ANALYSIS OF AFFORDABILITY AND ACCESSIBILTIY OF PUBLIC TRANSPORT TO WOMEN AND DISABLED PERSONS IN ISLAMABAD



By

ZAIN UL ABIDEEN Registration No. PIDE2019FMPHILDS02

Supervisor: Dr. Rizwan Ul Haq Co -Supervisor: Fahd Zulfiqar

MPhil Development Studies PIDE School of Social Sciences Pakistan Institute of Development Economics, Islamabad 2022



Pakistan Institute of Development Economics, Islamabad PIDE School of Social Sciences

CERTIFICATE

This is to certify that this thesis entitled: "Analysis of Affordability and Accessibility of Public Transport to Women and Disabled Persons in Islamabad" submitted by Zain Ul Abideen is accepted in its present form by the PIDE School of Social Sciences, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree in Master of Philosophy in Development Studies.

Supervisor:

Dr. Rizwan Ul Haq

Signature: Signature:

Co-Supervisor

Mr. Fahd Zulfiqar

External Examiner:

Dr. Amen Jaffer

Amen Jaffer Signature:

Head. PIDE School of Social Sciences: Dr. Hafsa Hina

Signature: Jalee

Author's Declaration

I Zain Ul Abideen S/o Muhammad Azeem hereby state that my MPhil thesis titled Analysis of Accessibility and Affordability of Public Transport to Women and Disabled Persons in Islamabad is my own work and has not been submitted previously by me for taking any degree from Pakistan Institute of Development Economics or anywhere else in the country/world.

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Date: 07-01-2022

(Zain Ul Abideen)

Dedication

I dedicate this thesis to my loving mother who has always provided me with comfort and care throughout my whole life

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First of all I am thankful to Almighty Allah for His countless blessings upon me. I am so grateful to Him who has blessed me with supportive people. My boss Major (R) Syed Hasnain Haider, Additional Secretary, Senate of Pakistan is one of those who gave me support right from the beginning of this degree. This dissertation and degree would not have been possible for me without the continuous support and encouragement of my boss Major (R) Syed Hasnain Haider.

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ABSTRACT

Accessible, inclusive and affordable public transport is essential in urban and rural spaces to allow people to participate in socio-economic activities and access opportunities necessary for their well-being and survival. This research first looks into existing public transport services, infrastructure and Metro Bus Service with a focus to analyse how transport services are being provided to the people of Islamabad living in urban and rural areas and what measures can be taken to improve the transport services to ensure inclusion of women and disabled persons. For this purpose four locales from rural and urban areas have been selected which includes Bara Kahu, Taramri, G-6 (Aabparah) and G-9 (Karachi Company) respectively, and five Metro Bus Stations were also selected for collecting the data. Qualitative data techniques, with content analysis, observation, semi-structured and unstructured interviews, have been used along with thematic analysis to get the results. Findings show that existing public transport service and infrastructure in Islamabad is creating mobility challenges for women and disabled persons to a greater extent which is leading to social exclusion of both and depriving them of socio-economic opportunities. This research discovers that public transport service and its infrastructure in Islamabad is inaccessible to disabled persons whereas women have to face lot of accessibility issues, harassment, misbehaviour etc. while accessing public transport. However, findings, in this research, reveal that Metro Bus Service in Islamabad is accessible to disabled persons to some extent but still improvement and continuous maintenance is required at the stations. Further, women expressed satisfaction with the MBS and suggested to allocate more space for women in the bus. Lastly, MBS should be extended to all of Islamabad to benefit people specially women and disabled persons. At the end, this research makes suggestions and recommendations to help policymakers and government to improve transport services in Islamabad.

Keywords: Accessibility, Public Transport, Social Exclusion, Disabled Persons, Inclusive Transport,

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LIST OF ABBREVIATIONS

BRT	Bus Rapid Transit
MBS	Metro Bus Service
CDA	Capital Development Authority
ITA	Islamabad Transport Authority
DRTA	District Regional Transport Authority
NTRC	National Transport Research centre
PIMS	Pakistan Institute of Medical Sciences
NIRM	National Institute of Rehabilitation Medicine
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
PUTC	Punjab Urban Transport Corporation
NGOs	Non-governmental Organizations
SDGs	Sustainable Development Goals
WHO	World Health Organization
PLM	People with Limited Mobility
LRT	Light Rail Transit
CNG	Compressed Natural Gas
PMA	Punjab Masstransit Authority
CCoTL	Cabinet Committee on Transport and Logistics
MCI	Metropolitan Corporation Islamabad

Chapter 1

Introduction

Accessible and affordable public transport has become necessary for mobility and active participation in urbanized societies. Urban mobility enables people to access goods and opportunities that ultimately improves their quality of life (Hernández, 2017). Growing urbanization has created mobility and accessibility challenges as distances and travel time are increasing between the activities (Adeel, 2016). Lack of access to public transport deprives people from accessing employment and business opportunities which resultantly generates poverty, limits economic growth and leads to low quality of life. Besides, it also leads to deprivation, reduced participation and social exclusion to a great extent (Shivonne et.al 2019). Women, children and people with disabilities are marginalized sections of society in Asia and absence of public transport facilities puts them at the risk of exclusion from society (Islam, 2015, ESCAP, 2012 & Shivonne, 2019).

Inclusive transport is among the top priorities of developed countries to meet the transport demand of the people and enhance economic growth. Concept of universal design given by United Nations, has been adopted by developed countries which enables, elderly, women, children and disabled people access to public transport with ease (World Bank, 2013). In addition to this, developed countries are moving forward to shift over to use of electric cars to reduce greenhouse emissions. In Asia, people face excessive mobility issues owing to lack of public transport and infrastructure. People are left out in economic and social activities due to absence of public transport which consequently causes poverty deprivation and social exclusion (Adeel, 2016). Flawed urban and transport planning in Asian countries is causing mobility challenges for all people including disabled persons.

In Pakistan unplanned urbanization is growing at fast pace creating mobility problems for people in accessing education, healthcare facilities and job opportunities. In Pakistan, neither the public transport nor its infrastructure is accessible for disabled, as buses and other modes of transport have no ramps to help them aboard on the bus or rail which resultantly deprives them of availing various opportunities and active participation in socio-economic affairs of life. Government of Pakistan has devised various transport polices but were limited in scope and could not produce effective or desired results (Imran, 2009). Consequently, dilapidated condition of transport sector is negatively affecting economic growth and human

development in Pakistan (Haque, 2015). Moreover, it is leading to reduced wellbeing of the people specially women and disabled persons. Owing to safety and security concerns women travel less in public transport or are not allowed to travel alone due to socio-cultural phenomena (Adeel et.al, 2016). Therefore, majority of women do not participate in economic activities by travelling outside their home. Moreover, women face lot of difficulties while accessing public transport such as harassment, limited and uncomfortable seats in local van, rude behaviour of conductors etc.

Islamabad is the Capital city of Pakistan which was planned in 1960s. According to Census of 2017, total population of Islamabad is 2.0 million. Islamabad is adjacent to a historical town, Rawalpindi, and houses most federal ministries, diplomatic missions and major headquarters. The study conducted on Islamabad (CDA, 2012) shows that about 700,000 trips occur every day within the city and up to a further 500,000 daily trips which either travel to or from the city to adjoining urban areas. Currently, Wagon, Coaster, minivan along with Bus Rapid Transit (BRT), remains the main mode of transport in Islamabad. BRT runs from Secretariat covering main commercial area, Blue Area to Saddar Rawalpindi and does not provide service to residential areas. Moreover, public transport services are inadequate and insufficient in Islamabad, therefore, people have to face lot of difficulties and have to rely on their personal vehicle or private taxi's for commuting to offices, schools, universities hospitals etc. According to Pakistan Bureau of Statistics (1998), 3.2 million people in Pakistan are disabled and around 8500 are living in Islamabad.¹ These numbers are likely to increase in future and these disabled persons require transport service for mobility and accessing opportunies such education job and healthcare facilities. Prsently, facilities for disabled persons in public transport is absent in Islamabad which is not only hampering their mobility but is creating lot of challenges for disabled persons and is affecting their quality of life.

Much work has been done globally on improvement of public transport for all including disabled, women and elderly people. Literature and research is sparsely available in Asian and particularly Pakistani context in which problems faced by women and disabled persons have also been highlighted. However, my research is an attempt to analyse the availability of public transport facilities for people with disabilities and women in the urban and rural areas of Islamabad. For the purpose of current research, sub-locales in urban areas of Islamabad include bus-stops at G-6 (Abparah), G-9 (Karachi Company), Khayaban e Johar, Ibn e Sina,

¹ See Pakistan Bureau of Statistics https://www.pbs.gov.pk/sites/default/files//disablity_data_1998.pdf

PIMS, 7th Avenue and Pak Secretariat. In rural areas of Islamabad sub-locales for the current research include, Bara Kahu (Athal Chok) and Tramrri. These bus stops and stations are major hubs for passengers commuting within the city. Routes for operating wagons, Suzuki's and mini buses in Islamabad are approved by Islamabad Transport Authority (ITA) and District Regional Transport Authority Rawalpindi (DRTA). Furthermore, my research has looked into social exclusion caused by inadequate public transport routes and transport services in the above-mentioned sub-locales of Islamabad.

1.2 Background

A Greek architect named C. A. Doxiadis was tasked for designing the city. Doxiadis planned Islamabad on a grid-iron pattern having sectors and sub-sectors and one commercial (Markaz) in each sector. Moreover, each of the sector would have low-rise and primarily made up of single-family houses. About 10,000 residents of a sector were to have access to all of the amenities that were generally required in daily living, such as places to shop, worship, schools, parks, or simply hang out for social interaction and pleasure. Residents in a sector would only have to travel further out into the metropolis for employment or special occasions. In addition to this, most of the facilities could be reached on foot, without having to cross any vehicular roads at all (Daechsel, 2015). Therefore, no heed was paid on the transportation system of Islamabad which now has created mobility challenges for the people.

Despite its status as the country's capital, Islamabad was never provided railway access or commercial business district (except Blue Area) or no zoning for the poor. In reality, the regime of the time saw Islamabad's inaccessibility and distance from the main hubs of political and economic life as its raison d'être. The capital was not intended to be a city but rather a modern-day analogue of the old colonial hill station, a place where government and the ruled, civil officials and society had as little touch as possible (Daechsel, 2015). Nevertheless, Islamabad has witnessed substantial immigration and urban sprawl due to growth of housing societies and roadways over the wide swaths of land with little regard for urban planning. Urban sprawl and horizontal growth of housing units has increased the travel time, transport cost, pollution and has generated transportation problem as well. However, Doxiadis' plan has been modified and adjusted, but still it suffers from its birth defects (Lubna, et.al. 2020). In order to solve the issues of transportation, master plan of Islamabad also needs to be revisited.

1.3 Socio-Demographic Dynamics of Islamabad:

The population of Islamabad has increased manifold due to migration from other parts of Pakistan. In 1950 the population of Islamabad was one hundred and ten thousand and at present, the total population of Islamabad is 2 million out of which 49.39 % live in rural areas. Since the Islamabad is experiencing population growth it is expected to grow more in coming years.

The city of Islamabad is one of the most diverse cities in Pakistan as residents from all over Pakistan have come to settle in capital due to government jobs and to seek jobs in international organizations, embassies and private sector. The city majorly consists of rural to urban migrated populace as well as residents of other cities who have to come seek better prospects for life.

Amongst the general ethnicities of Pakistan, Islamabad is predominantly made up of Punjabis, who make up 65 percent of the population, followed by Urdu Speaking Muhajirs, who make up 14 percent of the population, Pashtuns, who make up 10.5 percent, and Sindhis, Balochis, Kashmiris, and others, who make up the remaining 7% of the population.² However, the family characteristics for Islamabad are in consistent with those of Pakistan's other cities. Family structures are traditionally patriarchal, with the eldest being the family's leader and women playing a subordinate role, in keeping with the traditional structure of a typical Pakistani family.

However, given the young populace as well as multiple paradigms shifts amongst the local society as well an increment of individuals transitioning into higher classes in Islamabad, the city is experiencing with a more or less equal gender ratio in the city. Increased exposure to western media as well as international experiences have led to a greater and higher male to female ratio employment in the city. Women often receive equal if not more opportunities in terms of job prospects in the city as well as greater opportunities in terms of family freedom and independence, which reflects in the tendency for women to roam around the city for leisure activities, unaccompanied by a male relative. It is often common these days in the capital for the wife and husband both working in order to support their families, or for single ladies as well as widows to lead in terms of professional prospects.

² See statistics URL

https://web.archive.org/web/20060217220529/http://www.statpak.gov.pk/depts/pco/statistics/other_tables /pop_by_mother_tongue.pdf

According to Pakistan Bureau of Statistics,³ Islamabad is one of the cities of Pakistan having highest literacy rates (88%). The major reason behind high literacy rate in Islamabad is that the city has the rich facility of government/private schools, colleges as well as numerous universities. An additional reason might include the city's potential as a service-oriented sector. The unemployment rate of Islamabad is currently 15.7%.⁴ The city compromises of people included in the fifteen to sixty-four age bracket, making up for about 59% of the overall population. Over 37% of the population is under the age of fifteen, whereas the older population is comparatively quite small at just around 2.7%⁵. Islam is the dominant religion of the city, with over 95% of the general populace being Muslims and rest 4% follow Christianity, Hinduism and other predominant religions of the sub-continent.⁶ In addition to this, Islamabad is home to the biggest number of foreign tourists. Furthermore, the city serves as a rest stop or tourist destination for tourists travelling to the north, particularly to Kashmir, Naran, Kagan, Khunjerab, Gilgit, or Hunza. Tourists would frequently stopover to explore the city and its attractions before continuing on their trip to north.

According to Pakistan Public Administration Research Centre (PPARC), Establishment Division (2018-2019) the actual working strength of civil employees is 581,755 in all Ministries, Divisions, Attached Departments and Subordinate Offices working in the Federal Government, whereas, thousand others work in private service sectors of Islamabad. As stated above, 49.39 % of the population live in rural areas of Islamabad due to lack of housing units and expensive rents in sectors of Islamabad, however, looking at the entire socio-demographic characteristics of Islamabad and horizontal growth of city has increased the travel demand in the city as well and efficient transportation system is required for the movement of people stated above who are involved in different professions and activities on every day basis. Based on this, I have stated study's problem statement in the following text.

³ See data on See Pakistan Bureau of Statistics

https://www.pbs.gov.pk/sites/default/files/pslm/publications/pslm_prov2010-11/education.pdf ⁴ See data on See Pakistan Bureau of Statistics https://www.pbs.gov.pk/sites/default/files//tables/UN-

EMPLOYMENT%20RATES.pdf

⁵ See

https://web.archive.org/web/20100827004028/http://www.statpak.gov.pk/depts/pco/statistics/other_tables /pop_by_age_group.pdf

⁶See

https://web.archive.org/web/20060617205811/http://www.statpak.gov.pk/depts/pco/statistics/other_tables /pop_by_religion.pdf

1.4 Statement of the Problem

Demand for public transport has been increasing in Islamabad from the past several years. Currently, no bus service, except Metro, is in place in Islamabad and people have to heavily rely on private transport consisting of wagons (local van), coasters, taxis, and more recently on Uber and Careem. Though the Metro Bus Service operates in Islamabad but it does not provide services to rural and other urban areas of Islamabad. Inadequate transport facilities is affecting mobility of urban and rural population of Islamabad. Further it is affecting the mobility of disabled person to a greater extent since no disabled friendly transport or infrastructure is in place in Islamabad. No initiative has been taken so far in installing bus service in Islamabad to improve mobility of masses and unavailability of accessible and affordable public transport is excluding people specially the women and the disabled from accessible transport system with facilities for disabled person and women in the capital in order to ensure communal inclusivity in social and economic affairs of life.

1.5 Research Problem

The research problem perused takes up the analysis of affordability and accessibility of public transport to women and disabled persons in Islamabad. For the purpose of this study, I have operationalized the topic of study into the following research objectives and questions for gaining insights and providing an analysis of the topic. In the following are mentioned my study's research questions and objectives:

1.6 Research questions

- 1. What are the major constraints in accessing public transport and Metro Bus Service by women and disabled persons?
- 2. What facilities are in place for women and disabled persons in public transport and Metro Bus Service?
- 3. What transport do the women and disabled persons prefer using for traveling in Islamabad?
- 4. What is the view of women and disabled persons regarding fares charged by public and private transport and Metro Bus Service?

1.7 Research objectives

The objectives of the current study are to:

1. Explore issues and constraints faced by women and disabled faced in public transport system that hampers their mobility in rural and urban areas of Islamabad.

The objective aims to look at the barriers that hampers mobility of women and disabled persons. The research looks into how these people face constraints while accessing public transport in Islamabad and what transport women and disabled use for traveling. Analysis has been done keeping in contexts of their social settings.

2. To study the purpose of travelling by the women and disabled persons for different activities.

The second objective deals with purpose of travelling for different activities. The goal is to document for what purpose women and disabled person travel for their activities and what means of transport do they use.

3. <u>To examine how women and disabled persons commute on daily basis for work, health,</u> <u>education and other services.</u>

This research objective looks into to what extent disabled and women use public transport for employment, education, health and other activities.

4. To explain accessibility and affordability issues faced by women and disabled persons.

This objective looks into problems being faced by women and disabled persons in accessing public transport. The objective is to understand that whether the current public transport is affordable for them or not. Furthermore, the objective is also to explore whether disabled persons are given any concession in public transport. This objective also looks into whether bus stops and vehicles are safe and accessible for women and disabled persons.

5. <u>To suggest policy measures for improving accessibility and affordability of public</u> <u>transport in Islamabad.</u>

This objective suggests policy measures to government to improve accessibility and affordability of public transport in Islamabad for women and disabled people.

1.8 Limitations of the study

Islamabad is divided into five zones and transport operates from different rural and urban areas of Islamabad having hundreds of bus stops. Owing to time constraints, I could not investigate all the bus stops and areas of Islamabad. This study is restricted to Bara Kahu, Taramri, G-6 (Abparah), G-9 (Karachi Company) and five metro bus stations including Pak-Secretariat, 7th Avenue, PIMS, Ibn-e-Sina and Khayaban-e-Johar. In this case, this study investigates the problems of accessibility and affordability of public transport to women and disabled persons.

Moreover, I could not approach many women and disabled persons in rural areas of Islamabad to gain more insight about the problems being faced by them. However, difficulties faced by women and disabled persons have been discussed in this thesis.

1.9 Significance of the study

The present study has extended the existing knowledge about public transport accessibility and affordability issues faced by women and disabled persons in Islamabad. The research has unearthed problems being faced by women and disabled person in commuting and accessing public transport and the study has also revealed the mode of transport and travelling pattern of disabled persons in Islamabad. The study has also expanded the knowledge about existing ideas of inclusive transport as envisaged in "The National Transport Policy of Pakistan 2018". Further, this study can prove useful for the Ministry of Communication, NRTC, Ministry of Planning Development and Special Initiatives, Islamabad Transport Authority, policy makers and Capital Development Authority (CDA) in installing bus service and designing/constructing inclusive infrastructure for the betterment of the women and disabled persons. The study can also be helpful for further expansion of research.

1.10 Explanation of the Key Concepts

1.11 Social Exclusion

The Oxford dictionary defines the social exclusion as "exclusion from the prevailing social system and its rights and privileges, typically as a result of poverty or the fact of belonging to a minority social group". Whereas, the UK government Social Exclusion Unit defines exclusion in terms of a combination of "linked problems such as unemployment, poor skills, low incomes, poor housing, high crime environments, bad health and family breakdown"

(Social Exclusion Unit, 1998). Atiullah, (2018) defines social exclusion as "a process which causes individuals or groups of society to restrain in taking part in the normal activities in their residential area and has significant spatial demonstration". Duffy (1995) defines social exclusion as "a broader concept than poverty, encompassing not only low material means but the inability to participate effectively in economic, social, political and cultural life and in some characterisations alienation and distance from mainstream society".

These definitions define social exclusion in the case of transport exclusion; hence have been borrowed by me for the current study. I am more inclined towards the definition by Duffy (1995) as it is precise and most relevant to my research questions and objectives regarding transport exclusion, particularly when approached for both women and disabled people.

1.11.1 Mobility

Oxford dictionary defines mobility as "the ability to move between different levels in society or employment". Mobility refers to the movement of people or goods. It assumes that "travel" means person-or ton-miles, "trip" means person-or freight-vehicle trip. It assumes that any increase in travel mileage or speed benefits society. Mobility also refers to the movement of people and goods. This recognizes both automobile and transit modes, but still assumes that movement is an end in itself, rather than a means to an end. It tends to give little consideration to non-motorized modes or land-use factors affecting accessibility (Litman, 2011).

These above mentioned definition are well-suited to my research but definition given by Litman, (2011) is the most precise one and can be efficiently used for this research as it explains mobility from motorized and non-motorized perspective which the current study also will take into account.

1.11.2 Accessibility

In general, accessibility is labelled as the physical access to goods, services, and destinations. In the context of Urban Economics and Geography, accessibility, which is one of the most important outcomes of the transportation system, is characterized as the facilitation in accessing a specific area or location (Atiullah, 2018).

Accessibility (or just access) refers to the ability to reach desired goods, services, activities and destinations (collectively called opportunities). Access is the ultimate goal of most transportation, except a small portion of travel in which movement is an end in itself (jogging, horseback riding, pleasure drives), with no destination. This perspective assumes that there may be many ways of improving transportation, including improved mobility, improved land-use accessibility (which reduces the distance between destinations), or improved mobility substitutes such as telecommunications or delivery services (Litman, 2011).

I have used composite definitions from two theorists because these are highly useful for my research as my study is based on accessibility of public transport, hence this definition suits well to my research.

1.11.3 Universal Design

Universal design is the design of equipment, environments and services to be usable by all people, to the greatest extent possible, without the need for adaption or specialized design regardless of gender, ethnicity, health, size, ability, disability or other factors that may be pertinent. Universal design is the implementation of a process that improves the quality of life and greatly improves independence by enabling and empowering a general, yet diverse, world population to achieve optimal human performance, health and wellness through equal access to all facilities and social participation (A. P. 2020) For the fact that the current definition encapsulates social exclusion and socially excluded groups, hence are relevant to be adopted for the current research.

1.11.4 Persons with Disabilities

Centers for Disease Control and Prevention defines disability as "any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions)". The UN Convention on the Rights of Persons with Disabilities (UNCRPD) recognises that disability is an evolving concept. 'Persons with disabilities include those who have long-term physical, mental, intellectual or sensory impairments which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. (UNCRPD, 2006). These definitions are specifically suited to my research as they explain disability well.

According to (Disabled World), Paraplegia is defined as an impairment in motor or sensory function of the lower extremities. Paraplegia is usually caused by spinal cord injury or a

congenital condition such as spina bifida that affects the neural elements of the spinal canal. People with paraplegia are also referred to as Paraplegics. This form of condition paralysis both the legs of a person and use hands and wheelchair for the movement. I have explained this type of disability because I have interviewed two disabled participants in my research who have this condition.

As defined by (Smith, G. et al) Radial dysplasia (RD) is a wrist deformity, potentially disabling congenital upper limb anomaly, affecting approximately 1 in 8000 births. It is basically a malformation of radial side of the forearm and is characterised by the variable absence of the pre-axial upper limb skeleton (radius and thumb) and soft tissues. Affected children have isolated thumb hypoplasia to complete absence of the thumb and radius, with severe ulnar bowing, elbow stiffness and humeral hypoplasia. I have interviewed a disabled female having this condition.

Limb anomalies is the most common birth defects observed in infants. These malformations can occur as isolated malformations, in combination with hand and/or foot and also involves specific maldevelopments of the radius, fibula, or tibia (Tayel, S M et al). I have also interviewed the person having limb deformity for my research.

Chapter 2

REVIEW OF LITERATURE

2.1 Introduction

Review of literature provides an in-depth analysis of the prior research on the subject matter and aids in creating background, an academic connection and a discussion for the further research.

For the current study, the literature review takes a normative style. A normative literature review encompasses relevant theories which aid in the understanding of key concepts for a given research, builds a theoretical and conceptual background for the research and highlights research gap for further study.

I have arranged my literature in five broader themes: (i) public transport and women, (ii) inclusive transport for women and persons with disabilities (iii) Urbanization and transportation issues, (iv) social exclusion caused by lack of transport, (v) transport policies of Pakistan. I have studied Haque, Adeel, Lucas, Imran, Paez, Zolnika and Titheridge etc. and reports of World Bank and United Nations and Pakistan's Transport Policies for studying above-mentioned themes.

2.2 Transport & Women

In Pakistan activity participation is highly a gendered phenomenon. Women are assigned roles at home as homemakers and very few go outside for work or for educational purposes. Therefore, women's participation in social, political, religion, cultural or economic activities is very limited as compared to men. According to study conducted in Rawalpindi and Islamabad, women were more likely to use personal automobiles instead of public transport for different activities because of the fact that public transport owners reserve very few seats for the women. Whereas men preferred to use public transport for different activities instead of personal automobiles. Moreover, since the women's activities in education and employment are increasing, therefore, they prefer using personal vehicles specially four wheel vehicles because this mode of transportation is more socially acceptable to the families (Adeel et al., 2016b).

Social conventions and safety concerns limit women's mobility outside the home in Pakistan. Women's movement and usage of public transportation are restricted by social conventions prohibiting women from having close contact with unrelated men, as well as the discomfort, social stigma, and fear of harassment that accompany such interaction. This limits their options for joining the job force, continuing their education, or engaging in other autonomous activities. This issue is particularly pressing for women from lower socioeconomic backgrounds who cannot afford private transportation. In Pakistan, men and women have very different access to and experiences with public transportation as a percentage of non-walking trips. Women in Lahore are over 30% and prefer to take public transportation, such as buses or waggons, when commuting beyond walking distance. This is partly due to the fact that other options, such as riding a motorcycle or bicycle independently (both prevalent ways of transportation for males), are forbidden for women: Men are 70% more likely than women to use these private modes of transportation (Fizzah et.al 2017).

Women face difficulties in mobility owing to sociocultural phenomena. Women are considered family honour and are not allowed to travel without family's permission or male escort. This sociocultural context has made female less mobile, therefore, women and their families prefer a transport facility that is highly accessible, comfortable and helps preserving their honour and privacy. Unavailability of personal vehicle means that women have to depend on current public transport system which fails to provide privacy, comfort and hassle free travel. Moreover, limited access to transport greatly affects students, disabled and elderly (Adeel et.al 2016a).

In a society like Pakistan, women find it difficult to make contribution in the development process owing to harassment at public places and inaccessibility to transport and market. Despite the fact that government has reserved 5% quota for women in employment, but owing to social and environmental barriers, employment quota has never been observed or fulfilled. According to a research conducted by international organizations, women are underrepresented in the work force because of unfriendly environment and social constraints. The research revealed that harassment and discrimination discouraged women to take part in employment opportunities. In order to address these concerns number of legislation, with the help of NGOs and civil society, was effected and implemented by the government (ILO, 2011).

Report by Asian Development Bank (2011) shows that in Azerbaijan and Georgia women enjoy all the rights and are considered equal to men. Number of legislations regarding discrimination and sexual harassment has been incorporated in the law and is being implemented. However, there exists no law in Azerbaijan and Georgia that deals with sexual harassment at workplace, or in public or on public transport. Where as in Pakistan laws in favor of women rights exists but lacks enforcement. Since 2001 to 2014 only 293 cases against sexual harassment on public transport has been prosecuted which is however much lower keeping in view the population of around 191 million. In Baku, Azerbaijan, public transport consists of metro buses, mini buses and railways. There is Baku Metro Transport system which facilitates on average 700,000 commuters every day. In Tbilisi Georgia, transportation comprises of metro buses, mini buses and railways. Almost 331,000 trips are taken daily through metro buses. Where as in Karachi, Pakistan, modes of transportation includes, cars, taxis, auto rikshaws, mini buses, buses, chingchis. Other than buses, auto rikshaws and taxis are comparatively expensive and low income groups hardly hire it (Bank A.D, 2015).

Working women frequently collaborate with other women in their community to share the cost of rickshaw rides to and from work. Finding other women who live and work in the same region, on the other hand, can be challenging. They take advantage of pick-up and drop-off services provided by offices or educational institutions wherever available. Some people pay for private pick-up and drop-off services, although these can be costly or difficult to discover. When going to the market, visiting relatives, or commuting to work, others plan trips together and travel in groups on qingqis. Although women's experiences on public transportation differ, with some reporting harassment from male conductors, ticket checkers, drivers, and passengers, many report harassment from male conductors, ticket checkers, drivers, and passengers. When issuing or checking tickets, male conductors and ticket checkers may unintentionally touch female passengers. Passengers may be harassed or treated harshly by conductors at other times. Women frequently bring up the issue of male passengers harassing female passengers, particularly female students, by staring at them and passing on their phone numbers, whistles, or comments. Some women openly criticise any misbehaviour they witness, but the majority remain mute and suffer harassment, or try to avoid it by altering their travel patterns . (Fizzah et.al 2017).

According to a research done by the Asian Development Bank (2014), 85 percent of working women, 82 percent of students, and 67 percent of homemakers experienced harassment while

commuting at least once in the previous year. Working women, followed by students, report the highest rates of harassment. The main perpetrators in this regard are fellow passengers (75%), bus conductors (20%), and, in certain cases, even the bus driver (5 percent). Inside buses, minibuses, and chingchis, over 90% of harassment events occur. Harassment in its various forms Staring/leering and deliberate contact/groping are the two most common forms of harassment, each receiving 34 percent of replies. Crude remarks laced with sexual innuendos and accompanied by vulgar gestures are also typical. Men blocking the way for women to disembark, following them after they disembark, and stalking are examples of other forms of harassment.

A pilot project conducted by ILO, (2011) revealed that people supported the enforcement of sexual harassment act. Enforcement and implementation of act would ensure safety of women not only on transportation but at work place and at home as well. Women were of the view that implementation of the act would drastically reduce harassment and violence against women on transportation and at work places. Moreover, women believe that access to decent transport would allow them to succeed in their career, as they will not have fear of missing their vans or privately hired vehicles. They could leave office after finishing work and not before out of fear of not finding transport at late hours. Moreover, decent transport for women would satisfy their family members and they not be forced to quit jobs. Further, findings revealed that not fulfilling the transport needs of women have increased socioeconomic exclusion of women. By providing decent transport, mobility constraint will be removed for women and they will be able to participate and work in formal and informal economic sectors. Government, with the help of media, can spread mass awareness regarding sexual harassment act and importance of women inclusion in socioeconomic life (ILO, 211).

Women's participation in work force is less than that of men due to lack of access to public transport in Pakistan. Providing safe transport is beneficial for women's personal and professional life and makes them financially independent. Due to unsafe public transport, women have to face unwelcoming experiences that leave them feel victimized. These indecent incident are not considered crime and go unaddressed. Sexual harassment prevents women from actively participating in social and economic spheres of life. Civil society and governments around the world have taken measures to consider sexually motivated touching a crime and this can lead to imprisonment as well. Other countries have introduced buses that can only be used by women in order to curb the sexual harassment. In Pakistan pilot project

has been launched between Rawalpindi and Islamabad which provide similar facility for women to commute on daily basis (Bank A.D, 2015).

A report of Asian Development Bank, (2015) says that transportation sector is in dilapidated condition in Pakistan, where buses and trains are overcrowded, and physical access to transport is difficult. Such barriers bar women from accessing, education, market, employment and other opportunities. Mobility constraints put women at a risk of falling into poverty. There is dire need of paying attention towards mobility and accessibility issues faced by women due to transport. Poor physical accessibility and poor transport service has deep relation with poverty. Moreover, only addressing transport problem will not change the societal mind-set. By introducing women friendly transportation with behavioural change policy may change social mind-set of people towards women. Inducing sexual harassment act and ensuring safe travel of women would promote women's inclusion in workforce.

Sexual harassment is the main problem faced by women in all these three cities. Women who used public transport were either students or workers and frequent use of public transport made them more vulnerable against sexual harassment. There is dire need of ensuring safety in the public transport for the women. There must be police and security monitoring system which can track harassment cases. Drivers and conductors should be trained over how to report sexual harassment case. Government should encourage women to participate in transportation sector. Identify unsafe spaces with the help of commuters and patrolling of security and monitoring be tightened. Currently, Pakistan lacks legislation regarding sexual harassment in transportation. An effective antisexual harassment policy can help deter sexual incidents and provide safety to the women. Such policies can only be beneficial if they are enforced properly. Training of transport staff is vital in curbing sexual harassment. Moreover there needs to be a reporting system which would help locate offenders (Bank,A.D 2015).

Adeel et.al, (2016b) notes that as cities in Pakistan are expanding rapidly and there is challenge of affordability for low or middle income households. High transport cost is discouraging people to actively participate in social, economic, educational and other activities. Activity participation remains gender segregated issue, where men are more likely to travel outside for work and other activities whereas women are confined to their homes. High cost, quality and availability of public transport play an important role in limiting social and recreational activity travel among lower and middle income families.

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According to Zolnika et.al (2018) a study shows that majority of females are the daily user of metro bus service and are less likely to work outside home and do not travel alone in metro bus service. Females who live in the vicinity of metro bus service use it for trips rather than for work. The females who use this metro bus service either accompany with children, females or male counterpart to ensure safety. Zolnika et.al (2018) found that females accompany male companion to avoid risk of harassment in the public transport. Further women travel in group to mitigate fear of harassment. BRT operates in most of the cities worldwide including Latin America, Europe and Asia. Research suggest that the BRT system will not be adopted further by every country in the world. Research on benefits of BRT from user's perspective needs to be done because universally passengers are not satisfied from the service. It is argued that poor or middle income group are being excluded from BRT because of affordability constraint. BRT in Lahore was built with the help of Turkish Government. Lahore's Metro Bus Service is operated by Punjab Mass Transit Authority, currently 64 buses operate at 27 stations seven days a week from 06:15 to 22:00. The fare charged by the MBS is PKR 20 and approximately Rs.2 billion is given by the government as subsidy annually on the fare. 80 % of the people are satisfied with the Metro service in Lahore. BRT Standards is an evaluation tool which ranks BRT from gold to silver to bronze and to basic. Lahore's metro bus services belongs to basic category because it is inconsistent with performance and service. Moreover, the metro bus system in Lahore is not accessible to wheelchairs and are not universally accessible to all the residents of Lahore (Zolnika et.at 2018). Moreover, women benefit from the metro bus service were earlier van users and were charged high fares by the conductors for no reason. Females who use MBS/van belong from low income group, as their income increases they prefer to use private vehicle for movement. Age is also a big factor in female usage of metro bus service, as the female age increases they are more likely to use the metro bus service. Furthermore, the females who work for longer hours are less likely to travel by metro bus service (Zolnika et.at 2018).

2.3 Inclusive Transport for People with Disabilities

One of the target of Sustainable Development Goals (SDGs) for 2030 is to provide safe, affordable and accessible transport to all including people with disabilities and other vulnerable groups. Accessible transport allows people to access education, employment and health care. According to World Health Organization & World Bank (2011) approximately, 15 % of world's population or one billion people have some form of disability and 80 % of these are living in low-income countries (Frye, A 2019). According to Pakistan Bureau of

Statistics (1998), 3.2 million people in Pakistan are disabled and around 8500 are living in Islamabad.⁷ Frye, A (2019) notes that all forms of disability affect mobility of disabled people. Disability also increases poverty as persons with disability cannot go to school or cannot get to work. Disability and poverty are interconnected because lack of access or inability to use transport. Moreover, in low income countries, people who are blind cannot embark on bus due to crowd and poor road condition and people using wheelchair face the same difficulty. Consequently, disabled people are excluded economically and socially and are deprived from quality of life. According to Frye, A (2019) a survey conducted by Global Alliance on Accessible Environment and Technologies (GAAETS) revealed that disabled people wanted accessible public transport, better attitude of transport staff and better pedestrians.

According to United Nations (2018) 6 % to 10 % of people living in developing countries experience disability and are more likely to be poor. They are excluded socially and economically owing to inaccessibility of public transport. The UN Convention on the Rights of Persons with Disabilities (UNCPRD), has been ratified by 100 countries worldwide which stresses the need for removing barriers for disabled in all walk of life. The UNCRPD's guidelines are being followed by international institutions such as World Bank for betterment of disabled people in developing countries (World Bank, 2013).

According to World Bank, (2013) almost 80% of the world's disabled people are living in developing countries and majority of them do not receive education or go to work because of their disability. Inclusive policies are important to address the economic and social issues of disabled people. Concept of "universal design" should be taken into consideration while designing transport projects. Moreover, (World Bank, 2013) defines a term "People with Limited Mobility" (PLM) as people who face difficulties in accessing public transport but may not regard themselves disabled such as older people, pregnant women, children and visitors having too much luggage. Transport projects should be accessible for everyone so that people with limited mobility may benefit from it. Moreover, concept of trip chain should also be applied which consists of starting bus stop, bus stop to vehicle, ride in vehicle, vehicle to destination bus stop, bus stop to entrance of destination building. If any of the link in the chain is missing it would make transport accessibility impossible for PLM.

⁷ Pakistan Bureau of Statistics, <u>https://www.pbs.gov.pk/sites/default/files//disablity_data_1998.pdf</u> (accessed December 10, 2021)

According to Frye, A (2019) in order to address the mobility issues of disabled people, practical steps are required to be taken. Practical steps include, planning, designing transport infrastructure and services. Upgraded facilities and universal design be adopted to help people with disabilities access transport. Opinion from people with disabilities must be taken into account before designing and planning transport infrastructure. Monitoring mechanism should also be placed and disabled people should share their experiences with authorities to further improve the accessibility of public transport. (Frye, A 2019)

Frye, A (2019) suggests that to address concerns raised by disabled people, rules and regulations should be devised to enable disabled people access vehicles easily. Streets and pathways should be designed in such a way where access for wheelchairs be ensured. Drivers and transport staff should be trained in consultation with disabled people and awareness be imparted to change the attitudes towards them. While devising city and transport plans, it must ensure the accessibility for all including disabled people. Presently, various countries are adopting the concept of Universal design that ensures needs of every one by including easy access with minimum physical effort including children and disabled and sufficient space for all passengers including wheelchair. Various low-income countries have ratified UN Convention on Rights of Persons with Disabilities that sets out the principles of Universal design. Architects and road engineers should be trained so that they could design transportation infrastructure that could meet the needs of disabled persons. Training should be given in collaboration with disabled people who have first-hand experience and better explain what their needs are (Frye, A 2019).

Word Bank (2013) notes that countries where pedestrian and street infrastructure is poor and affects mobility, door to door services can be the best option for mobility for disabled people. Rickshaws and *tuk tuk* are best and cheap options. In many countries public buses have high steps where it is not possible for wheelchair user to board the bus. Mobility for disabled people can be improved by raising platforms or using ramps to aid wheelchair users to board on buses. For blind and deaf, audio announcements and visual system be installed. BRT is functioning in different countries, but many countries have not installed ramps and handrails and other equipment's to facilitate disabled people, at later stage renovating is expensive and difficult. Rail transport consists of heavy rail, light rail, tram and metro service. Rail system can be designed in such a way which meets the needs of everyone.

According to (World Bank, 2013) railway stations in many major cities in developing countries are quite old with no audible or visual facilities and inaccessible for disabled people. There is a gap between platform and doorsill which requires ramp to allow wheelchair users to board trains. Therefore, there is need to design and construct platforms and install ramps to make them accessible for everyone. Similarly, handholds and other equipment's can be installed to make rail and trams easily accessible. In order to facilitate PLM (World Bank, 2013) suggests that PLM should be facilitated in pre planning their journey in order to enable them to take a trip without any obstacles. Information regarding accessibility, timings, destinations, stairs, lifts and origins be provided online or in printed form. Information, available online or in printed form, should contain large fonts with contrasts colours to help cognitively impaired people plan their journey. Display screens with information regarding transport and audible announcements be made available at stations to facilitate people in undertaking their journey. During journey, on board information, timetable current locations and exit routes be displayed to help physically challenged people.

(World Bank, 2013) suggests that travel training can be given to disabled person who face issues while accessing public transport by travel expert. Training may cover over all aspect of transport journey, from pre planning to ticket booking to find a transport etc. It would help them use public transport without depending on others. In addition to this, disability awareness programs have been developed by many countries to train transport staff in assisting disabled people and behaving well with them. Designing footways and sidewalks is very important which could be easily accessible for people including PLM. Footways should not be obstructed by garbage, debris, street vendors, parked cars or other objects. Sidewalk should be wide in area to take load of heavy pedestrian traffic. Street crossing should be painted on pavements and raised roads. Moreover, there must be no step between footway and crossing to allow disabled and wheelchair users to cross the signal or road. Signalized crossings are also useful to help PLM cross the roads as it indicates when the traffic stops.

According to World Bank (2013), bus stop paving should be levelled and must provide a way for PLM. Ramps or lifts be used to help PLM board bus. Shelter may be constructed with facilities and ample space where PLM can turn and manoeuvre around. BRT or LRT have many similarities but it main contain folding seats because in case of peak demand passengers could be accommodated. Tactile paving can help passengers find waiting area for bus. All the bus, train, ferry, metro ferry and interchanges should have accessible features and obstacle free routes. Waiting areas should have enough space for wheelchair users and public toilet must also contain at least one unisex wheelchair accessible cubicle. Ticketing machines should be visible accessible and barrier free.

In a country where no regulatory frame work is available for implementing accessibility features in transport system. Countries can adopt best international practices devised by UN and other organizations to improve mobility and accessibility of disabled people (World Bank, 2013). Moreover, countries can implement accessibility laws or decrees to achieve the policy objectives. Latin American countries have implemented informal guidelines and regulations that govern the construction and vehicle specification to facilitate PLM. Establishing institution that could help implement regulations and deliver accessibility for PLM. Such arrangements can be made by countries to involve institutions which can design standards or best practices and help them implement these.

In order to carry out such projects, there are international organizations who provide grants and funds for development of facilities for disabled persons. Moreover, there are local organizations who also willingly come up to provide funds for the improvement of local area. National, international, multi-lateral development banks, financial institutions and NGOs can be approached who have signed up UN Convention on the Rights of People with Disabilities to fund such projects which would facilitate PLM. Additionally, benefit of concessionary fares can be provided to people with disabilities in order to reduce financial burden on them (World Bank, 2013).

A survey conducted by Adeel et al., (2016b), shows that major chunk of monthly income is spent on transport related expenditures. The issue of affordability is big challenge for middle or low income people. In order to minimize their expenditure on public transport, people prefer to work nearby to their home or on a walking distance to cut the cost of transport. Availability of public transport is another challenge that people face in Rawalpindi and Islamabad. This includes distance from home to bus stop, availability at night, waiting at bus stop and in vehicle waiting time, discomfort while using the transport, availability of seat direct access to destination.

The inclusive transport system would mean economic growth and numerous opportunities for people. In order to materialize this, existing transport routes are needed to be revised as per current demand and roads are needed to be widened to lower the congestion. Moreover, concessionary fares must be charged for students and elders. Moreover, BRT network needs to widen its routes and coverage so that every neighbourhood can benefit from it. Lastly, urban planners need to play their role in creating sustainable environment in the city to ease mobility challenges for people and specially women and physically challenged people (Adeel et.al 2016a)

2.4 Urbanization & Transportation Issues

Pakistan is one of the most urbanized country in Asia Pacific hence making it difficult for the people to survive in overcrowded localities lacking basic services. Since the majority of population belong to lower income class meaning only rich population can buy cars and automobiles. Resultantly, majority of the population has to rely on public transport system (Adeel et.al 2016a). Haque & Rizwan, (2020), Haque, (2015) and PIDE, (2020) have identified that in Pakistan, urban planners follow rural model which results in migration to urban cities. They allow construction of flyovers, underpasses, widening of roads and single family homes. Such approach compels people to rent a home in far flung urban areas where facilities and services are insufficient or encourages informal settlements of *katchi abadis*. Moreover, it leaves them with the option of motorcycle for mobility. Modes of urban transport include, walking, cycling, buses, trucks, cars, motorbikes etc. instead of spending budget on these modes of urban transport, Pakistan spends urban transport budget on construction of flyovers and underpasses.

Gakenheimer, (1999) says that with increase in population and rapid urbanization in Asian countries have caused mobility and accessibility challenges for the people along with issues of poverty, inequality and lack of access to basic services. Majority of population is suffering from lack of access to public transport but mainly poor, unemployed, young, elderly and women suffer the most. Therefore, it has been the top priority of national, local and non-governmental organization to provide better transport system in the country in order to enable population to commute on public transport which is affordable, socially acceptable and environmentally sustainable and results in economic well-being and growth of the area. However, current public transport system in Asian countries has failed to meet the needs of daily commuters (Dimitriou and Gakenheimer, 2011).

Globally, urban transport is planned considering accessibility and connectivity with strong cross-sector collaboration. This approach in different cities around the globe has delivered employment and quality of life to the people. People do not have to travel long for work or study. Integrated planning ensures growth, development and prevents social exclusion. Moreover, the policy must aims at shortening travel distance, discourage use of private

vehicles and support climate control and provide people with multimodal, accessible travel options (Rode et.al, 2019).

While planning for urban transport, planners need to keep in view the socio-demographic and economics context in mind. Moreover, government and planners need to foresee future needs of the city as well by analysing data. Therefore, transport planning must be integral part of urban planning. Urban authorities mostly upgrade roads when they see congestion and traffic. This is not called transport planning but reaction to car based congestion. Pakistan needs to discourage use of private cars, as it impacts the environment adversely (Haque, 2020). City planners focus on widening of roads, and construction of flyovers to facilitate cars on roads. Excessive budget is allocated for roads in annual development plans. While the world is discouraging use of private vehicles, Pakistani city planners are doing their best to promote car usage by suggesting widening of roads (Haque, 2015). Most of public places in urban area, where activities take place, needs urban transportation. Therefore, urban transport planning, is very vital from the perspective of mobility and accessibility. Purpose of an urban transport policy is to facilitate and provide people with safe, affordable, reliable, comfortable, and sustainable accessibility transport options, and preventing people from being excluded from accessing jobs, education, living, and other necessary services. (Haque, ul N., & Rizwan, M. 2020).

Due to insufficient public transport in urban cities, para transit fills the gap by providing transport services to the people. Individual rides, taxis, limo service and private vans falls into this category. Para transit being expensive promotes usage of public transport because the latter is economical. Cities having no public transport system are compelled to use private vehicles. Such as in Pakistan, people need cars and bikes for mobility. Successful urban transport ensures growth, while failure leads to destabilization. A good transport design that is safe, sustainable, economic and environmental friendly is considered as good project design and help achieve all goals. Urban road design includes expressway or freeway, arteries or boulevards, collectors or avenues and local streets. Moreover, urban transport cannot be sustainable or manageable without efficient traffic signals. In order to implement urban transport design, requires expert constructors so that it may not disturb the residents. Unfortunately, Pakistani contractors lack such expertise. Pakistan must work in collaboration with international agencies who have expertise in planning and delivering urban transport infrastructure projects (Haque, 2020). Master plan for major cities were finalized but have not been implemented. Donors have financed projects to improve city's hardware, roads,

sanitation etc. But these projects have not made any significant improvement in employment and productivity. Government needs to reform cities and stop pursuing financing of projects. Reforms will generate investment, employment, innovation and revenue. Reforms can only solve fiscal and urban problems. Deregulating city space, employing competent city management, modernizing and professionalizing civil service can put us on path of growth and development (Haque, 2015).

Adeel et.al (2016a) explains three broad constraints that Islamabad and Rawalpindi face constraints in urban modes of transportation i.e. regulatory, spatial and demand related constraints. Transport routes in Rawalpindi and Islamabad were defined in early 1980s without any survey or analysis. As two different authorities i.e. RTA and ITA, manage RIMA's transport system and lack of coordination makes it difficult to enforce uniform standards and regulations. With regard to spatial constraints buses, BRT, Suzuki/wagon service demonstrates high level of spatial constraints. Moreover, these transport services are available for the people at 10 to 20 minutes walking distance. This lack of accessibility to public transport makes room for other modes of transport such as Qingchi to cover the gap. As far as demand constraint is concerned students and employees prefer using buses and minibuses. As compared to Suzuki and wagon service, buses are more comfortable and gender friendly and have more seating capacity. These transport usually run from residential and commercial areas and low-paid population use it as means of travel. Therefore, buses are lower in number and during peak hours demand constraint for buses remain high.

2.5 Social Exclusion caused by Lack of Transport

People who are not able to participate in everyday social activities such as education, employment, health etc. are considered socially excluded. Social exclusion creates poverty and bar people from improving their well-being. The studies have shown that most of the people are excluded socially owing to poor transport services. Lack of transport not only limit peoples mobility but also limits them to think beyond the border for different opportunities. In Asian context, very less work has been done to study the issue of transportation and social exclusion. Even in Pakistan, the issue of public transport and social exclusion are rarely given attention because of lack of interest by the government. Moreover, poverty, underdevelopment and gender gap is further deteriorating the issues of social exclusion with the regard to public transport (Adeel et al., 2016b).

Paez, (2012) says lack of access or inability to take part in activities is considered as social exclusion. Transportation, if available, can ensure inclusion of all the people of society in social activities. Paez, (2012) suggest that well-being is related to participation in activities including travel and transportation improves well-being to greater extent. Inclusion of people is necessary to meet the basic needs of people. According to Lucas, (2012), a study was conducted on transport and social exclusion by Social Exclusion Unit (SEU) which revealed relation of transport disadvantage with unemployment, health inequalities, and poor educational attainment. In the field of social research much has been written about social exclusion as theoretical concept. There is consensus that social exclusion is multi-layered and multi-dimensional deprivation that goes beyond poverty. Adopting social exclusion approach helps us identify that transport disadvantage is multi-dimensional problem which can affect individual as well as whole society. Concept of social exclusion also keeps in view the causal factors such as disability, gender, race and area having lack of transport facilities, national, global economy, labour market etc. Lucas, (2012), thinks that the concept is important in a sense that it also relates social exclusion of people with institutions or delivery agencies who are responsible of delivering benefits from their policy decisions and practices.

Travel enables people to reach out opportunities such as education, employment etc. and lack of mobility options leads to social exclusion and put people at disadvantage. All the travel modes require money, and those affording it can enjoy wider range of opportunities. Providing affordable transport can help reduce poverty and enhance economic efficiency. The theory of spatial mismatch defines the relationship of transport and poverty from geographical context. This theory explains that how poor people are affected due to rapid urbanization and high reliance on car or transportation. Those who can afford transportation have access to jobs and other opportunities as compared to those who cannot. Moreover, poor has to face the issue of travel cost, distance to activities from home and income. The concept of spatial mismatch helps us understand pattern of travel by the people for work, education or training and helps us devise a solution for those who are deprived from the transportation facilities (Titheridge et.al 2014).

Transport disadvantage or mobility have clear impacts on individual and society. But one cannot establish it as fact that social exclusion occurs only because of transport disadvantage. People may have access to transport but could be socially excluded or they may not have good access to transport but still be highly socially included. Transport disadvantage can have direct or indirect relation to poverty because it can socially exclude owing to inaccessibility

of goods and services. Survey reveals that poor and socially excluded people are among those who have less access to transport. Moreover, in the US people who have low income or do not own a car have less access to public transport resultantly making it difficult for them to access employment and other services. In Australia, young people, low income households and aboriginal people face difficulties in accessing employment, education and leisure activities. Similarly, a survey in Canada, found that low income people are disabled and elderly, and travel short distances and have less access to services and facilities. Similar findings were revealed in a survey in South Africa that low income people have relatively poor access or no access to public transport. It can be deduced from above facts that less mobility and less access to facilities lead to social exclusion and affects well-being (Lucas, 2012).

According to Titheridge et.al (2014), students are not able to participate fully in social activities because the trips are not affordable. Same is the case with unemployed people. They have to rely upon public transport for job interviews and job opportunities. Elderly people from low income group faced problems of accessibility and affordability for travel. Elderly people prefer to take short trips in public transport in order to obtain food and medical supplies they need. Women also face number of barriers while accessing public transport. Women face personal safety and security issues and find it difficult to carry heavy baggage in public transport from food stores. Rural and deprived areas are quite risky for pedestrians and especially for young children. Reckless driving is observed in deprived areas and there is higher chances of getting injured or killed. Social exclusion theory, which mainly refers to the loss of ability to take part in social activities or in society, helps us understand the consequences of transport deprivation. Transport related social exclusion can be defined as people who are unable to participate in social, political and economic life due to nonavailability of transport have to live low quality of life and have limited access to opportunities. Transport related exclusion affects people's wellbeing and quality of life (Titheridge et.al 2014).

Paez, (2012) says that there has been lack of theoretical development with regard to disabilities research. Research in disability is available using biomedical and social model. In order to analyse the transport related social exclusion, Paez adopted above mentioned dimensions to develop a conceptual framework. In this framework, there are different five level of factors and effects. Personal, living space and economic components are linked with demographic, economic and environmental variables that describe an individual and

surrounding environment. These factors affect mobility of a person at different level. A results of the study conducted by Paez, (2012) show that age has negative impact on activity participation it may be because of reduced social network. People with disabilities (male) would attend events but are less likely to visit friends. Whereas married couple with children will visit parks and museums quite less. Family status and size was also one of the factor in activity participation (Paez, 2012).

Titheridge et.al (2014) says that social justice theory examines inequality arising out of transport related problems. Transport problems falls in the ambit of governance, hence, good public policies are the solution to transport problems. Social justice theory helps us analyse causes of transportation disadvantages in vulnerable areas where communities are deprived of transport and are isolated. Moreover, people with low income are likely to travel less and take walk trips or use bicycle as compared to those whose income is relatively higher. In rural areas, people with low income also face access problems as compared to people living in urban areas. Rural areas have less accessibility of transport and consequently they participate less in activities. Non-availability and inaccessibility of transport makes it difficult for people to access, education, job, employment and other opportunities. Due to lack of planning, even urban areas face issue of insufficient transport services. People living in such deprived urban neighbourhoods have to pay more for food and other facilities. It also reduces their ability to access healthcare.

A widely cited definition of transport related social exclusion given by Kenyon highlights that reduced accessibility and mobility prevents people from participating in economic, social and political affairs of life. Moreover, social exclusion in multidimensional are, physical exclusion, geographical exclusion, economic exclusion, time based exclusion, fear based exclusion, space exclusion and exclusion from facilities. In order to address multidimensional exclusion requires policy assistance in order to enhance the social capital of community by improving transport services and better planning. Multidimensional exclusion can be addressed by taking place, social and individual based measures. Theorists argue that social exclusion is caused by unequal distribution of network capital in society, which generates differential opportunities, access of goods and services for socially stratified individuals and communities. Moreover, geographers have identified transport related disadvantage with respect to time and space. Research carried out by them suggests that societal and structural changes have generated inequalities, poverty and social exclusion for people (Lucas, 2012).

Transport poverty is a complex term and various attempts have been made by different researchers to define it. Transport poverty is defined by various measures such as, poverty of access, transport wealth and transport hardship. But the national data on transport poverty can be taken to assume and define transport poverty. However, there seems to be general agreement that by identifying those people who experience difficulties accessing key activities and one can evaluate the impact of transport on vulnerable and deprived groups. Transport can be used to address the issue of poverty. Transport enables people to reach employment and educational opportunities. Government can provide unemployed cheaper travel to find jobs. Moreover, children's and college going students can be given access to free transport for their educational activities. Disabled and elderly can be given concessionary travel passes for trips to facilitate them. Since poor are more likely to use public transport, transport schemes in deprived rural and urban areas can help people uplift their socio-economic status (Titheridge et.al 2014).

Lucas, (2012) argues that social exclusion theories have arisen from the social policy disciplined from mid 1990s. Theoretical and policy progress have been made in transport related social exclusion. Moreover, it has also developed different methodologies to identify transport related social exclusion. Countries have taken into account the findings of social exclusion and transport disadvantage in their local transport polices and have taken measures to address issues and problems. After detailed research and identifying problems being emerged by transport disadvantage, United Kingdom, Australia and Canada have taken measures to make transport inclusive. Policy makers in respective countries have developed system approach and have carried out accessibility planning in local transport. Evaluation research has shown that public transport has brought improvement in deprived areas in terms of access to employment, education, health care facilities and other services (Lucas, 2012).

2.6 Transport Policies in Pakistan

Movement of goods and people in cities require transport. Study reveals that traffic will continue to grow along with growth of economic and social activities. Urbanized cities houses malls, parks, industrial areas, production sites and much more, therefore it causes increased mobility. A transport policy that includes infrastructure, vehicle, and operation, cycling and walking can reduce traffic, infrastructure cost and waste of natural resources. A public transport needs to be affordable and accessible for all those who do not have personal cars and are elderly. Therefore, multimodal transport facility can help community growth and

development. Corruption, lack of governmental financial assistance and ill planning are obstructing economic growth and community development. Expansion of urban cities like Karachi, Lahore and Islamabad/Rawalpindi are causing problems in mobility of people. In order to solve the issues, short and long term planning is required to cater the increasing needs of cities (Imran 2009).

Government of Pakistan is realizing that sustainable economic growth is strongly linked to efficient transport system. Transport sector contributes 10 percent to the GDP and provides 6 percent of total employment in Pakistan but deteriorated condition of transport and road sector is hampering economic growth. Congestion and traffic on roads is being caused by poor urban planning and growing motorization in the country. Resultantly, poor roads and congested traffic is hampering mobility of freights for internal trade and export's. Logistics services provided by transport sector are poor and not up to the mark (Sánchez et.al, 2013).

After 1947, railways was the only mode of intercity transport in Pakistan. It carried largest number of passengers and in first 5 year development plan, almost 70 percent of the investments were made in railways as compared to 30 percent in road transport (Imran 2009). Government of Pakistan established West Pakistan Transport Board in 1957, in accordance with the recommendations made in first five year plan (1955-60). For the first time road sector was given priority over railways and funds were allocated to introduce 500 new buses for intercity public transport and 1200 buses for urban transport in Karachi. In addition to this, private sector was also encouraged under first five year plan in road transport due to rapid growth of population and high demand. In 1991, National Transport Policy was published by National Transport Research Centre, which suggested adopting bus based transport system as compared to rail based transport. The transport policy also recommended to provide efficient and low cost transport to low and middle income groups. Moreover, Nawaz Sharif's government in 1991 introduced Transport Scheme in 1991 in order to provide relief to the people in importing taxis, buses and mini buses. This policy was aimed at improving public transport system (Imran 2009).

However, during Benazir Bhutto's regime in 1996, mass transit project was initiated to connect twin cities of Islamabad and Rawalpindi. The project was rail based which carried passengers from both the cities. This project failed to function owing to lack of planning and financial losses. Similar kind of project in Karachi, Rawalpindi and Islamabad under the name of Awami Bus Train was initiated by the Benazir Bhutto's government. This project

provided transport service to the people during peak hours but due to lack of interest and financial losses, this project was also shut down (Imran 2009).

National Integrated Transport Policy was prepared in 1998 which recommended use of land transport. Moreover, the policy also suggested a zoning plan for different land uses with reservation of land for future urban transport infrastructure. In addition to this, an effort was made by Government of Pakistan and international development agencies to chalk out transport policy. Consequently, Transport Sector Development Initiative (TSDI) was prepared in 1999, where policies regarding privatization and deregulation of public transport were framed. Later on these policies were incorporated by the NTRC transport policy in 2001. Moreover, in 1999, national transport strategy was developed to attract investments in public transport sector. The policy aimed at introducing buses as mode of urban transport. Similarly, in 2000s, National Transport Policy was drafted by Planning and Commission. This policy also suggested bus based transport system as solution to metropolitan cities (Imran 2009).

Planning Commission, (2018) considers transport as driver for socioeconomic development. It enables people to access markets, jobs, education and prevents people from social exclusion. Pakistan has spent huge amount of money on China Pakistan Economic Corridor (CPEC) to develop and turn transport sector in modern and sustainable. The National Transport of Policy of Pakistan 2018 aims at improving transport sector. The policy inculcates the principles of governance, policy objectives and implementation arrangements. Pakistan has a population of 210 million out of which 76 million live in cities. Transport sector contributes 22.3 % to the GDP and accounts for 6 % of nation's total employment. Keeping in view the challenges faced by transport sector, a national transport policy (2018) has been designed to steer the development process in the country. The policy also aims at achieving sustainable development goals. By providing sustainable transport people can access employment, healthcare and education. This will consequently result in eradicating poverty and hunger. After providing affordable and accessible transport in the urban areas, urban cities will become sustainable and liveable (Planning Commission, 2018).

According to Planning Commission, (2018) the vision of this National Transport Policy of Pakistan 2018 is to provide durable, safe, affordable, and environmentally friendly transport. Furthermore, the policy aims to provide transport in order to ensure access to jobs, markets, education, and other services. Objective of the National Transport Policy would be to improve the connectivity and accessibility for all the people and enable them to access, jobs employment etc. Furthermore, its objective is to achieve sustainable growth and compete at international level economically. To achieve policy objectives would require better policy directions in overall transport sector. Roads would be improved for smooth movement of passengers and connectivity of communities. Further, urban transport will be planned and integrated. Buses and metro projects would be initiated across all the urban cities (Planning Commission, 2018). To implement the policy would require coordination of all the concerned ministries and divisions of federal and provincial government. Implementation of the transport policy shall be overseen by Federal Cabinet in coordination with the Transport Ministry. The responsibility of the Cabinet would be to monitor, coordinate, and evaluate the implementation of the policy. It will be also responsible to review the performance and suggest actions/measures to successfully implement the policy. (Planning Commission, 2018)

Historically, various transport policies have been drafted and implemented in Pakistan. On the other hand, there have been many shortcomings in development and implementation of public transport policy. Pakistan faces issues of investments, management and operation. Government of Pakistan deregulated public transport and encouraged private sector to fill the gap but private sector could not meet the growing demand up to the mark. Consequently, Suzuki's, wagons and private vehicles started operating in urban areas which created heavy traffic in the cities. Sustainable transport requires, adequate financing, infrastructure, planning and governance. These characteristics were missing in Pakistan's public transport organization (Imran 2009).

Imran, (2009) believes that Pakistan has failed to develop capacity to manage public transport system and has remained negligent in developing such high capacity. Moreover, it has failed to utilize existing land patterns for development of efficient public transport. One cannot ignore the important role of governance, capacity building, investment and urban planning in efficient public transport system. There is dire need to improve governance structure. National Transit Authority be created in place of National Highway Authority along with public transport organizations at metropolitan level. Pakistani cities need to revitalize existing intercity railway networks into urban rail networks that can carry plenty of passengers. There is dire need of discouraging use of private cars by investing in public transport and nonmotorized projects. Government must provide incentives over use of public transport and disincentives over use of private cars. (Imran 2009) Masood et.al., (2011) suggests that Pakistan lags behind in research and development. Developing countries need research in transport sector in order to use their indigenous resources efficiently. A qualified person having expertise in transportation sector be appointed in devising policies and managing projects. Higher education should produce people in city planning and transportation to meet the demands. International donor agencies such as USAID, ADB and World Bank has been given Pakistan aid maintenance and construction of existing roads. One cannot deny the importance of maintenance but we need more roads that would connect cities and ease road problems. Owing to poor roads, lack of driver training and signs, Pakistan has one of the highest ratio of accidents in the world. Providing, education through schools, media campaigns and improving police efficiency and help improve road safety in Pakistan.

Masood et.al. (2011) says that policy makers are unable to build consensus over distribution of intra-modal traffic. In Pakistan, government has failed to meet the transport needs of people and private sector has been taking 80 % load of passengers. Government is hardly taking any load. Due to inefficiency and corruption, many bus projects like Omni-Bus in Lahore has failed to function. Eliminating *rikshaws*, *suzukis* and minibuses would not resolve transport problems. Transport system of any city is like a tree branch and every branch is useful in its own way. Therefore, *rikshaws*, *suzukis* and minibuses perform its function to meet the transport demands.

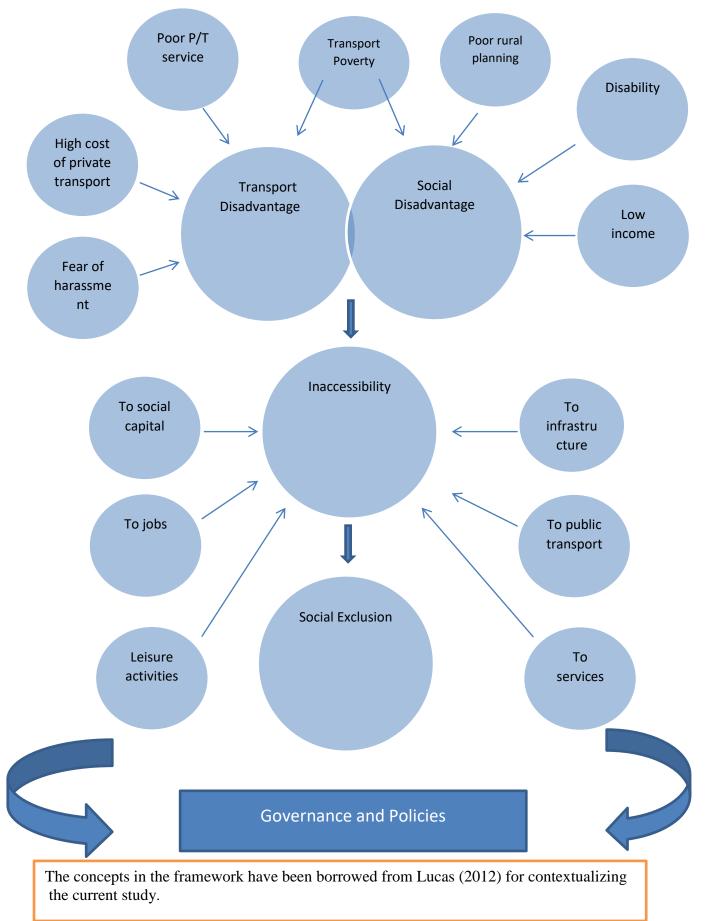
In the last decade, Pakistan has taken various steps to transportation sector and cities like Karachi, Lahore and Islamabad has improved road efficiency to reduce traffic problems. But comprehensive transport policy is needed for future projects by using modern technology. Improving streets and roads are not the long term solutions. We need Light Rail Vehicles (LRV) in our cities as a long term solution. Light Rail Vehicle plan can be implemented in Islamabad. Feasibility study for LRV in Islamabad should be done by government in collaboration with international construction agencies and investors. LRV line could run from new airport to Islamabad Secretariat. LRV could establish free and secure parking spaces where people could park their cars and motorcycles and ride LRV. Private minivans and buses could drop people at LRV stations from neighbourhoods (Masood et.al, 2011).

Presently, Rawalpindi/Islamabad lacks proper bus service. Suzuki's and minivans operate in the city by private sector which cannot meet the transport demands and citizens cannot afford cost of *taxis*. Population of both cities is growing at faster rate and transport sector cannot

cater the increasing transport demand. This results in traffic, accidents and environmental pollution. CDA should construct bicycle tracks and walkways. There needs to be multi-modal transport plan and traffic police needs to be trained in better way to avoid traffic jams and accidents. Research facilities should be improved and planning; designing should be done to solve the transport problems in both cities (Masood et.al, 2011).

The existing literature review has identified the economic and social disadvantages of inaccessible transport in Pakistan as well as in other developing countries. The urbanization and public transport are strongly interrelated as urbanization requires adequate and planned transport for movement of people for activities including women and persons with disabilities. International, regional and Pakistan's literature defines importance of accessible and affordable transport as it ensures social inclusion of people. International organizations has identified importance of universal design which ensures public transport accessible for all. Much research work is done internationally on accessibility of public transport for disabled persons and women. However, studies have been conducted in the context of Islamabad wherein transport problems faced by male, female and other underprivileged groups have been studied in detail. But in the context of Islamabad, research gap is found with regard to problems being faced by disabled persons and women in accessing affordable public transport in Islamabad, Pakistan and social exclusion thereof. My research has filled this gap to some extent and will help make further research in future.

2.7 <u>Conceptual Framework</u>



I have used various theoretical concepts for conducting this research and to understand and study accessibility and affordability of public transport in Islamabad. The concepts cover social exclusion, inaccessibility, transport disadvantage and social disadvantage.

Transport disadvantage, transport poverty and social disadvantage are interrelated as these hamper mobility of women and disabled persons. Transport disadvantage puts people in a position where they are unable to access public transport due to poor service for accessing employment, social network, services and other opportunities and activities.

Adeel (2016) explains social advantage by personal and household socioeconomic status, and transport disadvantage as access to land use and public transport resources, these two interact with each other to create transport poverty. All these above mentioned elements results in reduced mobility, inaccessibility and limited activity participation and in turn it leads to increased level of exclusion.

The concept of Transport poverty is defined by Titheridge (2014) as travel enables people to reach out opportunities such as education, employment etc. and lack of mobility options leads to social exclusion and put people at disadvantage. All the travel modes require money, and those affording it can enjoy wider range of opportunities. The theory of spatial mismatch defines the relationship of transport and poverty from geographical context. This theory explains that how poor people are affected due to rapid urbanization and high reliance on car or transportation. Those who can afford transportation have access to jobs and other opportunities as compared to those who cannot. Moreover, poor has to face the issue of travel cost, distance to activities from home and income. The concept of spatial mismatch helps us understand pattern of travel by the people for work, education or training and helps us devise a solution for those who are deprived from the transportation facilities.

Lucas (2012) explains that social exclusion revolves around the the lack or denial of resources, rights, goods and services. Moreover, people are considered socially excluded when they are unable to participate in activities which are available to the majority of people in a society. The activities may include economic, social, cultural or political affairs of life. It affects both the quality of life of individuals and the equity and cohesion of society as a whole.

The concept of inaccessibility of public transport have been discussed by Adeel (2016), Bank A.D (2015) and T. U. (2019) that inaccessibility of public transport caused reduced participation in society. Women and persons with disabilities face difficulties while accessing

public transport owing to lack of safety, facilities and services. Transport infrastructure and design which must be accessible for all are also discussed.

Furthermore, the concept of urbanization and government's policies are highly important while planning transport policies. Imran (2009) discusses about transport infrastructure and policies pursued by Pakistani government since independence and identifies loopholes and gaps to be filled. Haque (2020) discusses the concept of urbanization and need for including transport policies and infrastructure that encourages economic growth and ensures inclusion of people in economic arena.

All the above discussed concepts have been chosen to study the accessibility of public transport in Islamabad as it encompasses the concept and theories used for this framework.

Chapter 3

Research Methods and Methodology

3.1 Introduction

In this chapter, research methodology, research strategy and research design are explained and justified in detail. Further, it covers explanation and justification of research tools, units of data collection and procedure of data collection. This chapter also explains, sampling framework and sampling techniques. Finally, qualitative analysis and the stages of framework analysis are defined and explained.

3.2 Research Strategy

The current study uses qualitative research strategy in which the objective is to collect data from women, disabled persons, and public transport drivers/conductors, officials of Islamabad Transport Authority (ITA), District Regional Transport Authority Rawalpindi and National Transport Research Centre (NTRC) and to know about their experiences/opinion.

3.3 Research Design

For the current study I have chosen Explanatory research design. This design explains a phenomenon and making connections among concepts which are broken down into variables. It looks at the research matter in detail and provides an in-depth analysis of the research problem. Since the study's research problem aims to highlight the accessibility and affordability of public transport in Islamabad, hence an explanatory research design seemed to be most appropriate for the current study.

3.4 Methods of Data Collection

In this study primary data have been collected through interviews, observations and content analysis have been done as a tool of analysis for secondary data.

3.5 Units of Data Collection (UDCs)

UDCs are the sources which yield data for the researcher. My study's UDCs are:

3.5.1 UDC 1: Officials of National Transport Research Centre (NTRC), District Regional Transport Authority, Rawalpindi (DRTA) and Islamabad Transport Authority (ITA)

The first UDC include the relevant authority and officers of DRTA, Rawalpindi and ITA who directly deal/manage public transport operating in Islamabad and Rawalpindi. I chose them as my UDC to know about the transport issues and transport policies of Islamabad. Furthermore, I have also selected officials of NTRC as my UDC because they are part of research wing of Ministry of Communication and they provide transport related research to the government. This UDC helped me understand the government's perspective and policies about public transport. Data collected from the officials have been transcribed, translated and have been compiled for thematic analysis.

3.5.2 UDC 2: Transport Owners

UDC 2 were the public transport owners who are operating their vans from Bara Kahu, Taramri, G-9 and G-6. I chose this UDC in order to know about how they recruit drivers and conductors and problems they face while operating public transport in Islamabad. Further, the said UDC helped me gather data about barriers and hurdles that transport owners face while operating transport service. Rationale behind choosing this UDC is to know about the public transport services being provided by the transport owners.

3.5.3 UDC 3: Transport Drivers and Conductors

UDC 3 were public transport drivers and conductors. I chose them as my UDC because they operate the public transport in Islamabad and inhabit lived experiences and embody knowledge of routes, services for the study subjects, issues faced etc. for the women and the disabled. The said UDC helped gather information about the provision of safety and security to women passengers by drivers and how do they accommodate disabled persons.

3.5.4 UDC 4: Employees of BRT

UDC 4 were employees of BRT who were working in the Metro Bus Stations. I selected this UDC to know whether women and disabled persons travelled in the Metro Bus and what difficulties and problems they faced while traveling in BRT. The said UDC helped collect data about whether women faced any harassment in the BRT and whether disabled person travel in the BRT.

3.5.5 UDC 5: Women and the Disabled People

Existing literature, as highlighted in the study's review of literature and conceptual framework, identifies problems such as transport poverty, social exclusion, social disadvantage, and transport disadvantage, among others. In order to detail granular issues about these problems, I chose this UDC to know about the experience and views of women and disabled persons while travelling in all the modes of public transportation in the selected sub-locales.

3.5.6 UDC 6: 2018 Transport Policy

The basic tenets of this policy have been reviewed in the study's review of literature. I have also analysed policy using **qualitative content analysis**, which helped me in highlighting whether (or not) the policy contents concern with the issues faced by women and disabled people and whether (or not) there are gender- and disability-specific needs in the public transportation system in Pakistan. Further I analysed how far the transport policy have been implemented and whether it was effective or not.

UDCs	Research	Research	Sampling	Approach and
	Methods	Instruments		Tool of
				Analysis
UDC 1:	Semi-structured	Торіс	Purposive	Approach:
ITA, DRTA &	interviews	Guide/Interview	Sampling	Thematic
NTRC Officials		Guide		Analysis
				Tool:
				Framework
				Analysis
UDC 2:	Semi-structured	Торіс	Purposive	Approach:
Transport	interviews	Guide/Interview	Sampling	Thematic
Owners		Guide		Analysis
				Tool:
				Framework
				Analysis
UDC 3:	Semi-structured	Торіс	Purposive	Approach:
Transport	interviews	Guide/Interview	Sampling	Thematic
Drivers and		Guide		Analysis
Conductors				Tool:
				Framework
				Analysis
UDC 4:	Semi-structured	Торіс	Purposive	Approach:
Employees of	interviews	Guide/Interview	Sampling	Thematic
BRT		Guide		Analysis
				Tool:
				Framework
				Analysis
UDC 5:	Episodic	Торіс	Convenience	Approach:
Women and the	Interviews (EIs)	Guide/Interview	Sampling	Thematic
Disabled people	& Problem-	Guide for EIs,		Analysis
	centered	PCIs & FGDs.		Tool:
	interviews			Framework

Table 3.1: Study's Methodological Framework

	(PCIs)	Field diary,		Analysis for
		notes, and index		textual data.
	Focus Group	cards for		
	Discussions	observational		
	(FGDs)	method.		Visual analysis
				for visual data.
	Unstructured	Visual		
	participant	techniques		
	observation	(photographic		
		and/or sketch)		
	Social mapping	for social		
		mapping.		
UDC 6:	Please see last	Please see last	Purposive	Approach:
Transport	column	column	Sampling	Structural
Policy				Analysis
				Tool: Content
				Analysis

3.6 Observation

Observation is also a scientific tool and the method of data collection in which information is sought by researcher's observation without asking from the respondent. During my research work I observed that how women were being seated in the local vans by drivers and conductors and also saw that how difficult it was for females to find a seat during rush hours as crowded male passengers embarked upon the van by pushing each other leaving no space for females. In addition to this, I did not see any disabled passengers traveling in the local van during my research work.

Similarly, I travelled in the public transport and observed as how females felt uncomfortable when conductors overloaded male passengers and making them stand beside female seats and females would get touched by the passengers while embarking and disembarking from the van. While my research in metro bus stations I observed that most of lifts, elevators installed there were not functioning and majority of the metro bus stations had no slope on the entrance which made metro bus stations inaccessible for disabled persons.

In this manner, I conducted observation by visiting the locales under the study to gain more insight of the problems related to public transport in Islamabad.

3.7 Interviews

I have conducted both semi structured and unstructured interviews from the respondents with open ended questions as a tool for collecting the data so that the respondent can freely express their experiences about the public transport, moreover, all the interviews were recorded with the consent of interviewees.

3.8 Sampling

Since I had to highlight the problem of specific group of people to reflect particular group within population such as disabled persons and females therefore I have used non-probability sampling technique in this study. Since the UDC 1, 2, 3, 4 are the experts and stakeholders in this study therefore, purposive sampling has been chosen because it suits best for the current study. Finally for UDC 5 I have used convenience sampling for UDC 5.

UDCs	Sampling	Type of Interview	Number of
			Respondents
ITA, DRTA & NTRC Officials	Purposive	Semi-structured	6
Transport Owners	Purposive	Semi-structured	6
Transport Drivers and Conductors	Purposive	Semi-structured	6
BRT Employees	Purposive	Semi-structured	10
Women	Convenient	Unstructured	14
Disabled Persons	Convenient	Unstructured	5

Total number of interviews that were conducted from respondents were forty six in number for the current study. Respondents were chosen from the locales of Islamabad including rural and urban areas and respondents were also interviewed at Metro Bus Stations. Most of these forty in-depth interviews also include group discussions.

3.9	Profile of Female Respondents
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Sr.	Gender	Years of	Preferable	Frequency	Purpose of Travel	Income	Average	Vehicles	Walking
No		Education	Modeof	oftravel		Spent on	waiting	Change	Distance
			Transportation			Transport	Time		from
			_			(PKR)	(Minutes)		home to
									Bus stop
									(Minutes)
1.	Female	14	Metro Bus	Daily Basis	Education	3000	5	2	25
2.	Female	16	Van	Daily Basis	Education	1200	25	2	10
				-					
3.	Female	18	Van/Uber	Daily basis	Education/work/shopping	5000	20	2	10
4.	Female	16	Van/Uber	Often	Education/shopping	3500	20	3	30
5.	Female	14	Metro	Daily basis	Education	1100	5	2	40
6.	Female	14	Metro	Daily basis	Education	1100	5	2	20
7.	Female	14	Metro	Daily basis	Education	1100	5	2	10
8.	Female	16	Van/Uber	Often	Education/social work	3000	10	2	5
9.	Female	16	Metro	Daily basis	Work	1500	5	0	30
10.	Female	14	Van	Daily basis	Work	3500	15	2	15
11.	Female	14	Uber/Personal	Daily basis	Education/social work	15000-	0	0	0
			vehicle			20000			
12.	Female	16	Van	Daily basis	Education	2000	15	2	20
13.	Female	16	Van/Uber	Often	Education/social work	5000	20	2	10
14.	Female	16	Uber/Personal	Daily basis	Work	15000-	0	0	0
			vehicle			20000			

Overall, the sample respondents are young and fell in the age group of 18-35 years. Most of the female respondents were students and had 14 years of education. Majority of the respondents used local transport on daily basis followed by metro and Uber. The purpose of their travel is to access education and spent average Rs.5000 on transport. The average wait time for public transport of the respondents is 10.5 minutes and changed 2 vans to reach destination. Moreover, they walked 16 minutes in average to reach the nearest bus stop to catch a van.

3.10 **Profile of Disabled Respondents**

Sr.	Gender	Years of	Preferable Mode	Frequency of	Purpose of Travel	Income	Average	Vehicles	Walking
No		Education	of Transportation	travel	-	Spent on	waiting	Change	Distance
			_			Transport	Time		from
						(PKR)	(Minutes)		home to
									Bus stop
									(Minutes
1.	Male	14	Personal	Daily Basis	Work	16000	0	0	0
2.	Female	14	Uber/Personal	Daily Basis	Education/Work	20000	10	0	0
3.	Male	16	Van/Uber/Bykea	Daily basis	Education/Social	5000	20	1	10
					Work				
4.	Female	16	Van/Metro	Often	Education/Social	2000	10	2	15
					Work				
5.	Female	14	Metro	Daily basis	Work	1500	5	1	10
6.	Male	12	Van	Daily basis	Work	2000	15	2	10

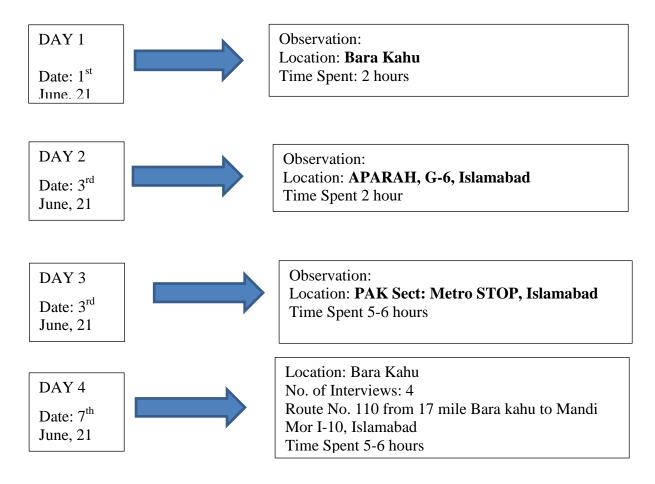
Most of the disabled respondents had 14 years of education and used public transport for education or work. Wheelchair users were more likely to use personal car or Uber to travel and to access educational institutes or offices. However, those disabled persons who were not on wheelchair were likely to use local vans. Cost of transportation for wheelchair users were higher than the non-wheelchair users.

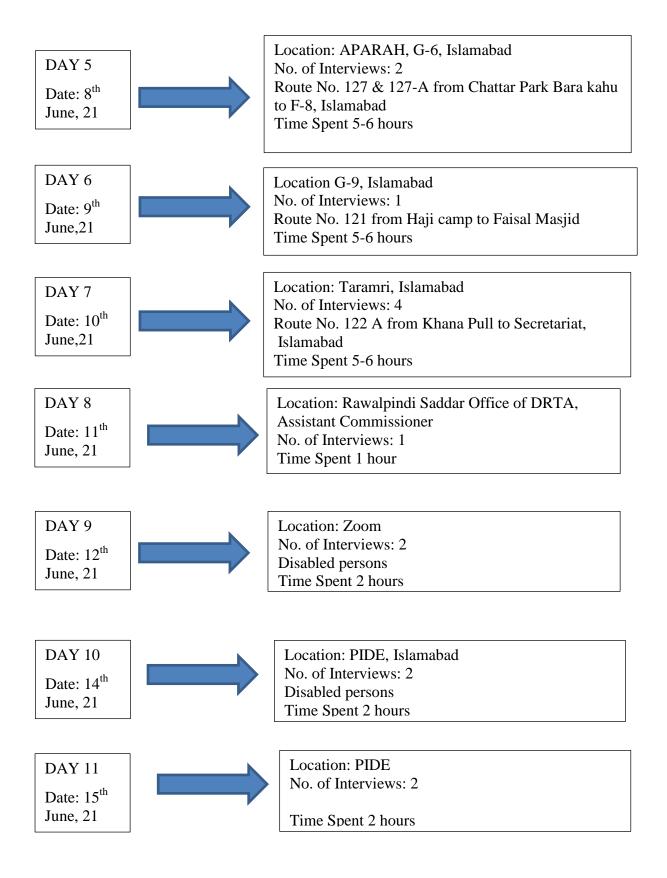
3.11 Research Ethics

As a matter of ethical confidentiality, the names of the disabled respondents used in the case studies are fictitious.

3.12 Research Timeline

I have illustrated my research timeline bellow which specifies days, dates and number of interviews conducted during the field work. However, the description of locales is discussed with social mapping in chapter 4 of this study.





DAY 12 Date: 16 th June, 21	Location: Bara Kahu, Islamabad No. of Interviews: 1 Time Spent 1 hours
DAY 13 Date: 21 st June, 21	Location: Pakistan Secretariat Metro Stations, Islamabad No. of Interviews: 4 Time Spent 5 hour
DAY 14 Date: 22 nd June, 21	Location: 7 th Avenue Metro Station, Islamabad No. of Interviews: 4 Time Spent 5 hour
DAY 15 Date: 23 rd June, 21	Location: PIMS Metro Station, Islamabad No. of Interviews: 4 Time Spent 5 hour
DAY 16 Date: 24 th June, 21	Location: Ibn e Sina Metro Station, Islamabad No. of Interviews: 4 Time Spent 5 hours
DAY 17 Date: 25 th June, 21	Location: Khayaban e Shuahrwardry No. of Interviews: 4 Time Spent 6 hours
DAY 18 Date: 28 th June, 21	Location: PIDE No. of Interviews: 2 Time Spent 3 hours
DAY 19 Date: 16 th June, 21	Location: National Transport Research Centre, Islamabad No. of Interviews: 3 Time Spent 4 hours
DAY 20 Date: 22 nd June, 21	Location: Secretary Islamabad Transport Authority office No. of Interviews: Group interview (2 persons) Time Spent 1 hours

3.13 Data Analysis

Framework is a method or technique which provides us way or systematic structure to manage, analyse and identify themes from the high volume of data. For the current study I have used framework analysis which is a way of generating themes. The steps that I have undergone for the construction of thematic framework are discussed below

3.13.1 Transcription & Translation

The interviews that I had conducted were all recorded and transcribed word by word in Roman Urdu language at the onset and later the transcriptions were translated into English language for this study. However, the words or utterances such as "hhmm" "huuh" and repeating words like "right" "yes" or "yeah" were omitted to produce coherent text for the study.

3.13.2 Familiarisation

Having data in the form of audio recordings, field notes and transcripts I familiarized myself with the data time and again and went through all the interview transcripts numerous times to search for themes and key points.

3.13.3 Coding

For the current study, all the transcripts were coded sentence by sentence and line-by-line coding was adopted. Line-by-line coding provides at least one code to each phrase, line, or sentence in the data. This gave careful detail and attention to each line, thus taking every detail within the transcripts. I took some notes in the text and identified the segments of data with different colours of highlighter as Braun and Clarke (2006) suggested.

3.13.4 Thematic Analysis

In this research study, this technique has been used to analyse the coded data. As mentioned above, I familiarized myself with transcripts of the data and then the same was coded and themes were generated. Later the data was analysed thematically for the current study.

Chapter 4

Locales

4.1 Introduction

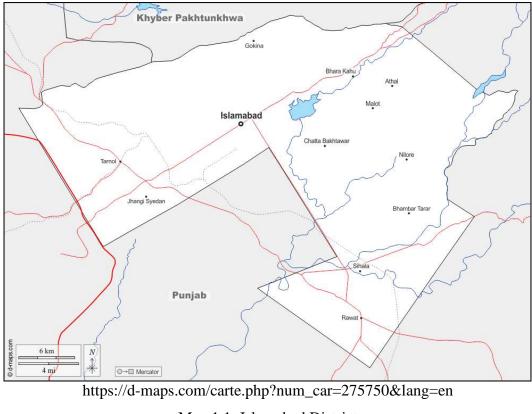
The current research was conducted in four locales of Islamabad that includes Bara Kahu, Taramri, G-9 (Karachi Company), G-6 (Aabparah) and five metro bus stations i.e Pak Secretariat, 7th Avenue, PIMS, Ibn e Sina and Khayaban-e-suharwardy. Out of these locales Bara Kahu and Taramri belong to rural areas of Islamabad and the rest of the locales are situated in urban areas of Islamabad.

4.2 Islamabad

Islamabad is a capital of Pakistan which was built in 1960. It is situated in the Northwest of the country on Potohar Plateau. Total area of Islamabad is 906 Sq. KM, in which the urban area consists of 220.15 Sq. KM and rural area is 466.20 Sq. KM respectively (CDA).

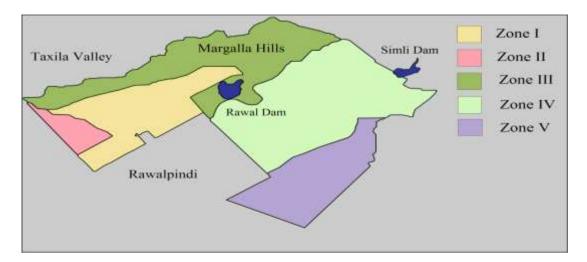


Map. 1 Islamabad Source: <u>https://www.worldatlas.com/maps/pakistan</u>



Map 1.1: Islamabad District

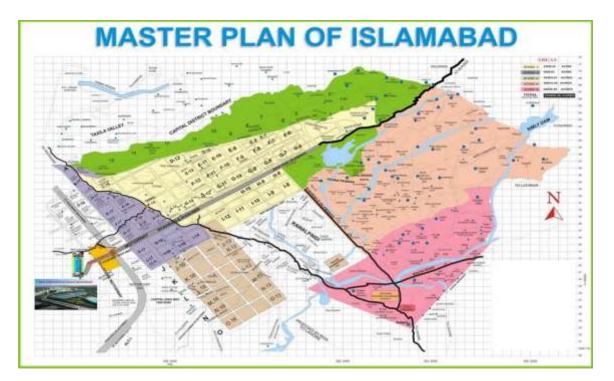
Islamabad city is further divided into five major zones: **Zone I, Zone II, Zone III, Zone IV**, & **Zone V**. Zone IV of the Islamabad is the largest zone whereas Zone I is the largest developed residential area and is divided into sectors. Each residential sector is identified by a letter of the alphabet and a number, and covers an area of approximately $2 \text{ km} \times 2 \text{ km}$ (CDA).



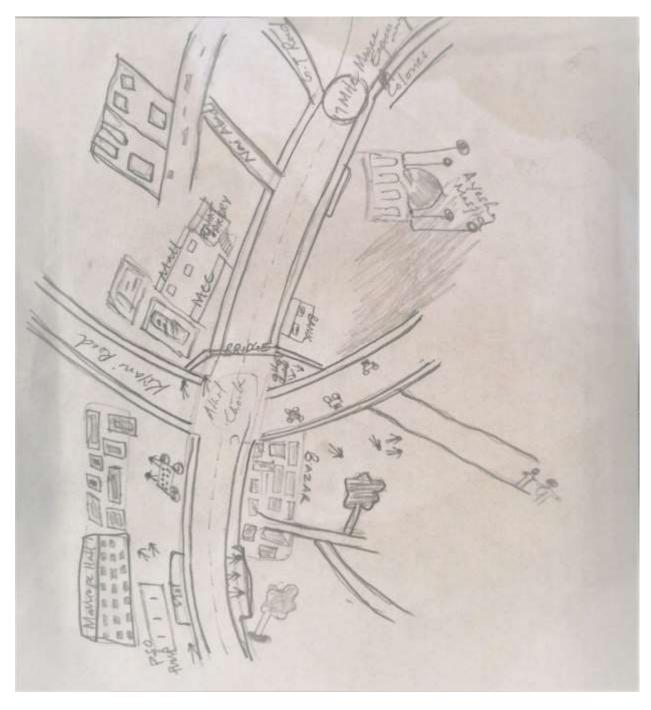
Source: https://tribune.com.pk/story/94988/in-danger-commercialism-threatensislamabad%E2%80%99s-beauty

Map 1.2 Islamabad Zones

The entire city is divided into horizontal and vertical lines which makes sectors and sub sectors roughly equal size. Rawalpindi is adjacent to Islamabad and being a historical city of Pakistan, the two cities form the greater Islamabad-Rawalpindi metropolitan area. The two cities are in a way dependent towards each other, with Rawalpindi offering cheaper accommodation to citizens working in Islamabad as well as to the people of Rawalpindi going to Islamabad for jobs etc. However, residents of Islamabad often visit Rawalpindi for cheaper raw material and goods from oldest markets of Rawalpindi. Thus, it involves the use of large-scale transportation and communication between the two major cities of Pakistan.



Bara Kahu



4.3 Bara Kahu

Bara Kahu is a rural area of Islamabad whose North-West area falls on Zone-IV and South-East falls under Zone-V and is located on the main Murree Road.

Its population has grown manifold and the area is rapidly expanding. Since it is a rural area most of its population belongs to lower- and middle-income group. House and land price is much cheaper in Bara Kahu than urban areas of Islamabad which attracts lower or middle income group to live in the area because of affordability. Bara Kahu is an unplanned rural area with congested streets where transport service cannot operate leaving transport service to operate on the main national highway only. Moreover, every day, thousands of passenger's commutes to Islamabad and Rawalpindi on public transport for job, education, business and healthcare purposes since major universities, offices, hospitals, parks, shopping centers and economic hubs are situated in Rawalpindi and Islamabad.

4.3.1 Major Bus Stops in Bara Kahu

Athal Chok in Bara Kahu is the major bus stop of Bara Kahu and is the main economic hub and busiest centre where most of the activity occurs. Most of the banks, restaurants, offices, bus stands and shops are located at Athal Chok Bara Kahu, making it most crowded area. Moreover, 17 Meel, Behra Pul, Jhuggi Stop, Bazar Stop and Jillani Stop are other bus/van stops of Bara Kahu from where people catch vans for commuting purpose.

4.3.2 Route Vans

Only two permit routes are issued to vans to access Rawalpindi and Islamabad. First route van is 110 which starts from 17 Meel Bara Kahu and crosses Faizabad and ends at Mandi Mor I-10 Islamabad⁸. Second route van is 127 which starts from Chattar Park and ends at F-8, Islamabad and another route van 127-A which starts from Behra Pul and ends at G-11, Islamabad. Both the route vans cross Aparah and PIMS hospital⁹. Moreover, people and tourists going to Murree and Kashmir cross from the Bara Kahu to reach there. Resultantly, on weekends the national highway (Murree Road) crossing from the Bara kahu is jammed due to traffic. This locale has been selected purposively to assess the transportation issues faced by women and disabled persons.

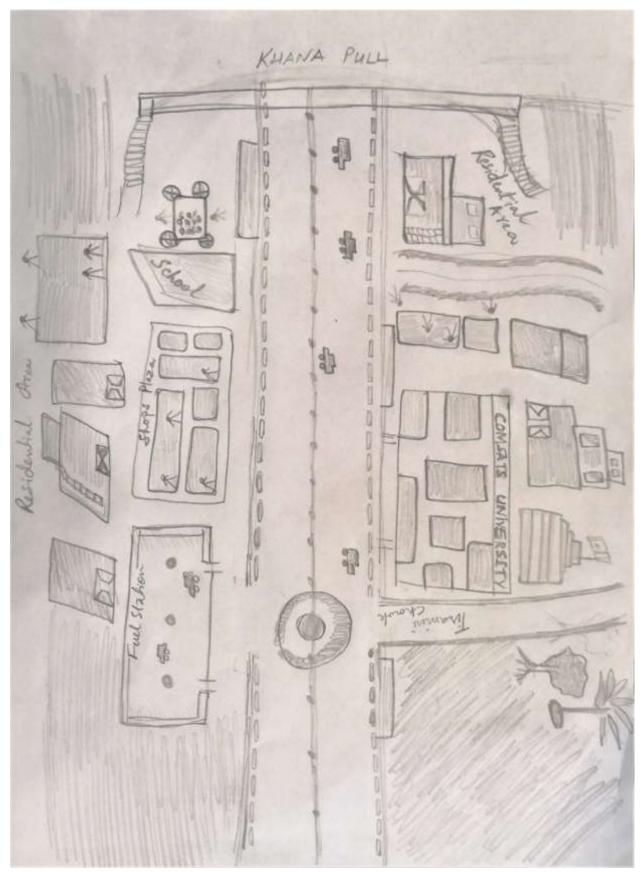
⁸ Please see appendix B for complete route and fare list of route van 110.

⁹ Please see appendix C & D for complete route and fare list of route van 127 and 127-A



Some of the pictures of van stops at Bara kahu: From Top right to left: Bazar Stop, Athal Chok, Behrapul

Sketch 1: Taramri



4.4 Taramri

Taramri is another rural area of Islamabad which falls in Zone-IV of the Islamabad. It is located nearby Islamabad expressway and can be accessed from Chak Shahzad Road and Khanapul which connects with Rawalpindi. Many housing societies such as Park Enclave, Rawal Town, Shahzad Town etc and COMSATS and Abasyn University are also situated on this road. Moreover, there is one of the biggest hospital National Institute of Health Sciences (NIH) which is also situated on Chak Shahzad Road which leads to Taramri. In addition to this, famous Lethrar Road also crosses from Taramri as well which connects it to major universities such as PIEAS. The area is mostly populated by lower and middle income group due to cheaper rent and land price. Lot of passengers travel to and fro from this area to access educational centres, markets and offices.

4.4.1 Major Bus Stops

Taramri Chok, Ali Pur Old Bank Stop are the main areas from where residents can get the transport to access other parts of Islamabad. Every day, thousands of passengers commute to Islamabad and Rawalpindi on public transport for job, education, business and healthcare purposes since major universities, offices, hospitals, parks, shopping centres and economic hubs are situated in Rawalpindi and Islamabad.

4.4.2 Route Vans

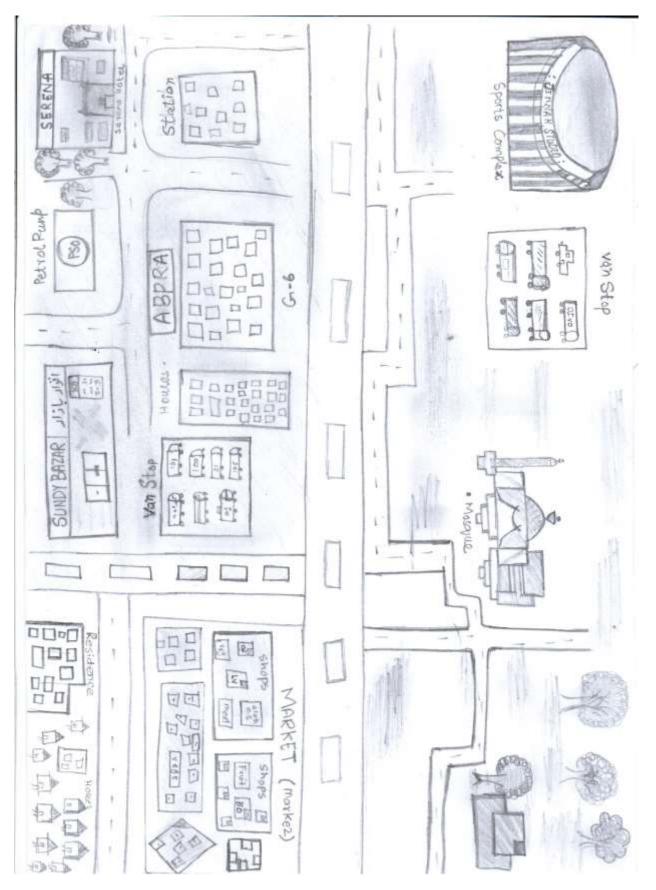
Taramri also has big commercial area on Lethrar Road where various banks, schools and shops are situated but no university or park is located in the Taramri. Only 122-A and 122 number route van operate from Chirah Chok and Khanna Pul to and Pak Secretariat¹⁰. This locale has been selected purposively to assess the transportation issues faced by women and disabled persons.

¹⁰ Please see appendix E & F for complete route and fare list of route van 122-A and 122.



Some of the Pictures of Taramri van stop

Sketch 2: G-6 (Aaparah)



4.5 G-6, Aaparah

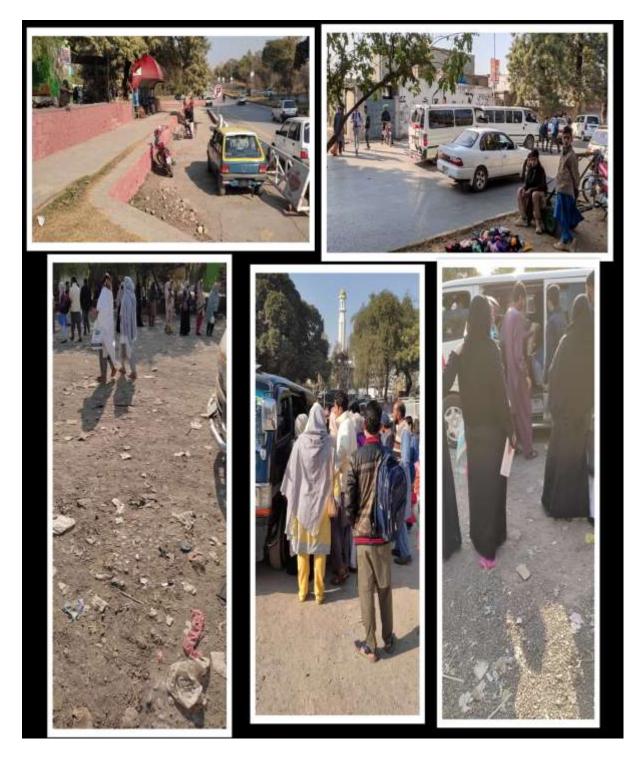
G-6 is one of the developed residential sectors of Islamabad. G-6 is one of the oldest sector of Islamabad and part of Zone-I and is recognized as urban area of Islamabad. Aabparah Market which is situated in G-6/1 is one of the oldest markets of Islamabad. G-6 (Aabparah) is busiest commercial centre because many shopping malls, cloth, footwear outlets, banks, meat shops, mobile shops etc. are situated there. Sunday Bazar is also situated there where many people come to buy groceries and necessary household food. Most of the housing units in this sector belongs to government and the same have been allotted to federal government employees. This sector has various government and private schools and colleges and two famous hospitals such as CDA hospital and Poly Clinic are also situated in this sector.

4.5.1 Major Van Stop

Aabparah van stop is also one of the major van stop from where people catch vans for accessing different sectors of Islamabad and Rawalpindi. Vans coming to and fro from rural areas make a stop here to take passengers to their destinations. Aabparah van stop provides access to passengers to commercial areas, hospitals and offices in urban areas of Islamabad. A passenger intending to go to Blue Area, Poly Clinic, PIMS Hospital, Pak Secretariat, G-9, F-8, Rawalpindi etc from rural areas such as Bara Kahu and Taramri can catch a route van from here. Hence, I chose this locale because Aabparah acts as connecting point for the residents of rural areas to urban centres of Islamabad to access, jobs, educational institutes, hospitals etc.

4.5.2 Route Vans

Aabparah van stop acts as a terminal where vans from Rawalpindi and Islamabad make a stop. Passengers travelling from Rawalpindi, Bara Kahu, Taramri and G-9 get dropped at Aabparah van stop to catch a desired van leading to their destination. Hence, route van 122, 122-A, 127, 127-A and 120 make a stop here to drop and take passengers. This locale has been selected purposively to assess the transportation issues faced by women and disabled persons from this stop.



Images of Aabparah Van stops



Sketch 3: G-9 (Karachi Company)

4.6 G-9 (Karachi Company)

G-9 is another developed residential sector of Islamabad and its main markaz is popularly known as Karachi Company. G-9 Sector falls under Zone-I of the Islamabad and is a hub of the G-9 Sector where shopping centres, hospitals, offices academies, hotels, restaurants etc. are situated. Karachi Company is surrounded by residential area where majority of the buildings and housing units belong to government and subsequently occupied by the government employees.

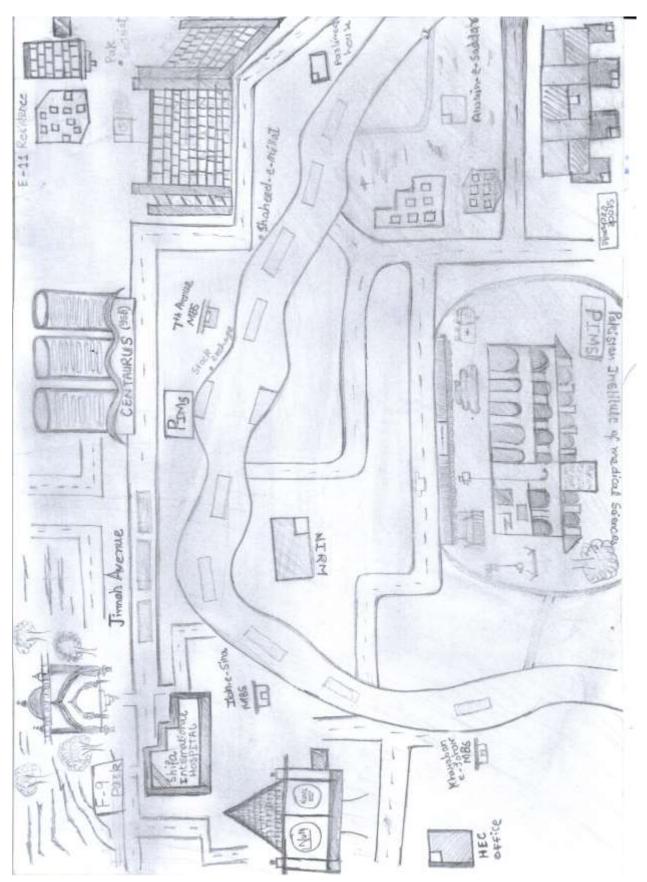
4.6.1 Major Bus Stop

Karachi Company van stop is one of the major van stop from where people catch vans for accessing different sectors of Islamabad and Rawalpindi. Vans coming from other sectors make a stop here to take passengers to G-10, G-11, Rawalpindi, G-6, Faisal Masjid, Metro Stations etc. Karachi Company van stop provides access to passengers to commercial areas, hospitals and government and private offices in urban areas of Islamabad.



G-9 (Karachi Company van stop

Sketch 4: Islamabad Metro Stations



4.7 Islamabad Metro Bus Stations

Rawalpindi-Islamabad Metro Bus Service is a 22.5 kilometre long bus rapid transit system operating between Saddar Rawalpindi to Pak-Secretariat Islamabad since June, 2015. It has 24 metro bus stations and most of them are situated in Islamabad. According to Manager Operation of PMA Rawalpindi, more than 100,000 people travel on the metro bus daily. Figure 1. is the list of stops of Metro Bus Service.



Figure: 4.1. Source: https://pma.punjab.gov.pk/pmbsr

4.7.1 Pak Secretariat

Pakistan Secretariat is the last station and terminal of MBS. Pak-Secretariat is located in the Red Zone area which houses majority of the cabinet, government ministries and offices where thousands of employees work and commute regularly from several parts of Islamabad and Rawalpindi. Marriot Hotel, Pakistan National Council of Arts (PNCA), Parliament House, Supreme Court etc. are also situated near by this station.

4.7.2 7th Avenue

It is another stop of MBS located in Blue Area on Jinnah Avenue of Islamabad. It has two exits, one exit is toward Kulsum International hospital Islamabad and second is toward 7th Avenue. Blue Area is a commercial zone which has offices, restaurants, banks and shops. Blue Area is the busiest centre of Islamabad and people commute every day from various parts of Rawalpindi and Islamabad through Metro Bus Service.

4.7.3 PIMS

PIMS Metro Bus Station is located on Jinnah Avenue near PIMS Hospital and Centaurus Mall. It has two exits one exit is towards PIMS Hospital and other is toward Centaurus Mall. This station is one of the busiest as it provides accessibility to thousands of people going for hospital and Centaurus Mall. Further, Faisal Mosque is 3.3 KM away from this station and F-8 Kacheri is also situated at walking distance.

4.7.4 Ibn-e-Sina

This Metro Bus Station is located on the 9th Avenue of Islamabad. On both sides of this station is the residential area. Furthermore, National Institute of Rehabilitation Medicine (NIRM) hospital is situated nearby this station where patients and disabled persons visit for check-ups. Moreover, people going for G-9 (Karachi Company), F-10, F-11 and E-11 Sectors disembark on this station and catch a taxi or van to access those areas.

4.7.5 Khayabn –e-Johar

Khayabn-e-Johan is also located on the 9th Avenue of Islamabad. Some of places including Margalla Railway Station, National University of Modern Languages (NUML), Higher Education Commission and Shifa International Hospital are situated nearby this station. The Khayabn-e-Johan station is also surrounded by residential area, government offices and education centres, hence, many people use metro bus service to access above mentioned places.

I chose these above mentioned locales to conduct interviews from respondents and to know problems being faced by females and disabled persons.



Some of the pictures of Metro Bus Service

Chapter 5

Data Analysis & Discussion

5.1 Introduction

This chapter entails all the data gathered through interviews and focused group discussions. Themes have been formulated to present the findings and these themes are framed with the data of forty six interviews.

5.2 Public Transport & Women

5.2.1 Public Transport Accessibility to Women in Rural Areas

Females are marginalized section of society in Pakistan. Due to social phenomenon most of the females are rarely allowed to travel alone in the public transport. However, in urban areas females travel alone to some extent in the local transport for work, education shopping, healthcare and visiting relatives. Due to lack of accessible and comfortable public transport most of the females face social exclusion and are unable to participate in social and economic affairs of life.

Women living in rural areas of Islamabad find it difficult to access public transport as they often have to cover the distance of minimum 20 minutes or more from home to reach on the main van stop. This is because of ineffective town planning where streets are so congested with no service roads, so the females have to cover the walking distance of more than 20 to 30 minutes to reach the van stop. In addition to this, in order to catch a van females have to wait for up to 15 minutes or more on the bus stop during rush hours because a van carries only 17 passengers and 12 to 14 seats are occupied by male passengers. They have to wait a little extra to find a seat.



Females are accommodated on front and back seat of the van if females are available, otherwise those seats are provided to male passengers. During the rush hours I have observed that there is much crowd on the van stops and number of male passenger in the crowd is always higher than the females. So the males try to embark upon the van either by pushing other passengers or jumping on to the running van leaving no space for females except the front seat. However, during non-rush hour one can catch a van easily within 5 to 10 minutes but then in order to fill the van with passengers drivers make passengers wait inside the van for up to 10 minutes or until the van is full.

Behra Pul, Athal Chok and Bazar Stop of Bara Kahu and Taramri chock are the areas where no proper bus stops, waiting area or shelter are constructed. People including females have to wait under the open sky, even during rain and severe hot weather, for catching a public transport.



5.2.2 Public Transport Accessibility in Urban Areas

Urban areas of Islamabad and sectors such as G-6, G-9 etc. are well planned by Capital Development Authority (CDA), hence public transport is accessible to females within 5 to 10 minutes walking distance. It can be attributed to the fact urban areas are planned well and local transport passes through almost every sector to facilitate commuters. However, females who were living in sectors of Islamabad reported to have accessibility to public transport but were dissatisfied with the service. Interestingly proper bus stops are constructed in the sectors but are so dirty and smelly that females prefer to wait under the open the sky rather than inside the bus stop shelter. A female respondent while describing the bus stops condition, said;

"There are no proper shelters and waiting area, even if there are any, they are so smelly, dirty and broken so I prefer to wait under the sun and not under the shelter"

Similar response was made by another women in the following words;

"You can say some bus stops are developed having shelters in sectors only. But these bus stops are not used by local transport drivers. They would make their own stops away from actual bus stops. So, these shelters are of no use. If there are developed stops drivers won't use it".

Even drivers do not make a stop on properly constructed van stops they would rather stop upon sight of a passenger on the road. This has made these bus stops redundant and unusable and later are occupied by street vendors as shown in the picture below.



Despite this, females have better access to public transport in urban areas but still lot of issues are faced by women while traveling in the van.

5.2.3 Issues Faced by Females in Local Transport

As drivers and conductors accommodate females on front and seats of the van. Females find those seats quite uncomfortable. Conductors or drivers of the vans accommodate two females on the front seat, next to driver, which women find quite uncomfortable because the space on the front seat is not enough for accommodating two females. There is no such segregation on the front seat and drivers hands touches the women while changing the gear of a van.



Similarly, seats on the back side of driver and the corner seat beside the van door is very uncomfortable and women avoid sitting because passengers embark and get off from the van and conductors open and close the van door frequently and touch women's shoulder (as it can be seen in the picture below) either deliberately or unintentionally. Such actions by the conductors make females feel unsafe. A female respondent said that;

"When front seats are filled, they accommodate females on the four seats at the back of driver, the corner seat beside door, I myself avoid sitting there and have seen females avoiding that particular seat because conductor opens door frequently and many try to take advantage of that thing, but many get insulted by female passengers. They open and close the door deliberately to touch women and we don't feel secure. However we don't face any problem on the front window seat but at the back we face lot of problem on door side seat."

Another female respondent said;

"I never sit on the corner I always prefer to sit in the mid seat or demand front seat. Because I once sat on the corner seat and it was very difficult because conductor was opening and closing the door again and again. So, I believe other females would also be facing the same issue while sitting on the corner seat because its uncomfortable."



There are no reserved seats for the females in the van however, drivers and conductors accommodate females according to availability of seats in the van. There is no such segregation in the van for male and female and there cannot be because the van is too small and congested. Drivers and conductors of the vans also accommodate females on the third row seats which has capacity to seat three passengers only. In order to maximize profit conductors overload van with male passengers by making them stand inside the van beside third row seat. I have personally observed that the females feel uncomfortable because male passengers surround them from back, front, and also stand beside them and same fact was confirmed by a female respondent in the following words;

"I never sit in the third row seat because whenever a man gets in the van than his shoulder touches ours again and again. And that is very awkward situation for being a female. So I never prefer that seat and I believe females should not sit there as well nor they should be offered to sit there. So I try to avoid sitting there."

Similarly another female respondents said;

"We feel too uncomfortable, no matter how well you adjust in the van, they have to fall on us. We get too much angry on this, then they say this passenger will get off on the next stop. This is what they say most of the time."

"Mostly females who are outspoken scold them, but women like me remain silent. I never say them anything because they have answers to everything such as "sister we were just opening the door, sister we were just taking the fare from front seat passenger" and they make hundred excuses. So, females who are outspoken get angry on conductors and scold them on the spot."

Second or third row seats mostly offered to females and male passengers cross those seats while going on the back seats and sometimes their hands or shoulder touch female passengers. Moreover, the conductors also make passengers stand beside second and third row seat making travel uneasy for females. However, females who are outspoken and bold, argue with the conductors over overloading and touching by passengers or conductors. But after having argument with conductors or passengers, the matter reaches a compromise. Females rarely complain traffic police or transport officials over the overloading of passengers and harassment because females do not receive positive response and many do not know who and where to complain.

5.2.4 Reasons of Fights with Conductors

Since there are no reserved seats for females, conductors mostly move passengers from seats again and again which angers and irritates them. Similarly, female passengers are moved from their seats to adjust male passengers time and again which results in fight with the conductor. The reason conductors move passengers is because they don't want any seat to go empty and to earn maximum profit. Upon argument by females, conductors simply ask them to travel in another van if she has a problem in changing seat. Since most of the conductors say the same and females are left with no choice but to travel in the same transport. Uber, Careem and taxi service becomes quite expensive for females so they prefer to travel in local transport, due to financial constraints, because it is affordable. Moreover, females also get into argument with conductors over overcharging of fares. Conductors try to charge Rs. 5 to Rs. 10 extra from the passengers which results in arguments with the females. In addition to this, local transport drivers do not observe COVID-19 SoPs. They would overload passengers which also makes travel uncomfortable and risky not only for females but for other passengers as well. However, females are less likely to report this to traffic wardens for action because most of them avoid getting into any trouble since they are females and they might get restrictions on travel from family. A female respondent while sharing her experience said;

"Since it's a COVID-19 right, when there are four females sitting on the back seat of driver, they will adjust another female in front of me, it gets too uncomfortable, right, when someone is sitting in front of your face and that lady will cough, so, on that point I got so angry with the conductor and I had a fight with him. And, when you want to go directly to your destination they normally charge Rs. 30 but they ask females for Rs 40 instead, over which I had a fight. And most of the time that we have fight with them is on this thing, in order to fill van with passengers, they will first ask you to sit on front seat and then they will ask you to sit at the back seat and then on the third seat and then again they will ask you to come on second seat. I mean I get sick of it and I have argument with them on this thing, now this is a matter of every day and I am used to it."

5.2.5 Travel Time in Local Transport

Local transport drivers do not observe proper timings and take stops time and again wherever they see a person standing on the road for taking passengers. Even they take long stops at non-designated stops to fill the vacant seats of the van. Since the fares set by the government are less so they cannot afford to leave seats empty. Therefore, a distance that could be covered within half an hour is than covered in one hour owing to drivers' frequent long stops. Female respondents have reported that the total travel of half an hour exceeds to one and half hour. Moreover, females are likely to change two or more vans to reach a destination which not only becomes costly but time taking as well. Two female respondents said;

"I have to change 3 vans to reach university and it takes me two hours. I use taxi to reach on bus stop, because bus stop is quite far from my home. From bus stop than I catch a van for Aaparah G-6 and then I catch another van from Aaparah G-6 to reach university gate. And even from university gate we have to get a taxi sometimes so it becomes too difficult."

"It takes one and half hour to reach university through public transport but when I come in university bus it takes me half an hour. But it takes one and half hour to reach university through public transport because I have to wait at Aaparah G-6 mostly because they do not have seats for females. I come to university through 120 number route van and they have only 2 seats for females. So, it takes 10 to 15 minutes to find a seat in van."

Spending too much time in travel not only exhaust passengers but discourage use of public transport also. I personally travelled to various areas of Islamabad where it took me way too much time to reach destination. Moreover, I have observed during travel in public transport that passengers get into arguments with drivers and conductors over longer and unnecessary stops made by drivers and passenger ask them to move van towards destination because in hot weathers its way too difficult to sit in stagnant vehicle for too long and people also get late for their job, tasks etc. So the excessive travel time encourage use of personal transport as it can be used to reach destinations in minimum time.

5.2.6 Affordability of Public Transport

All female respondents find public transport affordable because fares set by the government are nominal. But when it comes to Uber, Careem and taxi service, females have reported it to be quite expensive. Therefore, private transport is used very rarely by the females. They use these services in case the females are in hurry and want to save their time or going to a place where public transport does not go. Females also use private transport when they have stuff or luggage with them because carrying luggage in local transport is difficult and there is not much space to keep it; a female respondent said. "I prefer Uber when I want to go for job interviews because we don't know about the locations and Uber drivers take us to exact location by using Google map and it becomes easy for us. Moreover, I use this service when we are returning home from shopping because we have bags with us and we are also getting late so we prefer using Uber and it also depends on you like if your pocket allows you to travel on private service so you can. And I use Uber once in a month only."

Another female respondent said;

"Private transport is expensive, because I am a visiting faculty in International Islamic University. Today I just spent Rs. 1200 on transportation. From Bara Kahu to Islamic University I paid Rs. 500 because no local transport goes to Islamic University and then again from IIUI, I had to come to Quaid e Azam University urgently so I again spent Rs. 500. And then I had to go to Area study Center and there is no pick and drop service in the university so I again paid Rs.70 rupees for taxi. From there again, I had to come to main huts I again paid Rs. 70. Like this I spent 1200 rupees in just one day and it's really expensive. I am just teaching at Islamic university for my own experience otherwise I don't get enough package from there but I spend more on transportation."

5.2.7 Harassment in the Local Transport

However, harassment is common in public transport across Pakistan, whereas in Islamabad females also face this situation. But the female respondents whom I interviewed had never faced harassment incident in the local transport, however, they believed that there is always risk of harassment in the local transport. Verbal talks, body language and gestures of drivers, conductors and the passengers makes females uncomfortable and insecure in the local transport. Many drivers, conductors and even passengers try to make a move on female passengers. A female respondents while describing the situation said;

"When females are sitting on the back seats of a van conductors would stand beside you and put his arm on the seat for support so it is so weird. Once I was coming with my friend in a van then a conductor put his hand on seat. My friend asked her to remove his hand so he said sister I am just keeping hand for support. So one gets such negative and bad vibes at that time"

"Like sometimes van is running at a high speed and driver suddenly puts break so they fall on you. Sometime they keep hand on seat. Sometimes passengers will make gossips and play song etc. Sometime they talk on call and speak their number loudly. They think we don't understand their acts. So these are the few problems that we face by the passengers and conductors."

"Like most of the time I faced I realized that most of the people are not giving a very good gestures to females"

It is not easy for anyone to harass women public transport because a van carries 17 passengers at the same time. Therefore, it is very rare that anyone harasses women in the public transport because of threat of being caught. However, while conducting interviews with drivers and conductors, they confirmed that harassment cases are very rare, it happens twice in a year. It can be attributed to the fact that Islamabad has the highest literacy rate. Even if harassment occurs, the matter is hardly reported to police because females avoid getting into trouble and fear of losing families trust and honour or to face restriction on travel by families. Additionally, if a passenger, driver or conductor is caught harassing a women then the matter is resolved by passengers by either beating the culprit or by accepting the apology.

5.2.8 Insecurity in Public Transport

Females feel insecure while traveling in the public transport because of conductors and drivers behaviour as they try to take an advantage of female for being alone. Most of the females have reported that the drivers and conductors behave rudely. When females are sitting on front seat they have to take care of lot of things such as taking care of scarf and maintaining distance with the driver and conductors because the front seats are not segregated in the vans. Drivers touch knees of women while shifting gears of a van and conductors sit along on the back four seat while a single women is sitting there. Some women have reported to have fear of theft while traveling on the local transport. Moreover, females avoid traveling in the evening and in the night because of insecurity. Following are the responses received from the female respondent over the question whether the public transport is safe and secure;

"No I don't think so it's safe and secure for females because drivers and conductors mostly behave in a rude manner and sometimes they drop at a place where no other local transport comes or goes. Moreover, when females are sitting on the back seats of a van conductors would stand beside you and put his arm on the seat for support so it is so weird. Sometimes it happens like when you are sitting in a van and there are no females except you so you recite Ayat ul Kursi or pray that some women may sit with us from next stop. So females don't feel safe in local transport"

"You always have to take care of lot of things while traveling. If you are sitting with driver on front seat, you will have to take care of distance, then you have to take care of scarf as well. Sometime passengers sitting behind you create lot of hurdles for you. So, it's not easy for every female to freely move, we have to take care of hundreds of things all the time. A few women who are blunt speak on the spot about passenger's behaviour and harassment."

"Local transport is not safe and secure, there is risk of theft and conductors don't behave nicely"

"Look, few days back there was a protest by molvis and roads leading to Qauid e Azam University were blocked. I was with a friend, if she had not been with me, I don't know how I would have faced this situation. So we took a van from Aaparah G-6 and suddenly driver changed our route and took us toward secretariat in the red zone and the driver dropped us there. Now I had no idea about the roads since I don't go out much. I was just worried that how will I go home or university from there. Even network was down and I was not able to call Uber or Careem. So it's not secure for females you don't feel secure. Sometimes there are fights and females get hit by man unintentionally. So such situations are very difficult to face by females"

However, the private services, such as Uber and Careem are considered much safer than the local transport by females because these companies have set mechanism to ensure safety of passengers as you can share your ride details and live location with your family members and the captains and the cars are registered with the company. Moreover, at the end of the ride there is an option of captain's rating to be given by rider. If any captain misbehaves a rider can lodge an online complaint with the company through mobile Careem or Uber app.

5.2.9 Dependency on Family Members

Due to lack of public transport facilities females are likely to be dependent on their family members for providing them pick and drop service. Dependency on family members hampers their mobility and discourage them to pursue a career or education because their family members may not be available 24/7 to provide them pick and drop, hence, making it difficult for them to move alone. Moreover, females are dependent on their family members because the transport service is not operating where females are pursuing education or career. They

are either left with the option to use private service i.e. Uber or Careem or hire a taxi or ask one of the family members to provide them pick and drop on daily basis. A female respondents while sharing their experiences told that;

"Yes, of course. Sometimes it is very troubling to bother my brother when he is stuck somewhere academically and socially and I keep waiting for him at the stop. I am so dependent on my family which demotivates me to pursue higher education or to start professional career."

"It happens and local transport passes from my home but there are so many places where local transport does not go or service is unavailable. So, females have to get Careem or have to ask their brothers. Even brothers are not available 24 hours. Careem or Uber is unaffordable. So that's how we face problems."

"Yes, we always have to depend on someone because we cannot travel alone"

"My parents ask me to take someone from home, for instance, brother in order to be safer and secure."

"There are my friends who cannot go out so they have to depend on someone from their home like fathers or brothers. So they give them pick and drop. If someone is not available at home than they are not allowed to go out. My friend missed her practical exmas because of this issue."

It is worth noting that there are parents who have wariness on the public transport, and do not let their daughters travel alone, owing to safety concerns. Secondly, there are few parents who are narrow minded and believe that their women should not go out alone because it would be a disgrace to their honour. Mostly male members discourage female travel in the public transport. Such restrictions suppress female's abilities and potential to do or achieve something in life. In contrast to it, many females reported that they are allowed to travel alone in the public transport because their parents trust them and they know well that their daughters can handle and protect themselves. Such trust empowers women to achieve something and play a positive role in society.

5.2.10 Social Exclusion of Females

Lack of accessible transport has caused social exclusion of females to a greater extent. There are females who want to participate in social and economic affairs of life but are unable to do so owing to unavailability of public transport or are not allowed by parents to travel in the

public transport. Due to these reasons many women have to quit jobs. Females try to find a job where they are provided pick and drop service by the employer or where the public transport operates. Social exclusion not only deprives them from achieving economic independency but also puts them into anxiety and psychological disorder. Following female respondents shared their experience in the following manner;

"Yes, major issue of Pick and Drop. Right after my graduation I wanted to apply for a job which brought a debate in my home that, who is going to pick her every day and drop. Since my other siblings are also university students and no man of my home was available to facilitate me with this pick and drop service. So I gave up and remained at home."

"Yes it happened. Like I am working in HBL so I was being transferred to Red Zone branch but I somehow managed to stop my transfer because of transportation and it was way too difficult to travel from Rawalpindi to Islamabad. So I have quit 2 jobs earlier because of this."

"I live at Bari Imam and I was working at I-9 first, then I received a good job offer at DHA but I did not accept it because of unavailability of transport. I even quit my job at I-9 and now I work in travel agency at Melody because I find transport easily from here"

"Yes there are so many women whose families who do not allow them to do job if they are not provided pick and drop facility by the employer. So they face lot of difficulties. Parents of my friend did not allow her to do job. They said you can do job where metro bus stop is near to that office, where metro has no access or is not located nearby it you cannot do a job. We will not allow you to travel on local buses or vans. So she did not do job because of this reason."

Above responses by females show that how much difficulties and resistance they face due to lack of public transport facilities and by family members. Females avoid working at a place where transport facility is not available and also refuse good job offers because of inaccessible public transport. If female participation in economic activities is made sure by providing accessible and affordable transport, it can not only increase the participation of women in economic and social affairs of life but also contribute to our economic growth as well.

5.3 Public Transport & Disabled Persons

5.3.1 Accessibility of Public Transport to Disabled Persons

Local vans, Suzuki's and buses are the main mode of transportation in Islamabad. Majority of population including females use these services to commute on daily basis. However, the ratio of buses and Suzuki's is less in Islamabad than the vans. One of the major problems that disabled persons face is of accessing these local vans, Suzuki's and buses. These transport services are in no way accessible to disabled community especially to those who use wheelchair. Driver respondents said;

"Our vans are not accessible to disabled persons. How would they travel we don't have seat for them. Even if they travel and someone helps them adjust in seat where would we keep his wheelchair? We have no such place we will have to alter our whole van if they were to adjust in the van"

"Wheelchair users never come but persons having different kind of disability do come like blind"

"I have mostly seen blind people traveling on the local van, people help them embark upon the van (pakar k bitha ty he). Many times we have helped them cross roads. Even passengers help them and they don't give us opportunity"



Disabled persons who are on the wheel chair avoid or never use public transport because it is way too difficult and not disabled friendly. They always have to depend on someone to help them embark upon the van or bus. Moreover, these transportation has no specific place or seat for disabled persons where they could easily adjust. However, disabled persons who are handicapped, blind and those who have locomotor disability but can walk or move with difficulty are likely to use public transport but do not prefer it. Vans are quite congested and a disabled person cannot sit comfortably. Front seats of the van have quite enough space for such disabled persons who could spread their legs and sit comfortably but front seat is hardly available for them since it is preferably given to non-disabled females or sometime male community. A disabled female respondent said that;

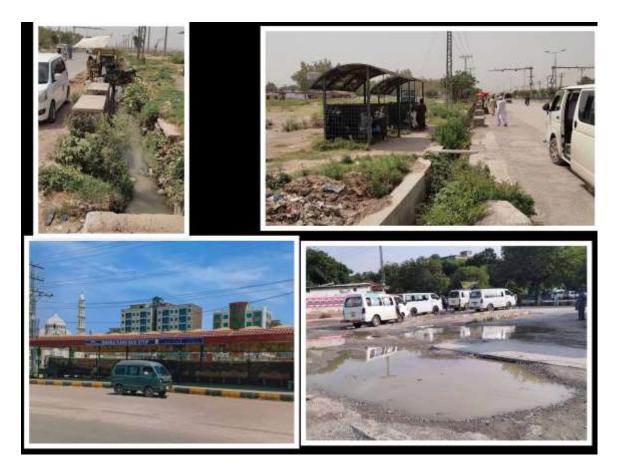
"No they don't give us seat on priority, if they have one female and two males they would give priority to males, because get more benefit by adjusting male passengers".

I have personally observed that drivers of public transport are insensitive towards disabled and old age community. They avoid stopping vans for old age and disabled people because they take time to embark upon the van, since they are competing with other drivers in loading passengers they want every passenger to sit quickly so that he could get another one ahead. Similarly, the disabled persons and aged people take time to disembark from the van so drivers consider it as the waste of time and prefer to take someone who could get in the van quickly. However, I did not see any disabled passenger traveling on the local transport during my field work. This fact was confirmed from the drivers as well who said the disabled passengers travel very less with us and even if they travel they are accompanied by someone.

5.3.2 Inaccessible Infrastructure

Another reason that makes transport inaccessible for wheelchair user is infrastructure roads and footpaths which are not constructed well or in a way that makes easy for disabled persons to access the bus stops on wheelchair. Footpaths have huge step and no slopes so wheelchair user require assistance who could drag their wheelchair on the road. A wheelchair user while imploring the situation said.

"It is very difficult to move on wheelchair on the roads. The roads have patches and pot holes and they are no footpaths than how can we move on wheelchair."



All the bus stops in the area of Bara Kahu, Taramri, G-6 and G-9 are not disabled friendly as it has huge step which makes impossible for any disabled person to accent. Moreover the roads are congested and damaged and wheelchair user cannot even move his wheelchair on the road. Inaccessibility of bus stops and public transport compels disabled persons to use alternate means of transport to travel or commute.

5.3.4 Private Transport and Affordability

Since there are no facilities for disabled persons in public transport then consequently, those who want to travel prefer private services such as Uber, Careem and taxi for commuting or use their own personal vehicle. Private transport becomes quite expensive for disabled persons if anyone is studying in university or doing job then a disabled person has to pay more than 20 thousand per month for private taxi service. A disabled respondent said;

"Yes I used to give home tuition at some place, but that place was not accessible so I had to go on Uber or Careem, but as you know it's too expensive so I had to quit that job because I was unable to meet my expenditures. However, public transport is affordable as compared to Uber and Careem." Moreover, disabled persons are not provided with any discount while using private transport service within the Islamabad. Owing to unaffordability and inaccessibility of public and private transport most of the disabled persons prefer to remain at home and get education from home because of high transportation cost. Moreover, disabled persons learn skills and work from home to generate some income.

5.3.5 Difficulties in Private Transport

Morning and evening time in Islamabad is mostly crowded because people are travelling for their jobs, education, etc. making it difficult for disabled persons to find transport during rush hours. In those particular hours transport services such as Uber and Careem are unavailable. Resultantly wheelchair users either travel with peak factor price or wait a little or travel early to avoid inconvenience. Since they are disabled persons they cannot go out to hire a private taxi. One of the wheelchair user respondent said;

"During rush hours Careem or Uber is unavailable and gets expensive due to peak factor. Companies charge Rs.200 to 300 extra for a trip. Moreover, you have to wait a little extra for like 20 minutes for Uber or Careem to come. So we do face difficulties."

5.3.6 Drivers Behaviour toward Disabled Persons

Disabled persons also face difficulties while using private transport such as Uber Careem and taxi's. Most of the drivers refuse to take ride booked by wheelchair user on the pretext that their car will get damaged by keeping wheelchair in it. A respondent shared her experience as follows

"Simply Uber and Careem drivers used to refuse on the pretext that their car will get damaged, therefore, they used to ask me to hire another vehicle. There are categories that are cheap, but cheap one, is mini, mehran. Drivers of mini are not literate so they do not accept this thing at all, they say their car will get damaged, so they can't keep the wheelchair in it. If mini charges Rs.200 then business class would charge you Rs. 1000. So I used to hire business class because I could afford it.

Whereas similar experience was shared by another wheelchair user respondent in following words;

But sometimes I used to hire big cars, they used to object and refused to take us because they thought wheelchair would damage their cars. So I had to face this behaviour. We also

submitted complains but no response was received. It is better to hire a local taxi it is more convenient. Because the drivers used to put wheelchair on the backseat or on the (Jangla).

A disabled female said;

"Most of them behave well but some don't. Sometimes they make issue over pick up and they ask for cancelling the ride since they don't want to come to the location. Sometime they demand extra fare."

Moreover, the disabled persons also face difficulties in adjusting themselves in the car. Since Mehran and 600cc cars have little space so the disabled persons prefer to hire a cars having enough space for them to shift easily. In Pakistan cars are not made keeping in view the disabled persons, its design and structure is same and hence disabled community has to adjust accordingly. Similarly, the disabled persons who are not wheelchair user also face rude behaviour by the local transport drivers. They do not treat them nicely. A respondent said that

"Drivers behave very rudely and they don't treat us nicely. They just want profit and fares. Every time when I travel via public transport I always fight with the drivers".

Even if disabled persons somehow manage to travel in the private vehicle to access education, job etc. then the buildings and infrastructure are not accessible which makes them look for another alternate or compels them to stay idle at home. Inaccessible public transport, buildings and infrastructure excludes them from social and economic participation. Even if some buildings are accessible and have installed ramps and facilities for disabled person, they are of no use for them. They are installed in such a way which makes it difficult for disabled persons to use them. While complaining about the facilities a respondent said that.

5.3.7 Dependency on Family Members

Keeping in view these accessibility issues, wheelchair users have to depend on the family members to travel because many of the wheelchair users have muscular dystrophy and cannot shift into car own their own and require help. Male wheelchair user can ask for help from anyone if he cannot shift in a car but females are dependent on their family members if their shifting techniques are not well. Moreover, wheelchair user cannot travel alone and rely on the family members for travel who would accompany them as well. Their disability becomes a barrier in their movement. Females who are on the wheelchair are also not allowed by their parents to travel alone owing to safety concerns. Since their lower limbs are damaged hence it is difficult for to protect them themselves. The dependency on family members of the wheelchair users is discussed in detail in case study. However, disabled persons who have minor disability do travel alone on the public and private transport but face lots of difficulties while accessing public transport.

"I think accessibility of public transport depends on how the community is where you live. Do they treat you well and are they aware of the problems that disabled persons face. Now government has provided much relief to disabled person in fare, such as if you travel in Daewoo you get 50 percent discount on ticket and it's not in local transport. Van drivers or conductors do not differentiate between normal and disabled passengers, they don't think that we should be provided some extra care. So they don't do this. They consider us like a normal passenger"

"No we can't easily access public transport. For us it's difficult. They don't follow proper timing, they don't maintain proper speed, if we say them anything they would ask passenger to get another van. So I think for disabled persons like wheelchair user or disabled from lower limbs, find it really difficult to travel."

5.3.8 Social Exclusion of Disabled Persons

Wheelchair users are unable to participate own their own in social, economic and educational activities owing to barriers in their movement caused by absence of affordable and accessible transport, buildings and infrastructure. Consequently, they avoid travelling outside and prefer to stay at home because they consider their disability a burden on their family members. Their frequency of travel outside is comparatively less than other members of family or non-disabled person. A wheelchair user while answering my question on the frequency of travel done by him told me that;

"I travel very less because lots of places are not accessible for me. I cannot travel outside the city because trains and buses have no facility and no ramps for disabled persons. I have to hire a private taxi which becomes expensive. Islamabad is already very expensive and taxi service charge high price for Lahore and other cities. I made plan to visit Naran, Kagaan but that could not be materialized due to my disability as these places are not accessible for me."

In addition to this, disabled persons are deprived from enjoying leisure activities and going to cinemas because of lack of accessible infrastructure in cinema halls, hill stations etc. Barrier in movement increases in them the sense of helplessness. Even if the wheelchair users manage to travel on private transport but yet there are places which are inaccessible. Wheelchair users who are poor are completely facing social exclusion because they cannot even afford private transport. A respondent told that;

"Look there are so many buildings, places and educational institute in Islamabad which are no accessible. Buildings are not accessible, there are no facilities for disabled persons no lifts, no ramps. Moreover, many disabled persons are unable to avail opportunities due to inaccessible public transport. They are left out then and become dependent on family members financially, physically and in every aspect."

5.4 Metro Bus Service & Female

5.4.1 Metro Bus Service

Metro Bus Service by Punjab Mass Transit Authority began its operation in Islamabad and Rawalpindi from June 2015. It stretches 22 kilometres and operates between Pakistan Secretariat Islamabad to Saddar Rawalpindi covering 24 stops. More than 100,000 passenger commute everyday on Metro Bus Service. Metro Bus starts its service from 6:00 a.m. to 10:00 p.m. with the two employee working shifts, first starts from 6:00 a.m. to 2:00 p.m. and the second from 2:00 p.m. to 10:00 p.m. and after every 3 minutes a bus leaves from Saddar or Pak Secretariat. However, during rush hours additional buses are run with the gap of one minute.



Route Map of Metro Bus Service

5.4.2 Accessibility of MBS to Females

Metro Bus Service runs on the specific route and mostly operates through commercial areas of Rawalpindi and Islamabad. Since its stations are located away from the residential areas, females face difficulties in accessing Metro Bus Stations as no shuttle service operates from other routes to Metro Bus Station so most of the females have to depend on their family members to provide them pick and drop or they use taxi service or local transport to access Metro Bus Stations from their homes, educational institutes and job places. Following female respondents remarked about the accessibility of Metro Bus Stations;

"Actually my brother drops me to the metro bus stop on his motorbike or I take taxi to reach. It's impossible to reach here by walk and there is no facility of public transport from Metro bus stop to my home and it takes 15 to 20 minutes to reach there by motorbike"

"My University is in E-9, No, metro does not go there but its two stop away from metro station so I have to travel extra every day. I have hired a shuttle van which provides me pick and drop every day to the Metro Station."

"My home is at 10 minutes' drive from metro bus station so my father comes to pick me up from there."

Since there are no shuttle services that could facilitate females to access Metro Stations, it makes accessibility of MBS difficult for females, hence, they have to depend on family members or local transport to reach the station. However, MBS is accessible to those who live nearby MBS stations. Moreover, the metro does not cover all the routes in Islamabad so females also have to travel extra from MBS stations to access their universities, offices etc.

5.4.3 Affordability of MBS to Females

Metro Bus Service is subsidized by the government in order to make it affordable for common people. All the female respondents have shown satisfaction over the fares charged by the MBS. Fares charged by the MBS are fixed to Rs. 30 and a passenger can travel from Pak Secretariat to Saddar Rawalpindi in just Rs.30. However, the females have to pay extra money to reach to the station or to their desired destination which is somehow extra expenditure. However, if the subsidy is removed and the fares are raised by the government than it might not be affordable for working women, students and labour class. A female while sharing her reservations said that;

"Metro is affordable till Rs. 30. When it first started operating the fare was Rs. 20, but I have heard that they are going to raise the fare to Rs. 50. If it remains till Rs. 30 it will remain affordable for females and labour force as well. Otherwise people will face difficulties or people will not travel than."

5.4.4 Women's Experience in MBS

Females traveling in the Metro Bus were quite happy with the service, as it provides them affordable, safe and comfortable travel as compared to the local transport. I personally observed that sufficient number of women were traveling in the Metro Bus than local transport because it has enough capacity to carry passenger at same time. The Metro Bus has not only improved female's mobility but also has saved them from social exclusion to some extent. Since it operates through the commercial areas, it has provided great relief to working women and students as well. Moreover, this service saves lot of their time because it follows proper timings and frequency of buses is good whereas local transport takes double the time than Metro Bus. It has also given females independency where they could travel alone easily. The Metro Bus has reserved seats with separate portion for female where females can sit or stand in the bus therefore, they do not face any kind of issue while traveling in the Metro Bus. A female respondent remarked that;

"Traveling in metro is a good experience, metro is a good. Despite the fact that seats for females are very limited but at least females are able to stand in the bus with peace. Because male and females have separate portions and it's up to you whether you want to sit on seat or stand."

5.4.5 Limited Seats for Females

Since Metro Bus began its service in Rawalpindi and Islamabad, more and more females have started traveling because it is a great facility for them and provides them access to job and educational opportunities. Front portion of the Metro Bus is reserved for females where there are twelve seats and enough space for standing. However, females have felt that the number of seats reserved for females is quite less than the seats reserved for males and the seats for females be increased since women are coming out of their home. I have personally observed that seventy five percent of the bus is occupied by male passengers and 25 percent by females.



A female respondents while depicting the situation said;

"You see so many girls are seen standing in the bus and female seats are all filled while male seats are empty so it means that girls are coming out for education job and even for shopping. They should not keep 5 to 10 seats only for females because we have seen too much crowd in the female portion."

"Well there are very limited seats for females in the bus and those seats are mostly given to the senior citizens. So most of the time I stand and since covid-19 I prefer standing rather than sharing seat with someone because of pandemic."

Despite limited seats the Metro Bus provides comfortable journey to the females than the local transport because there are no reserved seats for females and they are asked by conductors time and again to move to another seat.

5.4.6 Difficulties during Rush Hours

Morning and evening time are mostly the rush hours when everyone goes for work etc. Normally Metro Bus runs after every 3 minute, but in order to reduce the crowd, additional buses are run during the rush hours with the gap of one minute. During rush hours it is witnessed that male passengers encroach on the female portion congesting their space. However, it happens only in the specific peak hours when there is too much crowd. However, female find it difficult to travel with limited space in the bus and when the bus is full of passengers, they skip buses and embark on the one which has some space. But the staff employed in the MBS manages the crowd effectively when male passengers encroach in the female portion. Moreover, females also ask MBS drivers to move the male passengers from female portion, he then in turn directs Assistant Platform Inspectors (API) to either disembark passengers and adjust them in another bus or move away passengers from female portion. Following are the responses by females on the rush hour;

"Due to lack of space, mostly gents come into female portion. Sometimes people also come who look like thieves. But bus drivers disembark them (bahir nikal dete he) and female security also help in this regard."

"No, it's happens rarely but normally system is good and it's quite manageable."

"Yes I do find, if there is too much crowd I skip buses and wait for the one which has a place."

"Well, it is very rare therefore, I haven't faced any trouble. However, if that happens then the security is very active to deal this kind of situation in order to avoid inconvenient situations."

5.4.7 Safety and Security in MBS for Females

Metro Bus Stations is considered safe and secure by females because CCTV cameras are installed in every Metro Bus Station. Not only this, cameras are also installed in the bus and ample of security staff is employed to assist females and passengers which makes MBS more safe, secure and comfortable. Due to these reasons females find MBS safer than the local transport. In addition to this, majority of the females have reported that they never faced any kind of harassment or misbehave by the staff or passengers because of the fact that PMA has taken enough measures such as installing CCTV cameras and security staff which reduces the chances of harassment to great extent. Female respondents while sharing their opinion about safety and security of the MBS said;

"No, with the grace of Allah, I have never faced any kind of harassment."

"Definitely, definitely, I think it's safer, it's more secure and it's easier for us to travel now even if we are traveling alone."

"Definitely, metro bus is (bohat bohat bohat zyada) kind of blessing and I consider it very secure I never faced any difficulty while travelling in metro bus."

5.5 Metro Bus & Disabled persons

5.5.1 Accessibility of MBS to Disabled Persons

Since the MBS runs on the specific route covering the commercial areas and offices, hence, it is difficult to access by those disabled persons who live far away from Metro Bus Stations. These disabled persons either have to take a cab or private transport to reach on the metro bus. However, the said service is accessible to those who live nearby the Metro Bus Stations.

A female wheelchair user while commenting on the accessibility of MBS said;

"Now if your home is 15 kilometres away from metro station then you will have to book a taxi. I mean there should be transport service for disabled (jis ma ek hi dafa struggle karni pary)."

However, I personally witnessed disabled persons including wheelchair users, blind and people with leg disability traveling on the MBS at different stations, whereas in local transport I did not witness any. Furthermore, upon enquiring from the employees working in the Metro Bus Stations over the average numbers of disabled persons traveling in the bus said;

"Approximately, five to six disabled persons come every day including wheelchair users."

"8 to 10 disabled persons travel from this station."

Further, the disabled persons whom I interviewed displayed satisfaction over the MBS but still they faced issues in the wake of inaccessible infrastructure, malfunctioning of lifts and elevators which are discussed below.

5.5.2 Affordability of MBS to Disabled Persons

Punjab Mass Transit Authority (PMA) does not provide disabled persons with any concession in fares. Conversely, the fares are fixed for every passenger i.e. Rs. 30 and all the disabled persons approved that the fares charged by the MBS are affordable compared to the private services.

5.5.3 Reserved Seats for Disabled Persons

Metro Bus has four reserved seats for disabled persons two for the males and two for the females and there is also enough space for wheelchairs. Passengers cooperate with the

disabled persons and provide them seats. However, when no disabled passenger is traveling on bus then normal passengers sit on them but vacate the seat as soon as any disabled embarks on the bus. Besides, there is enough space in the bus for wheelchair where a wheelchair user can travel along with it. During rush hours, employees of the MBS help them embark and disembark the bus, and sometimes they are also assisted by passengers. Interestingly, it was reported by a female, who is handicapped, that non-disabled females do not vacate seats for disabled females whereas males do and she perceives it to be a behavioural issue. She shared her observation in the following manner;

"In metro bus there are two portions, one for males and one for female and they have also reserved two seats for disabled persons. But these two seats are not provided to disabled persons. It's a behavioural issue, male do give seats to disabled persons but if female is sitting on disabled seat she won't vacate the seat for disabled person. That's the big issue."

5.5.4 Infrastructure of MBS

Infrastructure designed by PMA is somehow good where lifts and elevators are installed to facilitate disabled and other passengers but still there are flaws in the infrastructure that makes it inaccessible for them. I witnessed that most of the Metro Bus Stations had no slope or ramp on the footpaths leading to Metro Bus Station making it impossible for wheelchair user to access bus station own their own.

Following were responses of wheelchair users on the footpaths leading to Metro Station;

"Now look at metro bus stations. You can access metro internally but to access metro station is a great difficulty. I have seen on many stations that there are steps now until someone helps you accent the step how can you travel in metro then. Even if someone helps you on accenting steps and you get dropped at your desired station how will you get to home from there which is located far away."

"I just visited metro bus once. First barrier is stairs and steps and it's difficult"

"I don't know which metro station I visited but I saw that there were two small steps before the lifts so you have to cross those steps to get in the lift. Every wheelchair is of different size now I don't think so everyone would be able to use the lifts."

Step on the footpath is a great barrier for wheelchair users. It hampers their movement and makes them dependent on someone. Mostly the wheelchair users are accompanied by

someone who help them on such stations which have no slope or ramp on the footpath or else are helped by passer-by or metro staff. Upon inquiring from the employee as to why the slopes are not constructed on most of the stations, it was found that the construction of footpaths leading to Metro Bus Station comes under the management of Capital Development Authority (CDA). Nevertheless, people who are handicapped, blind or deaf can access the bus station with assistance. For blinds tactile paving is only installed on the platform to assist them to reach the bus door but this tactile paving is not installed from entry points of the bus stations.

5.5.5 Malfunctioning of Lifts and Elevators

Lifts and elevators have been installed on every Metro Bus Station to facilitate disabled persons and passengers but these are mostly out of order owing to technical faults. Resultantly, it becomes difficult for disabled persons to reach the platform since all 24 platforms can only be accessed by stairs because these are either under the ground or at the height. Besides, these lifts and elevators take days to repair by the companies till then the disabled persons face difficulties. While interview with the MBS employees on different stations it was revealed that when lifts and elevators are out of order the employees carry the wheelchair to the platform. They described the situation in the following manner;

"When lifts are not working we go and help them and lift them up with the help of our staff and accommodate him in the bus. Sometimes we assist wheelchair users and blind people we bring them on the platform from downstairs."

"Security guards and marine operators help them because at every station 2 marine operators and 2 guards are available on each lift. Than operators lift them up from stairs and drop them at platform."

5.5.6 Behaviour of MBS Employees towards Disabled Persons

Employees of the MBS work in two shifts, first shift starts from 6:00 a.m. to 2:00 p.m. and second starts from 2: 00 p.m. to 10:00 p.m. There are two female and male Assistant Platform Inspectors on every station. All the employees assist and behave well with the passengers and no complaint was reported by the respondents because all the employees manage things effectively. One of the female respondents while sharing her observations said;

"Metro bus staff is very caring and I have seen them helping disabled persons, even passengers care lot, but security staff helps them. They not only help them but also help aged or ill persons they help them in getting a seat in the bus."

Besides this, employees of the MBS respond to the complaints of the passengers promptly and deal with the passengers in a positive manner.

5.6 Views of Transport Authority Officials

5.6.1 DRTA & ITA officials about Transport System

Secretary District Regional Transport Authority Rawalpindi and Secretary Islamabad Transport Authority oversee and implement the rules, regulations and policies issued by the government and regulate the van, taxi Suzuki and bus services. Their task is to issue route permits to the local transport owners, examine the vehicle condition and verify the driver's particulars in accordance with "The Motor Vehicle Rules, 1969". In addition to this, they suspend route permits, impose fines and seize vehicles for violating rules and policies. According to them there is dire need of mass transit system in the twin cities as females and disabled persons face lot of difficulties in traveling. The infrastructure is not accessible to disabled persons and constructing disabled friendly infrastructure require lot of funding. Moreover, they were of the view that government is trying to extent the metro bus service in twin cities and in future the transport issues are likely to reduce. Moreover, the officials were of the view that they try best to implement rules and regulations framed by the government to facilitate the passengers of twin cities, however, still a lot needs to be done to address overwhelming transport issues of Rawalpindi and Islamabad.

5.6.2 Complaints Received by DRTA & ITA

Offices of DRTA and ITA do not receive much complaints by females or disabled persons over harassment or misbehaviour by the drivers or conductors. Complaints by females are lodged quite rarely but when it is lodged, the action is taken by the officials by imposing fine, suspending the route permits and seizing the vehicle. Secretary ITA while telling about the nature and number of complaints, said;

"I have not received such complaints except one or two. A female complained once about overcharging by driver. So we seized the car and shut it for 2 days. But on harassment I have

not received such complaint. Yes there was another complaint by female like drivers play weird and vulgar songs during the night time and we also took action on that."

The above statement shows that the reporting of complaint by females is very low. It is because of the fact that females are reluctant to lodge complaints to avoid any untoward situation or they are unaware of the proper platform or believe that is useless to complaint since no action will be taken. Female respondents while remarking on the situation said;

"See we don't have a higher authority when it comes to hiaces and stuff like that, in metro bus for example now this is a proper system so you can have a higher authority on it but there again their drivers and their conductors where is the higher authority who do you call to you cannot what most women can do is to not travel again and that's what they do we don't have a higher authority over there."

"I have never complained, because I think people at Aaparah G-6 bus stop has a complete hold. I have seen them fighting there. And I think traffic police has no involvement or say in it. Our fare is Rs.15 but they charge Rs. 20 and this is wrong they should not do that."

It is a fact that drivers and owners overcharge fares and make violations but mistrust on the authority makes females not to lodge complaints. However, it was revealed that male passengers were more likely to make complaints against the drivers over overcharging, misbehaviour and non-completion of routes to concerned authorities and the action is taken promptly by the officials.

5.6.3 Seats for Females in Public Transport

There is no as such policy or rule by the government to reserve seats for females in the local transport, however, it is a customary practice to provide front seats to females. Since drivers are not bound to reserve seats for females they sometimes also accommodate male passengers on the front seats to maximize their profit. In order to know the whether they reserve seats for females, a driver told that;

"We provide women front and second seats remaining are for gents. We are not directed by anyone to reserve seats for females it's us who have reserved seats for females because they can easily get in and get off the van. If we provide them seat at the gent's side it will be a problem"

5.6.4 Accessibility of Public Transport

Officials of the DRTA and ITA conceded that the public transport and its infrastructure is not disabled friendly and accessible to disabled persons at all and females also faced issues while accessing public transport and they showed helplessness since infrastructure and installation of disabled friendly transport is to be done by Metropolitan Corporations and government respectively.

5.7 Views of NTRC Officials

National Transport Research Centre (NTRC) is functioning as Research and Development wing of the Ministry of Communications which provide ministry with research, strategy and plans needed for transport sector across Pakistan. Number of research and studies have been done by NTRC to provide roadmap to install transport service in Islamabad which are discussed in detail under the policy analysis heading of this chapter.

5.7.1 Reasons for Non-implementation of Transport Policies

NRTC officials are of the view that policies do exist but are not implemented owing to lack of government priority on the transport sector. Government mostly focuses on concrete development such as construction of bridges, roads and underpasses for political scoring, hence, no attention is paid to improve the transport sector. Although inclusive transport is linked with human development as it provides people access to jobs, education, goods etc. but situation in Pakistan is opposite as negligence has further deteriorated condition of public transport. Deputy Chief of NRTC while remarking said;

"It's all about government priorities, government determines priorities. We mostly focus on concrete development, like constructing roads, bridge. We don't pay attention to human development, so the transport is linked with human development. Have' nt you heard in old times that travel increases your knowledge. But now we have limited its scope now you are from Shahdadpur and you have come to Islamabad so now you are aware of many things like what the problems of small cities are and what the problem of big cities are, so it has increased your knowledge. So it's all about priorities, we could have introduced Uber 10 years ago, there used to meters on rikshaws and taxi's now they have disappeared. Now the metro was extended by previous government but it's not functional because it's not in the priority of the government. An English man said that if you cannot revamp whole public transport than at least improve the existing one and regularize it properly. Now 50 thousand Qinchigs are operating but you are not allowing it."

NRTC is only the research wing of Pakistan which provide research related to transport sector. However, lot of studies have been conducted by this wing suggesting practical measures to improve the transport sector. Now it is the work of government to implement transport policies, projects and plans to facilitate people.

5.7.2 Government Initiatives for Transport in Islamabad

Number of initiatives were taken by the governments in past but failed to materialize owing to political reasons. Such as during the regime of Pakistan People's Party from 2008 to 2013, a policy was prepared under the supervision of Prime Minister Yousuf Raza Gillani to provide subsidized loans to private sector to purchase buses and operate it in eleven metropolitan cities of Pakistan including Islamabad but failed to materialize over political disagreement. In addition to this, an Varan Tours Bus Service shut down its operation in February, 2005 owing to political reasons which was not only benefiting the public of twin cities but working females and students as well. Deputy Chief of NRTC said;

"During the Mushraf regime a company of Uzma Gul, Varan used to run public transport in Islamabad. But wagon mafia stood against them and company also did not meet contractual obligations time to time and did not update stock. It was a successful project. But when General Hameed's Gul relation got bitter with Mushraf and Supreme Court also gave judgment that there had been no bidding before giving contract to Varan Company. So it was closed down. Who would come now? Their 110 buses are rotting in the depot since decade. This is unnecessary intervention and whenever there is unnecessary intervention things get failed unnecessary intervention has far reaching impacts that's why no bus service has come in Islamabad since then."

Further the officials were of the view that initiative by the government to install Metro Bus Service has greatly benefited the passengers of twin cities and it has been now been extended to New Airport, its infrastructure is already built and we only need to inject buses. But the government is reluctant to make it operational because there are not much passengers on that route and it will hardly meet the operating cost.

5.7.3 Views about Transport Sector In Islamabad

Currently the transport system in Islamabad is not up to the mark, a vacuum created by public transport system is being filled by private vehicle owners. These people have started operating their vehicles on shifts or pick and drop service, carrying children's and females to schools, universities and to offices. The number of these vehicles have increased manifold and the same have not been regularized by the government so far. Moreover, these private vehicles are also not disabled friendly. There is no infrastructure or transport to facilitate disabled persons whereas women also face the issue of accessibility. According to NTRC officials there is need to provide transport facility to general public and then the government can move toward providing facilities to women and disabled persons. However, Metro Bus Service is a good initiative by the government which is facilitating passengers of the twin cities and is also accessible to disabled persons to some extent. In order to improve it further feeder routes or shuttle service is needed to be installed to facilitate passengers of other areas living in Islamabad. According to NTRC official;

"A person who works in G-9 and lives in Chak Shahzad, it will not be feasible for him to travel every day to his work place while he gets 20 thousand pay only. Now the infrastructure is already built so we should run buses which would connect to metro buses. Now money spent on only metro bus infrastructure could have been spent on running buses in whole of Islamabad. Now buses are also needed toward DHA side. Now there is congestion in van, it damages environment and is not comfortable at all. A single bus replaces 4 wagons, and it does not run on time and creates traffic."

Buses are more environment friendly and can accommodate huge number of passengers as compared to the vans and single bus replaces four vans. According to the officials, if the buses are run in Islamabad it can solve the transportation problems of the city. However, there is no need to build separate infrastructure for running a bus service since the building this huge infrastructure is way too costly for a country like Pakistan and does not solve the transport issues for all, instead it would be much better if feeder routes or shuttle service is started from rural areas and within Islamabad where MBS does not operate. This approach or policy can benefit great number of people including females and disabled persons as well.

Chapter 6

Case Studies

This chapter contains three case studies of disabled persons. In-depth interviews were conducted to gather the data.

Case Study 1

Local vans, Suzuki and buses are the main mode of transportation in Islamabad. Majority of population including females use these services to commute on daily basis. However, the ratio of buses and Suzuki is less than the vans in Islamabad. One of the major problems that disabled persons face is of accessing these local vans, Suzuki and buses. In order to assess the problems faced by disabled persons while accessing public transport, especially those who use wheelchair, in-depth interview was conducted from Mr. Adil who is 32 year old and works in Senate of Pakistan as an Assistant. Adil met a car accident 10 years which caused him Paraplegia. Paraplegia is usually caused by spinal cord injury or a congenital condition such as spina bifida that affects the neural elements of the spinal canal. This form of condition paralysis both the legs of a person hence he uses hands and wheelchair for the movement. Since car accident he has been on the wheelchair. He resides in PWD, Rawalpindi and the distance between his home and office is 20 kilometres and he commutes on daily basis from PWD to Senate of Pakistan. Before coming on to wheelchairs he used to travel on the public transport but now he never uses it due to its inaccessibility. Upon asking as to why he does not use public he told that:

"It is impossible to use current public transport. Neither you can use bus nor van, neither anything else because you are on wheelchair and you cannot use. Local vans are 100 percent not accessible because vans are at much height and until someone lifts you up and puts you in the van you cannot sit own your own. One can only sit in bus if there are proper bus stops with ramp facility".

Disabled persons who are on the wheelchair avoid or never use public transport because it is way too difficult for them to embark upon the vans because the public transport and infrastructure are not disabled friendly. They always have to depend on someone to help them embark upon the van or a bus if they ever have to travel in the same. Moreover, these transport vehicles have no specific place or seat for disabled persons specially wheel chair users where they could easily adjust. The same fact was confirmed from the public transport drivers and conductors that wheelchair users never travel in the vans because of the fact that there is no such space available for them in the van. Further, upon inquiring from Mr. Adil, the reason for not using public transport, his response was;

"The reason was like you cannot even take a single step on the road. Footpaths and roads are constructed in such a way that one cannot walk on it. I don't think so you can go on the roads. I live in PWD and I never saw anyone using it nor did I try myself."

Even if the disabled persons wanted to access the public transport, the roads and footpaths are in such a bad condition which affect their movement. Therefore, wheelchair users avoid to access or travel in public transport. In addition to this, wheelchair user have to depend upon someone to assist them moving the wheelchair on the road.

6.1 Dependency on Family Members

Moreover, lack of transport facilities have also affected the wheelchair user's mobility. They have to rely upon family members to take them to educational institutes on everyday basis and if they are unable to access the educational institute due to lack of transport facility then they prefer to take education from home. Upon asking how did Mr. Adil completed his education he replied that;

"I used to take home tuitions at home, but when I had to take a board or university exam after a year, I had to ask someone at home or my brother who would take me for exams."

It clearly shows that non-availability of accessible transport increases the dependency of wheelchair users on the family members and makes it difficult for them to access educational institutes own their own. However, launch of transport services such Uber and Careem has greatly benefited the disabled persons specially those who are able to afford it. But these services are way too expensive for those who are poor and financially dependent on their family members. Even for Mr. Adil the services are expensive. Upon asking he was of the view that;

Few years back services like Uber and Careem started operating so I started using careem and uber. I was lucky enough to be able to afford it so I used this service regularly for commuting to office for about two and half years but they are very expensive, at the onset it was affordable, but now it has become very expensive. There are categories that are cheap, but cheap one, is mini, mehran. Drivers of mini are not literate so they do not accept this thing at all, they say their car will get damaged, so they can't keep the wheelchair in it. If mini charges Rs.200 then business class would charge you Rs. 1000. So I used to hire business class because I could afford it"

Commuting on daily basis in the private service is expensive as major chunk of their income is spent on paying transport charges. Moreover, disabled persons also face difficulties while using private transport such as Uber Careem and taxi's. As stated by Mr. Adil, most of the drivers refuse to take ride, booked by wheelchair user, on the pretext that their car will get damaged by keeping wheelchair in it. However, business service which were expensive, were more likely to accommodate them in their vehicle.

Further he informed that he can easily shift in a car and does not require assistance by anyone but he has friends who are completely dependent on their family members. He described that;

"They face lot of difficulties and they do tell me as well. There are female disabled who cannot travel alone and I have observed that they are mostly accompanied by their family member because they have to shift in a vehicle. Now I am a boy, I can shift in a car own my own and sometimes ask for help if I cannot get in the vehicle. I have travelled to Lahore with female friends and it is way too difficult for them. Females face difficulties while shifting in vehicle, sometimes they get late at night and sometimes they don't find vehicle and sometimes mobile network is down and they cannot hire Careem or other service so it's way too difficult for them."

6.2 Affordability of Private Transport

Before working in the Senate of Pakistan Mr. Adil was working in Telenor Company. He was not provided with the transportation service from his office therefore he had to arrange his own transport to commute to office on daily basis. He was being paid Rs. 40,000 per month from his previous job and used to spend most of his income on transport service. Upon inquiring the income spent on transport he informed that;

"Uber and Careem have become expensive now, at the onset it was affordable, but now it has become very expensive. Almost 90 percent of my income was spent in transportation. Sometimes I had to go to my friends and before that I used to apply for jobs and used to go for interviews. But now I have purchased my own car and drive own my own. I don't face any issue these days, but if you hire a taxi for travelling outside Islamabad it's too expensive. They charge 40 thousand or 10 thousand per day so you cannot go outside." Since there are no transport facilities for disabled persons, Mr. Adil was compelled to pay major chunk of his income on transportation alone. However, after getting job in Senate of Pakistan he purchased his own car to commute on daily basis to office. Moreover, disabled persons are not provided with any discount while using private transport service within the Islamabad. Owing to unaffordability and inaccessibility of public and private transport most of the disabled persons prefer to remain at home and get education from home because of high transportation cost. Or else, disabled persons learn skills and work from home to generate some income.

6.3 Difficulties in Private Transport

Morning and evening time in Islamabad are mostly crowded because people are travelling for their jobs, education, etc. making it difficult for disabled persons to find transport during rush hours. In those particular peak hours transport services such as Uber and Careem are unavailable as other people also book them. Resultantly wheelchair users either travel with peak factor price or wait a little extra or travel early to avoid inconvenience. Mr. Adil while explaining difficulties faced by him said that;

"During rush hours I used to come office quite early, if I had to leave for office at 8 a.m. instead I used to leave at 7 a.m. to avoid peak factor and inconvenience during rush hours. During rush hours, Careem or Uber becomes expensive. I also had to face similar issues after office, so I had to take leave early or wait a little bit. Because Uber or Careem is not available soon after the offices are off as everyone books it. Moreover, my office used to close at 5 or sometime at 6 p.m. or 7 p.m. so I could not find pick and drop easily. Even I faced issues while booking Careem, such as sometimes they used to come late and sometimes network was down so I had to wait for it but somehow I used to manage it."

Rush hours puts disabled persons in a very difficult situation as they have to wait little longer for booking a transport service online. A normal person can at least walk till bus a stop or taxi stand to get a transport however, the wheelchairs users are bound to stay at the same place since the roads and footpaths are also not accessible for them. Moreover, protests have become very common in Islamabad in recent years and sometimes mobile and internet services are down for security reasons. In this scenario the wheelchair users also have to face difficulties in terms of booking a vehicle or finding a transport. Due to these issues the disabled persons who are able to afford to purchase a car do so to escape difficulties. Similarly Mr. Adil has purchased his own car and now he is able to move freely. Mr. Adil told that;

"Now I have purchased my own car and imported a device and I drive own my own for coming to office. But this is vehicle is not for disabled, it's a normal car, I have tried my best to import a car but the process is way too difficult. They ask me to get a license first and then a board would approve import of car. When I went to purchase a normal car they did not ask me for any license, they just asked whether you have money or not. I am in need of a car because I am a special person. Even officials at ministry do not know about the process. I tried my best to import a car but could not get approval from government offices as the process is way too difficult. It's not necessary that you have to drive that car and require license, you are a part of a family the family would driver for you. There are many types of disabilities some are blind etc. and they cannot drive a car, so I think procedures should be improved and rules should be relaxed for disabled persons."

Lack of transport facilities compels disabled persons, who are able to afford, to purchase a car for personal use. However, the government of Pakistan has provided the provision of importing duty free altered cars to facilitate disabled persons but the procedure is so lengthy and rules are so impractical that the cost of duty free car becomes higher and much cheaper car can be bought by disabled persons in Pakistan.

6.4 Inaccessible Infrastructure & Social Exclusion of Disabled Persons

Even if disabled persons somehow manage to travel in the private vehicle to access education, job etc. then the buildings and infrastructure are not accessible which compels them to get education from home or look for alternate online source of income or stay idle at home. Inaccessible public transport, buildings and infrastructure excludes them from social and economic participation. Mr. Adil told that;

There were 99 percent places in which I could not inside because of unavailability of ramps. Even I could not join law chamber because of the same reasons. I had done LLB but could not practice because chambers were not accessible for me. I received offers but could not join because some offices were situated at first floor and some at second which had no lifts or accessibility. So I would become liability for them, instead of providing them service.

Even if some buildings are accessible and have installed ramps and facilities for disabled person, they are of no use for them. They are installed in such a way which makes it difficult

for disabled persons to use them. While complaining about the installed facilities Mr. Adil said that;

There are facilities but not enough or useful. There are ramps which are of no use for wheelchair users. Take an example of parliament house, there are ramps, such as there is a ramp in media office, I cannot open its door while using ramp, in order to open the door two people have to remove the ramp first and then the door will open. Facilities are there but they very less and not useful. There are no washrooms for disabled person in parliament house I have checked every floor and none of them are accessible for disabled persons. So disabled has to suffer lot while doing job. Mostly disabled persons prefer doing job nearby their home. Wheelchair user needs to use wash rooms and companies avoid hiring such people because they cannot provide them much facilities."

Public places and buildings should be accessible and barrier-free to disabled people as they find it difficult to access and operate freely without assistance. Major facilities required by disabled people are lacking in many public buildings of Islamabad. As identified by Mr. Adil facilities installed in public buildings are in poor state or of no use and absence of key facilities restricts their movement. Moreover, companies try avoiding such people whom they cannot provide facilities which further reduces their chance of participating in social and economic activities.

Wheelchair users are unable to participate own their own in social, economic and educational activities owing to barriers in their movement caused by absence of affordable and accessible transport, buildings and infrastructure. Consequently, they avoid travelling outside and prefer to stay at home because they consider their disability a burden on their family members. Their frequency of travel outside is comparatively less than other members of family or non-disabled person. Mr. Adil Said that;

I had to go Lahore but my family went, leaving one person behind at home because of me because I could not go with them. I thought how would they lift me and adjust me in bus and it would be drama, because there are no ramps and no system so avoided it as it's not accessible for me.

In addition to this, disabled persons are deprived from enjoying leisure activities and going to cinemas because of lack of accessible infrastructure in cinema halls, hill stations etc. Barrier in movement increases in them the sense of helplessness. Even if the wheelchair users manage to travel on private transport but yet there are places which are inaccessible.

Wheelchair users who are poor are completely facing social exclusion because they cannot even afford private transport. Mr. Adil said that;

I avoid going to places which are inaccessible because I don't want to burden any one. Such as my colleagues are planning to visit a water fall and hill stations but they are not going because of me. So I make excuses and do not go. There are so many places that I cannot visit such as cinemas because they have no ramps."

Due to neglect in providing facilities to disabled persons, their movement is limited greatly which hampers the development of their abilities and restrict them to lead a healthy life like others. However, in Islamabad majority of buildings and places are inaccessible to disabled persons and lot is needed to be done by the government to make all such spaces accessible for disabled persons.

Case Study 2

Miss. Romaila is 30 year old woman who has done her masters and works in private organization. She has been on wheelchair since 2005 when she got spinal cord injury in an earthquake and her legs got paralyzed and lost her parents in the same unfortunate incident as well. She has worked in various private organizations and also teaches disabled community self-help and shifting techniques. She is also an activist who works for the empowerment of disabled community.

In order to get insight about how transport in Islamabad has affected female wheelchair user's mobility, in-depth interview was conducted from her. She frequently uses transport and mostly prefers to travels in private and personal transport for social, educational, work and personal reasons. In order to know as to why she prefers private or personal transport she responded that;

"I have never used vans and hiace because these are not accessible. I have used public transport like Uber and Careem a lot other than my own conveyance. The reason I travelled in Uber or Careem was that we mostly get good drivers and cars and it was affordable. Otherwise I have not travelled in vans because they are not accessible. There are many other disabilities like muscular dystrophy. People have less movements in their hands so they cannot travel in public transport even they cannot shift themselves on front seat. Transportation in Pakistan is not disabled friendly."

The public transport in Islamabad is not accessible for wheelchair users and the reason she does not use public transport such as van bus etc. is that these transport and its infrastructure are not accessible to them. Moreover, even if they use it for some reason or the other, especially female wheelchair users have to face lot of difficulties while shifting into these vehicles and have to rely on family members to shift them in a vehicle like these. In order to access educational institute, the wheelchair users cannot use university buses or any other transport as these are not disabled friendly. Upon asking how did she completed her education she replied that;

"I was pursuing my education in 2009. I could complete my degree at home but I wanted to go regularly so I hired a taxi and after one year my brother purchased a car and he used to provide me pick and drop and that's how I completed my degree. However, after completing my education I started working in a private company which provided us transportation service. The drivers used to keep our wheelchair in the van, but there was no ramp in the shuttle, we had to be dependent on people. So mostly I travelled in taxi or in my own car."

As stated above, since she could not avail transport facilities provided by university, she had to hire a taxi or travel in personal vehicle to complete her education. It is also pertinent to note that unavailability of accessible transport also increases the cost of education for wheelchair users as they have to use private transport for mobility. Further, it also increases their dependency on family members as they are the one who would provide them pick and drop on every day basis and cannot move own their own. Another problem that wheelchair user face is of shifting in a vehicle. Since they are in wheelchair they either have to depend on someone to shift them in a car or they shift own their own if they know the shifting techniques well.

"I can transfer on front seat in taxi. It all depends how well you know shifting techniques how independent you are. So for me I can shift on the front seat of any vehicle without anyone's help."

Since the wheelchair users cannot exercise much they tend to gain weight and it becomes quite difficult for them to shift in a car own their own. Hence, the accessibility of transport becomes difficult for them. However, there should be a training program for such wheelchair users where they must be taught self-skills and shifting techniques which would somehow make them independent. Moreover, they also be taught how to communicate with drivers for help. In addition to this, in Pakistan there is no innovation in cars. There is no change in car infrastructure because they don't prepare cars keeping disabled persons in mind. So the disabled persons face space and wheelchair accessibility issues.

6.5 Affordability of Transport

Since the public transport is inaccessible for disabled persons, consequently, they are left with no other option except personal or private transport such as Uber, Careem or taxi for commuting and mobility. The cost of these transport services is very high for the disabled persons for accessing education or office as they have to spent major chunk of their income on the transportation. Similarly, Miss Romaila also reported that half of her income was spent on the transportation to commute for office. While answering to a question regarding transport expenditure she informed that; "I was working with an organization in the past, so I was paying a taxi 18000 rupees a month and my salary was 40000 rupees. Still the driver was not happy with the money and he used to demand more because he used to help me in shifting and keeping wheelchair. So he was blackmailing me on that and was demanding more money."

Paying high cost for transportation out of income can really be discouraging for people with disabilities especially those using wheelchairs. Moreover, the disabled persons are not provided with any concession neither by local taxis nor by Uber or Careem. This high cost of transportation reduce their participation in society as majority of disabled community may not be able to afford it. However, they are still participating despite many challenges and must be provided ease in mobility. Miss Romaila further said that;

"We cannot access education and other things on regular basis because taxis are not affordable. Here comes the issue of affordability. If transportation becomes friendly then people would stop considering disability a taboo. People consider disability a burden, friendly transportation would remove this from people's mind-set. Then parents would send their children to school and jobs. So disabled people can actively participate in society."

Hence, if the affordable and accessible transport is available for disabled persons, there would be increase in participation of disabled persons as they would be dependent on anyone to travel or move. Moreover, they would be able to pursue their education and career with great ease. However, the current transport and infrastructure in Islamabad is greatly affecting their mobility and they have to rely on costly transportation services for movement.

6.7 Drivers Behaviour

Though the launch of online taxi service has benefited the people with disabilities as it can be booked via mobile phone and can be used by most of the people. However, it has been witnessed that majority of wheelchair users are not welcomed by the drivers of these services. These transport services has two major disadvantages first is the cost which is discussed above and the second is accessibility of wheelchair in the cars. Most of the drivers of these service refuse the ride owing to wheelchair as they think it could damage the seats. Miss Romaila had also faced the similar situation while booking a taxi service. She said that;

"It depends on the person and situation as well. It depends which car you are hiring. I mostly used to hire Alto, the drivers of these vehicles used to keep my wheelchair as well. But sometimes I used to hire big cars, they used to object and refused to take me because they thought wheelchair would damage their cars. So I had to face this behaviour. We also submitted complains but no response was received. It is better to hire a local taxi it is more convenient. Because the drivers used to put wheelchair on the backseat or on the (Jangla)."

The major problem is that the cars in Pakistan have not been designed in such a way that can accommodate wheelchair users. However, the refusal to take the ride by drivers disappoint disabled community. These taxi services like Uber and Careem should sensitize their drivers and keep in mind the needs of people with disabilities and must train the drivers to take care of passengers with disabilities before registering them to operate transport service. There is dire need of spreading awareness regarding disabled persons. Moreover, it is really important to educate and sensitize people and society about the problems faced by disabled persons.

6.8 Safety of Private Transport

Safety of private transport is very necessary for females to be able to travel safely. Since they are disabled it not only concerns parents but they also have to travel with fear. However, the Careem or Uber are much safer than the local transport as you can share your movement with your close family members and the online taxi service has all the data of a driver. However, the safety is still concern for disabled passenger since they are unable to protect themselves from any danger. Upon asking about safety of safety of Uber and Careem, Miss Romaila was of the view that;

"Transportation is never safe and secure because you get weird drivers and sometimes you get good drivers so I had to face awkward situation as well. Everything as pros and cons so it depends on the situation. I think <u>U</u>ber and Careem should run specific transport for disabled person which is friendly and has a female or male attendant. They need to educated drivers as well. They should also introduce an app which has cars for disabled persons only. It will build confidence in disabled persons and will also remove security concerns. But now it depends how they take this idea because everyone sees things from business point of view and they see profit only."

Keeping in view the specific needs of disabled persons, online taxi service can allow the operation of wheelchair accessible vehicles and drivers of these services can be trained as well. It will allow disabled persons especially females to travel safely. However, it may not be possible for private transport service to allocate attendant as it would become costly for the companies to operate services.

6.9 Accessibility of MBS

Infrastructure designed by PMA is somehow good where lifts and elevators are installed to facilitate disabled and other passengers but still there are flaws in the infrastructure that makes it inaccessible for disabled persons. I witnessed that most of the Metro Bus Stations had no slope or ramp on the footpaths leading to Metro Bus Station, making it impossible for wheelchair user to access bus station own their own. Therefore, they require someone's help to cross the step. Miss Romaila on the accessibility of Metro Bus Station said that;

"Now look at metro bus stations. You can access metro internally but to access metro station is a great difficulty. First barrier is stairs and steps and it's difficult. I have seen on many stations that there are steps now until someone lifts your wheelchair and help you accent the step how can you travel in metro then. Even if someone helps you on accenting steps and you get dropped at your desired station how will you get to home from there which is located far away. Now if your home is 15 kilometres away from metro station then you will have to book a taxi. I mean there should be transport service in which disabled person struggles for once only. Now people who are well settled can afford transportation such as Uber or Careem but there are people who are poor whose source of income is very less than how they are supposed to afford."

"I don't know which metro station I visited but I saw that there were two small steps before the lifts so you have to cross those steps in order to get in the lift. Every wheelchair is of different size now I don't think so everyone would be able to use the lifts."

Step on the footpath is a great barrier for wheelchair users. It hampers their movement and makes them dependent on someone. Mostly the wheelchair users are accompanied by someone who help them on such stations which have no slope or ramp on the footpath or else are helped by passer-by or metro staff. Upon inquiring from the employee as to why the slopes are not constructed on most of the stations, it was revealed that the construction of footpaths leading to Metro Bus Station comes under the management of Capital Development Authority (CDA). Nevertheless, people who are handicapped, blind or deaf can access the bus station with assistance. For blinds tactile paving is only installed on the platform to assist them to reach the bus door but this tactile paving is not installed from entry points of the bus stations. Moreover, the MBS runs on the specific route and does not cover all the residential areas of Islamabad. Hence, it becomes difficult for the disabled persons to access MBS since they have to get a cab to reach on the nearest MBS station. Hence, MBS is difficult to access

by those disabled persons who live far away from Metro Bus Stations. However, the said service is accessible to those who live nearby the Metro Bus Stations.

Further, during the course of field work I observed that the most of lifts and elevators in Metro Bus Stations were out of order and inaccessible that further hampers the mobility of those disabled persons who use MBS. These lifts and elevators remain out of order for weeks and months as spare parts are purchase from Karachi and Lahore which takes plenty of time.

6.10 Social Exclusion of Disabled Persons

Availability of inclusive transport is very necessary to avoid social exclusion of people specially disabled persons. Transport available in Islamabad does not cater the needs of people. However, the gap is filled by private transport which becomes difficult for poor to afford. Disabled persons are already marginalized segment of society and face social exclusion in many ways but the situation is further aggravated by the lack of transport facilities for them. Miss Romaila is also an activist and works for the rights of the disabled community, she was of the view that;

"Exclusion is the biggest problem. I have many friends who face this issue. Now I have friend who lives in Lahore and she is disabled. She has gained lot of weight due to disability and now her parents shift her in a car because she cannot shift own her own. Now she needs a full time attendant. I have another friend whose shifting skills are very poor because her muscles are very weak. She has to ask for help every time. Now the thing is there are people who cannot avail opportunities because of lack of good transportation. Now accessibility is not just about accessing car or transport it's about accessing everything. Suppose if you get a job now the question is, are there any lifts and ramps in the building? Is the building accessible to you or not? Many disabled persons cannot avail opportunity because they can come out of home but how will they then access buildings? Females also avoid using public transport because it's a risk. You don't know whether the driver is good or bad. That's why they are unable to complete their education and consequently job opportunities are reduced for them. That's why I have started teaching shifting techniques to females and disabled persons, and if they are not able to go out they can earn at home by providing online services. Or you earn that much you can hire a taxi or purchase a car."

There are lot of problems that disabled community face in terms of accessing opportunities due to lack of inclusive transport and infrastructure. Many are left out in the race and further marginalized due to lack of mobility caused by inaccessible transport. Transport is very vital in order to participate in the social affairs of life. Therefore, campaign should be launched by government at huge level highlighting problems being faced by disabled persons to aware the common masses. Campaign should be launched by online taxi service to aware drivers about how to handle a disabled persons. Government should also introduce vans and buses accessible for disabled persons with ramp facilities so that disabled persons can get inside easily. Specific seats or space be allotted where disabled person can sit on wheelchair easily. Inclusive transportation should not be introduced in Islamabad but whole of Pakistan so that disabled persons move freely without any barriers.

Case Study 3

Mr. Irshad is an MPhil Students who hails from Khyber Pakhtukhaw and studies in Islamabad. He is a disabled person and faces the issue of Limb anomalies since birth. It is the most common birth defects observed in infants. These malformations can occur as isolated malformations, in combination with hand and/or foot and also involves specific main developments of the radius, fibula, or tibia. He frequently uses public and private transport to commute for university and social work and to visit his family at KPK. In order to know to know about the problems faced by him due to limb deformities while using public transport in depth interview was conducted from him.

However, disabled persons who are handicapped, blind and those who have locomotor disability but can walk or move with difficulty are likely to use public transport but do not prefer it since the vans are quite congested and a disabled person cannot sit and adjust comfortably. Front seats of the van have quite enough space for such disabled persons who could spread their legs and sit comfortably but front seat is hardly available for them since it is preferably given to non-disabled females. In a reply to a question regarding experience of traveling in public transport, Mr. Irshad said that;

"It is very difficult to catch a local van. I have to wait a lot to get front seat even if they provide me front seat drivers mostly demand double fare. Though government has notified that disabled persons would be charged half fare and would be given front seat on priority but it's not practiced. I prefer front seat because my legs don't bend, they are stiff so I need front seat to sit comfortably because front seat has enough space. But I don't prefer using local vans because they are always in hurry and there is crowd in the van. In vans you have to get in and get off quickly so it's not easy for me. They don't make a long stop and treat us as a normal person. Even drivers of PIDE bus are in hurry. Many times I was about to fall. Even I fell from PIDE bus once but thankfully I did not get injured. That's why I don't prefer public transport".

I personally observed that drivers of public transport are insensitive towards disabled and old age community. They avoid stopping vans for old age and disabled people because they take time to embark upon the van, since they are competing with other drivers in loading passengers they want every passenger to sit quickly so that he could get another one ahead. Similarly, the disabled persons and aged people take time to disembark from the van so drivers consider it as the waste of time and prefer to take someone who could get in the van quickly. However, I did not see any disabled passenger traveling on the local transport during my field work. This fact was confirmed from the drivers as well who said the disabled passengers travel very less with us and even if they travel they are accompanied by someone.

6.11 Behaviour of Transport Drivers

Drivers and conductors of local vans always look for passengers who would sit according their wishes. Mostly they avoid taking disabled passengers who require space according to their needs. Since the driver and conductor try to get maximum profits by adjusting extra passengers they try not to take a passenger who would occupy double space. Mr. Irshad while complaining about the behaviours of drivers and conductors said that;

"Drivers behave very rudely and they don't treat us nicely. They just want profit and fares. Every time when I travel on public transport I always fight with the drivers as they never make a long stop for me. Passengers ask drivers and conductors to stop van for a while because they see I am disabled person."

Drivers are always in hurry because if they stopped longer at a non-designated stop they are likely to be issued ticket for violation by traffic police. Moreover, the fares set by the government for local transport is quite low so they try to maximize profit by adjusting as many passengers as they can. Contrarily Mr. Irshad finds the behaviour of Uber and Careem driver much better and satisfactory because they get rating at the end of the ride so they never behaved rudely with him. Moreover, he has been refused front seat many times by the drivers and conductors and despite making complaints he has not received any positive so far. According to him;

"I have complained to traffic police but they said they can't do anything until they are directed by Deputy Commissioner. It is because of our complaints the government has issued notification for giving front seat to disabled persons on priority. But it's not implemented and I always end up fighting with them."

Even when Mr. Irshad travels to KPK he pays double fare for getting a front seat. According to him only those disabled passengers are facilitated by drivers who pay the double fare.

6.12 Difficulties & Comfort of Local Transport

A local van can accommodate 17 passengers in a single van. The seats inside the van are quite congested even for a common passengers. However, for disabled persons like Mr.Irshad it is difficult to sit and adjust in the van comfortably. Only the front seat has space which is mostly given to female passengers. Mr. Irshad while sharing opinion over the comfort of local van said that;

"They only provide front seats to females so they don't give me front seat. So they provide me seat at the back. In Islamabad there is ban on use of CNG cylinder so I spread my feet and sit. But still I face difficulty because passengers have to get off."

Moreover, there is always crowd during the peak hours on the van stops so it is difficult for disabled persons to get in the van easily as other passengers push one and other while embarking on the van. Most of the times Mr. Irshad does not find seat in the van and book taxi which consequently becomes expensive for him. Owing to these issues, he travels less on the public transport and his mobility is affected to a greater extent.

6.13 Facilities and Issues in MBS

Metro Bus Service started operating in Islamabad since 2013. Mr. Irshad sometimes uses MBS for his personal tasks. However, I personally witnessed disabled persons including wheelchair users, blind and people with leg disability traveling on the MBS at different stations, whereas in local transport I did not witness any. Furthermore, upon enquiring about the experience of traveling in the MBS he told that;

"Yes I travel in metro bus sometime. I had a good experience and easily find seat. Bus service is good but the question is, are the disabled people benefiting or using this service. Because there is too much crowd in metro bus so how would anyone know that the person standing behind me is disable or not. Even if they see that I am disabled person they won't vacate the seat."

Metro Bus has four reserved seats for disabled persons two for the males and two for the females and there is also enough space for wheelchairs. Passengers cooperate with the disabled persons and provide them seats. However, when no disabled passenger is traveling on bus then normal passengers sit on them but vacate the seat as soon as any disabled embarks on the bus. Besides, there is enough space in the bus for wheelchair where a wheelchair user can travel along with it. During rush hours, employees of the MBS also help

them embark and disembark the bus, and sometimes they are also assisted by passengers. Further, the disabled persons whom I interviewed displayed satisfaction over the MBS but still they faced issues in the wake of inaccessible infrastructure, malfunctioning of lifts and elevators.

Further Mr. Irshad was of the view that the laws related to providing facilities to the disabled persons should be implement and its true spirit as disabled persons are marginalized segment of society and they have the right to live like other fellows. According to Irshad, a separate transport service should be initiated by every government department and universities which would provide them opportunity to participate equally like other people. He further stated that;

"I think government should form a monitoring team in each department whose sole work should be to monitor whether the policies and laws related to disabled persons are being implemented or not. Disabled persons belonging from well off families can enjoy facilities but what about the poor disabled persons. So these monitoring team in transport sector, education sector and other sectors be formed so that they facilitate poor people. A monthly survey should be done and disabled be asked whether they enjoy facilities or not."

Lastly, disabled persons who can walk or move are likely to use public transport but difficulties in public transport discourage them to use the service. They also confront the odd behaviour by the drivers and conductors for not providing them front seats according to their needs where they could adjust comfortably. Moreover, the drivers of these public transport are always in haste and this might cause injury to the disabled persons and further aggravate the problems already faced by the disabled persons.

6.14 Articulating Findings with Literature & Conceptual Framework

Sustainable transport allows people to move easily and interact socially and reduces negative effects on the people (Irem et.al 2020). According to Irem et.al (2020) the world is now shifting from conventional mode of transportation to BRT as it ensures quality of life, saves cost and time and reduces greenhouse gas emissions.

Accessible and affordable transport contributes in human development and has become a very basic necessity in contemporary world because it allows people to access education, job, health and other necessary facilities of daily life. As highlighted in the literature review of this study the developed countries have established world class transportation facilities that ensures inclusion of all segment of society including children, women, elderly and disabled persons. Following the footsteps of developed world, mass transit system is being pursued in various metropolitan cities of Pakistan to ensure inclusion of people including women and disabled persons in providing them safe, cheap and time saving travel. However, my findings reveal that BRT system is not ensuring accessibility to women and disabled persons to greater extent as it should or as suggested in the literature of this study. The reasons that make BRT inaccessible in Islamabad is poor planning, inaccessible infrastructure and its operation on specific route. Disabled persons cannot access the Metro Bus owing to inaccessible entrances, footways and malfunctioning of lifts and elevators. In addition to this, women and disabled persons who live in other areas of Islamabad cannot benefit from BRT even after spending exorbitant amount by the government in its installation. Hence, the poor planning is the reason which is making BRT less beneficial.

Likewise, literature regarding transportation reveals that growing unplanned urbanization is creating traffic, transportation problems and traffic in the urban cities and it is making transport inaccessible to large segment of society resultantly affecting economic growth and human development. However, my findings reveal that planned urbanization improves accessibility of public transport as service roads and main roads in planned residential sectors are within walking distance, whereas, unplanned urbanization creates inaccessibility to transport and other services owing to congested streets and spatial growth of population and housing.

Similarly, my findings reveal that attitude and non-cooperative behaviour of people also contributes to social exclusion of females and disabled persons. As female respondents disclosed that people taunted them for working out in job sector coming out of homes. They faced such taunts not only by the passengers but by other people as well. It discouraged them to come out and travel in such discouraging environment. Likewise, disabled persons implored that captains of Uber & Careem refused to take accept our ride as our wheelchair would damage their vehicles. Foregoing in view, it can be said that the non-cooperative behaviour and negative attitude of people also contributes to social exclusion.

Moreover, as highlighted in the literature review, females in Pakistan feel unsafe in public transport and faced harassment by conductors, drivers and passengers. Similarly, my findings show that females also felt insecure while travelling in the public transport in Islamabad whereas in BRT they felt much safe and secure. Moreover, females also had to quit jobs owing to non-availability of public transport and were discouraged by male members to travel alone in the public transport.

Moreover, as literature review mentioned that poor transport policies and planning pursued by the government of Pakistan in past increased public transport problems the same were found to be true as still government pursue transport policies for political scoring by building BRT only. Transport in urban cities is still not on the priority of succeeding governments and this sector face negligence.

Conceptual framework and literature suggests that improving transport infrastructure and accessibility can ensure inclusion of disabled persons in social and economic affairs of life. Contrarily, my finding suggest that even if the transport is made inclusive in Islamabad, disabled persons would still be socially excluded as buildings, footpaths, educational centres, offices etc. are not disabled friendly and inaccessible. Hence, making transport inclusive will not benefit the disabled persons as revealed by disabled respondents.

Conceptual framework given by Lucas (2012) does not makes mention of disability and poor urban/rural planning as social disadvantage, however, my findings suggest that disabled persons are at social disadvantage as they have no control over the disability by birth and disability caused by accidents, moreover, people living in developing countries like Pakistan are not provided with incentives to lead a quality life. Hence disability also puts people at social disadvantage. Moreover, rural/urban planning is done by the state or government and people have less say or control over unplanned urbanization etc., therefore, poor rural/urban planning also puts people at social disadvantage which makes transport and other services inaccessible.

I have borrowed concepts from the Lucas (2012) for the conceptual framework which I have developed for this study. I kept the concepts that were suitable for my study and added few concepts of my own that I had developed during my research work. However, I have omitted concepts which were irrelevant for this study from the conceptual framework given by Lucas (2012). Concepts that I added have been discussed in the above paragraphs in detail.

Lastly, poor policies, negligence, unaffordable private transport, poor transport planning etc. as discussed in the literature and in conceptual framework were in conformation with my findings but revealed different dynamics of problems faced by women and disabled persons in Islamabad.

Chapter 7

Analysis of National Transport Policy of Pakistan 2018

7.1 Introduction

Pakistan is struggling to provide quality and inclusive transport to the population of urban and rural areas. Keeping in view the growing transport demand in the country, the National Transport Policy was approved by the Government of Pakistan in 2018 which provides road map to improve transport sector for meeting growing demands and enhancing economic growth. In this chapter the National Transport Policy of Pakistan 2018 is discussed and analysed bellow.

7.2 Contextualizing State of Pakistan's Transport Sector

Pakistan's population is growing at fast pace so do the transport demand. Transport Sector contributes 22.3% of the services sector GDP and accounts for approximately 6% of the nation's total employment and 80 percent of interurban passenger and freight movement is done through road i.e. National Highway Network whereas urban transport is solely dominated by the road sector. Transport accessibility in rural areas is very low which hampers economic growth and development in these areas of Pakistan. Transport sector lacks up to date legislation and requires revision along with well-balanced development policies/projects keeping in view long term goals.

Transport sector in Pakistan needs to reduce air pollution as it causes death of 60,000 people annually due to air pollution related diseases. Transport Sector contributes one quarter of the CO2 emission which needs to be curtailed and addressed. Women in Pakistan have low accessibility to public transport which restricts their probabilities of accessing economic and social opportunities.

7.3 National Transport Policy and Master Plan

In view of challenges facing the transport sector, the National Transport Master Plan will be adopted by the government of Pakistan to materialize the aims and goals of this policy. All the government policies related to transport will be reflective of this policy. This policy will contribute to economic growth and development of the country and will help achieve social equity and preservation of environment. Furthermore, this policy is designed to help Pakistan achieve United Nation's Sustainable Development Goals which aims at, eradicating poverty, hunger, good health, innovation, clean energy, climate action and inclusive transport system for disabled and elderly persons. However, it has been witnessed that all the policies adopted by the government has not produced fruitful results and did not solve the transport problems so far. People of Pakistan continue to suffer in accessing the public transport and are compelled to travel in out-dated mode of transport service such as old wagons and buses or in Qing chis. The policies are needed to be implemented in true spirit keeping aside the political interest to achieve the targets and goals mentioned in the National Transport Policy or in Master Plan.

7.4 Principles for the Governance of Pakistan's Transport Sector

Principles for the Governance of Pakistan's Transport Sector of the National Transport Policy includes or sets eleven principles for improving and further developing transport sector. The objective of the principles includes that the transport policies shall be target oriented and objective led. Targets will be included in the National Transport Master Plan and evaluated, reviewed and reported in Governments Annual Plan. Further, the government will improve the data related to transport sector and the decisions will be taken keeping in view the data.

As envisaged in the National Transport Policy, integrated multi modal transport will be pursued in all modes of transportations including road, rail, air, maritime, pipeline and inland transport. Further, integrated urban plans will be prepared and implemented to reduce urban congestion and improving connectivity. Similarly, coordinated mechanism shall be formed among district, provincial and federal government and a Cabinet Committee on Transport shall be a form of coordinated mechanism. However, in reality very less progress is made on this front. In order to materialize these plans, require funds, expertise and commitment of the government.

7.5 Objectives of the National Transport Policy

Objectives of the current National Transport Policy are to improve accessibility of public transport for all and enhance international trade competitiveness by establishing international gateways such as ports etc. It aims at achieving equitable growth and sustainable development preserving environment from adverse effects. However, government has started constructing metro bus project in urban areas of Pakistan to improve accessibility such as Metro Bus in Lahore but it has failed to reduce traffic on the roads and it's inaccessible to

disabled persons as well. However, women do travel in the Lahore Metro Bus but still lot of people use still use Rikshaws and taxis.

7.6 Policy directions for each of the transport sub-sectors

National Transport policy further provides policy directions to transport sub sectors intending to achieve highest standards of transport system. In order to improve the road transport, the policy guides to encourage use of public transport by providing access of the public transport to remote areas. Focus will be to design and construct all weather roads with interurban connectivity and will place transport service for rural areas.

Integrated and single urban transport system will be considered and planned for all major cities keeping in view the framework for 10 to 20 years. Use of private motor vehicles will be discouraged and walking and cycling network will be laid in all major cities. Parking space for private vehicles will be limited and interventions will be made to encourage environment friendly electric and low carbon vehicles.

7.7 Implementation arrangements

In order to implement the said policy a Cabinet Committee on Transport will be formed which will include representation from all the responsible and concerned ministries. The Committee is mandated to oversee development, evaluate performance and consider periodic review of the policy.

7.8 Critical Analysis

The first chapter of the National Transport policy of Pakistan highlights the importance of transport sector as a driver of socioeconomic progress. Further, it identifies problems of transport sector which is limiting economic growth and development of the country and recognizes the need for better transport system in the country. However, the policy sees the deteriorated condition of transport as hurdle to economic growth and not the human development. In addition to this, it makes no mention of problems being faced by disabled persons who face social exclusion in the wake of unavailability of public transport and accessible infrastructure. Likewise, the policy does not recognize the increasing number of Qingchi's and private vehicles as a problem which is causing congestion in all major cities of Pakistan. Moreover, Qingchi's and taxis are being used by public as means of public transport service due to unavailability of accessible transport. The policy provides no strategy

to regularize these transport service which is largely being operated in the country especially in Islamabad. Moreover, it does not mention any standards, rules or regulations to be imposed on such transport service.

Since the policy was approved in 2018 no progress or work on National Transport Master Plan has been made so far to address the problems of the transport sector. No budgetary cost, timeline, or rigorous follow up of the policy is stated in the National Transport Policy. Moreover, the policy makes no mention of achievement made in the past transport policies.

Apart from setting principles for governing transport sector, the National Transport Policy does not set principles for pursuing urban planning which is the main big issue in all metropolitan cities. Unplanned cities make transport less accessible and encourage use of private motor, Rikshaw's and Qing chi's. Urban sprawl and horizontal growth of cities also needs to be limited as it causes huge transport problems for the people. All the principles set in the policy are idealistic but hard to pursue keeping in view the ground realities as cities are unplanned with presence of illegal mode of transportation, consequently, no steps have been so far to implement this policy. Furthermore, the current Imran Khan's government's priority is to set the economy on the right direction. Current government has more focus on climate control, export and construction sector. A Cabinet Committee on Transport and Logistics (CCoTL) was formed on 21st April, 2021 after five years of approval of this policy in 2018, which clearly shows the lack of priority and interest of government in transport sector.

Since the policy is approved in 2018, no significant achievement has been made by the government. National Master Plan is still not prepared as envisaged in the policy after passing of five years. Moreover, the road map to improve transport sector is missing as the policy provides general guidelines based on best international practices and idealistic approach. The policy is well intentioned which intends to achieve highest standards of public transport system but ground realities are quite the opposite such as presence of huge number of Qingchi's across Pakistan and no directions or principles are set to provide guidelines to either regularize it or remove it from the urban and rural transport system.

National Transport Policy is not prepared keeping in view the pre-requisite data, ground realities, social culture and people's attitude. The policy mentions of achieving Mass Transit System in all the major metropolitan cities of Pakistan which requires large investment and funding for mass scale projects hence it is way too costly for a developing country and struggling economy like Pakistan. In first phase the integrated transport should be initiated

for urban and rural areas of the country by running the buses initially with public private partnership to provide connectivity and integration. In the second phase necessary and disabled friendly infrastructure be built to facilitate the passengers. In the third phase the well town and urban planning be pursued to make the public transport accessible to all.

Chapter 8

Conclusion and Recommendations

8.1 Introduction

This chapter includes policy recommendations and conclusion in the wake of findings and discussion. This chapter also provides roadmap for future studies and underlines limitations. Inclusive public transport is direly needed in Pakistani metropolitan cities in order to provide masses comfortable, accessible and affordable public transport and save neglected segment of society from social exclusion. Lack of public transport facilities is not only limiting economic growth but it is also a barrier to human development. Islamabad is also one of those metropolitan cities of Pakistan which lacks inclusive and accessible transport system and policy. Following are the policy recommendations, if taken seriously, can provide great ease to the people specially female and disabled persons and make the capital interconnected.

8.2 Revamping Public Transport System in Islamabad

Islamabad is considered one of the most beautiful capital of the world because of its scenery and developed city planning but, factually, no concrete effort has been made to introduce inclusive public transport system in the city to make it connected. The National Transport Policy of Pakistan 2018 sets targets and visions to be achieved by the government of Pakistan at national level, however, on ground no further policies have been prepared or pursued to set the transport system in right direction in metropolitan cities including Islamabad. Undoubtedly, mass transit system have been implemented in major cities such Multan, Peshawar, Lahore and Islamabad but these have not resolved the transportation issues to the fullest and the issue of traffic and inaccessibility persist, further, people are left with no other option except to use Qingchi's and other modes of transport. Since Pakistan is developing country and is striving hard to achieve economic stability, it should spend money for installing bus service in collaboration with private sector in metropolitan cities, instead of spending huge amount of money on building infrastructure for separate BRT which caters the need for few. Therefore, Pakistan cannot afford to install first class transport service in one go. First a bus system should be introduced in major cities and then the infrastructure be built to cater the needs of people. However, following steps should be taken to improve the public transport system in Islamabad.

8.3 Transport Policy for Islamabad

Since Islamabad was made capital of Pakistan no transport policy have been prepared or implemented. However, many studies have been conducted by National Transport Research Centre (NTRC) in the past, stating the need of mass transit system in the city to reduce traffic congestion and social exclusion of the people. Though, Metro Bus Service has been implemented in Rawalpindi and Islamabad by the government at exorbitant cost, yet, it has not resolved the transport problems for whole of Islamabad.

Keeping in view, there is dire need of a transport policy for Islamabad, which could revamp the whole public transport system in the city. A transport policy should be prepared by government in consultation with Ministry of Communication, along with NTRC, Ministry of Planning and Development and Special Initiatives, Islamabad Administration, CDA, MCI, and Islamabad Traffic Police. Afterwards, an implementation mechanism should be set and responsibilities should be assigned to concerned ministries/authorities. Funds should be allocated and released by the government to revamp the public transport system in Islamabad. Quarterly policy implementation should be reviewed and evaluated and reformed accordingly.

8.4 Collaboration with Private Sector

Since Pakistan is struggling with its economy, it is not possible for the government to allocate huge chunk of money to install a mass transit system in the city. Instead of building separate infrastructure, stations etc. private sector should be invited to collaborate with the government. Private companies can be financed by the government to purchase buses and replace it with the vans and Suzukis which are the obsolete mode of public transport in the modern world. Such mode of transport is prevalent the capital city of Pakistan and be replaced immediately with the buses as they are more environment friendly and has the capacity to carry the passengers three times more than the van. Private sector/companies can replace these vans with the buses in whole of Islamabad.

Operating buses in Islamabad will not only reduce congestion on the road but will also save travel time, and reduce crowd on the van stops. Moreover, the bus service will be of a great relief for a females traveling every day for accessing job, education health facilities etc. as it would provide them comfortable and safe travel.

8.5 Construction of Inclusive Transport Infrastructure

Metropolitan Corporation Islamabad (MCI) and Capital Development Authority (CDA) should implement inclusive design of bus stops to facilitate disabled persons. Bus stops including footpaths in all of the Islamabad should be constructed in a way that is accessible by all. Waiting area on bus stops for both genders be constructed in whole of Islamabad to facilitate passengers specially women.

8.6 Quota for Women & Disabled Persons in Bus

As findings show that reserved seats for females in vans and MBS are less than the demand, therefore, all the buses should have at least 30-40 percent seats reserved for females. A separate public transport, exclusively for females may not be possible, therefore, by keeping more than 30-40 percent seats would greatly benefit female community in accessing jobs, healthcare facilities leisure activities etc. and would provide them comfortable journey. It would also inculcate in them the sense of safety and security in the bus since women would have separate space. Risk of harassment in bus would greatly reduce as is the case in MBS. Whereas, in vans, risk of harassment always prevails. Similarly, seats or space should be kept for disabled persons in all the buses which must have ramp facility so that disabled persons access the buses without any trouble.

8.7 Feeder Routes for MBS

Since the infrastructure is already in place and people living in farther areas find it difficult to access public transport, therefore, feeder routes should be initiated in urban areas to facilitate passengers living in different sectors where MBS does not operate. It will make transport system more connected and will discourage use of personal vehicles and ensure inclusion of different segment of society.

8.8 Bus System in Islamabad

The only way to resolve the transport system of Islamabad including rural areas is to start bus service in the city. The bus service should be installed to connect rural areas with urban centres, economic hubs, hospitals, educational institutes etc. A good bus service which would observe rules, proper timings and cleanliness can help encourage use of public transport in the city. Affordable bus service would ensure inclusion of neglected segment of society and increase economic output as well.

In addition to this, CCTV cameras on the bus stops and in bus service should be installed to ensure safety and security of females. Resultantly, families will allow their females to travel alone when a good bus service starts in the city where safety and security of females is ensured. It will save females from mental distress and will enable them to utilize their abilities in society. Similarly, bus service will reduce dependency of females and disabled persons on their family members and private transport which is, however, unaffordable and expensive.

8.9 Establishing Complaint Mechanism

A complain mechanism should be set forth to address the grievances and concerns of passengers. It can either be done by introducing mobile App or by establishing a complaint centres in major bus terminals/stops. Presently, findings show that females hardly report harassment, misbehaviour etc. to the authorities to avoid getting into trouble. However, if a good complaint mechanism is in place, would encourage females and disabled persons for reporting of grievances and prompt redressal of complaints would enhance trust of passengers in the government and bus service.

8.10 Training of Drivers and Conductors

Drivers and conductors of the bus service should be trained and made aware to deal nicely with the passengers including females and disabled passengers. They must ensure that the every passenger is travelling comfortably and must adopt cooperative behaviour. A rating mechanism of drivers and conductors can be laid down to keep a check on their rules violation such as speeding overloading, misbehaviour etc.

8.11 Sensitizing Public on the Issue of Disability/Mass Awareness

Disabled persons are the most deprived segment of society, hence, there is need to provide them comfort, assistance, and priority not only in the bus service but in all affairs of life. Awareness campaigns should be launched by the government to sensitize the public on the problems faced by disabled persons. Non-disabled community needs to change their behaviour towards disabled community and should provide them with seats and assist them in embarking and disembarking the bus if required.

8.12 Latest Transport Data/Studies

Latest research studies for transport should be conducted in Islamabad and policies be formed on the basis of collected data. Currently, latest data for Islamabad is unavailable with National Transport Research Centre (NTRC) owing to lack of funding. Funding can be sought from the international organizations or governments for the study projects in Islamabad. However, government can also request universities to conduct research on the transport sector in Islamabad and provide the said thesis/research of students/academia to the government for policy making.

8.13 Rural Planning

Capital Development Authority (CDA) in coordination with Metropolitan Corporation Islamabad should initiate town planning for rural areas as congested streets and spatial growth of population/house is making transport inaccessible for people living in rural areas of Islamabad.

8.14 Conclusion

Inclusive transport system plays significant role in human development and socio-economic growth of a country. Pakistan is a developing country and is struggling for economic stability and social development. Transport sector in Pakistan is facing issues and is in dilapidated condition which requires urgent attention and improvement which is hampering economic growth and human development to a greater extent. Majority of the population of Pakistan lives in rural areas and faces the issue of accessibility of public transport. Likewise, lack of public transport in metropolitan cities such as Islamabad is also creating multiple issues for larger segment of society including women and disabled persons.

Social exclusion of women and disabled persons caused by inaccessible public transport in Islamabad has further aggravated the situation for both and there is dire need of paying attention to the transportation issues. However, The National Transport Policy of Pakistan 2018 envisages principles and policy guidelines for improving the public transport system in the country but no progress has been made so far in achieving inclusive transport for all in major metropolitan cities like Islamabad.

Expansion of roads, underpasses and overhead bridges will not resolve transport problems of the city. Government needs to give priority to transport sector in initiating bus service with ramp facilities and inclusive bus stop infrastructure in major cities of Pakistan including Islamabad. Later, the government can move ahead with mass transit system keeping in view the funds required for the mass scale projects. Such willingness and steps by the government will not ensure inclusion of women and disabled persons in society but would benefit public at large.

8.15 Area for Future Investigation

Over the decades the transportation issues persist in Islamabad and lack of interest by the government in improving transport sector is creating congestion on the roads and social exclusion of women and disabled persons in the city. This study, in this regard, suggests to conduct comparative study of benefits of installing inclusive bus service in whole of Islamabad. A comparative study could give better understanding of how can we ensure inclusion of women and disabled persons especially in rural areas of Islamabad.

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Appendex A

Images from field work

Image I: Picture of Abparah G-6 van terminal: People are seen standing waiting for vans in sunshine. The van stop has no shades or waiting area and the ground is muddy



Image II: Picture of Pak-Secretariat Metro Bus Station Stop with slopy footpath



Image III: Picture of PIMS Metro Bus Station. No slope is constructed for disabled passengers

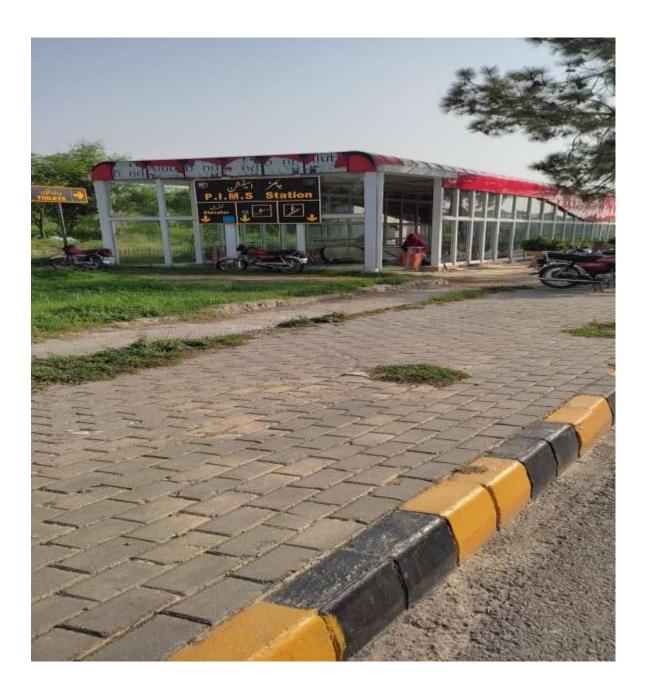




Image IV: Inside view of Metro Bus Staion

Source: https://www.shutterstock.com/image-photo/islamabad-pakistan-june-2019rawalpindi-metro-1561061303

Image V: Picture of ticket booth, ticket machine and lift



Source: https://cdia.asia/wp-content/uploads/2017/04/Article-85_4.jpg

Appendex B

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Appendix G

Interview

Interview Questions for ITA, NRTC & RTA Officials

Name: ______ Age: _____

Gender: _____

Occupation: _____

Time and date: _____

Location of Interview: _____

Q. 1. Which transport policies have been devised and implemented by Government of Pakistan since Islamabad was made capital?

Q.2. How far the transport policies have been effective?

Q.3. what kind of changes these policies have brought in transport sector?

Q.4. Have these policies been implemented? If not, what are the reasons for non-implementation of transport policies?

Q.5. why no bus service or public transport has been installed by the government in Islamabad?

Q.6. Why bus stops in Islamabad have not been developed by government?

Q.7. Why pavements are not disabled friendly?

Q.8. Who designs routes of public transport to facilitate movement of people? What criteria is kept in view before drafting/designing routes?

Q.9. How do you give route permit to public transport operators? Have you set any criteria or pre-requisites?

Q. 10. Do you bind transport owners/operators before giving them route permit to allocate space for women and facilitate disabled person in traveling?

Q.11. what steps have ITA/RTA have taken to ensure accessibility and affordability of public transport in Islamabad for disabled person?

Q.12. How many complaints do you receive from passengers?

Q.13. Who complains more and what is the nature of a complaint?

Q.14. Do you think Public private partnership in transport sector can bring improvement in Islamabad?

- Q.15. What loop holes do you find in public transport system in Islamabad?
- Q.16. What can be done to improve the public transport system in Islamabad?

Appendix H

Interview Questions for Transport Owners

Name:
Age:
Gender:
Education:
Occupation:
Time and date:
Location of Interview:

Q.1. How do you hire drivers and conductors?

Q.2. How do you facilitate women passengers in your transport? How do you ensure the women are allotted space in public transport?

Q.3. what facilities do you provide to disabled persons? Do you have any mechanism to facilitate disabled persons?

Q.4. Do you alter seats or make seating arrangements specifically for disabled person?

Q.5. Do you face any difficulties from transport authorities in ensuring accessibility of transport to women and disabled persons?

Q.6. Do you receive complaints of harassment by females?

Q.7. What are the major problems in transport?

Q.8. How can we solve transport issues?

Q.9. What do you expect from government in helping you out to provide facilities to disabled persons and women?

Q.10. What measures should be taken to improve accessibility of public transport for women and disabled persons?

Appendix I

interview Questions for Transport arrivers and conductors
Name:
Age:
Gender:
Education:
Occupation:
Time and date:
Location of Interview:
Q. 1. How do you accommodate women passengers in public transport?
Q. 2. How do you ensure safety to women passenger? And what steps do you take?
Q.3. How many disabled persons travel on local transport?
Q.4 How do you facilitate disabled persons in public transport?
Q.5. Do you provide fare discount to disabled persons and female students?
Q.6. Do you complete the routes as approved by transport authorities? If not reasons?
Q.7. Do you think facilities should be improved for female and disabled persons?
Q.8. What improvements would you suggest to ensure safety and accessibility of public transport for women and disabled persons?

Interview Questions for Transport drivers and conductors

Appendix J

Name:
Age:
Gender:
Education:
Occupation:
Time and date:
Location of Interview:
Q. 1. How women are provided safe travel in BRT?
Q. 2. How women are accommodated in BRT?
1.1 How much space is allocated in BRT bus for women?
Q.3. How many disabled persons do you facilitate every day?
Q.4. How BRT service ensures accessibility of transport to disabled person?
1.1 Are there any wheelchairs to facilitate disabled persons?
1.2 Are disabled persons provided space in BRT Bus?
1.3 Does lift operate well or remains malfunctioned? If malfunctioned, then how disabled persons reach at BRT platform?
Q.5 Do you think BRT infrastructure is well designed and accessible for disabled person?
Q.6 What facilities should be included to improve accessibility of BRT to disabled persons?
Q.7. What improvements would you suggest to ensure safety and accessibility of public transport for women?

Interview Questions for Employees of BRT

Appendix K

1110	erview Questions for temate and disabled passengers
Name:	
Age:	
Gender:	
Education:	
Occupation:	
Time and date:	
Location of the In	nterview:
Disability:	
Q. 1. How often	do you use public transport?
Q. 2. What is the	purpose of your travel?
Q.3. What public	e transport do you use or prefer? And why?
Q.4. How transpo	ort drivers and conductors behave with female?
Q.5. What action	do you take when drivers/conductors do not behave well?
Q.6. Do you com	plain to authorities over their misbehaviour or any other reason?
Q.7. Have you ev	ver faced harassment in the public transport?
Q.8. How much transport is affore	of your income is spent on using public transport? Do you think public dable?
Q.9. How much	public transport is accessible to you?
	ow much distance do you have to cover from home or office to access ublic transport?
1.2 H	ow much time do you wait for public transport at bus stops?
1.3 H	ow many vehicles do you change for reaching destinations?
1.4 H	ow much are you satisfied with the routes?
1.5 H	ow do you manage to get transport during rush hours?

Interview Ouestions for female and disabled passengers

1.6 Are you satisfied with the fare being charged?

Q.10. How much public transport hampers your mobility?

Q.11. Do you think lack of transport facility makes it difficult for you to access job, education, healthcare and other activities?

Q.12. Being disabled how much difficulties do you face while accessing public transport? (This question was asked from Disabled persons only)

1.1 Are you facilitated by public transport or staff in on boarding the vehicle?

1.2. Do you think lack of transport facilities deprive you from participation in education, economic and social affairs of life?

Q. 13. What suggestions would you like to give to improve public transport in Islamabad?