reform in Developing Countries*. Baltimore: John Hopkins University Press.
- Hada, J. (2020) Gender mainstreaming in the Nepalese rural transport sector: working towards transformative change. *Proceedings of the Institution of Civil Engineers – Transport* 173(2): 97–106
- Hännien, E. (2014). *Legitimizing Aid: Donors and Policy Making in the Rural Water Supply and Sanitation Sector in Nepal*. Publications of the Department of Political and Economic Studies 14 (2014). University of Helsinki.
- His Majesty's Government, (1996). *External Assessment: Suspension Bridge Division*. Nepal.
- \_\_\_\_\_ (2006). *Trail Bridge Strategy 2006*. Ministry of Local Development. Nepal.
- His Majesty's Government and Swiss Agency for Development and Cooperation, (2002). *Project Document: Trail Bridge Sub Sector Project (Phase I: July 1, 2001 – June 30, 2006)*. Nepal.
- His Majesty's Government, Swiss Agency for Development and Cooperation and HELVETAS, (2004). *Mid-Phase Review of Trail Bridge Sub-Sector Project*. HMG. Nepal.
- Hobley, M. and Paudyal, B. (2008). *Study of Income-generating activities in Kapilvastu and Ramechhap Districts*. SDC. Nepal
- Kabeer, N. (2005). Gender equality and women's empowerment: a critical analysis of the third millennium development goal. *Gender and Development*. Vol 13. pp: 13-24
- Jha, C., Prasai, S., Hobley, M. and Bennett, L., (2009). *Citizen Mobilisation in Nepal: Building on Nepal's Tradition of Social Mobilization to make Local Governance more Inclusive and Accountable*. World Bank, UK DFID and SDC.
- Juma, C., and Clark, N. (1995). *Policy research in Sub-Saharan Africa: An Exploration*. *Public Administration and Development*. Vol 15, pp 121-137
- Ministry of Federal Affairs and General Administration, (2010). *Annual Progress Report for FY 2009/2010*. MoFALD. Government of Nepal. Nepal.
- \_\_\_\_\_ (2019 a). *Annual Progress Report for FY 2019/2020*. MoFALD. Nepal.
- \_\_\_\_\_ (2019 b). *Trail Bridge Sector Wide Approach Framework-III (2019-2022)*. MoFALD. Government of Nepal. Nepal.
- \_\_\_\_\_ (2020). *Annual Programme and Budget for FY 2076/2077*. MoFAGA. Department of Local Infrastructure. Nepal.
- Ministry of Local Development, (2004). *Annual Progress Report. Trail Bridge Sub Sector Project*. MoLD. Nepal.
- \_\_\_\_\_ (2009). *SWAP Framework for the Trail Bridge Sub Sector (July 2009 – June 2014)*. Department of Local Infrastructure Development and Agricultural Roads. MoLD. Nepal.
- \_\_\_\_\_ (2014). *SWAP Framework-II for the Trail Bridge Sub Sector (July 2014-June 2019)*. Ministry of Local Development. Nepal.
- Programme Management Information System, (2021). *PMIS Database*. Accessed on 7 June 2021. Available at: <http://nepaltrailbridges.org.np/>
- Priya, U.T and Turner, J. Addressing the Linkages between Gender and Transport in Low- and Middle-Income Countries. *Sustainability*. 2019; 11(17):4555.



- Sharma, K. and Bhattarai, B. (2013). Aid, Policy and Growth: The Case of Nepal. *Journal of Economic Issues*. Vol. XLVII No. 4. Pp 895-910
- Sherpa, M., Tumbahangfe, A., Acharya, N., Chhetry, D., Tuladhar, I., and Carter, J. (2019). Transforming gender relations in Nepal's trail bridge programme: Policies and Practice. *Proceedings of the Institute of Civil Engineers- Transport* 17 3 (2): 107-21
- Swiss Association for Technical Assistance, (1981). *Suspension Bridge Programme Nepal: Evaluation*. SATA. Nepal.
- Sutton, R. (1999). *The Policy Process: An Overview*. Overseas Development Institute. London.
- Tanzarn, N. (2018). *Gender Mainstreaming in Rural Transport, Desk Review, GEN2157A*. London: ReCAP for DFID.
- World Bank, (1989). *Policies for Improving Growth and Alleviating Poverty*. World Bank. Washington DC.
- \_\_\_\_\_, (2005). *Measuring Empowerment in Practice: Structuring Analysis and Framing Indicators*. Policy Research Working Paper 3510.
- \_\_\_\_\_, (2012). *World Development Report 2012: Gender Equality and Development*. World Bank. Washington DC

## Diversity Mainstreaming as Panacea for Inclusive Transport Policy: The Twin Case of Windhoek, Namibia and Delhi, India

Alicia Yon and Rewa Marathe

### ABSTRACT

*We contend that transport systems need to be more inclusive by addressing diverse and complex mobilities. This argument is rooted in a review of the transport policies in the cities of Windhoek, Namibia and Delhi, India to determine whether they address the diverse needs of women and trans and gender-diverse people. Using the lack of safety as a common denominator across the two cities, we examine how safety affects mobility for these groups and reinforce other forms of inequities. The findings reveal a failure to account for different experiences, needs and expectations of and for transport among these groups, while rendering them invisible. We conclude with an argument for diversity mainstreaming as an approach for achieving inclusive transport systems. As a novel concept, diversity mainstreaming contests the failures of gender mainstreaming and gender equality in the context of difference and should form the basis for policy work aimed at inclusion.*

**Key words:** Inclusive transport, transport policy, transport equity, intersectionality, gender, and transport

### 1. INTRODUCTION

Gender mainstreaming was introduced as an important strategy for the promotion of gender equality, as part of the Beijing Platform for Action deliberations at the Fourth United Nations World Conference on Women in Beijing in 1995. Although an important concept, it is built upon the assumption of gender as a primary axis of inequality while ignoring the complex and equally important formations of identity beyond gender. And in the twenty-odd years since its adoption, there has been very little consensus regarding its transformative effect (Milward et al., 2015; Moser, 2005; Moser and Moser, 2005). Some feminist scholars even argue that it should be abandoned altogether (Halley, 2006; McRobbie, 2008; Piálek, 2008; Zalewski, 2010). Hankivsky states that gender mainstreaming has not “been realized in any jurisdiction or in any area of public policy” (2005, p. 981) and Lacey et al. note that “its limitations in moving towards deeper, meaningful and more transformative understandings of women’s diverse experiences are becoming widely recognized” (2013, p. 147).

These limitations of gender mainstreaming and its prioritization of gender as the primary axis of discrimination are rooted in the gender-binary conception. Hankivsky specifically laments the weakness of gender mainstreaming because of its disconnect with feminist theoretical underpinnings around the multidimensional and reinforcing nature of identity (2005, p. 978), thereby observing that we are at a critical juncture that calls for a new approach. A different approach is needed that can challenge the idea of gender mainstreaming and key global commitments for gender equality that equate gender with women only. This argument is amplified by Levy’s (2019) plea for reframing the problematic notion of travel choice to account for diverse and different identities. It is in this context that we argue for a different way of addressing gender in transport planning and policies, rooted in the concept of intersectionality.

The idea of intersectionality (Crenshaw, 1989) is useful for highlighting the limitations of policies based on gender mainstreaming. It rests on the understanding that there are several axes of inequality in society fixed on the different aspects of a person’s life, with gender being one of them. These different axes of inequality intersect and result in marginalization stemming from deeply embedded and systemic power imbalances. Prioritizing gender or considering it without the other axes of inequality fails to recognize the complexity of people’s lives. Intersectionality mediates the tension between the assertion of multiple identities without making gender the sole or the primary concern (Hopkins, 2019, p. 938). This mediation is evident in Crenshaw’s original development and application of the concept. She did so to illustrate the uniqueness of discrimination that Black women experienced as a result of their identity as a Black person and their identity as a woman. She used the concept of intersectionality to identify and articulate the compound impact of living at the intersection of these different identities. And while the concept of intersectionality originated from the experiences of Black women (Hopkins, 2019), Crenshaw (1991) noted its potential for understanding other socio-cultural contexts.

We present the argument that transport planning professionals need to include an intersectional approach to understanding and addressing inequities in all policy and decision-making. To make our argument for a more inclusive approach that recognizes actual lived experiences, we apply an intersectional lens to the transport policies for Windhoek and Delhi, two capital cities in the Global South and the authors' countries of origin.

An equitable, affordable, and accessible transport network is essential for an inclusive urban system that respects individual rights to free movement and bodily autonomy. With this in mind, we first illustrate the lack of attention to diverse identities and needs of the urban populations in transport planning and management in Windhoek and Delhi. To highlight their limitations in ensuring inclusion and mobility for all, we introduce a diagnostic tool to assess diverse and overlapping needs of different groups. Second, we apply the tool to analyse these cities' transport policies. We argue that the transport systems in both cities not only act as barriers to people who are at a disadvantage in a heteronormative patriarchal, ableist, and ageist society due to their identity, but also invisibilize those who do not fit into predetermined gender roles within the society. These barriers rob people of their freedom, agency, and opportunities that would enable them to live a fulfilling life of their choice. Third, we argue for diversity mainstreaming in transport planning policy as a precondition for recognizing overlapping and diverse needs as a crucial step towards truly inclusive transport systems.

## 2. CLARIFYING CONCEPTS

Before delving into questions about the highly contested terms of trans and gender nonconforming identities, it is necessary to first clarify our use of specific concepts. First, we use the concept 'trans and gender-diverse' as an umbrella term that recognizes diverse identities within the gender identity spectrum of people whose gender does not reflect their sex at birth. Although not an exhaustive list, this term embraces "all non-cisgender gender identities, including transgender, transsexual, transvestite, genderqueer, genderfluid, non-binary, genderless, agender, non-gendered, third gender, two-spirit, bigender, brotherboy, sistergirl, trans man and trans woman" (*What Is trans and gender-diverse?* n.d.). Second, we use the term 'gender and transport' and not 'women and transport' since people with all gender identities and not just women face gender-based violence and discrimination in transport. These conceptions are central to our diversity argument. Last, we use the term 'mobility' over 'transport' to acknowledge that it means more than transport. In essence, transport is meaningless without mobility. Mobility is about the everyday ability or freedom to move from place to place and is associated with equity considerations around accessibility, affordability, and safety which are necessary for facilitating movement (Kayal et al., 2014). Mobility is also a potent issue in the everyday struggles of trans and gender-diverse people (Law, 1999, p. 574).

### *Key global commitments and their limitations*

The United Nations adopted the concept of gender mainstreaming in 1997, and since then it has been the impetus for all work around gender equality, women's rights, and women's safety. However, we challenge the use of gender mainstreaming and gender equality as an approach for creating inclusive transport policy for two reasons. First, on grounds of their failure over the last two decades to deliver on the aspirations of transformative change (Milward et al., 2015; Moser, 2005; Moser and Moser, 2005); and second, for their failure to differentiate between gender and women (see Davids et al., 2013). Gender equality should not be treated as a women's issue, rather as that of empowering people with different gender identities. This limitation is evident in the Sustainable Development Goals (SDGs), for example, SDG5: Gender Equality to "achieve gender equality and empower all women and girls". The ambiguity over gender equality and its relationship with gender mainstreaming is exemplified by feminist theory's treatment of gender and equality constructs, which remains unresolved (Hankivsky, 2005; Verloo, 2001). Moreover, Doan (2007, 2010) shows how rigid categorizations of gender fail to consider the needs of trans and gender-diverse people, thereby impacting their freedom and mobility in a profound way. Hence, Doan's call for a revisioning of the concept of gender to create more transgender-friendly urban spaces, noting that even within queer urban spaces there is a prioritization of gay and lesbian cisgender people.

Equality is also often conflated with equity. Put simply, equality is about sameness, while equity is about fairness. Fairness ensures access to the same opportunities by simultaneously recognizing and addressing the structural barriers within asymmetrical power relations. However, sameness is limited to

offering the same opportunities despite different needs. Sameness ignores the structures of historical exclusion and discrimination and the impact it continues to have on the lives of people today. Thinking about the mobility needs of any population along the basis of sameness (or gender-blindness), one could argue that public transport in most countries is accessible to women, except in countries with strict rules against women's free movement, or in countries without public transport systems. However, such an argument ignores the structural barriers women face in accessing public transport, such as sexual harassment or time poverty—that is, the limited availability of time for freedom of mobility due to additional caregiving responsibilities compared to male partners—as key obstacles to rights of freedom and mobility. Evidence to this effect reveals a gender gap in transport data showing a disturbing lack of consideration of women's travel patterns and mobility constraints (Loukaitou-Sideris, 2014; Perez, 2019; The World Bank, 2010) and a lack of information about trans and gender-diverse people in most countries around the world.

There is a particular blindness to women's distinctive travel and mobility characteristics despite the widespread acceptance of gender mainstreaming and the growing policy focus on gender equality. This blindness is equally at the expense of other minority groups, such as people with disabilities, people from low-income households, and trans and gender-diverse people whose mobility needs are persistently ignored. This ignorance is a result of assumptions that fail to account for the everyday mobility needs of different people (Fainstein and Servon, 2005; Levy, 1991, 1992) due to the use of the principle of sameness instead of fairness. It thus seems futile to pursue equality without first achieving equity. At the same time, the concentration of wealth among male-dominated economic and political elites have distorted transport policies in all countries in the Global South (Pucher et al., 2005), resulting in a bias towards addressing the needs of able-bodied, heteronormative men (Levy, 2019; Miralles-Guasch, 2005; Peters, 2013). Against this background, we argue for a focus on equity in transport policies through the prism of intersectionality in order to redirect attention towards the needs of those traditionally marginalized within transport policies and systems. A paradigm shift from the gender-binary, heteronormative, and other contextual and societal assumptions about mobility needs within transport policy and key global commitments is critical to ensure the right to mobility for all to deliver equitable and inclusive transport outcomes.

#### *Questioning gender mainstreaming in transport policy*

Gender mainstreaming is a widely accepted tool for achieving equality between people of different genders based on gender-binary and heteronormative constructs. It grounds gender-sensitive practices and norms in public policy. One notable feature of gender mainstreaming is to combat inequality through, for example, gender disaggregated data. However, one key shortcoming of gender mainstreaming is that it is equated with women, explaining the gap in knowledge around the mobilities of gender minorities (Lubitow et al., 2017). Another shortcoming is its focus on fixing women's deficiencies by viewing them as a homogenous unit of analysis, rather than focusing on differences. For example, a major challenge of gender mainstreaming is the failure to discern differences between women on the basis of ability, ethnicity, caste, age or reproductive stage, sexual orientation, among several other axes of difference. This is highly problematic because it erases the diversity and complexity of different gender identities from policies and urban processes. Addressing this weakness means fixing systems, processes, and structures by inter alia identifying policy barriers that allow unfairness to creep in. This requires questioning gender mainstreaming as an approach because it can obscure, minimize, or erase the diverse experiences of not only women but also trans and gender-diverse people within transport policies. Enter Hankivsky's (2005) notion of 'diversity mainstreaming' as an alternative to gender mainstreaming. Diversity mainstreaming is premised on a "truly integrated analysis ... that captures the interstices of all factors of oppression [in situations where compound identity can disadvantage]" (p. 993), by allowing "broader inquiries" (p. 996). Hankivsky's (2012) Intersectionality-Based Policy Analysis Framework (IBPAF) for advancing social equity in policy offers a helpful approach for mainstreaming diversity. Intersectionality is a central frame in both her conceptualization of diversity mainstreaming and the IBPAF. In fact, she acknowledges that intersectionality-based analysis has been leading the intellectual charge around tackling the challenges of social diversity in policy and research (p. 18). The IBPAF's objective to mainstream intersectionality (and therefore diversity) to promote equity-based policy improvements offer an appropriate heuristic for examining our key proposition of diversity mainstreaming, underpinned by equity. The intention here is not to delve into the minutiae of the IBPAF but to briefly describe how it could be used to enhance transport policies to account for diverse needs.

Crenshaw's (1989, 1991) notion of intersectionality intrinsic to the Hankivsky's IBPAF is a useful way to dismantle enduring stereotypes about women in transport policies, by recognizing the mutually constitutive nature of and multiple axes of identity. Specifically, it enables the IBPAF to look beyond traditional one-dimensional categories of policy analysis, by foregrounding the complexity and diversity of identity. It not only offers a multidimensional and nuanced way to rethink typical assumptions about women's mobility and make visible trans and gender-diverse people but is also a way to reverse the failed revolutionary promise of gender mainstreaming through a rebranding that reconnects it with its feminist roots. The IBPAF can thus help avert the "impasse" of gender mainstreaming (Hankivsky, 2005, p. 979) through feminist thought around the multidimensional and reinforcing nature of identity. To do so, the IBPAF draws on Crenshaw's (1989, 1991) work on intersectionalities that makes visible various forms of oppression and how they mutually construct each other to amplify discrimination and marginalization.

The IBPAF is a normative tool for use at any stage of the policy cycle. It includes a set of guiding questions that can be adapted to a particular policy problem. The guiding questions are aimed at transformative change by examining equity-relevant policy impacts. The tool offers a right-based approach to policy diagnosis, with principles embedded within each guiding question analogous to the core tenets of intersectionality: multidimensionality, power, diversity, and social equity. Assessment criteria derived from the IBPAF to guide policy diagnosis are presented as five questions about a policy problem. The criteria are both descriptive to make apparent the assumptions and inequities underpinning policymaking and transformative by providing alternative policy responses to redress identified inequities. They are: (1) framing of problem (assumptions underlying problem), (2) process for framing problem (consultation), (3) how the group is differently affected by framing (affect), (4) current responses to the problem (interventions), and (5) what inequities exist in relation to problem based on current responses. The tool is used to bring prominence to equity considerations based on the following policy problem: *are the safety considerations of diverse and marginalized people using, or attempting to use, public transport recognized in transport policies?*

### 3. A TALE OF TWO CITIES

The two cases focus on the metropolitan centres of Windhoek, Namibia and Delhi, India where public transport use is strongly feminized, in line with the view of the 2018 International Transport Forum (ITF). To illustrate, the ITF shows that sexual harassment on public transport is a critical issue for women, who tend to rely on public transport more in cities for their mobility needs compared to men (ITF, 2018, p. 23). Even though these two cities are vastly different, marginalized people, particularly women and trans and gender-diverse people, experience similar mobility constraints in both. While there is no available data on the transport needs of trans and gender-diverse people in these cities, a limited number of international studies show that they experience similar safety barriers to accessing and using transport as women (Lubitow et al., 2017). Trans and gender-diverse people are also excluded from urban spaces as a consequence of hetero- and cis-normative dominance over those spaces, and because of normalized violence against them (Doan, 2010). This informs their mobility decisions and limits their ability to traverse the city freely (Lubitow et al., 2017, Reddy-Best and Olsen, 2020).

Both countries are diverse ethnically and linguistically: Namibia has 11 ethnicities and India has over 15 language-based groups<sup>28</sup>. Both cities also have significant domestic migration. For almost five decades now, rural women in Namibia have migrated to urban centres, as both a form of empowerment and socioeconomic advancement, at a rate equal to rural men of about 50 per cent<sup>29</sup> (Venditto, 2018, p. 86). In Delhi, 63 per cent of the population is migrant as per the Census of India 2011 (Krishnan, 2019), with marriage reported as the main cause of migration among women (about 60 per cent). A large proportion of women in both cities engage in domestic work and their socio-economic status dictates their dependency on public transport for their commute to work, consistent with the widely held view that lower household incomes are usually associated with transport deprivation. Both cities have also

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<sup>28</sup> Caste, religion, and language are captured in the Indian census instead of ethnicity.

<sup>29</sup> This excludes international migration mostly from neighbouring sub-Saharan countries and the rest of the African continent, which has been a steady stream since Namibia's independence in 1990. Of note, internal migration far exceeds international migration and is predominantly to the urban centres.

undergone rapid growth<sup>30</sup> and change in the last three decades, associated with Namibia's independence in 1990 and India's liberalization around the same time. India is different from Namibia in terms of the diversity of religion and the persistent caste system. Indian people from lower caste or minority religions face complex barriers, including discrimination and sometimes even outright violence. These experiences are further complicated because of their intersection with other categories of identity, including gender (Gorringer, Jodhka & Takhar, 2017; John, 2015). In Namibia, racial and tribal tensions have been a longstanding factor for discrimination (Bannon, Miguel & Posner, 2004).

Windhoek's urban form and functions were largely shaped by its colonial history. The combined impacts of historic racial spatial planning and a car-dominated transport system have forged deep divisions and growing inequalities for vulnerable groups. Informal settlements on Windhoek's edge continue to grow unabatedly and will remain the largest contributor to the city's population growth (Pendleton et al., 2014). In Delhi, historic unsuccessful planning attempts redirected population growth to the urban periphery, causing sprawl and a proliferation of informal settlements. Delhi has little affordable housing, limited public transport coverage, high private vehicle ownership, extremely high environmental pollution, poor quality of life and loss of livelihoods and community networks (Anand and Tiwari, 2006; Ewing, 1969; National Institute of Urban Affairs, 2017; Pucher et al., 2005).

Despite government investment, Windhoek's transport system has never kept pace with the mobility needs of a rapidly growing population, particularly on the urban fringe where informal settlements abound and the biggest need for public transport exists. Moreover, Windhoek lacks traditional forms of public transport like other capital cities and relies on a very small municipally owned and operated bus fleet (79 "ailing" buses purchased prior to 1990 and recently expanded by 13 new buses), characterized by an inefficient network that relies on the "backbone" of the taxi industry (Sustainable Urban Transport Management Plan, 2013, p. 17). Like the buses, unmetered<sup>31</sup> taxis (as the most common form of public transport) are in various states of repair and often break down, posing a safety risk for passengers. Taxi ranks are also considered unsafe and insufficient by the Namibian Public Passenger Transport Association (Madejski et al., 2014). Delhi's transport system is more sophisticated and includes a subway, bus, commuter rail and paratransit options, including auto- and cycle-rickshaw. In the last decade, ride-share services have also emerged. Even though public transport has a majority mode share in Delhi (National Institute of Urban Affairs, 2017; RITES, 2010; Tiwari, 2003), poor quality, limited last-mile connectivity and coverage render it significantly inadequate (National Institute of Urban Affairs, 2017; Tiwari, 2003).

In both cities, the public transport systems are sites of gender-based violence. In Namibia, this is the result of "gender-based violence deeply imbedded within Namibia's history" (Edwards-Jauch, 2012, p. 49) and disguised as traditional customs<sup>32</sup> used to oppress and devalue women. Despite gender equality policy intentions and legal protections, Namibian women are still treated as second class citizens with their safety<sup>33</sup> and mobility constantly under threat. Their status as lesser valued citizens are evident in their invisibility in data capture. In India, a Jagori report indicated that about 85 per cent of women using Delhi's public transport faced harassment or violence in public spaces, with "51 per cent women ... fac[ing] harassment inside public transport, and another 42 per cent while waiting for public transport" (Jagori, 2010). However, it was not until the widely publicized incident of six men raping and murdering a young woman in 2012 on a privately chartered public transport bus that the issue of violence against women in public spaces, especially public transport, gained serious attention in India (The Hindu Net

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<sup>30</sup> In 2014, Delhi is said to have grown by 33 per cent because of internal migration (Times of India, 2018), while Windhoek grows 4.3 per cent annually, almost double the national growth rate of 2.6 per cent (SUTMP, 2012).

<sup>31</sup> Taxis are generally a mix of formal (private) metered radio taxis (administered by a call center) and informal unmetered taxis shared with up to five passengers that can be hailed anywhere. Metered taxis are more expensive, resulting in unmetered taxis having the largest market share. The unmetered operation of the shared taxi system means fares are often negotiated and at risk of fare exploitation.

<sup>32</sup> Police Inspector General Sebastian Ndeitunga's statement "culture trumps constitutional rights" (Moshenberg, 2013) embodies the patriarchal hierarchy that continues to oppress Namibian women.

<sup>33</sup> In 2006, Namibian women accounted for 94 per cent of all rape victims (Legal Assistance Centre, 2006, p. iv), with this trend continuing today.

Desk, 2017). Violence experienced by trans and gender-diverse people is not captured in Namibia and to a very limited extent in India.

Namibia is a hostile place for people with disabilities despite being signatory to several international commitments to uphold and protect the rights of people with disabilities and the implementation of the *1997 National Disability Policy* and the *2004 National Disability Council Act No. 24*. This means there is a big gap between policy and practice, with Namibians with disabilities remaining marginalized and facing numerous mobility challenges due to poor or no access to essential infrastructure. This is worse for women with disabilities, who are routinely confronted by severe discrimination (often multiple jeopardy that culminate in various overlapping threats) compared to their male counterparts (Namibia Statistics Agency, 2017). Likewise, Indian women with disabilities face additional immobility resulting from their invisibility, with the existing legal regime systematically marginalizing them (Women with Disabilities India Network, 2012). This is directly correlated with disability not being recognized in Article 15 of the Indian constitution, to legally prohibit discrimination on grounds of caste, class, sex, religion, and place of birth. They are infantilized and forced to depend on others due to little or no support from the state and society (Human Rights Watch, 2018). Their invisibility is evident from the lack of data on disability in routine macro data collections.

Even though the Namibian Constitution is explicit in that “[n]o persons may be discriminated against on the grounds of sex” (The Constitution of Namibia, 1990, pt. Article 10), there are no legal protections for trans and gender-diverse people, with consensual male-to-male sex criminalized under Namibian law. Consequently, trans and gender-diverse people experience widespread demonization, discrimination, and dehumanization<sup>34</sup>. State-enabled violence continues to manifest in attitudes and prejudice that spill over into the policy landscape, which remains silent on trans and gender-diverse people’s specific needs, vulnerabilities, and interests. The Namibian situation contrasts significantly with India, where trans and gender-diverse are explicitly recognized as a third gender, following a decision from the Indian Supreme Court in 2014. However, the recently passed *2019 Transgender Persons Act* in India effectively reversed many of the protections that were formalized in 2014. And while homosexuality has been decriminalized in India in 2018, there is no protection against discrimination based on sexuality. Further, as gender is equated with women, both the Namibian and Indian transport policies do not adequately address the needs of trans and gender-diverse people facing intersectional challenges of gender identity and caste or class or disability in the Indian context. This leads to a lack of accessible and inclusive transport adversely affecting all areas of life and exacerbating exclusion. An example emerges from Delhi’s government’s recent attempt to make public transport free for women. The policy received criticism on many fronts. First, it was criticized as a unilateral decision in a city where the transport system is controlled by different government organizations at both state and national level. Second, it was criticized for its blindness towards the economic needs of trans and gender-diverse people in the city (Bose, 2019). Finally, while transport would likely reduce the economic burden on women, it did not address the issue of violence and sexual harassment they face while accessing and using public transport.

We would like to emphasize that this paper discusses a limited number of identities, largely due to a serious knowledge gap that exists on identities that are not visible to the system. At the same time, some forms of identity are more visible than others, influencing the kind of barriers they face, and the nature of intervention needed to overcome them. In the next section, we apply the IBPAF to relevant transport policies in both the cities to consider people’s challenging experiences in the spaces and places of public transport, based on the nature their identities overlap to illustrate the validity of our argument: the need to mainstream diversity instead of gender.

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<sup>34</sup> The government has previously incited anti-trans rhetoric through hate speech, exemplified by the Deputy Minister for Home Affairs Teopolina Mushelenga’s statement that the trans and gender-diverse community dishonors African culture (Augeetto, 2005), and former President Sam Nujoma’s campaign to ostracize and purge gay people have become common targets of pervasive hate crimes, including hate killings. Domestic violence in same-sex relationships are dismissed by authorities on legal grounds. Precisely for these reasons, it was not possible to obtain official information to determine the extent of hate crimes perpetrated against the trans and gender-diverse community in Namibia.

#### 4. TRANSPORT POLICY RESPONSE

The three policy instruments reviewed in Windhoek converge around a multi-modal integrated transport system, low traffic congestion and reducing road fatalities: the *2015 Road Transport Sustainability Plan* (RTSP), the *Sustainable Urban Transport Management Plan 2013* (SUTMP) and the *Non-motorized Transport Strategy 2018* (NMTS). Transport planning and management is shared between the national government and the City of Windhoek. Responsibility for the RTSP lies with the national government, while the city government is responsible for the other two. Delhi's complex and multi-agency governance system is dictated by three key transport policies that aim to improve mobility for people rather than vehicles: the 2014 *National Urban Transport Policy* (NUTP), Delhi's *Transit Orientated Development (TOD) Policy Chapter from Master Plan 2021*, and the recent *Parking Policy 2019*. Delhi's transport system is fragmented across jurisdictions, creating additional complexities. Recommendations have been made for an integrated transport management agency with limited progress thus far. In what follows, we analyse policy content based on the five IBPAF criteria introduced earlier (framing, consultation, affect, interventions, and inequities).

##### **Framing**

In the case of Windhoek, there is a common thread in all three policy instruments around a complete lack of regard for the diverse and complex needs of different identities, rendering any proposed policy improvements inadequate. These policies treat women in homogenous terms and associate gender with women only, thereby rejecting the heterogeneity intrinsic to gender. The RTSP is silent on the safety needs for specific transport user groups. The NMTS, however, recognizes women as a target group in its objective to "encourage women to cycle" (NMTS, 2018, p. 58). However, this recognition does not translate to targeted strategies that identify women's vulnerability to gender-based violence, the additional cost, or the diverse travel patterns, nor the vulnerability of trans and gender-diverse people using the system. Curiously, pedestrians are recognized in the NMTS as a separate target group to women when they make up a large proportion of non-motorized modes of travel with walking twice (16 per cent) as high as bus trips (8 per cent; UN-Habitat, 2008). The NMTS also delegitimizes women's safety by labelling them as the 'safer sex' because they are less inclined to take safety risks (despite women experiencing high levels of transport-related safety issues), by recognizing "road safety [as] predominately a male issue whereas cultural concerns mostly relate to women" (NMTS, 2018, p. vii). The NMTS does acknowledge the need for a new transport planning approach for people with disabilities; however, this is a throwaway statement since disability remains unattended. The SUTMP fails to recognize women's particular travel needs and preferences and the needs of trans and gender-diverse people. This explains the absence of the category of woman throughout the plan, despite women accounting for more than half of Windhoek's population. The SUTMP makes two cursory references to disability in homogenous terms in relation to social sustainability (p. 78) and the location of specialized institutions catering for people with disabilities (p. 151). The overall transport approach in relation to users is summed up by the following statement, "calculation [of traffic models is] based on groups with *homogeneous* behaviour and activity chains" [emphasis added] (SUTMP 2013, p. 41). This statement indicates a failure to account for the needs of diverse and vulnerable groups and completely ignores trans and gender-diverse people.

The three transport policies considered in the case of Delhi present further scope to recognize the diverse needs based on different identities; women, people with disabilities, senior citizens, and children; and address those and translate in relevant policy goal of ensuring mobility of people over vehicles into action. Delhi's parking policy aims to address the city's parking challenge without recognizing the mobility needs of people with disabilities or the issue of gender and the corresponding challenges associated with the threat of victimization. Nor does it comprehensively address the issue of last-mile connectivity for public transit. Metro stations in Delhi are not always accessible and require additional connections to surrounding neighbourhoods. Park and ride facilities are available at metro stations, but these are accessible for those who can afford and drive cars and can afford the cost of parking. This last mile to metro stations is often covered on foot, or by paratransit by those who can afford it, or by feeder buses. Extensive safety audits by Safetipin and Jagori in collaboration with other local groups in Delhi illustrate how these are often sites of harassment and violence (Bhandare, 2014), making that mile harder to traverse. Wealthier women can choose to drive or get dropped off at the metro stations in a private vehicle or simply drive to their destination, avoiding the crowded system altogether. Gaps in last-mile connectivity have received attention over many years, but a recent report by Centre Science and Environment (Roy, 2011) indicates that the situation has not improved much. While there is some



recognition of women's struggles, trans and gender-diverse people appear to be an afterthought. This is evident from the recent news to allow existing disabled toilets to also be used by trans or third-gender people, who are legally recognized in India (Times News Network, 2021).

Women appear in the NUTP and Delhi's TOD Policy but only as a passing reference in the promises made for safety, security and for universal accessibility. Despite being hailed as a progressive document, the TOD Policy is likely to increase length of commutes and impose additional time burdens on women within Delhi, who depend on public transport (Rukmini S, 2019). The NUTP also fails to account for people with disabilities while focusing on Non-Motorized Vehicles (NMT), safety for transport system users, better transport management and encouraging the use of public transport. These three policies broadly equate gender with women, while treating women as a homogenous group. People's ability to negotiate and navigate city spaces varies based on the intersection of their identities of gender, class, caste, disability, sexual orientation, ethnicity, and religion (Chakravarty and Negi, 2016). For example, a Dalit woman might not feel comfortable moving around the city, given how violence against Dalit women in India is frequently perpetrated with impunity (Geetha V., 2013). Their experience sits at the intersection of caste and gender. Similarly, mandatory gender-binary security screening at the entrance of every metro station renders non-binary people invisible (Bose, 2019). Policies fail to recognize and address this diversity. This critique of Delhi's policies is not new. Anand and Tiwari (2006), in their writing about the shelter-transport-livelihood link in Delhi, critiqued the failure of India's transport policies in addressing the effects of inadequate accessibility on the lives of the poor people through a gender perspective.

### *Consultation*

Windhoek' three policy instruments lacked information about consultation exercises. While the RTSP mentions a stakeholder workshop, it is vague regarding attendance and public participation. Traditionally, these workshops would be attended by predominantly male technocrats, along with male politicians. This is because transport and planning portfolios are usually assigned to men while the 'softer' portfolios, like social services, are managed by women (O'Riordan, 2014). While the NMTS engaged women, it is unclear if this involved diverse women. A key outcome of the NMTS consultation process regarding gender, as expressed by a female participant, was "a need for both [non-motorized transport] and car infrastructure" (NMTS 2018, p. 27). However, the city council appears to have a strong preference for women to cycle over walking. This contrasts with cultural opposition, women's travel patterns and the overwhelming feeling expressed by women during consultation, as evidenced by the following statement, "[m]ost females however *disagreed* and reacted with a *strong aversion* towards cycling" (ibid.) [emphases added]. The NMTS erroneously states that only a small proportion of people with disabilities live in the Khomas Region (Windhoek and immediate surrounds), to justify their low representation (0.04 per cent) in consultation activities. This statement fails to recognize that the Khomas Region has the highest number of people with disabilities (45 per cent) in Namibia (Namibia Statistics Agency, 2017). Importantly, NMTS acknowledges that people with disabilities have mobility challenges, but this does not translate to targeted policy outcomes. The trans and gender-diverse community appears to have been completely ignored in consultation processes for each policy instrument, mirroring their overall status in Namibia.

There is an established process of policy development in India that is designed on the principles of procedural and substantive justice. However, the process is often circumvented or subverted (Agarwal and Somanathan, 2005). It is known that in Delhi, the Delhi Development Authority (DDA) (the organization that prepares the city's Master Plan), often initiates projects without due process (Kumar and Prakash, 2016). Decisions have also been orchestrated to appear participatory in nature or participation is limited to the proposal stage when most of the decisions had already been made (Agarwal and Somanathan, 2005; Kumar and Prakash, 2016). Development of the TOD Policy involved many rounds of public consultation (CPR India, 2019) and seems to have never really ended (National Institute of Urban Affairs, 2017). Most recently, feedback was sought in 2019 on the TOD Policy (as part of Master Plan 2021), while the consultation process for Master Plan 2041 was being planned, making the consultation process for the old TOD Policy appear puzzling and more like a tick-box exercise. A subversion of standard consultation practice happened in 2016 when Delhi's Bus Rapid Transit project was scrapped after 8 years of operation despite measurable improvements for bus users because of opposition from the city's (economically upper class) car owners (Hidalgo and Bhatt, 2015). There is very limited information about the consultation process involved in the formation of the NUTP. However, a study conducted by the Indian Institute of Human Settlements (Baindur, 2015) does remark upon the

lack of proper engagement in its formulation. While the standard consultation process of inviting public comments on policy appears to have happened, evidence was not found of an inclusive consultation exercise. Nonetheless, Delhi offers a useful example of what could be done to counter poor public engagement in planning processes. Recently, local non-profit groups in Delhi created an initiative called 'Main Bhi Dilli'—a grassroots movement that was built to educate the wider population regarding the master planning process (for Master Plan 2041) and engage them in its feedback stage. The movement successfully advocated to extend the deadline for submitting feedback and organized workshops with residents in the city to develop and submit their feedback. Another way to provide additional opportunities for public engagement is online. For example, taking advantage of the high levels of smartphone ownership and mobile cellular subscriptions in Namibia with 113.19 handsets registered for every 100 people in 2019 (O'Dea, 2021), as well as the popularity of social media platforms, could provide accessible pathways for people with disabilities and those with other mobility restrictions to be involved in planning processes. The use of online participatory tools is not new and has facilitated greater community participation in cities everywhere (Afzalan et al., 2017).

### *Affect*

The responsibility for protecting and promoting the safety and wellbeing of women and children is vested with the Namibian Ministry of Gender Equality and Child Welfare, with a mandate to mainstream gender across government. However, all three transport policy instruments only respond to Windhoek's escalating population growth and fail to address gender, let alone trans and gender-diverse people. For example, the RTSP's safety focus is on reducing road fatalities centring around men, while women are encouraged to cycle. Despite the SUTMP's explicit recognition that the elderly, small children, mothers with trolleys and people with disabilities are excluded due to lengthy standing times at bus stops, and the bus fleet's lack of adequate embarking and disembarking (SUTMP 2013, p. 33), there are no dedicated inclusionary improvements. The SUTMP promotes ridership of the municipal bus system, however, its deficiencies (inter alia poor and limited routes; poorly designed, located and maintained bus stops; infrequency; lack of information; lack of bus interchanges and connectivity) force people to use other forms of transport, mostly taxis. However, taxi fares are 60 per cent (Kasera et al., 2016) more expensive compared to buses and severely impact low-income earners, who spend more than half of their monthly wages on transport (Madejski et al., 2014). Moreover, Namibia's Road Transport Board recently approved a 20 per cent increase in bus and taxi fares while wages remain stagnant, making it even more unaffordable for low-income earners. The NMTS applies to all non-motorized modes of transport, including wheelchairs. However, a mere mention of universal design in relation to mobility and safety needs is all the consideration given to disability. Again, the needs and concerns of the trans and gender-diverse people appear to have been ignored, despite being at a higher risk of violence based on strong cultural and religious aversion. Considering the limited coverage of the bus network, particularly in informal settlements, female domestic workers must walk vast distances between work and home daily, making them easy targets for sexual predators, muggers and criminal gangs, who often prey on them at bus stops on pay day (Mandus, 2016). However, this remains unaddressed in the NMTS. Importantly, the lack of integration and coherence between the three policy instruments significantly impacts the mobility, life opportunities and safety and wellbeing of diverse and vulnerable groups.

There is a lack of an integrated vision for planning Delhi's transport across different policy domains, resulting in fragmented decision-making that undermines effective change. Comprehensively addressing equity concerns in transport policy means recognizing the fragmented and complex relations that exist within and amongst the different agencies across the city. An example is the combination of historically car-centric development of Delhi, and now the development of far-flung TOD centres along the metro corridors, both of which reinforce urban sprawl and increase commute distance and time (National Institute of Urban Affairs, 2017). TOD centres have resulted in a donut-shaped density distribution in the city, with more people living on the urban periphery and commuting into the city for work. This has fuelled an increase in private vehicle ownership in the city (Goyal, 2018) and Delhi's famously bad air quality. Moreover, the spatial distribution has serious consequences for those who cannot drive or own a private vehicle. For example, women from low-income households are most affected by the lack of integration between the city's land use and transport disconnect (Thynell, 2016). Data indicates that women have given up admissions to highly ranked colleges and universities in Delhi, because they fear unsafe and uncomfortable commutes (Borker, 2018). Trans and gender-diverse people are excluded from the metro system given the gender-binary security checkpoints at every entrance. People with disabilities cannot use the public transport system, which is simply inaccessible.

Yet, there is an overall lack of deterrence for car ownership. Parking minimums are still a standard practice in the city, a practice that is being eliminated in cities (São Paulo, Berlin, London) around the world (Clements, 2019), to deter the use of private vehicles and to dissuade urban sprawl induced by the car. Although there is a scheme that limits car use based on odd or even number vehicle plates system (Ray, 2019), it does not affect wealthy people who can own multiple private vehicles. For the households with one private vehicle, the male breadwinners have priority access to that vehicle (Ganesan and Dhawan, 2018), allowing them to navigate the city with relative ease. Another example is the displacement of lower-income households living in informal settlements within the city to resettlement colonies on the urban periphery, resulting in a loss of social and political capital, employment, and communities that they belonged to for decades (Ramakrishnan, 2016). This once again harms women from poorer families and other marginalized people, who depend on informal work for their income by removing them from established employment opportunities, including domestic work, near their homes.

### *Interventions*

Windhoek's RTSP commits to undertaking road safety audits to inform road improvements, however, initiatives are generalist in nature and do not go beyond standard measures capable of tackling gender-specific or disability-specific safety requirements. Even though the NMTS recognizes women's different travel behaviours and the need for different travel strategies, this is only in relation to cycling. Perplexingly, the NMTS associates women's projected travel with cycling even though this is culturally not supported, is at odds with women's publicly expressed travel preferences and only forms 1 per cent of the modal share. The NMTS also affords little attention to culturally appropriate forms of alternative non-motorized options to meet the recognized difference in travel behaviours. Both the NMTS and the SUMTP acknowledge the need for a new transport planning approach for people with disabilities. However, both instruments neglect to include disability in any discussion about safety improvements. More recent SUMTP investigations into high-occupancy buses and non-motorized transport aimed at lower socio-economic groups do reference the accessibility needs of people with disabilities, but not other minority groups. The SUMTP also proposes a commuter rail network to alleviate traffic congestion, however, plans for this have not been progressed and it is not possible to ascertain whether it will meet diverse accessibility and mobility needs.

Delhi's NUTP and TOD Policy does recognize that the public transport system is fundamentally incomplete if it does not address the different aspects of an individual's journey, including last-mile connectivity and waiting time for public transport, boarding and travel (Bhatt et al., 2015; Kant, 2015). Both instruments, therefore, recommend improving pedestrian and bicycle infrastructure, and there has recently been an increase in the number of the feeder buses that run between metro stations and adjacent residential areas (Smart Cities Council Staff, 2019). The arrival of rideshare services, such as Ola and Uber, have also helped address some of the last-mile connectivity challenges (Press Trust of India, 2019). But, as discussed earlier, these interventions are for the wealthy and not for those living on the poverty line and who can barely afford public transit. The transport policies also do not offer any concrete strategies for addressing the diverse needs of people with disabilities (Women with Disabilities India Network, 2012). A key observation is that there are some standalone promises and commitments to people with disabilities, scattered across various policies. However, recognition pays lip service to actual implementation because there is no integration between these policies and no enforcement to comply. The highly siloed system in a multi-jurisdictional context also limits transformative change to improve mobility and safety for diverse groups.

**Inequities.** In Windhoek, there are strong connections between inequities and public transport. Lower socio-economic groups living on the city periphery due to cheap rents and the presence of informal settlements are even further marginalized from essential services and employment opportunities due to the lack of accessible, inclusive, appropriate, and affordable transport infrastructure. Transport-related inequities significantly limit the mobility of vulnerable groups and thus affect them to a greater extent in all life areas, including health and wellbeing. For this reason, the SUMTP transport demand model was updated. The existing model is trip-based and behaviour-oriented, allowing different socio-demographic and traffic variables to be considered. However, the model does not address gender or sexual differentiation. And, while the NMTS recognizes universal access and women's safety (2018, p. 71), it fails to translate those into actual outcomes. Moreover, it identifies in a highly discriminatory and inaccurate way that, "road safety is predominantly a male issue whereas cultural concerns mostly relate to women" (p. vii). The RTPS uses homogenous language by referring to "vulnerable road users" (2015,

p. 10) in attempts to improve pedestrian safety. Even though the RTPS includes equity and accessibility considerations in improving road efficiency, these relate to commuting in and out of the city, rural accessibility to services and establishing Namibia as a regional transport hub (2015, p. 9).

Transport inequities experienced by Namibians with disabilities “can be traced to disability policy shortfalls” (Chichaya et al., 2018, p. 1). The *National Policy on Disability of 1997* has not been updated in more than 20 years and does not meet the present day needs of Namibians with disabilities because it predates the *United Nations Convention on the Rights of Persons with Disabilities*. Moreover, policy gaps can be attributed to the disability portfolio constantly being moved to different government departments. The policy currently falls under the Ministry of Health and Social Services, supported by the more recently established Disability Affairs in the Office of the Vice President. Together, they are responsible for mainstreaming disability across government. It remains to be seen how their combined role will affect people with disabilities in relation to transport (and other life domains) as a result of disability mainstreaming in government policies.

Inequities can also be attributed to the lack of integration between state-based and local transport planning. The need to integrate planning efforts within and across different levels of government must be prioritized to address transport-related inequities sustainably, holistically, and efficiently. Windhoek’s public transport system has “explicitly favoured [taxi in] the Government transport policy” (p. 34). However, this is fraught with danger given the poorly regulated taxi industry — “chaotic” and “unsafe” (Madejski et al., 2014, pp. 3–4)—and the proliferation of ‘pirate’ (illegal/unregistered) taxis. The taxi industry is jointly regulated by the Ministry of Works and Transport and the City of Windhoek. There are just under 7,000 registered taxis serving the local population (SUTMP, 2013). However, this figure is expected to be much higher due to the growing number of pirate taxis. There is mounting anecdotal evidence of taxi drivers robbing, assaulting, and even raping passengers over fare disputes. The shared taxi system also means that taxi drivers are always “jostling” (Edwards–Jauch, 2012) and circling areas for additional passengers in a fiercely competitive and aggressive manner until their taxi is at capacity. Passengers often spend long waiting periods inside taxis with strangers while drivers solicit enough passengers to fill up their taxi, adding another safety risk.

India has a lopsided commuter gender ratio with five times as many men compared to women commuting to work (Rukmini S, 2019). Further, women who do travel, do so over smaller distances and typically on foot or public transport (Rukmini S, 2019; Shah et al., 2017). While women and people with disabilities have some form of recognition and perhaps even support within policies and systems (Singh, 2019), trans and gender-diverse people are invisible even though they face the same, if not additional, barriers to mobility (Changoiwala, 2018), such as male–female metro security checkpoints mentioned earlier. Moreover, India’s lawmakers and administrators are overwhelmingly male and often upper caste and continue to base planning decisions on their world view (Quraishi and Verniers, 2017). With limited resources for strong bottom–up consultation, corruption, and dominance of the powerful over decision–making processes, the day–to–day urban mobility needs of those who are marginalized are neither recognized nor addressed. The inequities ignored by these policies are innumerable and extremely critical if the transport system is meant to be inclusive and safe.

Considering the above discussion, policy evaluation outcomes will inform suggestions for policy improvements, discussed next.

## 5. PRIORITIZING DIVERSITY IN TRANSPORT POLICY

Mobility depends on the complex interaction between spatial and operational aspects of land use and transport planning and a person’s social and political capital. Transport systems should therefore not be viewed as a technical component of the city system independent of those complexities. Further, a person’s social and political capital is a product of their different formations of identity. This affects their mobility in terms of access, affordability, and safety. Based on the foregoing analysis, this discussion will reflect on the importance of intersectional mobility (Lubitow et al., 2017) as a fundamental requirement of inclusive transport to account for the needs of the diversity of women and trans and gender-diverse people. An intersectional approach is essential to transport policy to ensure meaningful inclusion of groups with diverse needs. Safety is of prime importance in this, including the perceived fear of victimization in transport and surrounding public spaces. Women and trans and gender-diverse people are vulnerable to gender-based violence (Keogh et al., 2006; Lubitow et al., 2017), with the

additional risk of victim blaming and oftentimes an absence of legal recourse. As a result, lack of safety and security can become serious barriers to mobility even in the presence of the best infrastructure.

The policy diagnosis revealed how neither city fully addresses these issues or the needs of their diverse populace. Both share commonalities in terms of the adverse effect that emerges from the implementation of transport policies that are not developed with the goal of recognizing diversity. Moreover, while these effects may not be as pronounced in Windhoek as in the case of Delhi given the economies of scale and a longer history of activism in India, they are no less important and resonate strongly with each other. Overwhelmingly across all five IBPAF criteria, the transport policies in both cities largely ignore the diverse needs of women and remain trans and gender-diverse blind.

These policies are not written with the intention to discriminate, rather they clearly state their goal of ensuring inclusion. Where they fail is to recognize the overlapping nature and diverse needs of different groups. Even though there are (limited) references to 'women' and 'disability' in some instances in both cases, these are largely tokenistic without follow through (for example, the unfulfilled Delhi commitment to make all public transport free for women due to the fragmented nature of transport planning and management). This treats women and disability as an after-thought or side issue despite existing legislation in both countries making gender and disability discrimination unlawful. Namibian law explicitly recognizes the rights of people with disabilities but not trans and gender-diverse people, while the opposite is true for Indian law, where a third gender has recently been formally recognized. Both cities need to acknowledge and materially address the needs of those groups in transport policies, including the complex needs stemming from the multidimensionality of identity based on other factors, such as ethnicity in Namibia and caste in India. Despite a vast body of research showing that women's mobility is different than men's (Ceccato and Newton, 2015), the policy analysis revealed little to no recognition of this difference across both cities. The mobility needs of the trans and gender-diverse community is significantly under-researched but it is understood from the limited available research on this subject (for example, Keogh et al., 2006; Lubitow et al., 2017) that they share similar safety concerns as women.

In both cities, there is a lack of policy integration within and across different levels of government and transport service providers. This lack of a coherent policy vision, coupled with layers of bureaucracy (Chakravarty and Negi, 2016), in the case of Delhi means that the transport system is exclusionary and even inhospitable towards the most vulnerable members of society. And, in the case of Namibia, the lack of ownership of the government disability portfolio until recently has meant that disability has never been mainstreamed in government policies. It is important for policies to be streamlined and actively make room to address the diversity and particularity of needs. This means recognizing and addressing the complex and heterogeneous nature of identity across policy spheres. Rejecting heteronormativity as the default approach in a patriarchal world and ableism in an ableist world is a critical first step in this process. Asking questions about who, how, why, when, and where people travel across the city will help guide transport improvements to become more responsive to specific needs. This calls for learning from the lived experiences of those groups through deep and meaningful engagement to understand their mobility needs.

The failure of transport policymakers and planners in responding to specific needs and evidence of the transport disadvantage of vulnerable groups places a heavy burden, particularly on those with low incomes, those with disabilities and other marginalized identities. For example, intersections of gender and poverty impact the access and experiences of transport for women. Transport inequities are linked to differences in income with poorer women experiencing greater challenges accessing health and public services, employment, and other life opportunities than those who are less poor. Addressing differential impacts and barriers must recognize the multidimensionality of people's lives (lived experiences). Only by recognizing the intersectional nature of identity and focusing on its diversity and complexity can transport systems, and ultimately cities, become truly inclusive.

It was not possible to source examples of diversity mainstreaming in transport policy anywhere and emphasizes the need for an urgent exploration into how transport systems could best respond to diverse and complex mobilities, to meet the needs of a modern-day world marked by difference. In this regard, the IBPAF is helpful for interrogating policy instruments to determine the extent of policy neglect as a starting point for making meaningful improvements.

## 6. CONCLUSIONS

This paper investigated the influence of key transport policies on marginalized people in the cities of Windhoek and Delhi, with the aim of gaining an understanding how those policies respond to overlapping and diverse needs. We found that, in light of the global attention on gender mainstreaming and (limited) efforts for inclusion, most interventions are focused on gender within a binary construct and are not inclusive of trans and gender-diverse people. More inclusive and sustainable transport systems can only be achieved if transport policies address intersectional mobility: the argument for diversity is the argument for inclusive and sustainable transport. This can only be achieved by focusing on mainstreaming diversity within transport policies to ultimately achieve equity. Transport policy must be built on the principle of 'no one-size-fits-all' and an understanding that solutions must evolve over space and time. It is impossible to make an exhaustive list of the diverse identities that exist within our societies. Different identities create the vibrancy that we cherish in our cities and that we must recognize and value. Blindness to this diversity viz-a-viz the narrow constructs of gender mainstreaming and gender equality adopted by transport planning policies inhibit people from living productive and fulfilling lives. The instances presented throughout this paper are only a few examples of this exclusion. As noted at the start of this paper, there is a lacuna when it comes to diverse experiences, because that information has never been collected. Focusing on diversity in the development and analysis of policies can make room within policies and systems for different and differing needs to co-exist and be equitably addressed. All people, irrespective of their gender, age, ability, sexual orientation, class, or caste, deserve and have the right to the freedom of mobility without physical, financial, or social restrictions or fear of violence. To achieve this, policies must recognize the complexity and diversity of the needs of marginalized people, thereby taking a leap forward for transport planning praxis.

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## REFERENCES

- Agarwal, O. P., and Somanathan, T. V. (2005). Public policy making In India: Issues and remedies [Centre for Policy Research occasional paper].  
[http://www1.ximb.ac.in/users/fac/Shambu/Sprasad.nsf/dd5cab6801f1723585256474005327c8/e78490ff090249d06525730c0030abf9/\\$FILE/Public\\_Policy\\_Making\\_in\\_India\\_TV\\_SOMANATHAN.pdf](http://www1.ximb.ac.in/users/fac/Shambu/Sprasad.nsf/dd5cab6801f1723585256474005327c8/e78490ff090249d06525730c0030abf9/$FILE/Public_Policy_Making_in_India_TV_SOMANATHAN.pdf)
- Anand, A., and Tiwari, G. (2006). A gendered perspective of the shelter-transport-livelihood link: The case of poor women in Delhi. *Transport Reviews*, vol. 26, No. 1, pp. 63–80.
- Afzalan, N., Sanchez, T. W. & Evans-Cowley, J. (2017). Creating smarter cities: Considerations for selecting online participatory tools. *Cities*, 67, 21-30.
- Bannon, A., Miguel, E., and Posner, D.N. (2004). Sources of Ethnic Identification in Africa. Working Paper No. 44, Afrobarometer Working Papers.
- Baindur, D. (2015). Urban Transport in India: Challenges and recommendations. [IIHS RF Paper on Urban Transport]. Available from [https://iihs.co.in/knowledge-gateway/wp-content/uploads/2015/07/RF-Working-Paper-Transport\\_edited\\_09062015\\_Final\\_reduced-size.pdf](https://iihs.co.in/knowledge-gateway/wp-content/uploads/2015/07/RF-Working-Paper-Transport_edited_09062015_Final_reduced-size.pdf)
- Bhatt, A., Menon, R., and Khan, A. (2015). Women's Safety in Public Transport—A Pilot Initiative in Bhopal. WRI Ross Center for Sustainable Cities. Available from [https://wrirosscities.org/sites/default/files/Final\\_Report\\_30072015.pdf](https://wrirosscities.org/sites/default/files/Final_Report_30072015.pdf)

- Bhandare, N. (2014). Delhi women still feel unsafe using public transport: Survey. Mint, 19 December. Available from <https://www.livemint.com/Politics/3mKyhqV4gSQKeOzKYLhFZJ/Delhi-women-continue-to-feel-unsafe-using-public-transport.html>
- Borker, G. (2018). *Safety first: Perceived risk of street harassment and education choices of women*. Available from [https://www.dropbox.com/s/09hrk6nah4f80t0/Borker\\_JMP.pdf?dl=0](https://www.dropbox.com/s/09hrk6nah4f80t0/Borker_JMP.pdf?dl=0)
- Bose, R. (2019). Discrimination, again? What the free public transport in Delhi may mean for transwomen. News18, 10 June. Available from <https://www.news18.com/news/buzz/discrimination-again-what-the-free-public-transport-in-delhi-may-mean-for-transwomen-2175749.html>
- Ceccato, V., and Newton, A., eds. (2015). *Safety and Security in Transit Environments: An Interdisciplinary Approach*. Palgrave Macmillan, London.
- Chakravarty, S., and Negi, R. (2016). Introduction. In *Space, Planning and Everyday Contestations in Delhi*, S. Chakravarty and R. Negi, eds. India: Springer.
- Changoiwala, P. (2018). India: No country for transgender women. South China Morning Post, 8 July. Available from <https://www.scmp.com/week-asia/society/article/2154077/india-no-country-transgender-women>
- Chichaya, T., Joubert, R., and McColl, M. (2018). Voices on disability issues in Namibia: Evidence for entrenching occupational justice in disability policy formulation. *Scandinavian Journal of Occupational Therapy*, vol 27, No 1, pp. 14-27.
- City of Windhoek (2018). *Non-Motorized Transport Strategy*.
- Clements, R. (2019). Parking and the city. *Planning Theory & Practice*, vol 20, No. 3, pp. 456–465.
- CPR India (2019). Comments sought on draft Transit Oriented Development (TOD) policy and regulations, 9 April. Available from <https://www.cprindia.org/news/comments-sought-draft-transit-oriented-development-tod-policy-and-regulations>
- Crenshaw, K. (1989). Demarginalizing the intersection of race and sex: A black feminist critique of antidiscrimination doctrine, feminist theory and antiracist politics. *University of Chicago Legal Forum*, vol. 1989, No 1, Article. 8.
- Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, vol. 43, No. 6, pp. 1241–1299. <https://doi.org/10.2307/1229039>
- Crenshaw, K. (2002). Background paper for the expert meeting on the gender-related aspects of race discrimination. *Revista Estudos Feministas*, vol. 10, No. 1. 171–188.
- Davids, T., Driel, F. van, and Parren, F. (2013). Feminist change revisited: Gender mainstreaming as slow revolution. *Journal of International Development*, vol. 26. No. 3, pp. 396–408. <https://doi.org/10.1002/jid.2945>
- Doan, P. L. (2007). Queers in the American City: Transgendered perceptions of urban space. *Gender, Place and Culture*, vol. 14, No. 1, pp. 57–74. <https://doi.org/10.1080/09663690601122309>
- Doan, P. L. (2010). The tyranny of gendered spaces – Reflections from beyond the gender dichotomy. *Gender, Place & Culture*, vol. 17, No. 5, pp. 635–654. <https://doi.org/10.1080/0966369X.2010.503121>
- Edwards-Jauch, L. (2012). Profile: Action research on gender-based violence at the University of Namibia: Results and methodological reflections. *Feminist Africa*, vol. 17, No. 2012, pp 102-113.

- Ewing, J. R. (1969). Town planning in Delhi: A critique. *Economic and Political Weekly*, vol. 4, No. 40, pp. 1591–1600.
- Fainstein, S. S., and Servon, L. J. (2005). *Gender and Planning: A Reader*. Rutgers University Press.
- Ganesan, S., and Dhawan, H. (2018). No ban but plenty of bias: Why so few women drive in India. *The Times of India*, 1 July. Available from <https://timesofindia.indiatimes.com/home/sunday-times/no-ban-but-plenty-of-bias-why-so-few-women-drive-in-india/articleshow/64809217.cms>
- Gorringe, H., Jodhka, S.S., and Takhar, O. K. (2017). Cast: experiences in South Asia and beyond. *Contemporary South Asia*, vol. 25, No. 3, pp 230-237.
- Goyal, M. (2018). How car ownership is changing rapidly and irreversibly in India. *The Economic Times*, 21 October. Available from [https://economictimes.indiatimes.com/articleshow/66296079.cms?utm\\_source=contentofinterest&utm\\_medium=text&utm\\_campaign=cppst](https://economictimes.indiatimes.com/articleshow/66296079.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- Halley, J. E. (2006). *Split decisions: How and why to take a break from feminism*. Princeton University Press.
- Hankivsky, O. (2005). Gender vs. diversity mainstreaming: A preliminary examination of the role and transformative potential of feminist theory. *Canadian Journal of Political Science*, vol. 38, No. 4, pp. 977–1001.
- Hankivsky, O., Grace, D., Hunting, G., Ferlatte, O., Clark, N., Fridkin, A., Giesbrecht, M., Rudrum, S., and Laviolette, T. (2012). Intersectionality based policy analysis. In *An Intersectionality Based Policy Analysis Framework*, O. Hankivsky, eds. Institute for Intersectionality Research and Policy.
- Heidersbach, F., and Strompen, F., eds. (2013). *Sustainable Urban Transport Master Plan*. City of Windhoek. Available from [http://www.windhoekcc.org.na/documents/SUTMP\\_Final%20Main%20Report%202013%20v1.pdf](http://www.windhoekcc.org.na/documents/SUTMP_Final%20Main%20Report%202013%20v1.pdf)
- Hidalgo, D., and Bhatt, A. (2015). Don't miss the bus, Delhi. *The Hindu*, 7 August. Available from <https://www.thehindubusinessline.com/blink/know/dont-miss-the-bus-delhi/article7508049.ece>
- Hopkins, P. (2019). Social geography I: Intersectionality. *Progress in Human Geography*, vol. 43, No. 5, pp. 937–947.
- Human Rights Watch (2018). India: Remove hurdles to justice for women with disabilities, April 3. Available from <https://www.hrw.org/news/2018/04/03/india-remove-hurdles-justice-women-disabilities>
- International Transport Forum (2018). *Women's Safety and Security: A Public Transport Priority*. Paris, France: OECD Publishing. Available from: [https://www.itf-oecd.org/sites/default/files/docs/womens-safety-security\\_0.pdf](https://www.itf-oecd.org/sites/default/files/docs/womens-safety-security_0.pdf)
- Jagori (2010). *Safe Cities Free of Violence Against Women and Girls Initiative*. UN Women. Available from [http://www.jagori.org/wp-content/uploads/2011/03/Baseline-Survey\\_layout\\_for-Print\\_12\\_03\\_2011.pdf](http://www.jagori.org/wp-content/uploads/2011/03/Baseline-Survey_layout_for-Print_12_03_2011.pdf)
- John, M. E. (2015). Intersectionality: Rejection or Critical Dialogue. *Economic and Political Weekly*, vol. 50, No. 33, pp. 72-76
- Kant, V. (2015). Impact of public transport on Delhi. *The Hindu*, 29 March. Available from <https://www.thehindu.com/sunday-anchor/impact-of-public-transport-on-delhi/article7043716.ece>



- Kasera, J., O'neill, J., and Bidwell, N. (2016). Sociality, tempo & flow: Learning from Namibian ridesharing. Paper presented at the First African Conference on Human Computer Interaction, Nairobi, November. Available from <https://doi.org/10.1145/2998581.2998582>
- Kayal, P., Singh, D. R., and Kumar, M. (2014). Defining Sustainable Urban Mobility. Working paper for The Energy Resources Institutes. Available from <https://www.teriin.org/projects/nfa/2008-2013/pdf/working-paper-11-Defining-Sustainable-Urban-Mobility.pdf>
- Keogh, P., Reid, D., and Weatherburn, P. (2006). Lambeth LGBT matters: The Needs and Experiences of Lesbians, Gay Men, Bisexual and Trans Men and Women in Lambeth. Available from <http://researchonline.lshtm.ac.uk/1380103/1/report2006c.pdf>
- Knight, K. (2019). India's transgender rights law isn't worth celebrating. Human Rights Watch, 5 December. Available from <https://www.hrw.org/news/2019/12/05/indias-transgender-rights-law-isnt-worth-celebrating>
- Krishnan, V. B. (2019). What is the biggest reason for migration in India? The Hindu, 22 July. <https://www.thehindu.com/data/india-migration-patterns-2011-census/article28620772.ece>
- Kumar, A., and Prakash, P., eds. (2016). *Public Participation in Planning in India*. Cambridge Scholars Publishing.
- Lacey, A., Miller, R., Reeves, D., and Tankel, Y. (2013). From gender mainstreaming to intersectionality: Advances in achieving inclusive and safe cities. In *Building Inclusive Cities: Women's Safety and the Right to the City*, C. Whitzman, C. Legacy, C. Andrew, F. Klodawsky, M. Shaw, K. Viswanath, eds. Routledge.
- Law, R. (1999). Beyond 'women and transport': towards new geographies of gender and daily mobility. *Progress in human geography*, vol. 23, No. 4, pp. 567-588.
- Levy, C. (1991). *Towards Gender-Aware Urban Transport Planning*. IDS Publications.
- Levy, C. (1992). Transport. In *Gender and Development: A Practical Guide*, L. Østergaard, ed. Routledge.
- Levy, C. (2019). Travel choice reframed: 'Deep Distribution' and gender in urban transport. In *Integrating Gender into Transport Planning: From One to Many Tracks*, C. L. Scholten and T. Joelsson, eds. Palgrave Macmillan.
- Loukaitou-Sideris, A. (2014). Fear and safety in transit environments from the women's perspective. *Security Journal*, vol. 27, No. 2, pp. 242–256.
- Lubitow, A., Carathers, J., Kelly, M., and Abelson, M. (2017). Transmobilities: Mobility, harassment, and violence experienced by transgender and gender nonconforming public transit riders in Portland, Oregon. *Gender, Place & Culture*, vol. 24, No. 10, pp. 1398–1418.
- Madejski, E., Amushila, R., and L, K. (2014). *The Effect of Regulations on the Efficiency of Bus and Taxi Services in Windhoek*.
- Mandus, A. (2016). *Light and Shadow in Namibia: Everyday Life in a Dream Country*. Palmato Publishing.
- McRobbie, A. (2008). *The Aftermath of Feminism*. SAGE Publications Ltd. Available from <https://uk.sagepub.com/en-gb/eur/the-aftermath-of-feminism/book211463>
- Milward, K., Mukhopadhyay, M., and Wong, F. F. (2015). Gender mainstreaming critiques: Signposts or dead ends? *IDS Bulletin*, vol. 46, No. 4, pp. 75–81.
- Miralles–Guasch, C. (2005). Transport and accessibility. Presented at Conference on Urbanism and Gender.

- Moser, C. (2005). Has gender mainstreaming failed? *International Feminist Journal of Politics*, vol. 7, No 4, pp. 576–590.
- Moser, C., and Moser, A. (2005). Gender mainstreaming since Beijing: A review of success and limitations in international institutions. *Gender & Development*, vol. 13, No. 2, pp. 11–22.
- Namibia Statistics Agency (2016). *Namibia inter-censal demographic survey report 2016*. Available from [https://cms.my.na/assets/documents/NIDS\\_2016.pdf](https://cms.my.na/assets/documents/NIDS_2016.pdf)
- National Institute of Urban Affairs (2017). *Transit Oriented Development for Indian Smart Cities*. Available from <https://tod.niua.org/todfisc/book.php?book=1&section=4#delhi>
- O’Dea, S. (2021). Number of mobile cellular subscriptions per 100 inhabitants in Namibia from 2000 to 2019. Statista, 8 March. Available from <https://www.statista.com/statistics/509593/mobile-cellular-subscriptions-per-100-inhabitants-in-namibia/>
- O’Riordan, A. (2014). Namibia’s ‘zebra’ politics could make it stand out from the global herd. *The Guardian*, 8 July. Available from <http://www.theguardian.com/global-development/2014/jul/08/namibia-gender-equality-zebra-politics>
- Pendleton, W., Crush, J., and Nickanor, N. (2014). Migrant Windhoek: Rural–urban migration and food security in Namibia. *Urban Forum*, vol. 25, No. 2, pp. 191–205.
- Perez, C. C. (2019). *Invisible Women: Data Bias in a World Designed for Men*. Harry N. Abrams.
- Peters, D. (2013). *Gender and Sustainable Urban Mobility (Global Report on Human Settlements 2013) [Thematic Study]*. UN Habitat.
- Piálek, N. (2008). Is this really the end of the road for gender mainstreaming? Getting to grips with gender and institutional change. In *Can NGOs Make a Difference? The Challenge of Development Alternatives*, A. Bebbington, S. Hickey, and D. Mitlin, eds. ZED Books.
- Press Trust of India (2019). Delhi Metro: Why are you giving ‘freebies’, it may result in loss to metro, SC tells Delhi govt. *India Times*, 6 September. Available from <https://economictimes.indiatimes.com/news/politics-and-nation/free-ride-for-women-will-cripple-delhi-metro-sc/articleshow/71010716.cms?from=mdr>
- Pucher, J., Korattyswaropam, N., Mittal, N., and Ittyerah, N. (2005). Urban transport crisis in India. *Transport Policy*, vol. 12, No 3, pp. 185–198.
- Quraishi, S. Y., and Verniers, G. (2017). The lawmakers we need. *The Indian Express*, 8 March. Available from <https://indianexpress.com/article/opinion/columns/the-lawmakers-we-need-women-voters-politicians-democracy-election-commission-4559184/>
- Ramakrishnan, K. (2016). Negotiating the state in a Delhi resettlement colony. In *Space, Planning and Everyday Contestations in Delhi*. S. Chakravarty and R. Negi, eds. Springer.
- Ray, A. (2019, November 3). *Delhi odd-even scheme 2019 starts today: Timings, rules, penalty explained*. *Mint*. <https://www.livemint.com/news/india/delhi-odd-even-scheme-dates-rules-timings-penalty-exemptions-explained-11572750034900.html>
- RITES. (2010). *Transport Demand Forecast Study and Development of an Integrated Road cum Multi-modal Public Transport Network for NCT of Delhi*. RITES: Delhi, India.
- Roy, A. (2021, August 3). Delhi not adequately accessible for its residents, finds study. *Hindustan Times*. <https://www.hindustantimes.com/india-news/delhi-cse-study-urban-mobility-planned-settlements-transport-facilities-101627998519185.html>

- Rukmini S. (2019). How reforms in public transport affect women. Mint, 11 June. Available from <https://www.livemint.com/news/india/india-s-women-commuters-are-the-pillars-of-public-transport-1560239135365.html>
- SCC Staff. (2019). Improving last-mile connectivity! Delhi Metro to run electric feeder buses, 31 October. Available from <https://india.smartcitiescouncil.com/article/improving-last-mile-connectivity-delhi-metro-run-electric-feeder-buses>
- Shah, S., Viswanath, K., and Gadepalli, S. (2017). *Women and transport in Indian cities*. Policy brief for Institute for Transportation and Development Policy.
- Singh, S. (2019). Life in a metro. *The Indian Express*, 25 June. Available from <https://indianexpress.com/article/opinion/columns/disabled-delhi-metro-dtc-aap-manish-sisodia-kejriwal-free-rides-5797808/>
- Texas A&M Transportation Institute. (2015). *Road Transport Sustainability Plan for Namibia*. Roads Authority of Namibia. Available from [https://www.ra.org.na/Documents/Namibia\\_Road%20Transport%20Sustainability%20Plan%20For%20Namibia.pdf](https://www.ra.org.na/Documents/Namibia_Road%20Transport%20Sustainability%20Plan%20For%20Namibia.pdf)
- The Constitution of Namibia, § Article 10 (1990). Available from <https://laws.parliament.na/namibian-constitution/>
- The Hindu Net Desk. (2017). After Nirbhaya: The rape cases that shook the nation. *The Hindu*, 7 May. Available from <https://www.thehindu.com/news/national/after-nirbhaya-the-rape-cases-that-shook-india/article18404268.ece>
- The World Bank. (2010). *Mainstreaming Gender in Road Transport: Operational Guidance for World Bank Staff*. The World Bank Group. Available from <https://openknowledge.worldbank.org/bitstream/handle/10986/17455/569540NWP0Tran10Box353751B01PUBLIC1.pdf?sequence=1&isAllowed=y>
- Thynell, M. (2016). The quest for gender-sensitive and inclusive transport policies in growing Asian cities. *Social Inclusion*, vol. 4, No. 3, pp. 72–82.
- Tiwari, G. (2003). Transport and land-use policies in Delhi. *Bulletin of the World Health Organisation*, vol. 81, No. 6, pp. 444–450.
- Times News Network. (2021, August 30). *Transgenders can access toilets meant for Divyangs at metro stations*. <https://www.nationalheraldindia.com/national/transgenders-can-access-toilets-meant-for-divyangs-at-metro-stations>
- UN-Habitat, ed (2008). *The State of African cities 2008: A Framework for Addressing Urban Challenges in Africa*. UN-HABITAT.
- Venditto, B. (2018). Migration: An account of women's empowerment in contemporary Namibia. *Journal of Namibian Studies: History Politics Culture*, vol. 24, pp 85–106.
- Verloo, M. (2001). Another velvet revolution? Gender mainstreaming and the politics of implementation. Working paper for Institute for Human Sciences. Vienna, Austria.
- V. Geetha. (2013). On impunity. *Economic & Political Weekly*, XLVIII(2), 15–17. *What is trans and gender-diverse?* (n.d.). I AM YOU: Be A Trans Ally! Available from <http://mytransally.weebly.com/what-is-trans.html>
- Women with Disabilities India Network. (2012). *Women with Disabilities in India*. Available from <https://www.womenenabled.org/pdfs/mapping/Women%20with%20Disabilities%20in%20India.pdf>

Zalewski, M. (2010). 'I don't even know what gender is': A discussion of the connections between gender, gender mainstreaming and feminist theory. *Review of International Studies*, vol. 36, No. 1, pp. 3–27.

## Promoting an Inclusive Transport and Cross-Border Trade in Bangladesh, Bhutan, India, and Nepal Sub-region

*Kajal Sharda and Jithin Sabu*

### ABSTRACT

*Women's participation in the transport sector and cross border trade in South Asia's Bangladesh, Bhutan, India, Nepal (BBIN) sub-region is very low. Safe and seamless access to transport and trade related infrastructure, inadequate planning, lack of sensitivity and awareness are some of the many inhibiting factors. Assuming that women are capable of accessing and utilising the infrastructure and policies equally as men, the transport policies and infrastructure are not looked at from a gender lens. The transport policies overlook this, despite the positive effects a gender inclusive transport and trade system can have. This paper discusses the bottlenecks at key transport and trade infrastructure in the BBIN sub-region that restricts women's participation and put forward suggestions to formulate gender inclusive trade and transport system in the sub-region.*

**Key Words:** BBIN sub-region, Cross border trade and transport system, gender friendly infrastructure, inclusive policies and procedures, sustainable development

### 1. INTRODUCTION

In view of the geographical proximity and common aspirations of economic growth, the South Asia Growth Quadrangle (SAGQ) was launched in 1997 by Bangladesh, Bhutan, India, and Nepal (BBIN) as a sub-regional initiative under the South Asian Association for Regional Cooperation (SAARC). The goals of SAGQ are to create an enabling environment for accelerating economic growth; to overcome infrastructural constraints; to make optimal use of and further develop the complementarities in the sub-region, and to develop economic and institutional linkages and nodal points for facilitating cooperation on policy framework and project implementation.

For the realisation of the goals of the growth quadrangle, the BBIN countries have numerous bilateral and multilateral agreements related to trade, transit, and transport. In 2015, the BBIN Motor Vehicles Agreement (MVA) was signed with the objective of enabling smooth and efficient cross-border transport in the sub-region (South Asia Sub-regional Economic Cooperation, 2015). Multiple trial runs of passenger and cargo vehicles are being done between the BBIN countries. The usage of waterways as a mode of transport is also being encouraged in the sub-region through policies such as the "Protocol on Inland Water Transit and Trade between India and Bangladesh" and "Use of Inland Waterways for Transport of Bilateral Trade and Transit Cargoes between Bhutan and Bangladesh".

There are several other transport and connectivity development initiatives being undertaken in the sub-region. However, women in the sub-region are unable to utilise these initiatives as equally as men. One cannot assume that women will automatically benefit from new infrastructure projects in the same way as men, due to the inherent inequalities that exist. It is necessary to acknowledge the possible distinct impacts on men and women according to their social standings. The COVID-19 Pandemic has furthered the existing disparities between men and women in the labour force participation rate and engagement in economic activities in the sub-region (International Labour Organization, 2021).

The policies introduced to boost trade, transit and transport in the sub-region share commonalities, unfortunately, also shared in terms of the underrepresentation of a gender perspective and absence of a gender-based analysis of the potential benefits. The national transport policies of the countries in the BBIN sub-region are discussed later in the paper. The transport infrastructure that facilitates cross-border trade and sub-regional economic connectivity is not seen through a gender lens in the BBIN sub-region. The transport infrastructure of the sub-region, especially in the countries' border areas is sub-optimal and restricts women's mobility and eventually their participation in cross-border trade and supply chains. Interactions with women in the border areas ascertain that infrastructure deficits, safety related challenges caused due to bad connectivity, lack of streetlights, and socio-cultural barriers combine to perpetuate an unwelcoming environment for women at the cross-border infrastructure of trade and transport.

Governments of all countries along with multilateral development institutions such as the World Bank, the United Nations Economic and Social Commission for Asia and the Pacific, Asian Development Bank, and the like are contributing and investing in various fields for the social and economic empowerment of women in this sub-region. For equal opportunities in education, initiatives such as *Samagra Shiksha* in India (Government of India), Female Secondary School Assistance Project in Bangladesh (World Bank), defending girls' right to education in Nepal (UNESCO), and such have been undertaken. Similarly, for women health, *Pradhan Mantri Matritra Vandana Yojana* and *Sukanya Samridhi* in India have been introduced.

However, a gender-inclusive approach is yet to be explored in the transport sector. Low attention to women-specific constraints in fields of transport has implications on economic productivity and development of the sub-region and not just women empowerment. Mobility issues restrict participation of women in economic activities, affects their education, health, and economic opportunity. Refocusing transport policies and infrastructure with a gender lens would convert into enablers of women's economic empowerment in the sub-region. Women's mobility across the sub-region will lead to a positive multiplier effect, accelerating their involvement in forward and backward supply chain linkages. In fact, economically engaged women are likely to reinvest their financial resources for their family's education and health (World Bank, 2013).

Women-specific policies in the trade and transport sector will also contribute to the Sustainable Development Goals (SDGs) by United Nations, intended to be achieved by the year 2030. This will contribute immensely to decent work and economic growth for all by reducing inequalities. SDG5, which aims to achieve gender equality and empower all women and girls, enables, and accelerates all other SDGs (Esuna Dugarova, 2018). Such policies will help in reducing poverty and hunger. Studies also indicate that there is a direct relationship between improved climate change and gender equality (International Union for Conservation of Nature, 2015).

Through this paper, the authors intend to analyse the systemic difficulties and challenges faced by women of the BBIN sub-region in participating in cross-border trade and supply chains. The paper investigates how gender inclusive infrastructure, transport policy and other services can enhance the participation of women in cross-border trade and other economic activities, thus adding to the social and economic development of the BBIN sub-region.

## 2. METHODOLOGY

The information used in this paper is from primary data and secondary sources. Primary data is collected by the authors during field visits in the sub-region as part of a project titled 'Enabling a Political Economy Discourse for the Multi-modal Connectivity in the BBIN Sub-region (M-Connect)'. CUTS International, India, with support from the United Kingdom's Foreign, Commonwealth and Development Office is implementing this project in partnership with Unnayan Shamannay, Bangladesh, Bhutan Media and Communications Institute, and Nepal Economic Forum. More than 55 locations were covered during the field visits (Figure 1) in which more than 450 stakeholders were interviewed which includes government officials, private sector, local communities, truck drivers, labours, non-government organisation officials, local academicians, and researchers among others. Secondary data is collected from multiple sources including governmental, international developmental organisations, and from previous research.



**Figure 1: M-Connect team interacting with Women workers in ICD (Siliguri, India)**

### 3. THE CURRENT STATUS OF WOMEN IN TRADE AND TRANSPORT IN THE BBIN SUB-REGION

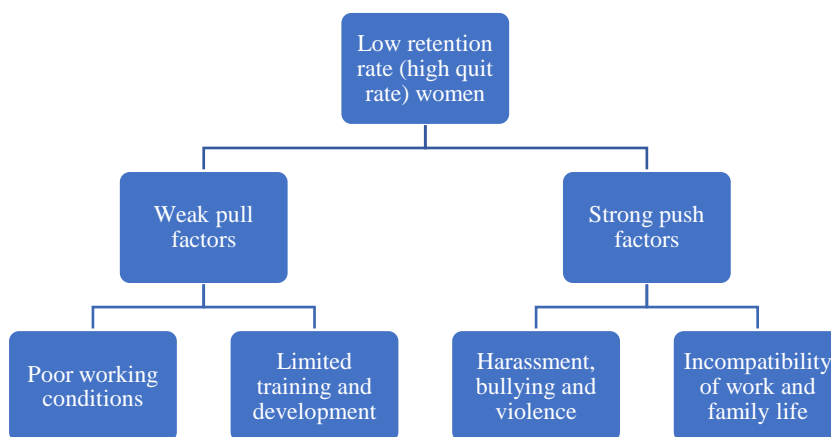
It is well known that gender disparity is deeply entrenched in the South Asia region, where the BBIN sub-region belongs (The Asia Foundation, 2018). Barely 18 percent of South Asian businesses were principally owned by women – the lowest rate among global regions (World Bank, 2020). In 2019, the female labour force participation rate in Bangladesh, Bhutan, India, and Nepal was 36, 59, 20 and 82 percent, respectively (World Bank). The participation of women has not improved much in the respective countries in the past years. In fact, it regressed significantly for India in the past 15 years.

The Global Gender Gap Index report (World Economic Forum, 2021) benchmarks the evolution of gender-based gaps in four areas - economic participation and opportunity, educational attainment, health and survival, and political environment. According to this report, Bangladesh ranked 147, Bhutan 130, India 151, and Nepal 107 among 156 countries. Table 1 shows the gender gap position of the BBIN countries on one of the major areas -economic participation and opportunity. It is revealed that a weak and gender-exclusive transport system in the sub-region is a major contributing factor for the low economic participation rate of women, along with other factors such as education, culture and labour policy (Lei et al., 2019).

**Table 1: Global gender gap position on economic participation and opportunity**

Country	Bangladesh	Bhutan	India	Nepal
Rank (2021)	147	130	151	107
Score (0-1)	0.148	0.556	0.326	0.630
<i>Source: Global Gender Gap Report, 2021, World Economic Forum</i>				

A person is considered poor if in order to satisfy daily basic activity needs, at least one of the following conditions apply: (a) there is no transport option that is suited to the individual’s physical condition and capabilities; (b) the existing transport options do not reach destinations where the individual can fulfil his/her daily activity needs; (c) the weekly amount spent on transport leaves the household with a residual income below the official poverty line; (d) the individual needs to spend an excessive amount of time travelling, leading to time poverty or social isolation; (e) the prevailing travel conditions are dangerous, unsafe or unhealthy (UNESCAP, 2020). The women in the sub-region are more exposed to these barriers than men, restricting their participation in transport related activities. Women are found in fewer than 20 percent of transport jobs in the Asia-Pacific region (International Transport Forum, 2011). This is particularly because women are underrepresented in senior roles in transport, logistics and infrastructure sectors.



**Figure 2: Cause-Effect Relationship of Poor Retention of Women in the Transport Sector (Transport Policy Brief, International Labour Office)**

The various factors that act as a barrier to the economic participation of women in transport and trade are listed in the next section. The engaged women are not able to continue their work due to various socio-cultural barriers. Various push and pull factors mentioned in Figure 1 are some causes of low retention rate.

#### 4. GENDER INCLUSIVENESS IN CROSS-BORDER TRADE, TRANSPORT AND SUPPLY CHAINS

The BBIN sub-region has a system of cross-border trade and transport which is not gender inclusive. There is no clear data available on the number of women involved in transport and trade facilitation activities such as in the logistics, warehousing and freight forwarding. However, when the authors visited some strategically located trade and transport related offices in the subregion as part of the M-Connect project, it was clearly evident that the participation of women in cross-border trade and supply chains is very minimal. The offices visited includes the Integrated Check Posts (ICPs), Land Customs Stations (LCS), River and Sea Ports, Railway stations, and Inland Container Depots (ICDs), among others, in the sub-region. The number of women in exporter-importer associations in the subregion is very low. For example, less than 2 percent of the total members of Andhra Pradesh Chamber of Commerce are women. Similar was the case with Meghalaya International Exporters Chamber of Commerce, with around 5 percent of the members being women. Lady transporters or truck drivers were not visible in the cross-border movement of goods. In fact, the South Asia region, where the BBIN sub-region belongs, has one of lowest female labour force participation in the world and the existing labour force is majorly concentrated in the agriculture sector (Livani et al., 2019). In South Asia, there was an annual income loss of about US \$ 888 billion in 2016 due to the existing gender disparities in economic participation (Ferrant & Kolev, 2016). The mobility restrictions and impediments to the transport related services in the sub-region play a crucial role in limiting the economic participation of women and engagement in trade related activities.

The national transport policies of the countries in BBIN provide little or no mention of making it gender inclusive. Bangladesh has a 'National Land Transport Policy, 2004', which says that "...roads and transport are inseparable part of man's livelihood...". The policy does not mention about gender inclusiveness and giving equal access for women. Therefore, it is not surprising to find that women in Bangladesh do not get even opportunities like their male counterparts in accessing efficient and adequate transport options. The poor women in Bangladesh such as the daily wage labourers and the garment factory workers have very low affordability and accessibility to the public transport (INTAL Inc, 2019). In comparison, the middle-income group of women in Bangladesh have affordability to the public transport, but the safety concerns and the harassment experience they have faced in their life in public transports prevents and discourages women from using it. The poor condition of buses, unavailability of bus shelters and high waiting times in bus waiting centres are some of the factors that demotivate women from using public transport. Even though the high-income group of women are not restricted like their low and middle-income women counterparts, they too restrain from using efficient and adequate transport opportunities due to the social norms and beliefs. The mental and physical assault concerns bar women from using the transport system of the country for engaging in productive economic activities (INTAL Inc, 2019). This gets translated into low women participation in economic activities – the ratio of female to male labour participation rate for Bangladesh in 2019 was 44.6 percent, according to the World Bank data. Less than 10 percent of the business owners in Bangladesh are women (Bangladesh Bureau of Statistics, 2013).

Bhutan's National Transport Policy of 2017 mentions addressing gender disparity and promoting social equity as one of its objectives. Besides that, it mentions about ensuring security and safety in the transport systems by using technology and effective monitoring. However, the policy does not mention any concrete steps to increase the access of women for safe and efficient transport system. Nonetheless, Bhutan manages to perform better than Bangladesh and India in terms of women's labour participation rate. The ratio of female to male labour force participation rate for Bhutan was 80.4 percent in 2019, according to the data from the World Bank. But Bhutan's Integrated Strategic Transport Vision 2040 fails to make any mention about making the transport sector gender inclusive. It does not even refer about the gender specific requirements in the transport sector.

India, the largest country in the sub-region also lacks a transport policy which gives proper attention to the gender inequalities of accessing public transport system. The National Urban Transport Policy 2006 of India mentions about the need to provide safe, affordable, quick, comfortable, reliable access to jobs, education, recreation, and such other needs within cities through incorporating urban transport as an important parameter. However, it does not mention about the gender specific needs and requirements. The updated National Urban Transport Policy 2014 recognises women as section of society with reduced mobility and therefore mentions about the need to accommodate the specific requirements of women in the public transport system. It further mentions certain features for transport services to be



universally accessible: (1) be used fairly; (2) provide high degree of freedom; (3) be simple; (4) be easy to understand; (5) be safe; (6) shall not require unnecessary bodily strength, and (7) maintain an appropriate space and size that is easy to use. It gives some practical recommendations such as using only police verified drivers and conductors in buses and leveraging the use of CCTV cameras and GPS system in public transport system for enhancing security of women. However, when it comes to national level and in the rural areas of the country, India does not have a transport policy which considers the specific requirements of its female citizens. The country has a paltry 27.3 percent rate of female to male labour force participation rate in 2019, according to the World Bank data. This is one of the lowest in the entire South Asia and the lowest in the BBIN sub-region.

Nepal, another country in the BBIN sub-region has its National Transport Policy 2001, which mentions reliable, cost-effective, safe, and sustainable transport system as the objective of the transport policy, to help Nepal achieve social and economic development. Regrettably, the policy fails to investigate the gender specific aspects of the transport sector and address it. Nevertheless, the National Environmentally Sustainable Transport Strategy for Nepal mentions ensuring gender equity in transport services as one of its objectives. It mentions about implementing all-women public transport vehicles and raising the percentage of seats for women. The ratio of female to male labour force participation rate for Nepal is quite a remarkable 97.4 percent in 2019 according to the World Bank data source. However, the employment ratio of women is very low, according to the Nepal Central Bureau of Statistics. Majority of women are employed in non-profit making and non-wage-earning works (Kathmandu Post, 2019). Majority of the employed women are in the informal sector, and most of them are in the informal agriculture sector (ibid). Absence of women-friendly work environment is an important factor that prevents women from being in the formal sector (ibid).

Thus, gender specific aspects and requirements in the transport sector are not mentioned in most of the transport policies in the BBIN sub-region. Even if mentioned, it is only about the urban transport sector. The transport sector requirements of women in rural and remote areas of the sub-region are totally ignored. In areas near the borders in the sub-region, the transport facilities are very appalling and unsatisfactory. The transport facilities in the border areas are not friendly or safe for women users.

The transport sector has a significant role to play in facilitating women's participation in cross-border trade and related economic activities. Access to proper roads and transport facilities can increase the probability of women joining the non-farm sector activities and engaging in economic activities (Lei et al., 2019). Thus, the absence of women-friendly transport facilities in the sub-region acts as one major reason for the low labour force participation rates of women.

The cross-border trade related infrastructure in the sub-region is another reason for poor participation of women. Many of the Ports, Land Customs Stations (LCSs) and Integrated Check Posts (ICPs) in the sub-region are not friendly for women as they lack even basic facilities such as washrooms and sanitation for women, not to mention any other critical requirements of women. The border infrastructure largely remains as a male dominated space, where the presence of women is very low and even zero at places.

When the authors visited the trade and transport related infrastructure in the border areas of the sub-region during the period between October 2020 and March 2021 as part of the field survey under M-Connect Project, there were offices in which no women officers were working. It is not because women are not appointed there, but because women do not take up appointments given to them in these offices. They perceive them as unsafe and not friendly for women. There are no staff quarters and accommodation facilities for staff in most of the LCSs and ICPs, and because these offices are in remote areas, no accommodation facilities are available nearby as well. Therefore, the ones who take up the job in these offices will have to daily commute long distances from the nearest town which will have decent accommodation and dining facilities. Due to the limited travel options available in border areas and the poor infrastructure, most women appointed to such offices do not dare to take such risk. This leads to the cross-border trade and transport related offices to be an all-male space, discouraging women's visit and access to services.

Another major issue is the absence of proper electricity and internet connectivity in many of the border areas of the sub-region. Therefore, the surveillance and security system including CCTV cameras are not functioning in many of these border infrastructures, making them blind spots and thus, not safe for women. The GPS enabled vehicle tracking system is not properly implemented in the sub-region. In

many of the border areas of the sub-region, there exists threats of trafficking and kidnapping of women. The open borders in the sub-region become a cause for more crimes and illegal activities, making the border villages and areas around more vulnerable. Women are more at the receiving end of these security issues.

The involvement of women in trade and allied activities is very low in the BBIN sub-region. Complementing to many other factors, the poor transport and mobility access to women adds to their lower participation in trade. It is a widely known fact that women and men get affected disproportionately in terms of access to the market when there is poor connectivity (Staritz & Reis, 2013; Jha et al., 2015). In the BBIN sub-region, a number of physical visits and hardcopy document submissions are required for establishing a business and taking it forward. This requires women entrepreneurs to travel and visit the male dominated office spaces, thus discouraging women from establishing their business dreams.

When it comes to cross border trade in the sub-region, the participation of women is even lower. For cross-border trade, a significant number of women entrepreneurs engage in the informal trade sector due to the difficulty in accessing the non-facilitative land borders and cumbersome formalities (Consumer Unity and Trust Society [CUTS], 2021). The difficulties in accessing cross-border markets due to the mobility constraints caused by absence of safe and reliable transport facilities is another problem for women entrepreneurs. Many women entrepreneurs are not able to make marketing trips in foreign countries due to mobility related concerns and are unable to source raw materials from sources abroad. To a large extent, these transport and mobility related concerns result in women entrepreneurs to depend on their male family members or hire male staff, thus increasing their trading costs and making their business uncompetitive.

Women in the manufacturing and formal trade in the sub-region are mostly engaged in Micro, Small and Medium Enterprises (MSME) sector. However, the women owned micro and small enterprises are in a position of disadvantage to the ones owned by their male counterparts: Limited access to the market information, networks and resources are some of the reasons for this (CUTS, 2021). The mobility constraints faced by women entrepreneurs due to an adverse transport system severely affects their business and expansion prospects.

In all, it is possible to conclude that a gender inclusive transport and logistics system that provides equal opportunity for women to involve in cross-border trade and other allied economic activities is absent in the BBIN sub-region.

## **5. CRAFTING A GENDER INCLUSIVE TRADE AND TRANSPORT SYSTEM IN THE SUB-REGION**

In the United Nation's Universal Declaration of Human Rights, the freedom of movement and the right to travel is mentioned as a basic right, stated in Article 13. However, transport is regarded as "no place for women" in many countries around the world (International Labour Office, 2013). Ensuring a gender sensitive and inclusive system of transport and trade facilitation is imperative for the BBIN sub-region to accomplish its full growth potential and attain the desired development where no one is left behind. It is important for the governments in the sub-region and developmental agencies to acknowledge the fact that women do not have the equal chance of seizing opportunities compared to men, due to the unequal access to transport among other factors. A host of policy and infrastructural measures complemented by attitudinal changes can lead to the creation of a gender inclusive cross-border trade and transport system in the BBIN sub-region.

### *Gender sensitive transport policy*

The transport policies in the sub-region currently ignore the transport needs of women in rural and border areas and the transport system there does not give equal opportunities for women. Women are restricted to certain modes and times of the day for their travel purposes. They are forced to travel in groups or with a man due to safety concerns and there is even an invisible dress code for women to follow while they are travelling in public mediums. This leads to the lower mobility of women and thus a lower economic participation including the participation in trade and allied activities.

Building a gender sensitive transport policy that gives adequate attention to the gender specific needs is an essential prerequisite for building an inclusive transport and trade system. The transport policies in the sub-region should mention their strategy for accommodating the specific needs of women such

as safety and accessibility. In public transport planning, all geographical areas should get the required attention, as women largely depend on public transport for their travel needs (Bandagi, 2021). There should be adequate and frequent availability of public transport to the cross-border trade and transport related offices.

The transport policy should also aim to encourage the participation of women in transport related professions and services. The transport related spaces are to be made more women friendly, for which presence of women in the sector is important.

#### *Including women in transport policy and project planning*

In the sub-region, the infrastructure project planning and implementation is mostly a male dominated area, and this results in the failure to recognise the gender specific needs and women's perspectives. Involvement of women in transport policy and infrastructural projects planning is essential to address the gender specific needs and accommodate the perspectives of women. Involving women in the transport and infrastructure designing process is also an imperative for building a gender inclusive transport system. The sub-region can learn from global good practices in this regard. Uganda with the aid from the World Bank introduced a plan to take account of gender, together with a communication and evaluation strategy, at the Transport Ministry in 2006 to ensure that road projects consider the explicit needs of women (International Transport Forum [ITF], 2011). In Liaoning province of China, women were integrated in various phases of an urban transport project, which led to the identification of the specific problems faced by women and addressing it by re-structuring the initial design of the project (ITF, 2011).

#### *Crafting a policy against violence in transport sector*

The sub-region can frame a policy against violence in transport sector taking 'Code of Practice on Workplace Violence in Services Sector' of International Labour Organization (ILO) as a reference tool. The code of ILO covers hazard identification, risk assessment, prevention and control, management and mitigation of the impact, care and support of workers affected, training, monitoring and evaluation. This policy can be used to develop practical responses and plans of action at trade and transport related works and workspaces for making it a gender friendly sector.

#### *Building gender friendly infrastructure*

The major transport and trade related spaces in the sub-region are not built in a gender inclusive manner. With interactions with people (Figure 3) it came into light that even basic requirements such as separate washrooms for women with running water availability are absent at most places. The public transport system should be designed to accommodate the needs of all genders. They should have provisions for safe accessibility of pregnant women and mothers with babies. There should be shelters at public places that are equipped with safety monitoring settings such as CCTV surveillance. A separate toilet for women with running water facility should be built at transits and roadside facilities frequently.



**Figure 3: M-Connect team interacting with local representative and boatmen (Dhubri, India)**

Gender friendly eateries at public places run by women should be encouraged. This will also be an opportunity for shepreneurs (female entrepreneurs). These gender friendly eateries at public places should have a network of added facilities such as baby feeding rooms and restrooms. Facility of she lodges (lodges for women, run by women) can be explored along with this at places where there is scope. Apart from this, there should be guest houses and staff quarters in the vicinity of all trade and transport related offices. This is essential for making these spaces friendly for women who wants to use the service and for women who are working in these places. The She Lodge project initiated by Kerala government can be a good model in this regard (The Wire, 2018).

#### *Awareness generation and driving attitudinal changes*

Mobility of women is different from what is experienced by men. It emerges from the community directed gender roles, with economic, social and livelihood influences. Therefore, generating awareness regarding the importance of women's participation in the economy and how mobility is essential for this, is important. During interactions with women in the field visits it can be easily understood that most of the women of the border areas of the sub-region are severely confined to performing household chores (Figure 4). There should be understanding among people that women have the right to travel anytime and anywhere according to their needs. Ensuring a safe environment for women travellers and transporters and strategizing the same with awareness generation needs to be ingrained in all policy discourses and transport related initiatives. Specifically designed capacity building and awareness generation programmes are critically required for this purpose. This also calls for sensitisation of policy makers.



**Figure 4: Women engaged in household chores (Phulbari, India- Bangladesh border)**

#### *Encouraging women drivers and transporters*

Driving heavy vehicles is a job that was historically entitled by men in the sub-region. However, the past decade saw women coming up to take up the job as drivers of heavy vehicles such as trucks and buses. Currently, there are a few women truck drivers and transporters in the BBIN sub-region. There should be incentives to encourage the participation of women as drivers and transporters. Added with facilitation of basic facilities at transit and public places, this will motivate women to participate in the sector. She Taxi system implemented in the southern state Kerala of India with female driven taxis that have online booking and tracking system is a good model for the sub-region to explore in the commercial trucking system to encourage the participation of more women in the sector. Women should also be encouraged to participate in other logistics related works such as logistics management, warehouse and store management, freight forwarding, and transport analysis.

### *Increasing the safety and monitoring infrastructure*

There should be surveillance and monitoring systems in all the public places. GPS based real-time tracking system should be used in all public transport vehicles. Provisions such as emergency button in public transport facilities should be implemented. Streetlights should be placed at all streets and public roads. Making a 24/7 accessible helpline that facilitates reporting of security concerns for women will be a useful service for reducing crimes and increasing real-time reporting of threats. Security personals and pink police should be deployed at all major points along with regular patrolling. Pink police initiative started in Kerala to provide necessary help, guidance and security awareness to women, children, and senior citizens. They will prevent eve teasing at public places, ensure the safe travel of women and children. Women trafficking and other crimes in the border areas can be prevented by increasing the patrolling and security checks.

### *Increasing the access to information*

Access to information is an important factor that empowers women. Women should be updated with the new opportunities in the logistics and trade sector. Access to information can also make women aware about their rights and in enjoying them. Women should be trained with the knowhow of participating in import-export business. Many women do not participate in the cross-border trade because of the absence of the knowhow of the procedures and formalities of doing it. Therefore, equipping women with the information about engaging in cross-border trade and the market opportunities in the foreign markets will increase their participation in cross-border trade.

### *Use of digital technologies*

Digital technologies should be used to their fullest potential for increasing the involvement of women in cross-border trade. Through the digitisation of the entire process, from establishing a business to the delivering of goods to the markets anywhere, women can be motivated to participate in the cross-border trade.



**Figure 5: Piles of files at Ranaghat Rail Custom Station, India**

The current system requires the entrepreneurs to visit multiple offices with physical documents for doing cross-border trade. Huge piles of files could be seen during the field visits to different locations having significant importance in the transport and trade sector as shown in Figure 5. This leads to corruption practices and discourages participation of women, as most of them are not comfortable with visiting the offices which are mostly male dominated spaces. However, through digitisation of the entire process, these unnecessary visits can be avoided, and the process can be made more gender friendly. Complementary efforts have to be taken parallelly to increase the digital literacy among women and access to digital devices. Digitisation can also lead to simplification and rationalisation of the trade and customs formalities and procedures, thus reducing the barriers related with transport and logistics

services. Digitisation of payments also help women to engage in cross-border trade without visiting banks which are mostly crowded at many places, consuming a large amount of time.

## 6. CONCLUSIONS

Even though women centric policies and gender friendly infrastructure can create an extreme positive domino effect to the socio-economic conditions of the sub-region, the transport sector in the BBIN sub-region is poorly equipped with the same. The transport policies of the BBIN countries do not address the concerns of women separately, assuming that the impact of such policies is gender neutral.

Transport in the border areas of the sub-region is even worse, making cross-border trade and transport a non-inclusive sector for women. The presence of women was zero or minimal in the border locations in the sub-region visited by the authors under the M-Connect project. When enquired about the cause of the said problem, absence of proper transport available was said to be one of the major reasons.

The BBIN region's border ecosystem is not women-friendly and at some places not even trade friendly. Governments can make the borders trade friendly and women friendly at the same time by addressing gender sensitive issues through government policies and infrastructure programs, and by facilitating harmonized trade measures. Women-friendliness and trade friendliness should not be considered as mutually exhaustive.

The reason for the invisibility of women in cross-border trade and transport should be investigated and specific steps according to the location and requirements should be taken, along with major steps mentioned above such as a gender sensitive transport policy, including women in transport policy and planning, crafting a policy against violence, building gender friendly infrastructure, and so on. In the modern era, use of technology and access to information is revolutionary. Major concerns of safety can be eradicated by increased safety measures and monitoring infrastructure. Coming up with policies and programs and their constant monitoring and evaluation is needed.

It is a known fact that the COVID-19 crisis impacted women disproportionately in terms of income loss, burden of unpaid work, gender-based violence and so on. But the policy response having a focus on women has been insufficient, especially when it comes to trade and transport infrastructure planning in the sub-region. In the current scenario, when the participation rate of women is falling and there is a dire need for the economies to rebuild from the consequences of the COVID-19 pandemic, coming up with women centric policies and programs in the transport sector can be a game changer. Small steps in the gender domain have massive positive consequences. Offering transport and trade facilitation with a gender lens would complement the current and upcoming initiatives and be transformed into enablers of women's economic empowerment.

When the border areas become equipped with the said infrastructure and policies, women officials and workers will not be hesitant to work in the cross-border areas. This would encourage women drivers and transporters and bring an attitudinal change. Moreover, this will have a wider impact on the whole supply chain and trade as women traders could visit the border areas on their own and would not need middlemen anymore. Increased participation of women will also inspire other women to be a part of economic activities in the region and break the social barriers. Thus, women's engagement in the transport and trade related activities will have a far-reaching impact than the mere increase in economic development and value addition.

The BBIN sub-region has an opportunity to become proactive in fostering inclusive transport and trade forward and backward linkages. The presence of women in the border areas can be increased by minimising the violence and "men versus women work" perception and increased safe working conditions and training and development. Increased participation of women in transport and trade has the potential to develop new platforms and avenues to boost women's economic empowerment.

## REFERENCES

Asian Foundation (2018). *Four things about women and trade in the BBIN*. Available from <https://asiafoundation.org/2018/04/25/four-things-about-women-and-trade-in-the-bbin/>

Bandagi (2021). *We need a gender-sensitive public transport system*. India Development Review.

- Available from <https://idronline.org/why-india-needs-a-gender-sensitive-public-transport-system/>
- Bangladesh Bureau of Statistics (2013). *Economic Census: Dhaka*. Statistics and Information Division, Ministry of Planning, Government of Bangladesh.
- CUTS (2021). *Mainstreaming Shepreneurs in International Trade Evidence from the BBIN Sub-region: Jaipur*. CUTS International.
- Ferrant G & Kolev A (2016). *The economic cost of gender-based discrimination in social institutions.*: OECD Development Centre.
- Esuna Dugarova (2018), *Gender equality as an accelerator for achieving the Sustainable Development Goals*. United Nations Development Programme.
- INTAL Inc (2019). *Transport and Social Exclusion in Bangladesh.*: International Network for Transport and Accessibility in Low Income Countries.
- International Labour Organisation (2021). *Building Forward Fairer: Women's rights to work and at work at the core of the COVID-19 recovery*. Available from [https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms\\_814499.pdf](https://www.ilo.org/wcmsp5/groups/public/---dgreports/---gender/documents/publication/wcms_814499.pdf)
- International Transport Forum [ITF] (2011). *Gender and Transport: Discussion Paper No. 2011-11*. Available from <https://www.itf-oecd.org/sites/default/files/docs/dp201111.pdf>
- International Union for Conservation of Nature (2015). *Gender and climate change Strengthening climate action by promoting gender equality*. Available from <https://www.weforum.org/reports/global-gender-gap-report-2021>
- Jha S et al. (2015). *Gender, trade and green growth*. New York, NY: UN Women
- Kathmandu Post (2019). *Only 22 percent of working-age women are employed in Nepal*. Kathmandu Post of 2<sup>nd</sup> May, 2019. Available from <https://kathmandupost.com/valley/2019/05/02/only-22-percent-of-working-age-women-are-employed-in-nepal>
- Lei L, Desai S & Vanneman R (2019). *The Impact of Transportation Infrastructure on Women's Employment in India.*: Feminist Economics. vol. 25 (4): 94-125.
- Livani T, Rizwan N & Kathuria S (2019). *Inclusive Regional Trade: Promoting the Economic Empowerment of Women in the BBIN Region.*: Indian Journal of Women and Social Change 4 (1): 33-50.
- Marie Thynell (2016), "The quest for gender-sensitive and inclusive transport policies in growing Asian cities", *Social Inclusion*, vol. 4, No. 3, 72–82.
- South Asia Subregional Economic Cooperation (2015). *BBIN Agreement on Motor Vehicles Signed*. Available from <https://www.sasec.asia/index.php?page=news&nid=238&url=bbin-agreement-on-motor-vehicles-signed>
- Staritz C, & Reis J H (2013). *Global value chains, economic upgrading, and gender: Case studies of the horticulture, tourism, and call center industries*. Washington, DC: The World Bank.
- The Wire (2018). *Kerala Govt's 'She Lodges' to Provide Safe Accommodation for Female Travellers*. The Wire 12<sup>th</sup> November 2018. Available from <https://thewire.in/women/kerala-she-lodge-female-travellers>
- United Nations Economic and Social Commission for Asia and the Pacific (2020). *Safe and inclusive Transport and Mobility*. Available from [https://www.unescap.org/sites/default/files/EN\\_4\\_SAFE%20AND%20INCLUSIVE%20TRANSPORT%20AND%20MOBILITY.pdf](https://www.unescap.org/sites/default/files/EN_4_SAFE%20AND%20INCLUSIVE%20TRANSPORT%20AND%20MOBILITY.pdf)

UN Women: *Women and the Sustainable Development Goals (SDGs)*. Available from <https://www.unwomen.org/en/news/in-focus/women-and-the-sdgs>

World Bank, 2013. *Gender and the Extractive Industries*. Available online: <https://www.worldbank.org/en/topic/extractiveindustries/brief/gender-in-extractive-industries>

World Economic Forum (2021). *Global Gender Gap Report 2021*. Available from <https://www.weforum.org/reports/global-gender-gap-report-2021>



## Gender, Inclusive Transport and Sustainable Development Goals: A Legal Perspective to Transport Policies

Aakriti Singhai and Krati Singhai

### ABSTRACT

*Transport policies are a means to improve the well-being of people by facilitating access to economic and social benefits, and thus should be designed to best fulfil the requirements of all user groups in ways that are equitable and affordable. However, it is wrongly assumed that they equally benefit men and women. In fact, men and women are affected differently by transport services, as they use different modes of transport for different purposes and in different ways. These differences must be well comprehended in order to build gender-inclusive transport policies. Gender mainstreaming has been widely embraced as a strategy for achieving gender equality on a global scale. It entails incorporating a gender perspective into the development, planning, implementation, monitoring, and evaluation of policies with the goal of promoting gender equality and eliminating discrimination. A political commitment for gender equality and a compatible legal framework is the basic conditions for the development of a successful gender inclusive transport policy.*

*This article examines the present legal and policy framework for public transport in India via a gender lens in light of the constitutional mandates and highlights the importance of gender-responsive public transport in becoming a cornerstone of sustainable development. The research highlights the gendered dimensions of transport and its impact, with examples of gender-based discrimination across the globe. Researchers have studied the global best practises for gender mainstreaming in transport and made recommendations for future policy directions, which will improve the Sustainable Development Goals "economic and social" pillars by improving access to education and equal employment opportunities and will become a key enabler for achieving gender equality in urban areas.*

**Key words:** Gender mainstreaming, SDGs, transport, public policy, legal framework, equality, India

### 1. INTRODUCTION

The United Nations General Assembly adopted the Sustainable Development Goals (SDGs), which include 17 goals and 169 specific targets, in order to ensure that globalisation becomes a positive force for humanity. These Global Goals include economic, social, and environmental dimensions, and they motivate governments to eliminate poverty and promote long-term social and economic development. Transport plays a critical role in socially sustainable development by expanding access to health and education services, employment, etc. However, women's needs appear to have received little attention in global transport development initiatives (World Bank, 2004).

This article reflects on how our transport systems affect women and men differently and why governments need to address the inequalities in access to transport to ensure sustainable development, with focus on legal aspects and transport policies in India. The right to equality has been guaranteed under Articles 14 and 15 of the Constitution of India. However, the Indian Constitution recognises positive discrimination and empowers the government to make special arrangements for the upliftment and advancement of women to ensure equity and equal opportunity. Despite the fact that women make up half of the world's working population, they earn less, work in less productive jobs, are over-represented in unpaid work, and are more likely to be unemployed. This situation is not only a detriment to women, their families, and communities, but also to the local and global economy. As we enter the post-COVID-19 period, pressure is mounting to address many of the social and economic inequities brought into the spotlight by the pandemic and the inadequacy of public transport systems to accommodate different users' diverse needs is one of the major issues.

Gender has begun to emerge as a recognised issue in transport policy and planning on a global scale. As a result, "Gender and Transport" takes on new professional territory. The link between gender equality and transport interventions becomes clear when attention is given to the different transport needs, purposes, and modes of transport of women and men, instead of a narrow focus on provision of hard transport infrastructure. Since men and women are affected differently by transport services, efforts

should be made towards gender-responsive transport, designed to improve women’s access to education, health, and employment. Gender-specific planning can improve the accessibility, safety, security, convenience, and affordability of public transport. In order to achieve gender equality, it is necessary to promote and institutionalise a gender-responsive approach to financing, as well as to ensure that enough investments are made to implement national plans and policies for women’s empowerment.

**2. GENDER INCLUSIVE TRANSPORT AND SDGS**

Gender equality is at the heart of the 2030 Agenda for Sustainable Development, which emphasises that achieving gender equality is a matter of human rights and essential to accomplishing all the goals and targets. The 2030 Agenda for Sustainable Development with 17 Sustainable Development Goals (SDGs) and 169 targets that encourage people to take action to move the world toward a more sustainable and resilient future. Actions undertaken in one area have an impact on outcomes in other areas and that development must find a balance between social, economic, and environmental sustainability (UN, Department of Economic and Social Affairs, 2015). The 2030 Agenda states that “sustainable transport systems, along with universal access to affordable, reliable, sustainable and modern energy services, quality and resilient infrastructure, and other policies that increase productive capacities, would build strong economic foundations for all countries” (UN, 2015 Agenda, Para 27).

Although there is no independent SDG for sustainable transport in the Agenda, it is incorporated into many of the proposed SDGs, particularly those related to food security, health, energy, infrastructure, cities and human settlements, and climate change (Figure 1). Most, if not all, SDGs require transport and infrastructure to be met:

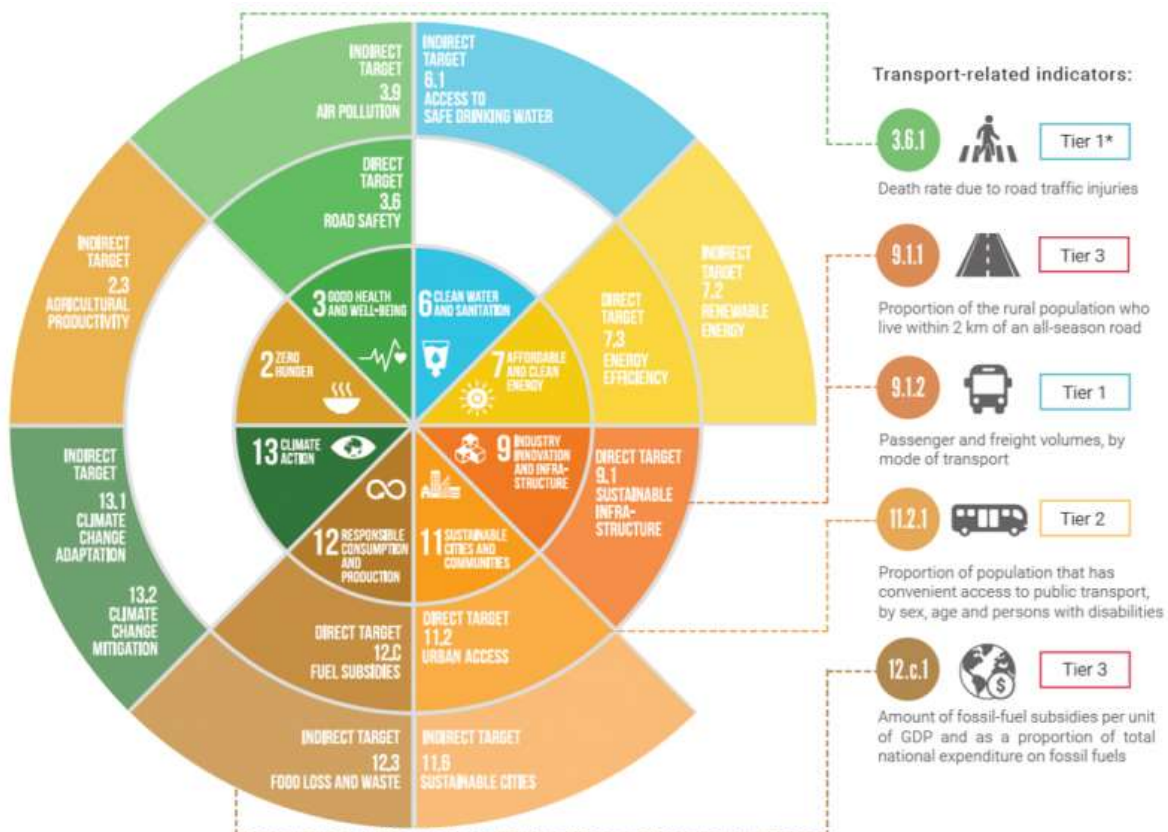


Figure 1: Transport-Relevant SDG Targets (Source: <https://slocat.net/sustainable-development-goals-transport/>)

Figure 2 comprises five targets that are directly related to transport. Road safety (Target 3.6), energy efficiency (Target 7.3), sustainable infrastructure (Target 9.1), urban access (Target 11.2), and fossil fuel subsidies are all directly affected by transport (Target 12.c). This underlines that sustainable

transport is not required just for its own purpose but is required to help accomplish a wide range of SDGs.

<b>Direct Transport Targets of the Sustainable Development Goals</b>	
<b>SDG 3. Ensure healthy lives and promote well-being for all at all ages</b>	<b>3.6</b> By 2020, halve the number of global deaths and injuries from road traffic accidents ( <i>Road safety</i> )
<b>SDG 7. Ensure access to affordable, reliable, sustainable and modern energy for all</b>	<b>7.3</b> By 2030, double the global rate of improvement in energy efficiency ( <i>Energy efficiency</i> )
<b>SDG 9. Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation</b>	<b>9.1</b> Develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all ( <i>Sustainable infrastructure</i> )
<b>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b>	<b>11.2</b> By 2030, 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 persons ( <i>Urban access</i> )
<b>SDG 12. Ensure sustainable consumption and production patterns</b>	<b>12.c</b> Rationalize inefficient fossil-fuel subsidies that encourage wasteful consumption by removing market distortions, in accordance with national circumstances, including by restructuring taxation and phasing out those harmful subsidies, where they exist, to reflect their environmental impacts, taking fully into account the specific needs and conditions of developing countries and minimizing the possible adverse impacts on their development in a manner that protects the poor and the affected communities ( <i>Fuel subsidies</i> )

Figure 2: Direct Transport Targets of SDGs (Source: <https://slocat.net/transport-targets-sustainable-development-goals/>)

Figure 3 comprises seven targets that are indirectly related to transport: agricultural productivity (Target 2.3), air pollution (Target 3.9), access to safe drinking water (Target 6.1), sustainable cities (Target 11.6), food loss reduction (Target 12.3), climate change adaptation (Target 13.1), and climate change mitigation (Target 13.2).

Indirect Transport Targets of the Sustainable Development Goals	
<b>SDG 2. End hunger, achieve food security and improved nutrition and promote sustainable agriculture</b>	<b>2.3</b> By 2030, double the agricultural productivity and incomes of small-scale food producers, in particular women, indigenous peoples, family farmers, pastoralists and fishers, including through secure and equal access to land, other productive resources and inputs, knowledge, financial services, markets and opportunities for value addition and non-farm employment ( <i>Agricultural productivity</i> )
<b>SDG 3. Ensure healthy lives and promote well-being for all at all ages</b>	<b>3.9</b> By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination ( <i>Air pollution</i> )
<b>SDG 6. Ensure availability and sustainable management of water and sanitation for all</b>	<b>6.1</b> By 2030, achieve universal and equitable access to safe and affordable drinking water for all ( <i>Access to safe drinking water</i> )
<b>SDG 11. Make cities and human settlements inclusive, safe, resilient and sustainable</b>	<b>11.6</b> By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management ( <i>Sustainable cities</i> )
<b>SDG 12. Ensure sustainable consumption and production patterns</b>	<b>12.3</b> By 2030, halve per capita global food waste at the retail and consumer levels and reduce food losses along production and supply chains, including post-harvest losses ( <i>Food loss and waste</i> )
<b>SDG 13. Take urgent action to combat climate change and its impacts</b>	<b>13.1</b> Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries ( <i>Climate change adaptation</i> )
	<b>13.2</b> Integrate climate change measures into national policies, strategies, and planning ( <i>Climate change mitigation</i> )

Figure 3 Indirect Transport Targets of SDGs (Source:<https://slocat.net/transport-targets-sustainable-development-goals/>)

The SDGs highlight the importance of gender-inclusive development and ensuring equality in spheres of economic, legislative, and social framework. To ensure that future generations inherit a better world, governments, the private sector, civil society, and citizens must work together to achieve the SDGs. Gender mainstreaming is a strategy for making women's and men's concerns and experiences an integral dimension in the design, implementation, monitoring and evaluation of policies and programmes in all political, economic, and societal spheres so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal is to achieve gender equality. Gender equality has been pitched as a key driver for the economic growth of a country. Hence, the countries should strive towards seriously considering it as a developmental agenda.

### 3. GENDER DIMENSION TO TRANSPORT

Gender is not a 'core competence' among urban municipal organisations or managers, who are preoccupied with providing basic services. Gender expertise is thought to fall under the purview of traditional women's programs/agencies like women and child development (R. Khosla, 2009). Women's access to urban transport has also been defined through either a rights-based perspective or a public health or economic development rhetoric, but not both.

Women and girls make up about half of our urban population. They make up only 19 per cent of "other workers" in India, but 84 per cent of their travels are taken by the public, intermediate public, and non-motorized modes of transport (Census 2011). Women make up most people who utilise public transport around the world, but numerous obstacles limit their mobility.

According to a survey, approximately 80 per cent of women fear being harassed in public places (Action Aid, 2016). In developing countries, safety concerns and limited access to transport have reduced the

likelihood of women participating in the labour market by 16.5 per cent., with serious economic consequences: closing the gender gap in male and female labour force participation by 25 per cent by 2025 could boost global GDP by US \$ 5.8 trillion (Tobin, 2017).

“Transport is not gender-neutral”. This was the main takeaway from a high-level gender discourse conducted by the World Bank and the World Resources Institute during the “Transforming Transport 2018” conference in Washington, DC, on January 11-12, 2018 (Gonzalez, 2018). This was the first time in the annual event's 15-year existence that a plenary session focused solely on the gender dimensions of transport.

Women and men bear different burdens owing to the performance of urban transport systems, but the regulations in most countries are blatantly gender blind. Safe, comfortable, convenient, and economical transport can help meet women's practical requirements, such as getting to school and the market, as well as contribute to their strategic empowerment by facilitating access to social and economic possibilities.

While the three main elements that determine women's transport accessibility are cost, personal security, and time; poverty, cultural perceptions and spatial location also play a vital role. Women, for example, may not go without a male chaperone or must dress ‘decently’ to avoid harassment. Similarly, women may forego better job chances further away from home in favour of lower-paying local opportunities and girls may drop out of school due to a lack of dependable and affordable transport. These ideas are also internalised by women, which may further limit their mobility.

It is necessary to implement and reinforce legal and institutional arrangements on gender equality, as well as strengthen accountability mechanisms for meeting existing commitments, in order to advance gender equality and ensure that women exercise their rights and fully contribute to and benefit from development. This will necessitate political will, as well as increased multi-stakeholder engagement involving not only national and local governments, but also civil society, the commercial sector, academic institutions, and the media.

#### **4. GENDERED TRANSPORT NEEDS**

Transport that is both sustainable and inclusive has a strong gender dimension. Women's travel patterns are commonly acknowledged to differ from men's, and these variances are marked by persistent inequality. In any given metropolitan environment, women bear a bigger share of their household's travel burden and make more trips related to reproductive and caretaking tasks. Mobility is critical to women's empowerment since it allows them to access opportunities as well as challenge patriarchal restraints. Furthermore, women's mobility improves access to occupations in low-income homes, enhancing their family's prospects of overcoming poverty.

When it comes to assessing transport attributes, men and women have distinct priorities. Women's worries are centred on personal protection and aspects connected to their wellness while on the road, such as comfort, courteousness, and hygiene, whereas men's concerns are focused on speed, often at the expense of service or personal security. Despite the fact that “women and men experience cities in different ways,” gender is frequently disregarded in transport design. This is largely due to a gender-blind approach to urban development, which focuses primarily on infrastructure and real estate developments with little or no regard for who uses them or whether the benefits are equal for men and women.

Women's mobility has improved in India and around the world in recent decades. While women's distance travelled per capita has grown since the 1980s, their social duties within families continue to limit them, perpetuating dualism and multitasking in their lives. (Fainstein and Servon, 2005). Increasing women's mobility necessitates changing transport policy to accommodate women's travel patterns and requirements.

##### *Gender Variation in Mobility*

According to statistics, women rely on public transport more than men, throughout the world, especially when they are from lower socioeconomic groups.

- In France, women account for about two-thirds of public-transport passengers.
- In **the United States**, 55 per cent of public transport passengers were found to be women.
- In Germany, statistics show that women make use of public transport more than men (Hasson and Polevoy, 2011).

However, data collected by public transport authorities are not disaggregated to better understand women's nodal shares or to identify the enablers and barriers (affordability, accessibility, information, safety, and security) that keep them from taking public transit. The success of global transport networks in serving women's demands, as well as the unintended consequences of their development on women's lives, are poorly understood and documented. As a result, they are also underserved.

Women's mobility patterns are more diverse than men. For example, according to data collected in Argentina, men make more than two-thirds of their journeys for employment, compared to only half of women's trips. In contrast, nearly one-third of women's journeys are for domestic tasks, whereas just one-eighth of men's trips are for family responsibilities. Buenos Aires is now designing gender-inclusive public transport solutions based on this data (Gonzales, 2019).

Gender inequalities in mobility demands are especially prominent in developing nations, necessitating gender-sensitive policy solutions. Mobility shapes gender relations, and gender relations shape mobility. This research paper contends that a breakthrough in the form of policy action is required to resolve this dialectic relationship.

## **5. GENDER CONSTRAINTS ON TRAVEL AND ACCESS TO TRANSPORT: A LEGAL PERSPECTIVE**

More than 2.7 billion women around the world are legally barred from having the same career opportunities as males. Women's employment in transport is now restricted in 19 economies, and sexual harassment in public areas is not prohibited in 177 economies (World Bank, 2018). Mobility is a fundamental precondition for women to get access to income and resources, and therefore to be economically and socially empowered. It is significantly linked to women's asset ownership and engagement in the workforce. In many countries, however, legal limitations restricting women's freedom to choose where they go, travel, and live still exist.

Women's participation in education is also hindered by shared social standards of their belongingness at home, limiting their economic and empowerment potential. If they do step out of their house, the prospect of social harassment and violence may serve to further isolate them. In the end, with little or no legal protection, many women accept the home position that has been allocated to them by custom. Women and men must be treated equally under the law, according to Article 15 of the Convention on Elimination of all kinds of Discrimination Against Women (CEDAW, 1979). This has never been more crucial than it is right now. As a result, this is one of the CEDAW Convention's most important articles. Many countries, however, have expressed reservations about this provision. In these reservations, there are numerous State-sponsored abuses of women's right to freedom of movement. Monaco's reservation to this Article states that it is obligated only insofar as the provision relates to unmarried women, implying that married women's rights may be limited (UNTC, CEDAW Declarations and Reservations). Despite the protection of the right to freedom of movement under Article 13 of the Universal Declaration of Human Rights (UDHR, 1948), coupled with its recognition as an economic necessity, some countries continue to impose legislative movement restrictions on women. Some of these practices are highlighted in the next segment.

### *Discriminatory practises*

There still exist some discriminatory practices in some countries in Middle East, Africa and Arab region that restricts independent travel of a married woman, sometimes requiring consent of a guardian or husband due to customary reasons (Freedom House, 2005, World Bank Report, 2014). Some surveys also indicate majority views that support that a woman should be free to travel alone (UNIDO, 2006)

### *Good Practises: Heading Towards a Change*

To accelerate development, policymakers should consider the restrictions that are placed on women, particularly in terms of their freedom of mobility. This shift can be seen in several countries, albeit very recently.

The husband's approval is no longer required for a married woman to have a separate passport in Kuwait, following a ruling by the constitutional court in 2008 invalidating Art. 15 of the Passport Law (Kuwait Constitutional Court Verdict No. 256 of 2008). In 2015, Passport Law in Iraq removed the requirement that women under the age of 40 be accompanied by a guardian while applying for a passport.

Women in Saudi Arabia were only recently granted the freedom to drive in 2018. Later in 2019, women above the age of 21 were allowed to obtain passports and travel abroad without obtaining permission or being accompanied by a male guardian (World Bank: Women, Business, and the Law, 2019).

Women's mobility is recognized to be crucial to the country's economy. For instance, Philippines and Sri Lanka's economy rely heavily on the migration of female employees and the money which these migrants send home. Similarly, tradeswomen cross borders with their commodities in several Sub-Saharan African economies (Maduravala, 2009). Women's mobility and earning potential are boosted when they have access to identifying documents. Equality implies business and it makes sense not only from a human rights standpoint but also from an economic and commercial standpoint.

Legislation is influenced by socio-cultural norms, and norms can be influenced by new laws. Change must be pushed in both directions at the same time. This necessitates top-down action – international entities pressing national legislators to encourage change – as well as bottom-up programmes that promote grassroots change and shift community mindsets. Men must be included in the discourse, and their support must be enlisted so that the burden of protesting and campaigning for women's empowerment does not fall only on women.

## **6. GENDERED IMPACT OF POOR TRANSPORT**

Gender is typically a stronger factor than age or wealth when consumers have to choose which mode of transport to take (private automobile, public transport, cycling, walking, etc.). This can be attributed to the following major factors:

### *Effect on Economic Potential*

According to the McKinsey Global Institute, if women were to play an equal role in labour markets, the global economy could grow by US \$ 28 trillion by 2025 (McKinsey Global, 2005) Yet, women's participation in the workforce remain low in many countries. For example, despite the rising trend of women in the labour market, women account for only 15.5 percent of the entire workforce in urban India; in fact, the female labour force in India has decreased by 19.2 million people since 2004 (Labour Force Survey, 2017).

The inadequate provision of mobility services for women can be linked to the falling female labour force, as the consequences of bad public transport affect women more adversely than males. When public transport is unreliable or pricey, women may forego better job chances further away from home in favour of lower-paying local opportunities. As a result, public transport is a critical enabler of women's economic potential (Barbanchon, 2019).

### *Fear of Sexual Harassment*

Physical harassment, such as groping and touching, verbal harassment, such as remarking and whistling, and visual harassment, such as gazing and leering, are all examples of sexual harassment. Sexual assault in cities has become a severe issue as a result of increased urbanisation. Women's mobility, accessibility, and confidence are all affected by sexual harassment. Women's human rights and ability to participate equally in the city are harmed by a lack of protection and security in public spaces and public transport.

Several studies have been undertaken in India over the last several years to investigate the nature and amount of sexual violence experienced by women and girls in Indian cities, particularly in public settings such as public transport. According to research conducted in Delhi in 2010, over 90 per cent of women had experienced some type of sexual harassment in the previous year (Jagori, 2010). According to the same report, 51 per cent of women have been harassed when using public transport, and another 42 per cent have been harassed while waiting for public transport. According to a 2014 Thomson Reuters Foundation report on dangerous public transport in capital cities throughout the world, Delhi ranks fourth among the cities surveyed, behind Bogota, Lima, and Mexico (Thomson Reuters Foundation, 2014).

Due to increasing instances of harassment and violence, women and girls avoid taking public transport and are forced to remain immobile. This, in turn, restricts their access to opportunities (such as school and employment), which can have long-term consequences for women empowerment. Ending all forms of violence against women and girls will contribute to achieving peace and security and human rights (SDG 16).

### *Employment in Transport Sector*

Only 17.5 percent of women work in urban public transport in the EU, and the proportion is much lower when it comes to decision-making positions (Gonzalez, 2018). An increase in the number of women working in transport will broaden the talent pool and strengthen the sector's ability to connect all users. According to the International Labour Organization, transport is one of several industries where women have traditionally had “no place” (Turnbull, Lear and Thomas 2009). In India, women made up 6.85 percent of the transport workforce in 2005, compared to 19 percent of men. Women made up only 12.5 percent of the Brihanmumbai Electric Supply & Transport (BEST) Committee and 1 per cent of its engineers in 2010, according to a World Bank report. When BEST tried to hire female bus conductors, they all asked to be reassigned to desk duties (World Bank 2011). The Delhi Transport Corporation (DTC) has 245 female conductors but only one female driver (SSATP Report, 2012).

Few notable examples to take lessons from:

In England, “Transport for London” has taken many steps to create a more gender-balanced workforce, including gender-blind recruitment, apprenticeship programmes, and mentorship for women. They recently modified the structure of their board to make it more gender-balanced (EU-OSHA, 2014). In Lagos (Nigeria), women are recruited as drivers for a high-capacity Bus Rapid Transit system (BRT). These women have established a great track record of safety and professionalism over the previous two years, encouraging Lagos Metropolitan Area Transport Authority to strive for full gender parity among its bus drivers in the future (SSATP Report, 2012).

## **7. LEGAL FRAMEWORK IN INDIA**

The Indian Constitution contains various provisions which directly or indirectly protects a woman's right to have access to a safe and affordable public transport system. Below are some of the Constitutional safeguards in favour of women:

### *Right to Equality and Non-Discrimination*

The principle of equality is internationally acknowledged and specifically recognised in Indian Law. Equality and non-discrimination form the foundation of Articles 14 and 15 of the Constitution of India and are well recognized fundamental rights. The Constitution of India envisions that the citizens should enjoy all the rights on an equal footing and any existing inequalities should be identified and removed. Any direct or indirect discrimination in the existing enjoyment of the right to equality and non-discrimination amounts to a violation of a fundamental right and must be immediately addressed.

Many laws were enacted in order to attain this Constitutional goal of “formal equality”, or treating likes equally, by banning practises that were discriminatory based on sex. Despite the abolition of discriminatory laws, disparities continue to persist. Gender equality cannot be achieved in a true sense if women continue to be in a disadvantageous position because of unsafe and inaccessible transport.



### *Right to Education*

Article 21-A of the Constitution of India was introduced by the Constitution (Eighty-sixth Amendment) Act, 2002, to provide free and compulsory education to all children aged six to fourteen years as a Fundamental Right in such a way as the State may specify by legislation. Consequently, the Right of Children to Free and Compulsory Education (RTE) Act, 2009 was enacted to ensure free and compulsory education for all children below the age of fourteen.

To attain equality of both genders, access to education for the girls has to be ensured and as has been already discussed earlier, the poor commutation facilities to school compel girls in rural and backward areas to drop out of school. Lack of safe and affordable transport facilities can contribute to higher rates of school absenteeism and poor educational outcomes. There have been studies which have proved the effect of transport on female students is considerably large and building of rural roads results in doubling of attendance of male students and tripling of attendance of female students.

### *Right to Work*

Article 41 of the Constitution of India provides that “*the State shall within the limits of its economic capacity and development, make effective provision for securing the right to work, to education and public assistance in cases of unemployment, old age, sickness and disablement, and in other cases of undeserved want.*”

Article 38 of the Constitution of India states that “*the State shall strive to promote the welfare of the people*” and Article 43 states “*it shall endeavour to secure a living wage and a decent standard of life to all workers.*”

Women and girls have few work prospects due to a shortage of safe transport facilities. They may be unable to accept such positions, or they may be required to work fewer hours and at lower pay. Therefore, the failure on the part of the State in providing safe, accessible, and affordable public transport facilities translate to the infringement of constitutionally guaranteed fundamental rights as well as internationally recognized human rights of women.

## **8. NATIONAL TRANSPORT POLICY, INDIA**

The National Urban Transport Policy (NUTP) of the Ministry of Urban Development, Government of India, is the country's main guiding policy on urban transport.

### *National Urban Transport Policy – 2006, India*

The following were among the goals of the National Urban Transport Policy (NUTP) in 2006:

- To achieve a more equal distribution of road space by focusing on people rather than vehicles.
- To encourage greater use of public transport and non-motorised transport (NMT) by providing central financial aid.

The NUTP discovered that in Indian cities, the way transport systems are set up causes low-income groups to pay more in terms of both cost and time. Furthermore, users of NMTs are pushed off roads. Lanes and corridors must be set aside for NMT, and urban public transport must prioritise NMT when allocating road space. The policy also looked at several public transport systems that prioritised affordability and efficiency, as well as diverse public transport technology in depth. In essence, the strategy emphasised the importance of public transport and demonstrated a willingness to redirect funds from road-building projects to public transit systems and efforts that boost NMT and other modes of transport. Under Jawaharlal Nehru National Urban Renewal Mission (JNNURM) funding, the national government prioritised the construction of bike tracks and pedestrian routes in all cities.

However, the 2006 Policy was focused on the mode of transport and did not address various user groups who use public transport for commuting and it did not consider the gendered perspective to transport.

*National Urban Transport Policy (NUTP) – 2014, India*

To frame NUTP 2014, the NUTP 2006 was evaluated and amended. With the introduction of the idea of Transit-Oriented Development (TOD), the updated policy also stresses public transport and NMT. It also suggests that transport planning should follow the 'avoid-shift-improve' philosophy: users should switch from private to public transport and enhance transport technology and fuels to minimise a rise in demand. In contrast to the prior policy, the modification addresses universal accessibility for a variety of user groups, including women, pregnant women, and children. For the first time in this iteration, mass rapid transit is covered, as well as the use of electric vehicles as para-transit choices.

The NUTP framework focuses on planning and investments in public transport and NMT networks in cities, with the underlying rationale of people-based transport planning. For sustainable and equitable growth, city and state governments must embark on a sustainable and equitable urban transport path.

## 9. GLOBAL INNOVATIONS FOR MAINSTREAMING GENDER IN TRANSPORT

The following paragraphs outline some of global innovations in mainstreaming gender in transport.

### ***Policy Approach***

The 2010 objectives for Swedish transport policy and institutions aimed for a gender-equal transport system. The city of Malmö created public transport with gender equality in mind, including public consultations, design and system reviews, service schedules, and feedback, among other things (Polk M., 2003).

### ***Physical Design Approach***

Vienna is a great example of how infrastructure may be changed to fit the needs of female users. In transport initiatives, the city prioritised women's needs by enlarging walkways, installing ramps for strollers, and boosting lighting for safety (Khanna M., 2020).

"Between two stops" service Montréal, Québec, Canada - effort to allow ladies travelling alone at night to request a stop between two standard stops from the bus driver. The woman must request one stop ahead of time, after which the driver evaluates whether it is safe to bring the vehicle to a stop at the requested location (Transport Plan, Montreal, 2007).

Infrastructure that is barrier-free and universally accessible: removing steps from roadways and replacing them with platforms for baby carriages, baggage, and wheelchairs. Platforms have step-free access to trains, subways, and buses. Footpaths and bus stops that are lively, bustling, and well-lit Last-mile connectivity that is safe and secure, with attractive feeder networks, and so forth.

### ***Personal Security approach***

- Reservation of seats for women in buses or separate women coaches in trains
- Wide aisle and gates, sufficient legroom, storage, pram space, etc.
- Suitable lighting, CCTV and panic button
- Women drivers, conductors, and security staff

### ***Sensitization Approach***

- JAGORI and Delhi Transport Corporation (New Delhi, India)
- Pink coaches for women in Delhi Metro (New Delhi, India)
- Fazilka ECO-CAB (dial a rickshaw) – cycle rickshaw scheme which was first started in Fazilka, Punjab in June 2008 to organize rickshaw drivers in a self-regulated scheme and to promote the use of non-motorized transport. (Fazilka, Punjab, India).
- Janamarg BRT (Ahmedabad, Gujarat, India)

### ***Urban planning Approach***

- 2002 - Mariahilf district in Vienna was designated a gender mainstreaming "pilot district".

- 1996 - The European Union prioritized gender mainstreaming and funded 60 networked projects.

### **Design Approach**

- Cheonggyecheon Restoration Project, Seoul, 2005- Cheonggyecheon Stream has been transformed into a 10.9 km (7.0 miles) modern public recreation space in downtown Seoul with universal design feature)
- Central European Urban Spaces (UrbSpace) project, focusing on the renovation of open urban spaces, such as public parks and squares
- Mixed land use, narrower streets with wider footpath facilities
- Eyes on streets - Integration of informal sector on street-sides; zero building setback, transparent frontage, lighting, etc.

### **Mainstreaming Gender in Transport Policy: Zambia (National Gender Policy, Zambia, 2002)**

The Zambian government took the following steps to close the gender gap in transport policies, which had left most women, particularly those in rural areas, with limited access to transport:

- Creating a gender-based inventory of transport and communication usage
- Educating and empowering women in the building and management of transport infrastructure
- Facilitating research to identify the forms of transport used in diverse rural areas, particularly by women, so that suitable solutions can be developed
- Facilitating and giving soft loans as well as other incentives for rural transport providers, such as tax vacations, in order to enhance access to transport for disadvantaged women and those with disabilities
- Empowering women to take part in transport management in their communities
- Developing measures to ensure that women enjoy benefits from the transport industry and other sectors of the economy
- Passing a law that requires transport companies to import facilities that are accessible to women and people with impairments

## **10. FUTURE POLICY DIRECTIONS: TOWARDS GENDER-SENSITIVE URBAN TRANSPORT POLICIES, PLANS AND PROJECTS**

Gender mainstreaming materials and formal international or national policy documents alone do not imply successful gender integration in the transport sector. Cities and states must be proactive, and the following actions for long-term urban mobility solutions may be considered.

### *Need for A Comprehensive and Integrated Transport Plan*

The city bus corporation, Delhi Transport Corporation (DTC), the municipality, the rail and metro-rail corporations, the city development authority, Delhi Development Authority (DDA), and other modal agencies oversee city transport in India. What's truly needed is an integrated transport planning process that coordinates inter-city and intra-city transport. However, a long-term urban transport system necessitates the combination of land use and transport planning. The Transit-Oriented Development (TOD) policy will serve as a blueprint for integrating public transport with the built environment.

### *System-based Approach*

Networks of transport cannot exist in isolation. Intermodal integration, or the integration of diverse modes of transport to offer seamless connectivity for commuters, is required for sustainable urban mobility. Last-mile connectivity is a critical component in determining the effectiveness of a city's public transport system, particularly in the context of vulnerable groups, as security is a major issue that deters women from utilising public transport.

### *Intelligent Tracking System (GPS) in Public Transport*

Urban mobility, particularly public transport such as buses and bus rapid transit (BRT) systems, must become a fundamental aspect of urban growth for cities to be habitable. We need to come up with new ways to fund public transport projects and implement policies that disincentivize the use of private vehicles. It is necessary to improve public transport operations by implementing an Intelligent Transport System (ITS) and GPS bus tracking for better route planning. This would result in a long-term behavioural shift in which women would be encouraged to use public transport.

### *Barrier-free Integrated Transport Solutions for Vulnerable Groups*

To make cities more inclusive and to meet the needs of the most vulnerable sectors of the population, planners must consider the concerns of various segments of the population while planning transport. Women make up most people who utilise public transport around the world, yet they confront numerous obstacles that limit their mobility and ability to enter the formal labour sector. As a result, all public transport experiences, including those of women, children, the poor, and the disabled, must be considered, funded, and planned for. The corridors, stations, and intersections for buses and trains must be adequately illuminated, conveniently accessible, and placed in crime-free zones.

## **11. CONCLUSIONS**

Gender equality is essential for accomplishing a wide range of sustainable development goals, including increasing economic growth and labour productivity, lowering poverty, and improving human capital, and ensuring more peaceful and inclusive communities. Based on the research, the paper argues that accelerating the pace of advancing gender equality in all spheres of society leads to a more rapid increase in progress towards achieving the 2030 Agenda. Ending discrimination against women and girls is critical to ensuring equal access to quality and affordable education (SDG 4), access to the labour market (SDG 8), and political participation (SDG 10). Ending discrimination will also empower women and girls to contribute to promoting peaceful and inclusive societies (SDG 16) and to pursue opportunities for decent work and employment (SDG 8), therefore also contributing to poverty reduction (SDG 1).

Women can gain significant benefits from transport investments that are built with gender aspects in mind, such as enhanced access to jobs, markets, education, and health services, as well as a reduction in time poverty. Women's travel demands, concerns, goals, and preferences are frequently overlooked in the design of transport policies and services. Women also largely remain underrepresented in transport sector agencies, and their voices are not heard in transport sector policy and planning processes. For the transport sector to be sustainable and inclusive, women and men need to be equal partners in developing new ideas and strategies for improving access and affordability of transport infrastructure and services.

The theoretical tools for achieving gender equity in transport are now within easy reach of any committed decision-maker, but the practical, cultural, and institutional barriers to implementation have proven to be frustrating for many who have tried to incorporate greater gender awareness into transport politicians', planners', and engineers' established practises and ways of thinking. To overcome institutional difficulties, truly "give women a voice" in urban transport, and achieve genuine gender parity in transport systems, a considerable deal of political will is still required.

Understanding women's needs, creating instruments to address those needs, analysing the costs and advantages of those instruments, and establishing an appropriate policy framework are all steps in making transport policy more responsive to their needs. The paper's main message is that advancing gender equality at a faster pace in all spheres of society—at home and in the community, in the economy and workplace, in health and educational attainment, in political participation and leadership—leads to faster progress toward the 2030 Agenda for Sustainable Development. As a result, rather than executing discrete piecemeal initiatives, it is critical to take a comprehensive approach to gender equality targeted at altering the institutions that create and sustain gender inequality.

**REFERENCES**

- Action Aid, UK (2016). Fearless: Safe Cities for Women. Available from [https://www.actionaid.org.uk/sites/default/files/publications/safe\\_cities\\_for\\_women\\_may\\_2016.pdf](https://www.actionaid.org.uk/sites/default/files/publications/safe_cities_for_women_may_2016.pdf).
- Akshara Centre (2015). Can We Make Our City Safe for Women? A Report on an Experiment in Mumbai. Available from <https://www.aksharacentre.org/wp-content/uploads/2016/03/report4.pdf>
- Annual Report, Periodic Labour Force Survey 2017-2018, p.53
- Asian Development Bank (2013). Annual Report. Available from <https://www.adb.org/sites/default/files/institutional-document/42741/adb-annual-report-2013.pdf>.
- Boros C. (2014). EXCLUSIVE-POLL: Latin American cities have most dangerous transport for women, NYC best, Thomson Reuters Foundation. Available from <https://www.reuters.com/article/women-poll-idUKL6N0S32MQ20141029>
- EU-OSHA (2014). Mainstreaming Gender into Occupational Safety and Health Practice. European Agency for Safety and Health at Work. Available from <https://osha.europa.eu/en/publications/mainstreaming-gender-occupational-safety-and-health-practice>.
- Fainstein, Servon (2005). Gender and Planning: A Reader. N.J. Rutgers University Press, New Brunswick.
- Freedom House (2005). Women's Rights in the Middle East and North Africa – Egypt. Available from <https://www.refworld.org/docid/47387b6a46.html>.
- Gonzalez K. (2018). Transport is not gender neutral. World Bank Blogs. Available from <https://blogs.worldbank.org/transport/transport-not-gender-neutral>.
- Hasson, Y., Polevoy, M. (July 2011). Gender Equality Initiatives in Transportation Policy
- Iqbal S., (2018) Women, Business and the Law, World Bank. Available from <http://documents.worldbank.org/curated/en/926401524803880673/Women-Business-and-the-Law-2018>
- Jagori and UN Women (2010) Report of the Baseline Survey Delhi 2010. Available from [http://www.jagori.org/wp-content/uploads/2011/03/Baseline-Survey\\_layout\\_for-Print\\_12\\_03\\_2011.pdf](http://www.jagori.org/wp-content/uploads/2011/03/Baseline-Survey_layout_for-Print_12_03_2011.pdf)
- Khanna M. (2020). Mind the Gender Gap. American Planning Association. Available from <https://www.planning.org/planning/2020/feb/mind-the-gender-gap/#vienna>.
- Khosla, R. (2009). Addressing Gender Concerns in India's Urban Renewal Mission. Available from <http://www.indiaenvironmentportal.org.in/files/AddressingGenderConcerns.pdf>.
- Le Barbanchon, T., Rathelot, R., & Roulet, A. (2021). Gender Differences in Job Search: Trading off Commute Against Wage. The Quarterly Journal of Economics, vol. 136, issue 1, pp. 381-426
- Madurawala, D.S.P. (2009). Labour force participation of women in child-bearing ages, Sri Lanka. Sri Lanka Journal of Population Studies, vol.11, pp. 1–38
- McKinsey Global Institute (2015). How advancing women's equality can add \$12 trillion to global growth. Available from <https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth#>
- Polk M.(2003). Gender Equality in Transport Policy in Sweden. World Transport Policy and Practise, vol. 9, issue 4, pp. 28-33. Available from <https://www.eco-logica.co.uk/WTPPdownloads.html>

- Sakhi (2011) A Study on Gender Based Violence in Kerala. Available from <http://sakhikerala.org/wp-content/uploads/2020/06/Gender-based-violence-in-Kerala-study-report.pdf>
- Silby, S. (2016). Why do Many Women Who Study Engineering Leave the Field? Harvard Business Review. Available from <https://hbr.org/2016/08/why-do-so-many-women-who-study-engineering-leave-the-field>.
- SSATP (2012). The Soft Side of BRT: Lessons from Five Developing Cities. The International Bank for Reconstruction and Development. Available from <https://www.ssatp.org/sites/ssatp/files/publications/BRT-Case-Studies.pdf>.
- Tobin, S. (2017). What Causes Gender Gaps in Labour Market. International Labour Organisation. Available from [https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS\\_566891/lang-en/index.htm](https://www.ilo.org/global/about-the-ilo/newsroom/news/WCMS_566891/lang-en/index.htm).
- Turnbull, Lear and Thomas (2009). Promoting the employment of women in the transport sector – Obstacles and policy options, International Labour Office, Geneva.
- UN Industrial Development Organisation (2006). Promoting Women Empowerment for Inclusive and Sustainable Industrial Development in Middle East and North Africa Region.
- UN, Department of Economic and Social Affairs (2015), The 2030 Agenda for Sustainable Development. Available from <https://sdgs.un.org/goals>.
- UN, ECOSOC Report (2010). Achieving Gender Equality, Women Empowerment and Strengthening Development Cooperation. Available from [https://www.un.org/en/ecosoc/docs/pdfs/10-50143\\_\(e\)\\_\(desa\)dialogues\\_ecosoc\\_achieving\\_gender\\_equality\\_women\\_empowerment.pdf](https://www.un.org/en/ecosoc/docs/pdfs/10-50143_(e)_(desa)dialogues_ecosoc_achieving_gender_equality_women_empowerment.pdf).
- UNTC, Convention on the Elimination of All Forms of Discrimination against Women (1979). Declaration and Reservations. Available from [https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg\\_no=IV-8&chapter=4#EndDec](https://treaties.un.org/Pages/ViewDetails.aspx?src=TREATY&mtdsg_no=IV-8&chapter=4#EndDec).
- World Bank (2004). Gender and Development and Middle East and North Africa (MENA Development Report).
- World Bank (2011). A Gender Assessment of Mumbai's Public Transport. Available from <https://documents1.worldbank.org/curated/en/857731468269134420/pdf/681950ESW0WHIT0nalReport00June02011.pdf>
- World Bank (2014), Voice and Agency: Empowering Women and Girls for Shared Prosperity. Available from [https://www.worldbank.org/content/dam/Worldbank/document/Gender/Voice\\_and\\_agency\\_LOWRES.pdf](https://www.worldbank.org/content/dam/Worldbank/document/Gender/Voice_and_agency_LOWRES.pdf).
- World Bank (2019). Women, Business, and the Law: A Decade of Reform. Available from <https://thedocs.worldbank.org/en/doc/702301554216687135-0050022019/original/WBLDECADEOFREFORM2019WEB0401.pdf>.