

**URBAN MOBILITY & INEQUALITY IN PUBLIC SERVICES  
IN DHAKA CITY: AN ANALYSIS OF ACCESSIBILITY OF  
TRANSPORTATION FOR PEOPLE WITH DISABILITIES  
(PwDs)**

By

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A thesis submitted to the Department of Brac Institute of Governance and Development  
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Master of Development Studies

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## **Ethics Statement**

The ethical standard for conducting such research had been strictly adhered to. All of the participants were treated in accordance with the ethical guidelines of the American Psychological Association (APA) and the University of Nebraska Institutional Review Board (IRB). Although there are no identifiable risks for participating in this study, some considerations were kept in mind while dealing with the participants. At the very beginning it was ensured that the respondents were comfortable with the interview; understood the purpose of the research and that no monetary benefits would be provided for their assistance with the study. Also, permission has been taken to use their names in the paper. The respondents' participation was entirely voluntary, and they had the right to withdraw from the interview at any point in time. All research equipment, for example, a recording device was used with the permission of the respondents.

## Abstract

*Dhaka city lacks accessible, available, acceptable, reliable, safe, comfortable and affordable transportation system for people with disabilities creating barriers to their mobility. The study, through secondary sources, not only identified the main global and national policies that exist for the people with disability (PwD) but also found major gaps in the policies. Due to these gaps in the policies or due to the inefficient implementation of the laws the PwD face inequality in accessing the public services, especially the public transport and infrastructure. The findings from primary data show that PwDs are facing infrastructural and social barriers hampering their mobility and creating inequality in the public services. Therefore, this study has provided strategies to remove the infrastructural and social barriers, which mainly includes to train the transport providers regarding the services that needs to be given to PwD.*

**Keywords:** accessibility; public transport; disability; inequality; urban mobility; public services

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## List of Acronyms

BBS	Bangladesh Bureau of Statistics
BRTA	Bangladesh Road Transport Authority
CA	Capability Approaches
CrPC	Criminal Procedure Code
CPI	Consumer Price Index
CRT	Critical Race Theory
CRPD	Convention on the Rights of Persons with Disabilities
DDA	Disability Discrimination Act
GDP	Gross Domestic Product
HI	Handicap International
HIES	Household Income and Expenditure Survey
NFOWD	National Forum of Organizations Working with Disabilities
NSDC	National Skills Development Council
PwD	People with disability/Person with Disability
RPPDA	Rights and Protections of the Persons with Disabilities Act
RTI	Right To Information
SDG	Sustainable Development Goals
SSNP	Social Safety Nets Program

TVET	Technical & Vocational Education & Training
UDHRs	Universal Declaration of Human Rights
UNCRPD	United Nations Convention on the Rights of Persons with Disabilities
WEF	World Economic Forum
WHO	World Health Organization

## Glossary

Accessibility:	An ability to live independently and participate fully in all aspects of life including access to physical infrastructure open for all irrespective of their urban or rural belonging
Acceptability:	Public acceptability of sustainable transport measures where mobility to all income groups of the society needs to be ensured without hampering environmental balance and road safety condition.
Affordability:	It refers to the extent to which the financial cost of journeys put an individual or household in the position of having to make sacrifices to travel or the extent to which they can afford to travel when they want to.
Availability:	The right of persons with disabilities to get access, opportunity and treatment on an equal basis with others in all facilities and services available to the general public, including physical infrastructure, transportation, communication, information, and information and communication technology
Comfortability:	Public transport of all kinds needs to be planned and designed or adapted so as to provide some facilities in the vehicles so that disabled persons can access the vehicles and ride on them in comfort
Definition of Disability (DDA, 1995) :	According to the Disability Discrimination Act 1995; disabled people are those who have, or who have had, either a physical or a mental impairment that has a

	substantial and long term adverse effect on a person's ability to carry out normal day-to-day activities
Definition of Disability (ICIDH):	Disabilities and Handicaps (ICIDH) as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”.
Definition of Disability (The European Commission) :	The European Commission (1996), categorized disability into five-namely; physical disability, sensory disability, learning disability, mental disability and others.
Thesis:	An extended research paper that is part of the final exam process for a graduate degree. The document may also be classified as a project or collection of extended essays.
Public Transport:	Public transport is generally defined as publicly available transport, usually shared with other users and operating on set routes at scheduled times
Reliability:	In order for a system to be accessible, it must provide information in forms that are useable by everyone, and training for transport staff to understand the needs of disabled and elderly people. Streets, parks, and other urban areas must be designed in a way that enables people to move about safely and confidently
Sustainable Transport:	Sustainable transport system is one that “allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations. It

is affordable, operates efficiently, offers the choice of transport mode, and supports a vibrant economy. It limits emissions and waste within the planet's ability to absorb them, minimizes consumption of nonrenewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.

Universal Design:

The design of products, environments, programs and services to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design.

# Chapter 1

## INTRODUCTION

### 1.1 Background

Accessibility is about giving equal access to everyone (United Nations, 2007). UN accepts the concise and pragmatic definition of accessibility that refers to provision of 'flexibility' to accommodate each user's needs and preferences (Akter, 2017). Accessibility focuses on ensuring access for People with Disabilities (PWDs) and is strongly related to universal design which is “the process of creating products, devices, services, infrastructures, roads, transport and environment that are usable by people with the widest possible range of abilities, operating within the widest possible range of situations” (Ubaed, 2016). This is about making things accessible to all people (whether they have a disability or not) (Ubaed, 2016). It is increasingly recognized as a key element of a high quality, efficient and sustainable transport system (Soltani, Sham, Awang, & Yaman, 2012).

The ideal transport system is: “...a mix of accessible equipment – the vehicles, the stations, the platforms, the bus stops – and ways of operating that do not create barriers to universal use” (Heiser, 1995, cited in Wilson, 2003). Transport includes both public transport (buses, trains, taxis, aircraft and ferries) and private individual transport (cars and bicycles), as well as walking (Mitchell, 1997, cited in Wilson, 2003) and community transport (eg dial-a-ride<sup>1</sup>). Public transport is generally defined as publicly available transport, usually shared with other users and operating on set routes at scheduled times (Mitchell, 1998; cited in Wilson, 2003). ‘Mainstream’ public transport includes buses, trains, taxis, aircraft and ferries. Other specialist public transport services include health, education and social services transport, dial-a-ride<sup>1</sup> and other community transport services (DETR, 2000d; DPTAC 2002b; cited in Wilson, 2003).

Transportation is a crucial element for staying out of poverty (Babinard, 2010). In transportation, poorly accessible transport systems, infrastructure and vehicle design, as well as lack of accessible information to passengers hinder accessibility. This form of exclusion increases the costs associated with disability and people who are denied access to essential

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<sup>1</sup> also known as paratransit, on-demand, door-to-door, or curb-to-curb transportation service, could be as simple as a car or small minivan, many of the vehicles in use are wheelchair-compatible and able to accommodate riders with different physical needs for boarding and unloading

transport services tend to face greater challenges to stay out of, or exit, poverty (Babinard, 2013). Lack of transportation not only limits access to job opportunities, but can also escalate the difficulty finding employment based on limited access to employment center and interview locations (Department of the Environment, Transport and the Regions [DETR], 2000; Kenyon, et al., 2002, cited in Bascom, 2017). Charlotte McClain-Nhlapo, the World Bank's Global Advisor on Disability mentioned that "Mobility improvements are key because transport gives you access to jobs, schools, healthcare, markets, leisure (The World Bank, 2015).

The Agenda 2030 includes a specific Goal that aims at making cities and communities inclusive and sustainable for persons in vulnerable situations and with disabilities (SDG 11). The 2030 Agenda pledges to leave no one behind, including persons with disabilities, and has recognised disability as a crosscutting issue, to be considered in the implementation of all of its goals (UITP & handicap international, 2019,). In particular, SDG target 11.2 sets to provide by 2030 "access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons" (UITP & handicap international, 2019). The Sustainable Development Goals (SDGs) framework includes seven targets which explicitly refer to persons with disabilities and six further targets on people in vulnerable situations which include persons with disabilities (Bennet, 2016). Safe and accessible rights-of-way are essential elements of community life. Rights-of-way include streets, sidewalks, crosswalks, curb ramps, crossing signals, street parking, and other public infrastructure, and are crucial to viable transportation for people with disabilities (AAPD, n.d.).

The principles of the UN Convention on the Rights of Persons with Disabilities (CPRD) brings new momentum to ensuring accessibility in the delivery of transport infrastructure and services (Babinard, Wang, Bennett, & Mehndiratta, 2012). It includes various provisions related to the issues covered by SDG 11, particularly on making cities and human settlements inclusive for persons with disabilities and that public transport must be accessible on an equal basis with others. The New Urban Agenda also commits to improve road safety, public transport and transport infrastructure for persons with disabilities. (UITP & handicap international, 2019)

According to the definition of the Council of Europe (1992, Article 3), disability is a "limited ability caused by physical, psychological, sensory, social, cultural or other hindrances preventing persons with disabilities from being integrated and from participating in the life of

family and community on the same bases as everyone else". (Žganec, Laklija & Milić Babić, 2012)

Around 600 million persons with disabilities in the world, which is equivalent to around 10% of the world population, and they are very heterogenous in terms of the type of disability, degree of disability and various distinguishing categories. Similarly, there are different definitions of disability, which leads to different estimates of the number of persons with disabilities. (Žganec, Laklija & Milić Babić, 2012) The World Bank has estimated that about 15% of the world's population experience some form of disability during their lifetime, and up to 190 million experience significant disability (Bennet, 2016). 10-12% of the world's population has moderate to severe disability and 80% of disabled people live in developing countries (Babinard, 2010). 80-90% of persons with disabilities of working age persons are unemployed; 1/3 of primary school aged children not in schools due to disabilities or are looking after family members with disabilities (Babinard, 2010).

Individuals who face difficulty in accessing transportation are considered 'transportation disadvantaged', and include the elderly, the poor, and individuals with disabilities (Rajé, 2003; Levinson, Wasfi, & El-Geneidy, 2006; Yigitcanlar, Dodson, Gleeson, & Sipe, 2005, cited in Bascom, 2017). Heiser (1995) defines transport disability as 'the unnecessary exclusion of disabled people from current forms of transport', and estimated that 12-13% of the population belong to this group. (Wilson, 2003). Four generic barriers have been identified, which are affordability, acceptability, availability and accessibility. (Wilson, 2003)

Around the world, a large proportion of urban and inter-urban transport systems remain inaccessible to persons with disabilities (The World Bank, 2015). Mobility constraints are a serious impediment to disability-inclusive development, as they exacerbate the personal, economic, and social isolation of persons with disabilities (The World Bank, 2015). Many people with disabilities have to stay at home every day due to mobility constraints (Babinard, 2010). Keeping people with disabilities at home keeps them out of jobs, away from shopping, and out of community life, and it prevents them from making valuable contributions to our society as individuals, as workers, as consumers, and as taxpayers (AAPD, n.d.).

Accessibility is not about physical access to vehicles and systems whereas the transport chain must be accessible at all points because an individual can only travel if every link in the chain, from door to destination, is reliable, accessible, and affordable. (EMBARQ, n.d.)



The concept of disability inclusion and mainstreaming is still evolving and is perhaps not adequate on its own to lead the path towards sustainable development. A large number of people remain unproductive due to lack of proper accessibility and inclusion in our society. Laws have been passed, a United Nations (UN) convention has been ratified, but these are not being implemented well or monitored as needed. (Hossain, 2019) Although there were several global efforts taken to promote accessibility through development aid and “the right to movement” is claimed as a human right by the UN Convention on the Rights of Persons with Disabilities, however, it is not clear how much of the efforts have significantly resulted in increased accessibility though there is growing importance of finding concrete solutions because of increasing aging populations of many countries, including developed and developing. (EMBARQ, n.d.) On balance, the extent of inequality for disabled people can be viewed as a measure of the political success of liberal ideology where the activities of the courts and government enforcement agencies either serve to advance or roll back liberal regulations promoting equality. (Russel, 2000)

During the Budget Speech in 2019, it has been expressed that according to the latest GDP ranking based on PPP published by the IMF, Bangladesh is now the 30th largest economies in the world. In South Asia, Bangladesh is now the second largest economy after India. On the other hand, approximately 15 million people suffer from various disabilities, including women with disability, who have limited access to education and employment, suffering due to improper care and treatment leading to exclusion in the decision-making process in the families. (Akter, 2016)

The transport and communication sector of Bangladesh got allocated the third highest share of the total budget, but sadly, there is no specific allocation to make roads, highways, footpaths, footbridges, and public transport disabled-friendly. (Jahan, 2019) The Dhaka city currently suffers from various impacts caused by lack of affordable, inclusive, efficient and safe transport mode for mobilization of its people (Ahmed, Alam, & Warda, 2017). Dhaka is the 26th Mega City and 10th most populous city of the world (Habib et. al., 2005, cited in Khan & Hoque, 2013). The population is expected to further grow to about 20 million by 2020 and to 25 million by 2025 (STP, 2005, cited in Khan & Hoque, 2013). Only 9% of roadways and 6% of pavement area are available, in which 62 km functional primary, 108 km secondary and 221 km connector road serve the city road network (Mahmud et. al., 2008, cited in Khan & Hoque, 2013). The traffic congestion cost is US\$3 billion a year and the city losses over 8 million work hours daily (Osman, 2011, cited in Khan & Hoque, 2013). The city roads are unwelcoming not only for

people in a wheelchair but also for persons with all types of disabilities (Sakaki, 2018). There is great diversity of needs among people with disabilities. Specific impairment may be linked to a physical, hearing, speech, visual or cognitive condition (Babinard, 2013).

In Dhaka, historically roadway is the most favored and dominant form of transport (Khan & Hoque, 2013). The affordability of public transport is an issue in developing countries (Mamun, 2014). In Dhaka City, bus is the cheapest (Rahman, 2010) mode of transport available in Dhaka City. However, bus service of the city is in unsatisfactory condition due to lack of proper maintenance, planning and management, and uncontrolled development (Olsson and Thynell, 2004, cited in Rahman, 2010). Unfortunately, there are no visible facilities found for wheelchair users in the said public places (Akter, 2017). On the other hand, there is a clear directive in the Bangladesh National Building Code to make buildings accessible for PwDs but implementation of this directive has also been very slow (The Daily Star, 2017). Research shows that in two major cities, in Dhaka and Chittagong, 90%, public buildings are not designed for disable people (Akter, 2017). Only a few buildings, for example, the National Museum, the Parliament Building, Mirpur National Stadium, Bisswa-Shahitto Kendra, University of Dhaka and The Daily Star Building have pavements and ramps for disabled person whereas some ministry buildings and even not all the hospitals have ramps (Akter, 2017). As a result, it is very challenging for PwDs to enter a building and the toilet facilities are also not disabled-friendly (The Daily Star, 2017).

There is no doubt that access to public transportation for these individuals in Bangladesh, particularly in Dhaka, is a great challenge. Though section 32 of the Rights and Protection of Persons with Disability Act, 2013, directs that 5 percent of seats in any public transport should be reserved for persons with disabilities, the reality is different. In most cases, bus, train or launch stations do not have necessary infrastructure and support systems in place for these individuals. The vehicular designs are such that most of the persons with disabilities, especially those who use wheelchair, cannot get into a vehicle. This inaccessibility also creates barriers to receiving education, healthcare services and of course employment, which again are a violation of their human rights. (Hossain, 2019)

Like many other minority groups, people with disabilities have been stigmatized and this has resulted in fewer opportunities for economic advancement and have left many with disabilities in poverty (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). Many families hide their children with disabilities due to social stigma (The Daily Star, 2017). There

are purposefully constructed and maintained physical, programmatic and attitudinal barriers for people with disabilities (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). Other than infrastructural barriers, the people with disabilities also face social barriers while travelling in public transport. A study from disability equality charity Scope has found one in four disabled people say that negative attitudes from other passengers prevent them from using public transport, while 40 per cent often experience issues or difficulties when travelling by train in the UK (Coffey, 2018). The same scenario is in Dhaka City as well.

Transport professionals need to understand and develop expertise in operationalizing access and mobility issues for people with disabilities and people with limited mobility in the design and implementation of projects (Babinard et al., 2012). Transportation was identified as an issue to be addressed, not only because it directly impacts the daily lives of individuals with disabilities, but also because an equitable transportation system will increase visibility and participation of people with disabilities in all aspects of community life and have a greater impact on overall community inclusion for people with disabilities (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). So, if we can bring PWDs into the economy as productive members of the workforce, double-digit growth can be achieved (The Daily Star, 2017).

There are many aspects of travel, in urban, rural, inter-urban and international travel which make it difficult or impossible for disabled people to travel independently. (Wilson, 2003) Despite the fact that there can be feasible solutions to these problems, however, many operators will not provide solutions without guidance from the government (Bellerby, 2000, cited in Wilson, 2003) whereas it is necessary that people are convinced about the accessibility case (Tyler, 2002, cited in Wilson, 2003) and the governments realise that better mobility has tangible benefits both at the general and individual level. (Mitchell, 1997, cited in Wilson, 2003)

However, Governments often perceive accessibility to be a luxury that they cannot afford, and consider universal access unaffordable in the face of pressure to meet other priorities (Babinard et al., 2012). We tend to forget that if 9.1 percent of the population of Bangladesh are left behind because of inaccessibility, it hinders the overall progress of its economy. Lack of awareness as well as of interest moves us towards this kind of false assumption. The reality is, some accessibility accommodations are simple, some are complex, but all are very important. Increasing access means creating an environment that can be used by all people, including

those who have disabilities (Hossain, 2019). Additionally, in most cases, adopting inclusive design principles requires planning and attention, not extra cost (Babinard, 2013).

## **1.2 Overall Goal of the Study**

The purpose of the paper is to identify the global and national policies for the people with disability and identify the major policy gaps in accessing the rights to use the public transport. In addition, through focus group discussion and interviews, the study seeks to explore the barriers that the people with disabilities face, in terms of, accessing transportation systems matching them with the policies that exist. It also derives some possible recommendations to remove these barriers to build sustainable transportation system promoting inclusive society in Dhaka City.

## **1.3 Objectives of the Study**

Overall, the objectives of the study are:

- To identify the global and national policies regarding the rights of disabled people in public services and identify the major policy gaps
- To identify barriers of accessible transportation system for People with Disabilities (PwDs) and to derive some possible recommendations

## **1.4 Research Questions**

This study provides answers to the following questions:

- (i) What are the major universal and national policies and its gaps or criticisms providing the rights of disabled people to access public services?
- (ii) What are the barriers (infrastructural and social) of accessible transportation for people with disabilities in Dhaka City and its possible recommendations?

## **1.5 Rationale of the Study**

Dhaka is the 26<sup>th</sup> Mega City, a fast-growing mega city, and 10<sup>th</sup> most populous city in the world, which is moving towards double-digit GDP growth and that, is creating a huge demand for transportation services, but the lack of accessibility is leaving behind a certain population, people with disabilities, creating a non-inclusive society leading to unsustainable development.

## **1.6 Significance of the Study and Structure of the Thesis**

- Academically, this study will add knowledge about the barriers that Person with Disabilities are facing in the current transportation service creating a non-inclusive society
- This would also add knowledge for the policymakers about the inexpensive solutions to this problem
- Again, it would add knowledge for similar cities like Dhaka facing the similar trend

The study has been divided into 6 chapters. The first chapter sets the background for the study along with mentioning the overall goal, objectives, rationale, significance and the method of the research. The second chapter provides the literature review on the topic of this paper. Chapter 3 will discuss the relevant theoretical framework and the definitions of terminologies related to disability and transport regarding this research paper. Chapter 4 include the global and national policies and the gaps in the global and national policies. Chapter 5 will frame the infrastructural and social barriers that the people with disability faces in accessing public transport, and chapter 6, the last chapter, will discuss on the overall findings of the study and would provide a concrete conclusion on this topic.

## **1.7 Research Methodology**

This study followed mixed-method. The data is collected for a period of 4 months from the month of September 2019 to December 2019 to achieve the result for the purpose and scope of this study. In this study, the secondary and primary data is used to enrich the article. The secondary data is collected through different sources such as journals, newspapers, magazines, thesis, census reports, press releases, NGOs reports, and electronic resources. In case of data for transportation system, the study particularly used data from Dhaka Structure Plan (2016-2035), 2017 Statistical Year Book of Bangladesh by Bangladesh Bureau of Statistics, which includes data from Bangladesh Railway, B.R.T.C., B.I.W.T.C., Bangladesh Road Transport Authority and other sources. In case of analyzing data for disability, the Household Income and Expenditure Survey 2016 preliminary Report and other authentic secondary sources. All the secondary data has also been analysed in this study according to the relevance of the paper.

Primary data was collected by using a developed questionnaire. Two in-depth Focus Group Discussions with people with disability consisting of 5 people in each group and 1 in-depth interview with an instructor of the people with disability were conducted. All the participants

were male of different disabilities, who are wheelchair users, physically disabled, speech and hearing impaired, dwarfism and intellectually disabled and the life histories of each of the participants were found. The factor that hinders urban mobility and creates inequality for the disabled people to use public transport were used to develop the questionnaire. Open ended questions were discussed during the focus group discussion and interviews, and an analysis of the responses is given on the findings section in terms of accessibility, availability, acceptability, reliability, safety, comfortability, affordability and also included the social barriers that the people with disability faces. The transcribed version of the FGD and interview is given in Appendix.

## Chapter 2

### Literature Review

Today 15% of the world population are persons with disabilities (WHO/World Bank, 2011; The Inclusion Imperative: Towards Disability-inclusive and Accessible Urban Development; cited in UITP & handicap international, 2019) and the first World Report on Disability, produced jointly by the World Health Organization (WHO) and the World Bank, suggests that more than 1 billion people in the world today have some form of disability (Babinard, 2013). 80% of whom live in developing countries, many subsisting below the poverty line. In some countries, as much as two thirds of the disabled population is also elderly. UN-Enable explains that persons with disabilities in both developed and developing countries are more among the world's poor population and they are poorer than the abled ones. So, it is very necessary to consider the needs of disabled and elderly citizens while designing transport and building infrastructure. (EMBARQ, n.d.) Mobility and access requirements of people with disabilities should be considered by planning and designing barrier-free transport systems (Babinard et al., 2012). This implies an understanding and identification of the circumstances that create barriers for people with disabilities (Meriläinen and Helaakoski, 2001, cited in Babinard et al., 2012)

#### Inclusive Mobility System

The lack of inclusive mobility system lead people with disabilities in vulnerable situations, for instance, in most developing countries 9 out of 10 children with disabilities do not go to school (UNICEF, (2015) Global Initiative on Out-of-school children; cited in UITP & handicap international, 2019) whereas 80% of PwD of working age and willing to work are unemployed. (International Labour Organisation (2007) The Employment Situation of People with Disabilities: towards improved statistical information; cited in UITP & handicap international, 2019)

Disabled people in England and Wales travel a third less often than the general public, drive cars less, and less likely to have a car in their household (60% of disabled people have no car compared with just 27% of the abled people) (DPTAC, 2002a; cited in Wilson, 2003). On the other hand, the most common mode of transport for people with disability is a car driven by someone else (67% of disabled people) (DfT, 2002a; DPTAC, 2002a; cited in Wilson, 2003), use taxis/minicabs (67% more frequently) and buses (20% more frequently) more often

(DPTAC, 2002a; cited in Wilson, 2003). The combination of low income and low car ownership make the poor, women, older people, the young and people with disabilities disproportionately dependent on public transport. (Lewis, 2011)

Hence, Tyler (2002) suggests that rather than dimension-based standards he suggests ‘performance-based standards’ are developed for users, which means it is required that a wheelchair user can reach, enter and leave the wheelchair space comfortably and with dignity. (Wilson, 2003)

### Public Transport

Public transport is a collection of modes of transport which are available to the public irrespective of ownership [White, 2002, cited in Niger, 2013], and has a key role in the overall success of a city’s transportation system. However, it is not always according to the changing demand vs. supply though the provision of an efficient public transport control congestion in future plans of a city [Mackett, 2001, cited in Niger, 2013].

As noted earlier, the ‘transport chain’ is a key issue for accessible transport, for instance, walking to a bus stop, waiting for a bus, getting on and off the bus, making a connection, getting on and off second vehicle and walking to destination needs to be user-friendly and accessible (DTLR, 2001a, Ling Suen and Mitchell, 1998a; cited in Wilson, 2003)

Research has suggested that to increase the use of public transport, a route should be free from obstacles and hazards so that people with disabilities do not face problems, including visually impaired, or mobility impaired (Smith, 2006), that is, the pedestrian access is safe, convenient, and comfortable (Griffin, 2000), minimum one accessible route from accessible parking spaces, passenger loading zones and transportation stop to the accessible building entrance (ADA, 2004, cited in Soltani et al., 2012), tactile surfaces for the visually impaired (Cullen, 2006), appropriately designed, constructed and managed ramps for wheelchair users or who use walking frames (Sawyer and Bright, 2007) resulting accessibility for the people with disabilities (Henry, 2009).

In 2010, Malhotra who conduct a practice in accessible public transport highlighted that priority seats for disabled in the vehicle should be close to both the driver and to the entrance/exit, to ease communication with the driver and to minimise the distance walked in to the public bus. Disabled and elderly find that standing for any length of time uncomfortable or



even impossible, so providing seating at appropriate points throughout the terminal is very important (Soltani et al., 2012).

### *Policies to ensure equality*

Several policies mention about ensuring equality in public services for people with disabilities. I would particularly look at the major universal and national policies. Among the major universal policies that would be discussed later in chapter 4 were Universal Declaration of Human Rights 1948, The Convention on the Rights of the Persons with Disabilities 2006, and Sustainable Development Goal. From the national policies, National Constitution 1972, National Policy on Disability 1995, Disability Welfare Act 2001, Protection of the Rights of the Persons with Disabilities Act 2013, Road Transport Act 2018, and Budget for the Protection of Disability Rights.

The Universal Declaration of Human Rights, drawn up by the United Nations at its inception, marked freedom of movement as a core right. Today, however, there is a recognition that this concept can only truly be achieved by implementing universal basic mobility, even if more narrowly framed within the context of one's community. (Corwin, 2019) Article 2 of the Convention of the Rights of the People with Disabilities (CRPD) defines universal design of accessibility, which is to design the products, environments, programs and services in a way that would be usable by persons with disabilities where needed. (Akter, 2017) In addition, The Protection of the Rights of the Persons with Disabilities Act 2013 ensures that public infrastructures are accessible to people with disabilities, for instance, Building Construction Act 1952 and National Building Code 2008 stated that every building should be designed and accessible to disabled person or section 32 of the 2013 Act gave the right to have 5% reserved seats in public transport for disabled people. (Akter, 2017). The details about all other policies related to transport and people with disabilities would be mentioned in the later chapters.

### *Difficulties faced by people with disabilities*

Additionally, it is crucial to link accessibility and safety: without road safety for all, cities cannot be completely inclusive and accessible. Through SDG Target 11.2, all countries committed to achieve this, notably for people in vulnerable situations, women, children, persons with disabilities and older persons. (UITP & handicap international, 2019) Research for the Joseph Rowntree Foundation found that transport was a major issue for disabled women as, in addition to the general problems of getting around faced by disabled people, they have a particular concern with personal safety. Lack of reliable, accessible transport meant they were

isolated in their homes, unable to pursue employment, education or leisure activities (JRF, 1995; cited in Wilson, 2003).

Whether it's the high cost to purchase, maintain, and operate a private vehicle; or the absence of accessible, reliable, and affordable public transit; a significant proportion of low-income communities find transportation a major impediment to accessing employment, quality education, and healthcare. An inclusive system of mobility can help create greater opportunities for advancement for these populations while promoting the overall economic health of communities. (Corwin, 2019)

It has been found that in England that the condition worsens for the people with visual impairment and disabled people without access to car (Campion et al, 2003, p6; cited in Wilson, 2003) so it is a slightly more important priority for them along with disabled people aged 35-44. However, in the current scenario it is felt that accessibility is generally meant only for people with mobility impairments and left behind others, for instance, people with autistic spectrum disorders, people with learning difficulties and older people. In addition, young disabled people who are very reliant on parents or carers to provide transport severely limit their opportunities and independence (Morris, 2002, cited in Wilson, 2003). Moreover, in 1999 only 51 of over 300 train stations in Scotland were accessible in all areas for wheelchair users (Henderson, 1999; cited in Wilson, 2003) and found that there is a deviation in terms of accessibility, information, assistance, long waiting times, lack of available seating on platforms and longer distance between platforms and trains. (Wilson, 2003)

Lipman (2006) suggests that transport cost can be considered unaffordable if it exceeds 20% of household income as low-income households spend proportionately much more of their income on transport (Ahmed et al., 2017). It is becoming clear that a lack of affordable and efficient transportation has a substantial impact on personal finances and quality of life, for instance, poorest third of households in US spend about 16% of their income on transportation and the richest spend 50% of their income, prevent applicants from accepting jobs, poor living in suburbs spends 3 to 4 hours a day commuting, and 75% of infant mortality rates are due to insufficient transport to basic health facilities and hospitals. (Corwin, 2019)

The DPTAC (2002a) findings indicate that although cost is a priority for disabled people, it is no more so than the need for frequent and reliable services, as for the general population as a whole. Improving access and service delivery, particularly attitudes of transport staff, were seen as key issues. (Wilson, 2003)

### *Link between improved transport and diminished regional disparities in income and well-being*

In coordination with other sectoral policies, transport represents an important policy instrument for reducing poverty and diminishing social exclusion. Germany, for example, have witnessed a larger reduction in sub-regional income disparity than most other OECD nations. (Lewis, 2011)

The affordability of the public transport can be a barrier for the people with disabilities not only because most of them belong to the poor population but also because they cannot come out of the poverty due to the lack of employment. As suggested by Khoo et al., (2013), the disabled are “untapped resources” who are productive and have the ability to contribute to the economy and growth of the nation and as per the World Bank, their exclusion from the mainstream society has resulted in an estimated loss of between USD 1.37 trillion to USD 1.94 trillion to the global gross domestic product where the amount would probably range between USD 1.68 and USD 2.38 billion dollars for a medium-income country like Malaysia (Perry, 2002, cited in Wahab & Ayub, 2016). Although this loss is evident, the people with disabilities are still excluded from the society and they are not only facing troubles in finding suitable jobs but in many cases are being either employed in lower income jobs or struggling for their career advancement. Several barriers have been identified as factors that hampering PWD from getting job such as problems in finding suitable jobs, low grade jobs, economic and social pressures, as well as negative perception and misconceptions of employers (Barnes, 1992; Perry, 2002; Khoo et al., 2013; Schur et al., 2016; Lee et al., 2011; cited in Wahab & Ayub, 2016). Moreover, there is a false assumption about the people with disabilities, which is, that they cannot or do not want to work whereas the disabled persons want and need to work to earn a livelihood, enjoy social contracts, and to gain self-esteem (Siddiqua, Islam & Afrin, 2012, cited in Wahab & Ayub, 2016). So, this process of social exclusion not only leads to poverty but also keep them the members of the lower class and are not able to cross the poverty line. Therefore, employment is also seen as one of the effective measures to empower and enable PWD to be economically independent and stay out of poverty. (Wahab & Ayub, 2016)

### *Safety in Public Transport*

On the other hand, accidents are one of the major causes of disability and disabled people have the chance to be more prone to accidents. 1.35 million people die every year because of road crashes and 90% of these casualties happen in developing countries (WHO, “Global Status Report on Road Safety”, 2018; cited in UITP & handicap international, 2019). SDG 11.2

specifically recognises the importance of having access to a safe and sustainable transport system based on a backbone of public transport, which in turn will help improve road safety, as travelling by public transport is ten times safer per mile than travelling by car (Litman, 2019; cited in UITP & handicap international, 2019). Road safety is also at the core of SDG target 3.6, which aims at halving the number of global deaths and injuries from road traffic accidents. Expanding public transports also contributes to achieve both SDG 11.3 and SDG 3.6. (UITP & handicap international, 2019)

However, very little research has been undertaken into accidents on public transport involving disabled people, but elderly people, particularly those who are mobility and visually impaired, have been found to be more likely to be involved in accidents on public transport and as pedestrians (Mitchell, 1997, cited in Wilson, 2003). There are different forms of accidents that PWD faces, for instance, Kirk et al (2002) found that slips, trips and falls on buses and coaches caused by slippery and uneven floor, unexpected or high steps, steep slopes and a lack of visual clues (Wilson, 2003). In addition, there are accidents while boarding or alighting vehicles caused by the step to the kerb being too high and for the steps to be of varying heights, or the drivers are suddenly accelerating or decelerating before the passenger reaches their seat. These are the type of non-collision accidents that occurs on buses and coaches, and drivers need to receive appropriate training in disability awareness along with using accessible vehicles (Wilson, 2003). It has also been evident that children with sensory impairments are at a higher risk of involvement in road accidents (Williams et al., 2002, cited in Wilson, 2003), adults with learning difficulties are at two to three times greater risk of fatal pedestrian accidents than the general population (Wilson, 2003). However, the data on the involvement of PWD in road accidents, including vehicles and pedestrians, is largely unavailable whereas accessible vehicles and pedestrian environments, alongside more coordinated safety training for children with disability should reduce the risk of these accidents. (Williams et al., 2002, cited in Wilson, 2003)

### Transport in Bangladesh

The transport sector in Bangladesh faces the challenge of providing equitable services and opportunities in an extremely densely populated country. Although there has been a fast expansion of the road network, which provided considerable benefits to population lacking accessibility, however, this has created a tradeoff with water transport and railways, safety of transport users and environment. It is seen that public expenditure on the transport sector was

Taka 413 billion (\$6.7 billion), which is about 2.2 percent of GDP, during fiscal years 2002-3 to 2006-7. However, the overall efficiency in the use of resources allocated to the transport sector is questionable and, in particular, widespread corruption has also a key role on not being able to achieve the results that is expected. (Sustainable Development Department, Transport Unit, 2009)

The dense land use and the flat terrain are advantages when it comes to supplying infrastructure. Countries with such advantages need to spend a smaller share of GDP to ensure connectivity to their population: 1.5-2 percent of GDP may be adequate, if well used and sustained over time. Adding in funds to clear the backlog of deferred maintenance, 2.5 percent of GDP may be a reasonable budget share, recognizing other priorities that the Government has to fund. (Sustainable Development Department, Transport Unit, 2009)

Bangladesh witnessed rapid growth of transport since independence in 1971. The overall annual growth rate is nearly 8.2 percent for freight transport and 8.4 percent for passenger transport. During this period, over \$40 billion has been invested in the transport sector. The energy-intensive road sector, in particular, has attracted the lion's share of the allocation, far exceeding investments in other modes. (The Daily Star, 2010)

In Dhaka, historically roadway is the most favored and dominant form of transport (Khan & Hoque, 2013). About 90 percent of transport sector budgetary allocation is for road sector development. Consequently, roadway inventory and number of vehicles has been registering a very high growth rate. During 1985-1993, the volume of road traffic increased by 88 percent whereas the volume of water and rail traffic declined in almost equal proportion. (The Daily Star, 2010) A key reason for road transport's dominance is its efficiency relative to other modes. It provides door-to-door services, is more flexible, and completes the service in less time than competing modes. An important element in the dominance of road transport has also been the government's public expenditure policy that has favored the road sector, at the expense of rail and river transport. (Sustainable Development Department, Transport Unit, 2009)

### Transport in Dhaka City

The transport environment in Dhaka consists of both motorised and non-motorised transports. They are using the same road space causing traffic congestion and noise/air pollution due to mismanagement and conflict of jurisdictions and poor coordination among the various government agencies (Dhaka City Corporation, DMP and BRTA) who are entrusted with the

responsibility of overseeing this sector. So, the transport service in Dhaka has several deficiencies in terms of physical, developmental and institutional-cum-policy framework related which lead to lower efficiency, higher transport costs, longer waiting and travel time, discomfort and more significantly, transport unreliability, all of which have major adverse consequences for the economy and environment. (The Daily Star, 2010) And, according to ESCAP (2012), 1.5% of the country's GDP is lost because of the severe traffic congestion. (Bangladesh Bureau of Statistics, 2012; cited in Munira & Santosos, 2017). On the other hand, during the years 1995 to 2005, road area has increased by only 5 percent but population and traffic have increased by over 50 percent and 134 percent, respectively. (The Daily Star, 2010) Interestingly, although the road density of Bangladesh in terms of area (km per 100 sq. km) is the second highest in the world (69.2 compared to 70 km/100 sq. km in US) but in terms of population (km per 1,000 persons) it is one of the lowest (0.88 against 27 in US). (The Daily Star, 2010) The lack of street space is especially acute in Dhaka, where roads occupy only 8 percent of the city's area. International comparisons suggest that probably double this much is needed for reasonably uncongested flow, which requires the clearing of occupied land in the case of Dhaka city. (Sustainable Development Department, Transport Unit, 2009)

Further, the road hierarchy is poorly established and most new development is taking place without any coherent road system [DDC, 1998, cited in Niger, 2013]. This rapid population growth together with the limited space available for new transport infrastructure will further aggravate the heavy congestion in Dhaka. Hence, the existing road network in metropolitan Dhaka needs a planned restructuring to support an efficient public transport, which is based on standard and functional road classification system and provides a hierarchy of roads, viz: Local streets, Collectors, Arterials, Access Controlled Freeways etc. (Niger, 2013)

The people of Dhaka city mostly use bus (Rajdhani Unnayan Karttripakkha (RAJUK) & Ministry of Housing and Public Works, 2015). The higher the supply of public transport, the higher the availability of service and so is the quality of service (Mamun, 2014). However, it is found that in the year 2012, according to statistical report of Bangladesh Road Transport Authority (BRTA), 73.33% of the total number of registered vehicle in Dhaka is small private vehicles (private car and motor cycle), while public vehicle (bus, minibus) is only 1.65% of the total newly registered vehicle (Khan & Hoque, 2013) which implies lack of availability of buses and low quality of service. Moreover, although the car-people ratio in Dhaka is still very low by global standards, its rate of increase in recent years has been significant. Dhaka has almost half (44.41 percent) of the total number of motor vehicles registered in the country. (The

Daily Star, 2010) In addition, the present bus services (operated under as many as 750 individual ownerships) are inefficient, unproductive and unsafe. During peak hours, buses often make unscheduled stops in the middle of the road creating obstruction to the free flow of traffic and women, children, senior citizens, and physically disabled persons are often unable to get on buses during this period. (The Daily Star, 2010)

The affordability of public transport is an issue in developing countries (Ahmed et al., 2017). While people with disabilities have no other choice than to take a private mode of transport such as taxis, rickshaws, auto-rickshaws, or CNG as they are known here, drivers of these services sometimes claim up to triple the normal fare because of the additional assistance provided for getting on and off the vehicles (Sakaki,2018). In Dhaka City, bus is the cheapest (Rahman, 2010) mode of transport available, however, the lack of quality of service and accessibility, people with disabilities from low income group rely heavily on walking (Rahman, 2010). The average cost of transport ranges from about 8 percent of household income for high income groups to 17 percent for low income groups. A substantial majority of the city dwellers have very poor access to transport services. (The Daily Star, 2010)

Injury and death rates from road accidents in Bangladesh are among the highest in the world. According to police statistics, road traffic crashes cause 4,000 deaths annually, but the unofficial figures are much higher. Even using official figures, road accident fatalities in Bangladesh would be about four times those of India (57 deaths per 10,000 motorized vehicles in Bangladesh versus 13 in India). (Sustainable Development Department, Transport Unit, 2009)

A sustainable city is an elusive goal without a sustainable transport network. A sustainable urban transport system balances social, economic, and environmental goals through inclusive decision-making. Public acceptability of sustainable transport measures is a challenge for developing cities such as Dhaka, where mobility to all income groups of the society needs to be ensured without hampering environmental balance and road safety condition. (Munira & Santoso, 2017) However, the scenario is very different and the environment is not structured to increase healthy lifestyles especially for people with disabilities.

According to the latest budget, the allocation for the disabled is 2.19 percent of the budget for social safety nets, and only 0.31 percent of the total budget. Allowances make up a whopping 85.3 percent of the total allocation for the disabled. As per the latest budget, 15.45 lakh insolvent persons with disabilities are going to receive a monthly allowance of Tk 700, which

was given to 10 lakh persons with disability previously. (Jahan, 2019) According to nine organisations working for persons with disabilities in Bangladesh, the allocations for disabled people is inadequate and limited only to the social safety net. They are still excluded from the development budgets of the government, with little to no investment in the creation of accessible environments in which they can function and flourish. (Jahan, 2019) The government should allocate more funds for them. (The Daily Star, 2017)

The mobility for the people with disabilities in the current scenario is hampered due to various reasons. For example, sidewalks are broken, there are missing ramps, and public parks may not be well kept or easy to get to (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). The city's footpaths are often discontinuous and are often interrupted by vendors, chawallas, illegally stowed building construction materials, overflowing dumpsters, and abrupt open drains which makes it difficult to walk for anyone especially for people with wheelchairs (Akter, 2017, Morshed, 2018). Moreover, wheelchair and crutch users cannot use these transports and stations as there are almost no ramps or apt arrangement for them (The Daily Star, 2018). They also face barriers such as inaccessible bus stops, intersections without curb ramps, street crossings, no tactile, pedestrian signals that are not audible to individuals with visual disabilities, and barriers such as telephone poles blocking sidewalks (The Daily Star, 2018, AAPD, n.d). Also, long waiting time, delay on plying, overcrowding, lack of comfort, and long walking distance from the trip origin are the common problems of public transport in Dhaka City (Haque, 2000, cited in Rahman, 2010)

Besides, using the train is next to impossible for physically challenged people, considering that even fully-abled people face difficulties getting onto a train. The railway department imported 270 couches in the last term, and is importing 250 this term, of which 50 couches have already arrived. Sadly, only 10 percent of them, have some seats reserved for physically challenged people along with washroom facilities. (Jahan, 2019)

### Social Barriers

Other than infrastructural and economic barriers, people with disabilities also face social barriers. Many families hide their children with disabilities due to social stigma (The Daily Star, 2017). Bus operators, with their major focus on maximizing returns, are less inclined to accommodate the specific needs of women (Rahman, 2010) and the people with disabilities. People with disabilities continue to battle an established medical model that believes that people with disabilities need to be helped or fixed, and do not need or deserve equal access to



opportunity as people without disabilities (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). People with disabilities are treated as if they are unable to make decisions about their lives and well-being for themselves. (Services for Independent Living (SIL) & Disability Rights Ohio, 2015). It is not the person who falls outside the norm that has a problem, but it is the way that society is structured that does not allow them to fully participate. There are purposefully constructed and maintained physical, programmatic and attitudinal barriers for people with disabilities (Services for Independent Living (SIL) & Disability Rights Ohio, 2015).

Action to improve the integration of the social agenda in transport operations is often constrained by the serious shortage of data on the access and mobility needs of users, particularly the poor, women, the disabled and elderly (The World Bank, 2016). Many policy analyses ignore the fact that most travelers with disabilities make the majority of their trips in private vehicles and rely heavily on walking to facilitate their use of all modes of travel (Rosenbloom, 2007). Addressing the transportation needs of such travelers requires active cooperation between transportation planners and those in a number of other policy and program arenas, relevant personnel range from educators to medical personnel, from employment counselors to urban designers, and from housing remodelers to land use planners (Rosenbloom, 2007). However, the lack of incentives and a perception that implementation is expensive, particularly for applying disability standards and solutions, the measures are not taken whereas in most cases, adopting inclusive design principles requires planning and attention, not extra cost (Babinard, 2013). Moreover, it is often forgotten that all the necessary changes we can think of will not only ensure accessibility for persons with disabilities but also help other people in various ways. (Hossain, 2019)

## **Chapter 3**

### **Introduction of main terminologies & Theoretical Framework for People with Disabilities (PwDs)**

This chapter covers the introduction of main terminologies related to transport and people with disability along with the 10 theories to understand what barriers the people with disabilities faces in terms of infrastructure and social. The main terminologies that have been discussed in this chapter are change in the definition of disability from the prominent social model of disability to the definitions of disability given by WHO, ICIDH, Disability Discrimination Act (DDA), and The European Commission; including other definitions, which are sustainable development, sustainable transport, public transport, UN Universal Design principles, the main factors of public transport that should be considered – accessibility, affordability, acceptability, availability, reliability and comfortability; and the concept of equity. The 10 theories that have been discussed in this chapter are Disability Studies, Critical Disability Theory (CRT), Minority Group Model, Feminist theory, Marxist materialist approach, political economy perspective, The Comprehensive Theory of Disability Oppression, Capability Approach, Theory of Equity Planning and Transport's influence on well-being at the aggregate expenditure level.

### **3.1 Introduction of main terminologies**

#### **3.1.1 Change in the definition of Disability**

In recent past, disability has been viewed mainly from medical and clinical perspective (Kaplan et al., 1992 and Oliver, 1996; cited in Odufuwa, 2007); while in the present time, focus is on the function, how specific causes of disability changes the manner by or limits the extent to which life's activities and actions are performed. Thus, defining disability is not an unambiguous process; but a change in the perception of disability has been observed in academic discourse (Morris, 1991; Oliver, 1996; Porter, 2002; cited in Odufuwa, 2007).

A few of the definitions on disability is given below to show the change in the definition of disability.

#### ***Social model of Disability***

The social model viewed disability from the societal behavior or attitudes and how the society organizes and constructs disability with impairments (Mathews, 2002; pp. 43; cited in

Odufuwa, 2007). Disability, according to the social model, encompasses all factors that impose restrictions on people with disabilities, ranging from negative social attitudes to institutional discrimination, from inaccessible public buildings to unusable transport systems, from segregated education to exclusion in work arrangements, and so on. (Hiranandani, n.d.)

### ***Definition of Disability (WHO)***

The World Health Organization (WHO, 1992) viewed disability using the International Classification of Impairments. (Odufuwa, 2007)

### ***Definition of Disability (ICIDH)***

Disabilities and Handicaps (ICIDH) as “any restriction or lack (resulting from an impairment) of ability to perform an activity in the manner or within the range considered normal for a human being”. (Odufuwa, 2007)

### ***Definition of Disability (DDA 1995)***

According to the Disability Discrimination Act 1995; disabled people are those who have, or who have had, either a physical or a mental impairment that has a substantial and long-term adverse effect on a person’s ability to carry out normal day-to-day activities (DDA, 1995, cited in Odufuwa, 2007).

### ***Definition of Disability (The European Commission)***

The European Commission (1996), categorized disability into five-namely; physical disability, sensory disability, learning disability, mental disability and others. (Odufuwa, 2007)

### **3.1.2 Definition of Rights**

According to the Constitution of Bangladesh, all citizens of the country have the right to enjoy their dignity, fundamental human rights and have social equality. It does not give new rights to persons with disabilities. But the Constitution says that Bangladesh should make sure persons with disabilities have equal rights like everyone else. (Women with Disabilities Development Foundation (WDDF), Asia-Pacific Development Center on Disability (APCD), & South Asian Disability Forum (SADF), n.d.)

*These include the right to:*

*Recognition of Equal Citizenship*

*Right to Proper Health Service*

*Right to Use Sign/Own Language and Communication*

*Right to Accessibility in The Community*

*Right to Use Accessible Transportation*

*Right to Education and Training*

*Right to Discrimination-Free Employment Opportunities*

### **3.1.3 Sustainability/Sustainable Development**

*“Sustainable development is development that meets the needs of the present, without compromising the ability of future generations to meet their own needs.”*

Sustainability encompasses three main domains: economic, social, and environmental (Bickel et al., 2003; Litman, 2009b; Toth-Szabo et al., 2011; cited in Munira & Santoso, 2017). Recently, institutional development, concerned with the vision and capability of the local organization and the participation of all community members in the decision-making process, is also being considered as an aspect of sustainable development (Toth-Szabo et al., 2011, cited in Munira & Santoso, 2017).

For instance, traffic congestion adds stress to people’s life (social issue) and causes pollution (environmental issue) and loss in gross domestic product (GDP) (economic issue). (Munira & Santoso, 2017)

### **3.1.4 Sustainable Transport**

A comprehensive definition was given by the Centre for Sustainable Transportation (CST, 1998, p.2) that outlined sustainable transport system as one that

*“allows the basic access needs of individuals and societies to be met safely and in a manner consistent with human and ecosystem health, and with equity within and between generations. It is affordable, operates efficiently, offers the choice of transport mode, and supports a vibrant economy. It limits emissions and waste within the planet’s ability to absorb them, minimizes consumption of nonrenewable resources, limits consumption of renewable resources to the sustainable yield level, reuses and recycles its components, and minimizes the use of land and the production of noise.”*

(Munira & Santoso, 2017)

The factors underpinning transport security lies within the realm of the following; affordability, availability, accessibility, reliability and comfortability. (Odufuwa, 2007)

### **3.1.5 Public Transport**

Public transport is generally defined as publicly available transport, usually shared with other users and operating on set routes at scheduled times (Mitchell, 1998, cited in Wilson, 2003). ‘Mainstream’ public transport includes buses, trains, taxis, aircraft and ferries. Other specialist public transport services include health, education and social services transport, dial-a-ride and other community transport services (DETR, 2000d; DPTAC 2002b; cited in Wislon, 2003). The 4 factors that should be considered in terms of public transport are affordability, availability, accessibility, and acceptability (Wilson, 2003)

#### ***Accessibility***

While defining accessibility in Article 9, the UNCRPD emphasizes on

*“ability to live independently and participate fully in all aspects of life including access to physical infrastructure open for all irrespective of their urban or rural belonging.”*  
(Sadat, Zaman, & Shamsuddin, 2018)

Accessibility is shown to depend on whether transport exists between people and the services they require; whether people know about all available transport service; whether they find it reliable and feel safe using it; and whether people are physically and financially able to access it. (Lewis, 2011)

#### ***UN Universal Design Principles***

According to Akter (2017), UN has identified a set of universal design principles appropriate to countries:

- (a) Equitable use: the design is useful and relevant to a wide group of users;*
- (b) Flexibility in use: the design accommodates a wide range of individual preferences and abilities;*
- (c) Simple and intuitive use: the design is easy to understand regardless of the knowledge:*

*(d) Perceptive information: the design communicates information effectively to the user regardless of the ambient condition or the sensory abilities of the user;*

*(e) Tolerance for error: the design minimises the hazards and adverse consequences:*

*(f) Low physical effort: the design can be used easily, efficiently and comfortably with a minimum of fatigue;*

*(g) Size and space: the size and space for approach, reach, manipulation and use should be appropriate regardless of the body size, posture or mobility of the user.*

### ***Affordability***

As exemplified by Carruthers, (2005),

*affordability refers to the extent to which the financial cost of journeys put an individual or household in the position of having to make sacrifices to travel or the extent to which they can afford to travel when they want to. Based on this notion, affordability of public transportation by the disabled people can be viewed as the ability to make necessary journeys to work, school, healthy and other social services, and make visits to other family members. (Odufuwa, 2007)*

### ***Acceptability***

Public acceptability of sustainable transport measures where mobility to all income groups of the society needs to be ensured without hampering environmental balance and road safety condition. (Munira & Santoso, 2017)

### ***Availability***

Article 2 of The Rights of Persons with Disabilities Act 2013 defined as

*“the right of persons with disabilities to get access, opportunity and treatment on an equal basis with others in all facilities and services available to the general public, including physical infrastructure, transportation, communication, information, and information and communication technology.” (Office of the High Commissioner on Human Rights (OHCHR), 2017)*

### ***Reliability***

*“In order for a system to be accessible, it must provide information in forms that are useable by everyone, and training for transport staff to understand the needs of disabled*

*and elderly people. Streets, parks, and other urban areas must be designed in a way that enables people to move about safely and confidently. The transport chain must be accessible at all points, for an individual can only make the journey if every link in the chain, from their door to their destination, is reliable, accessible, and affordable.”* (EMBARQ, n.d.)

### **Comfortability**

*“Public transport of all kinds need to be planned and designed or adapted so as to provide some facilities in the vehicles so that disabled persons can access the vehicles and ride on them in comfort. The bus stations, terminals, railway stations and motor launch landing stations will be re-planned to provide proper facilities for disabled persons so that they do not encounter any impedance to movement.”* (Niger, 2013)

### **3.1.6 Concept of Equity**

The concept of equity has been understood in various ways, including a demand for impartiality (Sen, 2009, cited in Pereira, Schwanen, & Banister, 2016), proportionality between an individual’s reward and cost/effort (Schweitzer & Valenzuela, 2004, cited in Pereira, Schwanen, & Banister, 2016), treatment of people according to their differences (Rawls, 1999, cited in Pereira, Schwanen, & Banister, 2016), and the consideration of particular circumstances in ethical judgements (Barry, 1965, cited in Pereira, Schwanen, & Banister, 2016).

It is evident that there are inequalities in accessibility levels. Hence, from a justice perspective, accessibility can usefully be conceptualised as the ease with which persons can reach places and opportunities from a given location and be understood as the outcome of the interplay of characteristics of individuals, the transport system, and land use (Kwan, 1998; Neutens et al., 2010; cited in Pereira, Schwanen, & Banister, 2016). A substantial literature on inequalities in transport accessibility (e.g. Church, Frost, & Sullivan, 2000; Delmelle & Casas, 2012; Welch, 2013; cited in Pereira, Schwanen, & Banister, 2016) considers accessibility as a necessary, though not sufficient, condition for the expansion of people’s freedom of choice and promotion of equality of opportunities in terms of employment, healthcare, education services, etc. (Pereira, Schwanen, & Banister, 2016)

## **3.2 Theoretical Framework**

### **3.2.1 Disability Studies**

Disability studies is “a location and means to think critically about disability” (Linton, 1998, p. 1, cited in Rocco, 2005) where critical divisions in society such as “normal vs. pathological, the insider vs. the outsider, or the competent citizen vs. ward of the state” can be explored (Linton, 1998, p. 2, cited in Rocco, 2005). A sociopolitical analysis reframes disability as a designation with political and social significance locating disability as a problem manufactured by society and outside the individual. The analysis is based on three distinct traditions. The first tradition is American functionalism, which sees disability as not functional and not able, “an inevitable outcome of the evolution of contemporary society” (Barnes, 1998, p. 69, cited in Rocco, 2005) The second tradition is the role of culture and society in the social construction of identity. Handicaps are a function of society’s attitudes and structures and are not the result of individual biological or cognitive differences (Oliver, 1996, cited in Rocco, 2005). Society is the problem: creating inaccessible environments and nurturing stigma (Berg, 1999, cited in Rocco, 2005). The third tradition stems from the work of Marx and the notions of historical materialism and alienation. Alienation is internalizing oppression to the point that individuals feel isolated from similar others and powerless to change their condition. (Rocco, 2005)

### **3.2.2 Critical Disability Theory**

According to Rocco (2005), this conceptualization of critical disability theory is built on the work of disability scholars and borrowed from the work of Critical Race Theory (CRT). The principles are: (a) disabled people have a unique voice and complex experience (Gleeson, 1999, cited in Rocco, 2005); (b) disability should be viewed as part of a continuum of human variation (Asch, 2001, cited in Rocco, 2005); (c) disability is socially constructed (Oliver, 1990, cited in Rocco, 2005); (d) ableism is invisible; (e) disabled people have a right to self-determination (Gorman, 2000, cited in Rocco, 2005); and (f) the commodification of labor and disability as business combine to maintain a system of poverty and isolation (Albrecht, 1992, cited in Rocco, 2005).

Disability has a unique voice and complex experience. Disabled people’s voices are not heard because they are not asked or are ignored (Rocco, 2005). The specific impairment becomes the defining characteristic for what the person can do and what is [not] possible (Rocco, 2005).



Disability exists on a continuum of human variation. Asch (2001) proposes a human variation approach suggesting that instead of maintaining the dichotomy--disabled or not disabled--we should determine how to modify the environments so that they are not disabling and consider a continuum of abilities.

Disability is social constructed.

*“Disability is socially constructed what disables is the created environment not the physical, cognitive, or mental variation of an individual (Hahn, 1988, cited in Rocco, 2005), the objectification of disabled people, and their portrayal as victims (Linton, 1998; Oliver, 1996; cited in Rocco, 2005). Public attitudes as well as physical space inside and outside of buildings make up the environment. The organization of public space is driven by private and public attitudes about disability. For example, when architects decided on the standard size for a door they did this based on the size of a ‘normal’ man. Just as easily, the architecture field could have made the standard door size the width of a wheelchair. The norm would have shifted if the majority of people used wheelchairs. If the standard were changed to include disability as part of the equation rather than an exception, society would benefit because exceptions are always more costly.” (Rocco, 2005)*

Ableism is invisible. Discrimination against disabled people is so ordinary that it is invisible meaning one’s experiences are not even considered an inconvenience. (Freeman, 1995, cited in Rocco, 2005)

Self-determination is a right. Disability should be recognized with true minority group status, instead of viewed as an individual anomaly. Self-determination is “control over one’s life based on the choice of acceptable options that minimize reliance on others making decisions and in performing everyday activities” (National Council for the Handicapped, 1983, p. 3, cited in Rocco, 2005). This would include choice over living arrangements and the right to work through integration and independence (Charlton, 1998, cited in Rocco, 2005).

Commodification reduces economic opportunities. The dominant group reproduces discrimination through cultural and political structures, which support the material exploitation and physical marginalization of disabled people (Gleeson, 1999, cited in Rocco, 2005). Transportation would not be deemed special if disabled people were not historically invisible to the transportation system. (Rocco, 2005)

### **3.2.3 Minority Group Model**

According to the minority group view, the physical, cognitive, sensory, and emotional make-up of the individual was not "the problem," but was a problem only because social institutions and human-made environments were created without taking into account the characteristics of all people. (Bowe, 1978; Bowe, 1980; Gliedman & Roth, 1982; Hahn, 1983; Bickenbach, 1993; cited in Asch, 2001)

### **3.2.4 Feminist Theory**

Feminist theories emerged due to the need of understanding how gender had marginalized women (Cummerton, 1986; Fraser & Gordon, 1994; Harding, 1997; cited in Hiranandani, 2005). This feminist analysis of disability is necessary because among the people with disabilities more than half of the population are women (Wendell, 1997; Asch & Fine, 1988; cited in Hiranandani, 2005) and this theory has raised the deep-seated issues about cultural representations of the body. (Hiranandani, 2005) Wendell (1996) stated that both disability and gender are not biologically given rather they have been socially constructed from biological reality (Hiranandani, 2005). Garland-Thomson (1997b) explained that both the female and the disabled are seen as deviant and inferior in the culture through demonstrating them in opposition to a valued norm of the male, white, upper class, able-bodied which are considered to be superior characteristics in the culture and society leading to exclusion from full participation in public and economic life (Hiranandani, 2005). Hence, the feminist theory explains that in a culture, which places a high value on the "ideal" body and control over the body, hence, those, who cannot control their bodies, people with disabilities, are seen as the "other". (Hiranandani, 2005)

### **3.2.5 Marxist materialist approach**

Marxist writers analyze disability as a social problem that is directly linked to the changing mode of production (Oliver, 1990; Priestley, 1999; cited in Hiranandani, 2005). Adopting a Marxist (materialist) approach, Michael Oliver (1990) has sought to demonstrate that disabled people are socially excluded because they are deemed unproductive and so hinder the progress of capital accumulation (Kitchin, 1998). He stated that with the emergence of industrial revolution, the role of the people with disabilities has radically changed because disabled people being unable to be productive as compared to the able-bodied resulting in exclusion or marginalization from the production process (Kitchin, 1998). He also argued that this process of exclusion was reinforced by the state through ideologies of individualism, which explains

that disability is an individual rather a societal problem, and medicalization, that enforces the need for disability to be treated (Kitchin, 1998).

### **3.2.6 Political economy perspective**

Habermas (1987) argued that welfare capitalism lead to new kinds of domination and subordination (Hiranandani, 2005). So, nowadays, disability is raised as technical problems that to be dealt with by medical and legal specialists, social workers, and vocational trainers, whose concerns is to “integrate” disabled people into “ordinary” life and work (Hiranandani, 2005). This has eventually led to the emergence of institutional welfare arrangements to serve the new needs of disabled people creating a political issue of redistribution, that includes separating the deserving from the underserving, which gradually became a clinical problem (Hiranandani, 2005).

### **3.2.7 The Comprehensive Theory of Disability Oppression**

According to Rocco (2005), disability scholars (Charlton, 1998; Gleeson, 1999; Linton, 1998) explain oppression using Young’s (1990) five faces of oppression, which are exploitation (occurs within the process of labor), marginalization (the inability or unwillingness of the system to incorporate the group into political, economic, and cultural life), powerlessness (lack of authority over one’s own life), cultural imperialism (demeaning of the group by majority values), and violence (random or organized attacks on members of a group).

Building on Young’s (1990) work, Charlton (1998) proposed a comprehensive theory of disability oppression as “when individuals are systematically subjected to political, economic, cultural, or social degradation” (Charlton, 1998, p. 8, cited in Rocco, 2005) because of group membership. Domination is organized and reproduced to reinforce the normality of the domination. At the same time domination compresses difference into a dichotomy of normal and superior versus abnormal and inferior. The fundamental concepts of the theory are: (a) political economy, (b) culture(s) and belief systems, (c) (false) consciousness and alienation, and (d) power and ideology (Charlton, 1998, cited in Rocco, 2005).

The theory of political economy and culture and belief systems have been explained before, False consciousness and alienation are the third concepts. Alienation is the internalization of the notion that “they are less normal, less capable than others” (Charlton, 1998, p. 27, cited in Rocco, 2005). This self-annihilation prevents disabled people from “knowing their real selves,

their real needs, and their real capabilities” (Charlton, 1998, p. 27, cited in Rocco, 2005) and therefore not recognizing their options. (Rocco, 2005).

Power and ideology organize the way in which the world is experienced through social, political, and economic systems (Rocco, 2005). The dominant class maintains power by using it to maintain order through the capacity to cause events and to control resources (Clegg, 1989, cited in Rocco, 2005).

### **3.2.8 Capability Approaches (CA)**

The economist and philosopher Amartya Sen, termed people-focused approach to development as human development. He articulated the capability approach, which provides the philosophical foundation of human development. The key idea of the capability approach is that social arrangements should aim to expand people’s capabilities – their freedom to promote or achieve valuable beings and doings. Thus, the capability approach is multi-dimensional and incomplete. The capability approach is a framework for assessing states of affairs. It is neither a social theory nor a theory of justice.

The human development approach introduced three additional dimensions to basic needs – utility for judging states of affairs, no distinction between developed and developing countries, and a greater emphasis on human freedom and participation. It conceives development as being about expanding people’s wellbeing. It sees human wellbeing as being about the freedom that people have to do or be what they have reason to value. All aspects of life - economic, political or cultural – are viewed from that perspective. Economic growth, as such, becomes only a subset of the human development paradigm.

According to Sen’s capability approach, an essential test of development is whether people have greater freedoms. A test of inequality is whether people’s capability sets are equal or unequal.

The capability approach identified five determinants to understand the relationship between people and freedom, which are:

- individual’s physiology (gender, age, disability)
- local environmental diversities (climate, pollution)
- variations in social conditions (availability of public services),
- difference in relational perspective (social standards, norms, ability to appear in public without shame) and

- distribution within family (sharing food, healthcare, education, properties within family).

These five important determinants changed the way development is viewed as in the society.

The human development approach gives a central role to the ability of people to be agents of their own lives. People are both the ends as well as the means to development. It is about the freedom to make decisions in matters that affect their lives. Whether at the level of policy-making or implementation, this principle implies that people need to be involved at every stage not merely as beneficiaries but as agents who are able to pursue and realize goals that they value and have reason to value.

Capability approach also helps to view the poverty from a different angle other than only the lack of access to income. It argues that there are also other factors, which can lead to poverty, for example, education, health care facilities, democratic rights etc.

There are significant connections between the human rights approach and that of human development and capability. Principally, both agree that individuals should not be treated as a means but as an end. Human life, and its quality and dignity should be assessed according to the criteria of states of affairs, economic, political and social arrangements. The human rights approach enhances human development with its stronger focus on obligations and duties, while the latter remains an evaluative framework for assessing states of affairs. In contrast, human development does not focus on the state and legal institutions alone. The approach also claims that to ensure human development through freedom of conscience, movement or association, it is only the role and responsibility of the state: it is also the role of multiple entities, such as civil society organizations, businesses and individuals. In addition to these, human development and capability approach also focuses on the sensitivity to means, for instance, the capability to move freely would require different resources for a blind person than a normal person. It also emphasizes both the intrinsic and instrumental character of civil and political rights. Moreover, focuses on the institutional factors that violate human rights and tries to find ways of changing these constraints, and of mobilizing resources, so that human rights can be guaranteed, because legislation alone is not sufficient to ensure the protection and provision of these rights. Hence, while usefully highlighting mobility's instrumental importance to the development of other human capabilities, the idea of mobility as capability should be expanded into an understanding of accessibility as a combined capability. (Pereira, Schwanen, & Banister, 2016)

More recently, the countries around the world is focusing on the sustainable development and this concept has similarity with the approach of human development and capability. The 1987 Brundtland Commission Report, *Our Common Future*, defined sustainable development as the development that meets the needs of the present without compromising the ability of future generations to meet their own needs. The demand for sustainability is part of the universal character of human development. Human development is about promoting the freedoms that people have reason to choose and value in both future and present generations. This universalism entails that deprivations and sufferings of both current and future generations be given equal attention. The principle of sustainability is a core human development principle. But the human development and capability approach offers a much broader framework for analysis and action, such as evaluative and institutional tools to address the challenges of development and sustainability.

A policy is a chaotic process dominated by political, practical and socio-cultural forces. (Spence & Deneulin, 2009, p. 290) Two sets of questions being asked while creating policies. One set relates to how the policy decision will affect economic output. The other set relates to how the policy will affect people's quality of life – negatively or positively.

The capability approach argues that focusing on capabilities is a more direct and accurate way to expand what people really value. Focusing on capabilities introduces fewer distortions. The capability approach is not a theory that can explain poverty, inequality and wellbeing; instead, it rather provides a tool and a framework within which to conceptualize and evaluate these phenomena.

The human development and capability approach is not prescriptive about public policy. It never prescribes a policy as being 'good' for any country. Its richness lies in providing an analytical framework to make appropriate policies in given contexts, within the overall objective of promoting human freedoms. However, its policies are guided by the questions of efficiency, equity, sustainability and empowerment.

A human development approach to policy analysis is based on the notion that all areas of public policy promote human freedom and flourishing, and that the policy process itself should respect people's agency.

Educational policies, health policies, transportation policies, environmental policies or macroeconomic policies, to name a few, ultimately affect what we are able to do. Given the hundreds of important public policy areas facing all governments at any given moment,

developing the skills and capacities of people and processes involved in public policy is a primary determinant of successful policy development and implementation.

A human development perspective on policy analysis holds that:

- (1) the success of policies should be assessed according to whether they promote people's freedoms, and
- (2) policies should respect people's agency and be specifically based on their ability to participate (giving particular voice to marginalized groups).

These reflect the 'evaluation' and 'agency' aspects of human development (Spence & Deneulin, 2009, p. 295)

Thus, for policy reasons, it is important to frame accessibility as a combined capability in respect of two analytically separable but interconnected accessibility components:

- (a) One component is the person's capability to access and use mobility technologies and transport systems/vehicles, which depends on the interplay of personal (physical fitness, mental fitness, motor and cognitive skills and sufficient financial resources) and external factors (social environment, transport system's physical design, provisions for disabled individuals, price levels, quality and availability of travel information, and others) (Pereira, Schwanen, & Banister, 2016).
- (b) The other component of accessibility refers to how the interactions between the transport system and land-use patterns enhance people's capabilities, which means how the transport network is distributed and connected across the city vis-à-vis the distribution of desired opportunities and activities, in addition to the transport system performance, including service frequency, reliability, speed, etc. (Banister & Hickman, 2006; Kenyon, Lyons, & Rafferty, 2002, cited in Pereira, Schwanen, & Banister, 2016).

Therefore, to formulate, evaluate and reformulate good public policies, better data will have to be collected about the state of people's health, education, nourishment and political participation. From a human development perspective, the major purpose of policy analysis is to bring policy change so that people's freedoms are expanded, and not reduced. In addition, advocacy is an important stage of policy analysis. Once the analysis is conducted, one needs to bring its major message into the public domain in order to mobilize public opinion and confront the special interests underpinning it.

### **3.2.9 Theory of equity planning**

The main goal of transport security is to ensure that individuals have access to transport systems needed at all times, and to be able to utilize the service to meet their daily activities or needs (Odufuwa, 2007). Equity transport planning, in particular, focused on the consideration of the needs and capability of various groups of people in mobility process (Litman, 2006 and Carruthers, 2006; cited in Odufuwa, 2007).

Litman (2006) defined equity as the distribution of benefits and costs, and the degree to which that distribution is considered fair and appropriate (Odufuwa, 2007). This means, that it includes to consider the distinctive characteristics of people while deciding how they should use available public resources (Odufuwa, 2007). Similarly, equity in transportation planning and management, particularly, for public transport services require to provide reasonable transportation services that is more accessible for transit dependent population resulting in reduced inequalities (Odufuwa, 2007). Thus, Krumholz (1982) argued that equity planning is an effort to provide more choices to those individuals who have limited or no choices (Odufuwa, 2007). This means that necessary attention need to be given to the people whose mobility can be constrained due to lack of physical capability along with other factors (Odufuwa, 2007).

### **3.2.10 Transport's Influence on Well-Being at the Aggregate Expenditure Level**

The aggregate level of transport investment creates improved well-being through growth in economy, that is, growth in Gross Domestic Product (GDP), which results in higher living standards because without GDP growth, the disposable incomes of the population would not grow and neither, therefore, can their living standards improve (Lewis, 2011).

GDP is defined as the product of number of workers times the amount of production per worker (Lewis, 2011). This implies that growth in GDP would be due to more workers making goods and services creating more output per person, that is, more productivity (Lewis, 2011). Among these 2 factors, higher productivity contributes most to long term economic expansion (Lewis, 2011). Consequently, this productivity would be higher if the workers are equipped with better facilities and equipment, that is, technological progress (Lewis, 2011). And, in order for the technological progress to happen, it had to be embodied in the form of some capital goods, in other words, it needs capital accumulation (Lewis, 2011). Thus, the more quickly new capital accumulation occurs, the better the quality of embodied technological progress, the higher will be the productivity leading to higher growth of economy (Lewis, 2011).



Therefore, in terms of transport infrastructure investment, to increase productivity growth and improved standards of living can only be achieved by not only from the quantity of capital, but also require more efficient and better-suited facilities, equipment and technology (Lewis, 2011)

The theories have been summarized in the below table:

<b>Name of the Theory</b>	<b>Proponents of the theory</b>	<b>Main findings of the theory</b>
Disability Studies	<p>HIV/AIDS (Courtenay, Merriam, &amp; Reeves, 1998)</p> <p>Learning disability (Jordan, 1996; Ross-Gordon, 1989)</p> <p>Deaf/Hard of Hearing (Clark, 2002)</p> <p>Heart Disease (Wise, Yun, &amp; Shaw, 2000)</p> <p>First tradition – American functionalism – Barnes</p> <p>Second tradition – society and culture – Oliver, Berg</p> <p>Third tradition – historical materialism and alienation – Karl Marx</p>	<p>Disability studies is “a location and means to think critically about disability”. The analysis is based on three distinct traditions.</p> <p>The first tradition sees disability as not functional and not able.</p> <p>The second tradition is the role of culture and society in the social construction of identity creating inaccessible environments and nurturing stigma. The third tradition stems from the work of Marx and the notions of historical materialism and alienation to the point that individuals feel isolated from similar others and powerless to change their condition</p>
Critical Disability Theory and Minority Group Model	<p>Critical Disability Theory: Borrows from disability studies, the comprehensive theory of disability oppression (Charlton, 1998), and the tenants of critical race theory (Delgado &amp; Stefanic, 2001).</p>	<p>These two theories explain how the disabled are viewed in the society</p>

	<p>Minority Group Model:</p> <p>Social model (Barnes, Mercer &amp; Shakespeare)</p> <p>Identity model (Brewer, E., Brueggemann, B., Hetrick, N. &amp; Yergeau, M)</p> <p>Human rights model (Degener)</p>	
Feminist Theory	Wendell Garland-Thomson	It explains how the disabled are oppressed like women in the society and who oppresses them
Marxist materialist approach, and political economy perspective	<p>Marxist materialist approach:</p> <p>Michael Oliver</p> <p>Political economy perspective:</p> <p>Habermas</p> <p>Gritzer and Arluke</p> <p>Ingstad &amp; Reynolds-Whyte</p>	These three theories explain why disabled are oppressed
The Comprehensive Theory of Disability Oppression	Charlton, 1998; Gleeson, 1999; Linton, 1998	These two theories explain how people with disability are oppressed
Capability Approach	Amartya Sen	These two theories explain what are the rights of the disabled people and what should be done so that they can access the rights
Theory of equity planning	Litman (2006)	This theory demonstrated how the people with disability can come out of oppression
Transport's influence on well-being at the Aggregate Expenditure Level		This theory finally explains how the investment in transport can cause economic benefit in a country

**Table1: Summary of theories**

From the above theories that have been discussed, it is found that disability is seen as not functional and not able, the culture and society construct an identity of disability creating inaccessible environments and nurturing stigma pushing them towards the point that individuals feel isolated from similar others and powerless to change their condition. Critical Disability Theory and Minority Group model demonstrated how the disabled are viewed in the society, which means that they are ignored and is socially constructed portraying them as victims. The dominant group, the able-bodied, creates discrimination through cultural and political structures leading to marginalization of disabled people. In addition, feminist theory explains how the disabled are marginalized due to biological reality and depicted them as inferior as opposed to the superior able-bodied. Then Marxist writers adopting the Marxist materialist approach argued that this marginalization has occurred because they are deemed unproductive in the capitalist society as compared to the able-bodied which is reinforced by the state and the welfare capitalism lead to new kinds of domination and subordination separating the deserving from the undeserving. Then it has been demonstrated through the Comprehensive theory of Disability Oppression how the people with disabilities are systematically subjected to political, economic, cultural, or social degradation. Thus, capability approach by Amartya Sen explains the rights of the disabled people and argued that the social arrangements should aim to expand people's capabilities, that is, their freedom to promote or achieve valuable beings and doings, so the idea of mobility as capability should be expanded into an understanding of accessibility as a combined capability and the major purpose of policy analysis is to bring policy change so that people's freedoms are increased and not reduced. Therefore, the theory of equity planning demonstrated how the people with disability can come out of oppression if distinctive characteristics of people is considered while deciding how they should use public resources including public transport. Finally, it has been shown that high quality investment in transport infrastructure, considering the accessibility issues of people with disabilities, can increase the growth productivity resulting in growth in GDP and economy of the country creating better standards of living.

## Chapter 4

### Result and Analysis (Policies and Gaps)

This chapter includes the major universal and national policies related to people with disability and the right to use the public infrastructure, however, there seems to be gaps in the policies, which are discussed here, that is hampering the people with disability to access the rights and to ensure equality. The major universal policies and its gaps or criticisms discussed in this chapter are Universal Declaration of Human Rights (UDHRs) 1948, The Convention on the Rights of the Persons with Disabilities 2006 whereas the national policies covered here are National Constitution 1972, Disability Welfare Act 2001, Protection of the Rights of the Persons with Disabilities Act, 2013, Road Transport Act 2018 and Budget for the Protection of Disability Rights.

#### 4.1 UNIVERSAL POLICIES

##### 4.1.1 Universal Declaration of Human Rights (UDHRs) 1948

The Universal Declaration of Human Rights (UDHRs) was proclaimed and adopted by the United Nations General Assembly in 1948. It states that, “all human beings are born free and equal in dignity and rights”. There are 30 articles of this UDHR. (United Nations, 1948)

According to Article 7 of UDHR,

*“All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.”*

Article 21

*“Everyone has the right to equal access to public service in his country.”*

Article 23

*“everyone has the right to work, to free choice of employment, to just and favorable conditions of work and to protection against unemployment.”*

##### **Gaps/Criticism in Policy**

Even though the UDHRs lays a foundation for the protection of rights of every individual in the aspects of economy, social, cultural, political and civil rights, it is not a legal instrument and has no binding force. It was in 2006 where the United Nations passed the landmark Convention on the Rights of Persons with Disabilities (CRPD) (Wahab & Ayub, 2016)

#### **4.1.2 The Convention on the Rights of Persons with Disabilities (UN; 2006)**

The Convention on the Rights of Persons with Disabilities (CRPD) was adopted by the UN General Assembly in December 2006 and came into force in May 2008. (McColl et. al, 2010) The CRPD is a comprehensive human rights treaty instrument in the 21st century. (Wahab & Ayub, 2016) Its goal of is to promote, protect and ensure equal enjoyment of all human rights and fundamental freedoms by all persons with disabilities and to promote respect for their inherent dignity. (McColl et. al, 2010; Wahab & Ayub, 2016) It has adopted a social model of disability and guarantees the equal opportunity right of the PWD (as compared to those without disabilities), together with full and effective participation in society in every aspect of their lives including accessibility (including information technology), independent living and community inclusion, rehabilitation, personal mobility, political and social participation, health, education, employment and others. (McColl et. al, 2010; Wahab & Ayub, 2016) In addition, it includes various provisions related to the issues covered by SDG 11, particularly on making cities and human settlements inclusive for persons with disabilities and that public transport must be accessible on an equal basis with others. (UITP & handicap international, n.d.) The CRPD appear to be influenced by the World Health Organization's publication of the International Classification of Functioning Disability and Health (2001), in which disability is framed as a universal issue, experienced by all in the population to a greater or lesser degree. (McColl et. al, 2010)

Although CRPD focuses explicitly on rights protections but it also ensures that the structures are in place to prevent discrimination, rather than redressing actual incidents of alleged discrimination. (McColl et. al, 2010) It has been able to change the attitudes and approaches to PWD from the viewing of charity, medical treatment and social protection towards viewing them with entitlement of rights, capable of claiming those rights and making decisions for their lives based on human rights and fundamental freedoms so as to become part of the society. (Wahab & Ayub, 2016)

Article 2 provides the definition of “universal design” of accessibility which includes

*“the design of products, environments, programs and services to be usable by of persons with disabilities where needed.”* (Akter, 2017)

Article 3 provides the underlying general principles of the CRPD, which are:

*“(a) Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons; (b) nondiscrimination; (c) Full and*

*effective participation and inclusion in society; (d) respect for difference and acceptance of persons with disabilities as part of human diversity and humanity; (e) equality of opportunity; (f) accessibility; (g) equality between men and women; and (h) respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities.” (Wahab & Ayub, 2016)*

Article 9 specifically focuses on the accessibility of PWDs to the physical environment, transportation, information and communications, including information and communications technologies and systems, and to other facilities and services open or provided to the public, both in urban and rural areas. (Hossain, 2019; Wahab & Ayub, 2016)

Article 27 recognizes the rights of equality to employment. The article details out that the working environment must be open, accessible and inclusive to PWD clause 27 (1). These include the removal of “barriers” such as physical barriers to places of works which are inaccessible physically, lack of accessible transportation, legislations that discriminates the PWD or do not protecting them, lack of accessible information about employment opportunities and lack of accommodation in facilitating the communication (Lord, 2010, cited in Wahab & Ayub, 2016).

### ***Gaps/Criticism in Policy***

The law outlines expectations on governments, public and private sector enterprises, but enforcement is exercised at the individual level, using a complaints-based approach. (McColl et. al, 2010)

Moreover, CRPD is not an instrument which creates new rights for the PWD, rather, it is a legal instrument that emphasizes the rights which are already in existence to be promoted, protected and ensured. (Wahab & Ayub, 2016)

### **4.1.3 Sustainable Development Goal**

“Sustainable Development Goals (SDG)” is with 17 goals and 169 targets including the matters of the persons with disabilities on Goal-4, 11 and in target 11.2, 11.7 where emphasis is given on accessibility for the PWDs through special provision. (Ubaed, 2016)

## **4.2 NATIONAL POLICIES**

### **4.2.1 Steps taken by Bangladesh**

The country has already put necessary policy frameworks in place to ensure disability-inclusive development. It has brought in legislation to protect people with disabilities, namely “Persons with Disabilities Rights and Protection Act 2013” and “Neurodevelopmental Disability Protection Trust Act 2013”, and ensured inclusion of disability in its 7th Five Year Plan, National Education Policy, National Skills Development Policy, and other policy frameworks. Bangladesh has also ratified the UN Convention on the Rights of Persons with Disabilities (UNCRPD) and is highly committed to achieving Sustainable Development Goals by 2030, leaving no one behind, particularly those with disabilities. (Dio, 2018)

As early as 1993, the Government established a National Coordination Committee on Disability under the Ministry of Social Welfare. It adopted the National Disability Policy in 1995 and to ensure equal participation and pave increased opportunities for persons with disabilities. The Disability Welfare Act came into force in 4 April 2001. The Prime Minister’s office issued an executive order in 2002 to bring this into force. A National Coordination Committee on the Rights and Protection of Persons with Disabilities (responsible for coordinating all disability initiatives by the Government of Bangladesh) then adopted a National Disability Action Plan on Disability 2006. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) The Action Plan is very comprehensive, involving forty-six Ministries and divisions of the government to undertake specific activities for persons with disabilities. The government has also appointed a focal person in every division of the Ministries (forty-six focal persons) who can provide the persons with disabilities the opportunity to get services from the government easily. Bangladesh signed and ratified in 2007 the United Nations Convention on the Rights of Persons with Disabilities (CRPD). In May 2008 the government signed the CRPD's Optional Protocol. The Ministry of Social Welfare, the Department of Social Services and the National Foundation for Development of the Disabled Persons are the three government bodies that cater to the needs of persons with disabilities. (Alam, 2009)

The Dhaka City Building Construction Rule 2008 was adopted under Building Construction Act 1952 (E.B Act II of 1953). This Rule recognized Universal Accessibility and Universal Design. Under section-33 of the Rule a „One Window Service Cell“ is formed that is

responsible for scrutiny and approval of the designs. Representative from the organizations working for persons with disabilities is a member of this Cell. Section-75 (Special provision concerning universal accessibility including persons with disabilities) of this Rule guaranteed the accessibility rights of persons with disabilities. According to this section each building has to ensure universal accessibility from parking space to lift lobby, there should be at least one accessible toilet in each floor or 5% of total toilets. Schedule 3 (Minimum standard of universal accessibility) under the Dhaka City Building Construction Rule 2008 provides a detailed description of universal accessibility. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

In 2009, the Government has constituted an independent National Human Rights Commission, which is entrusted with the responsibility to act as a watchdog for monitoring the rights and fundamental freedoms of all citizens, especially those who are most vulnerable. This Commission that will ensure the rights and privileges of persons with disabilities in the country, on an equal basis with others. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The Government has enacted the Right to Information (RTI) Act in 2009, ensuring provisions for people with different types of disabilities. This has opened a new frontier for people with disabilities, especially the educated, who have more access to information now, regarding the policies, services and programs of different ministries, departments and functionaries of the Government, and will help them take far more informed decisions about their own future plans. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The Ministry of Telecommunication & Information Technology has created various training opportunities for educated youths with disabilities, so that, they could pursue a better career. The centers have been made accessible, and the NGO is providing the required technical support relating to disability. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The National Skills Development Council (NSDC) has developed an inclusive National Skill Development Policy (2011). With the support of ILO and the European Union, NSDC has also brought about a reform in the Technical & Vocational Education & Training (TVET) program, declaring a Skill Vision 2016, to make it gender sensitive and also disability-friendly. As a result, besides the Government, a large number of private organizations have also successfully



developed and implemented specific employment programs for persons with disabilities. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The National Women Development Policy 2008 has been updated in 2011. The 2008 Policy, for the first-time categorized women with disabilities as especially vulnerable women in Bangladesh, under its Chapter - 3 Paragraph 16. The paragraph mandates that programs should be addressed for especially vulnerable women, including women with disabilities, considering their diversity of position and needs to provide them with special facilities. The 2011 Policy once again puts further stress on women with disabilities. In its list of objectives (Article 16) a specific objective was set for establishing the rights and promoting development of women with disabilities (Article 16.17). Moreover, a stand-alone section (Article 39) has been dedicated to the rights and development of women with disabilities, following the content and spirit of the CRPD. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The Government of Bangladesh has adopted National Children Policy in 2011. The Policy has provided for a two-pronged approach concerning children with disabilities. Firstly, the entire Policy has been framed ensuring non-discrimination on any grounds whatsoever. Secondly, recognizing the vicious cycle between poverty and disability, a special section on children with disabilities (Article 6.8), based on the principles of the CRPD have been incorporated, and additional proactive programs have been targeted so that the children with disabilities can grow up with other non-disabled children in an equitable manner. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

The Children's Act 2013, applicable for protecting the rights of all children without any discrimination whatsoever, has made specific reference to children with disabilities in two places, in Article 89 (1), in a list of underprivileged children; and in Article 19 (3) permitting special seating arrangements in the juvenile court, if the child requires so due to disability. Article 89 (2) empowers the government to adopt special provisions to cater the needs of underprivileged children, to be prescribed by the Rules of this law. Drafting of the Rule under this Act is under process. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Hence, a number of steps have been taken by Bangladesh in the policy level to protect the rights of the people with disabilities, however, there still remains a few gaps or criticisms in the policies, similar to the global policies above, which will be mentioned below.

#### **4.2.2 The Constitution of the People's Republic of Bangladesh - National Constitution (1972)**

National Constitution (1972) is based on the principles of equality, human dignity & social justice for all citizens, as declared in the “Proclamation of Independence of Bangladesh”. The Constitution mandates equality, non-discrimination and also creates room for equitable measures to ensure that all backward sections of the population interact with all, on an equal basis with others (OHCHR, 2017) In Bangladesh, the Constitution is the Supreme Law of the Republic. Although the fundamental principles of the constitution are not legally enforceable, they provide the guidance for the governance of the country and dictate the relationship between the state and the citizens. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 7 of the Constitution ensures its supreme power and warrants that every law of this country has to be enacted in compliance with the Constitution. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

The Fundamental Principles of State Policy act as a guideline for the State in making policy. Article 11 states that "Fundamental human rights and freedoms and respect for the dignity and worth of the human person shall be guaranteed". (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 14 places a responsibility on the State to free vulnerable sections of the population from all forms of exploitation. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

The Constitution of the People's Republic of Bangladesh assures and conveyed it in article 15 (D) where it is said,

*“The right to social security, that is to say, to public assistance in cases of undeserved want arising from unemployment, illness or disablement, or suffered by widows or orphans or in old age, or in other such cases.”* (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), &

Bangladesh Legal Aid and Services Trust (BLAST), 2015; Ubaed, 2016)

Article 15 also affirms

*“the right to work that is the right to guaranteed employment at a reasonable wage having regard to the quantity and quality of work.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Article 19, 27, 28 and 29 reiterates similar issues. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 19 (Equality of opportunity) affirms,

*“(1) The State shall endeavor to ensure equality of opportunity to all citizens. 2) The State shall adopt effective measures to remove social and economic inequality between man and man and to ensure the equitable distribution of wealth among citizens, and of opportunities in order to attain a uniform level of economic development throughout the Republic. (3) The State Shall endeavor to ensure equality of opportunity and participation of women in all spheres of national life.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Article 20 affirms,

*“(1) Work is a right, a duty and a matter of honor for every citizen who is capable of working, and everyone shall be paid for his work on the basis of the principle "from each according to his abilities to each according to his work". (2) The State shall endeavor to create conditions in which, as a general principle, persons shall not be able to enjoy unearned incomes, and in which human labor in every form, intellectual and physical, shall become a fuller expression of creative endeavor and of the human personality.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Freedom from all kinds of discrimination have been guaranteed in Article 28 of the Constitution. Article 28 (4) encourages the State from making special provision in favour of women or children or for the advancement of any backward section of citizens. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

The Constitution specifically addresses the issue of women in Article 19 (3) where it states,

*“The State shall endeavor to ensure equality of opportunity and participation of women in all spheres of national life”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

in Article 28 (2)

*“Women shall have equal rights with men in all spheres of the State and of public life”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

and Article 28 (4)

*“Nothing in this article shall prevent the State from making special provision in favor of women or children or for the advancement of any backward section of citizens.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Further protection of rights is provided in Article 29(3) (a) which empowers the State to make laws for the vulnerable and backward section of the society, in instances where they are not adequately represented in the service of the Republic. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 29 of the Constitution affirms,

*“(1) there shall be equality of opportunity for all citizens in respect of employment or office in the service of the Republic. (2) No citizen shall, on the grounds only of religion, race, caste, sex or place of birth, be ineligible for, or discriminated against in respect of, any employment or office in the service of the Republic.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Under the Constitution, persons with disabilities, like all other persons, are guaranteed the right to life and personal liberty, rights on safeguards on arrest and detention and speedy trial, protection from torture and cruel inhuman and degrading treatment, freedom of movement, association, assembly, profession and occupation, religion and expression. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 40 of the Constitution affirms,

*“Subject to any restrictions imposed by law, every citizen possessing qualifications, if any, as may be prescribed by law in relation to his profession, occupation, trade or business shall have the right to enter upon any lawful profession or occupation, and to*

*conduct any lawful trade or business.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

### ***Gaps/Criticism in Policy***

The implementation of the rights of PWDs assured by the provision in the Constitution of Bangladesh are not being followed strictly. Developer organisations are not conscious and don't care about the accessibility facilities for the PWDs and even the government is breaking the rules in building constructions. (Ubaed, 2016)

#### **4.2.3 National Policy on Disability in 1995**

This policy embodies the first official recognition by the government of the issue of disability as part of development agenda. This policy was given legislative support when the National Parliament enacted the Disability Welfare Act on 4 April 2001. This law provides the first ever national definition and classification of disability. (Alam, 2009)

#### **4.2.4 Disability Welfare Act 2001**

Bangladesh Persons with Disability Welfare Act-2001 ensure equality of opportunities and provide other benefits and privileges to the persons with disability. Even though the previous legislation on disability (the Disability Welfare Act) was enacted in 2001, it was drafted earlier during the mid to late 90s, when the overall understanding of Disability and its classifications prevalent in the country was more of a medical model, rather than a social model. The legislation therefore had reflection of such model. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

According to Disable Welfare Act 2001,

*“Disability means any person who (a) is physically crippled either congenitally or as result of disease or being a victim of accident, or due to improper or maltreatment or for any other reasons became physically incapacitated or mentally imbalanced, and (b) as a result of such crippledness or mental impairedness,- (i) has become incapacitated, either partially or fully; and (ii) is unable to lead a normal life. The impairments have been classified as physical, sensory (visual, hearing & speech, and deaf blindness), intellectual, and mental (psychosocial). The legislation specifically addresses impairments in communications, so that people with Autism & Autism Spectrum*

*Disorders or with various other non-verbal forms of communications can be addressed effectively.” (Office of the High Commissioner on Human Rights (OHCHR), 2017)*

In the Disability Welfare Act 2001, article 5 has focused on equality and non-discrimination for the people with disabilities who should have access in all aspects of life including the public services, mentioned in article 9. The Act has also made sure the freedom of expression and opinion, and access to information in article 21 and have also specifically focused on the rights of the disabled women in article 6. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

According to Office of the High Commissioner on Human Rights (OHCHR) (2017), “Disability Welfare Act 2001” ensures transport facilities through the following:

- 1. To set up appropriate facilities at all buildings and establishments and transports belonging to the Government, Statutory Bodies and private organizations to facilitate easy movements and communications for the PWDs.*
- 2. To take measures to adopt toilets at rail compartments, water-vessels, bus- terminals and waiting rooms so that the persons with disabilities can also use it alike others.*
- 3. To install auditory signals at all main road-crossings in the cities.*
- 4. To devise out suitable signs and symbols to facilitate safe and hazard-free movements of persons with disabilities.*
- 5. To facilitate easy access to and movement of the wheel chair users making appropriate curb cuts and slopes and ramps are to be made at public buildings and toilets are also to be adapted for them.*
- 6. The persons with disabilities carrying duly issued Identity Card are to be allowed to travel by train, buses, water-vessels, airways along with an escort at concessional fare and also to make arrangement for carrying portable luggage alongside.*

#### **4.2.5 Protection of the Rights of the Persons with Disabilities Act, 2013**

“Protection of the Rights of the Persons with Disabilities Act, 2013” was passed with a view to ensuring the 21 rights and dignity of persons with disabilities. The newly enacted law will abolish the former “Bangladesh Persons with Disability Welfare Act, 2001. The aim of the act is to guarantee the educational, physical and mental improvement of persons with disabilities and to support their participation in social and state activities by removing all sorts of

discrimination and ensuring accessibility in building, roads, transports, educational institutions, hospitals, courts, police stations, rail stations, bus terminals, airports and other ports, shelter centres, cyclone centres, cultural centres, tourist spots, service centres, parks, libraries, historical places, spectacular spaces, public toilets, under pass and over bridges. (Arif, 2014; Ubaed, 2016) Bangladesh has enacted this legislation to comply with the United Nations Convention on the Rights of the Persons with Disabilities (UNCRPD), of which Bangladesh is a party to. (Arif, 2014) Subsequently, the Government of Bangladesh formulated the Rights and Protection of Persons with Disabilities Rules in 2015 for further clarification of the 2013 Act. The 2015 Rules give clarification as to the roles of the committees at different levels, registration process of the PWD and how the District Committee will deal with complaints of discrimination and these respective committees will also decide the quantum and standard of compensation. (Sadat, Zaman, & Shamsuddin, 2018)

“Disability”, “Persons with Disabilities”, and “Rights of Persons with Disabilities” refer to any person who is physically, psychologically, and/or mentally not functioning properly due to social/environmental barriers. Any person who can’t take part actively in the society is considered to be disabled. Persons with disabilities have rights equal to all citizens, including fundamental basic human rights that are mentioned in this Act and other laws. This Act gives persons with disabilities the opportunity to lead their lives like other people without facing any obstacles. (Women with Disabilities Development Foundation (WDDF), Asia-Pacific Development Center on Disability (APCD), & South Asian Disability Forum (SADF), n.d.) Hence, any person suffering from the following forms of disorders are considered as disabled: autism or autism spectrum disorders, physical disability, mental illness leading to disability, visual infirmity, speech impairment, intellectual disability, hearing infirmity, deaf-blindness, cerebral palsy, down syndrome, multiple disability, and other disabilities. (Arif, 2014; Women with Disabilities Development Foundation (WDDF), Asia-Pacific Development Center on Disability (APCD), & South Asian Disability Forum (SADF), n.d.)

According to clause 16.2 of this ACT: Any person, institution, authority or organization that shows any type of discrimination against persons with disabilities must follow these rights (Women with Disabilities Development Foundation (WDDF), Asia-Pacific Development Center on Disability (APCD), & South Asian Disability Forum (SADF), n.d.):

- Persons with Disabilities have the right to complain against any kind of discrimination

- If the complaint is accepted, then compensation for persons with disabilities will be given.
- If the compensation is not paid, then litigation can be submitted against the convicted persons directly or indirectly.

“Discrimination” refers to any act that prevents persons with disabilities to get fair treatment, enjoy rights, and have access to facilities provided by the government. (Women with Disabilities Development Foundation (WDDF), Asia-Pacific Development Center on Disability (APCD), & South Asian Disability Forum (SADF), n.d.)

The few relevant sections regarding this act would be discussed below along with their gaps or criticisms regarding the policy, in comparison with the global UNCRPD policy.

### Accessibility

In Article 2 (13) „Accessibility“ has been defined as

*“the right of persons with disabilities to get access, opportunity and treatment on an equal basis with others in all facilities and services available to the general public, including physical infrastructure, transportation, communication, information, and information and communication technology.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

According to Article 4(1) of the UNCRPD defines “universal design” and requires every signatory state provides an undertaking to ensure and promote full realization of all human rights and fundamental freedoms for all PWD without discrimination of any kind on the basis of disability. (Sadat, Zaman, & Shamsuddin, 2018) Nevertheless, the UNCRPD in the same Article (Article 4(1) (f)) refers to requiring minimum possible adaptation and the least cost to meet the specific needs of a PWD alongside promoting their availability and use. It also calls upon state parties to use and to promote universal design in the development of standards and guidelines. (Sadat, Zaman, & Shamsuddin, 2018)

Article 9 of the UNCRPD emphasizes on accessibility in ensuring the rights of PWD. While defining accessibility in Article 9, the UNCRPD emphasizes on ability to live independently and participate fully in all aspects of life including access to physical infrastructure open for all irrespective of their urban or rural belonging. (Sadat, Zaman, & Shamsuddin, 2018) Article 9 (1)) The State’s obligations in this regard include monitoring the implementation of minimum standards and guidelines for accessibility of facilities, training those to assist to ensure



accessibility to PWDs and promoting the design, development, production and distribution of accessible information. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) Moreover, article 9(2) (d) specifically focuses on providing public signage in braille and in easy to read and understand forms so that communication can be made accessible for PWD (Sadat, Zaman, & Shamsuddin, 2018)

### *Equality before law and Access to Justice*

The Act also proclaims accessibility as

*“to get a safe and healthy environment and protection from persecution.”* (Arif, 2014)

It emphasizes on protection and benefit of the law by imposing criminal conviction with a view to preventing discrimination based on ground of disability. (Sadat, Zaman, & Shamsuddin, 2018)

Article 5 of the UNCRPD emphasizes that

*“to promote equality and eliminate discrimination the state has to take all appropriate steps to ensure that reasonable accommodation is provided to PWD.”* (Sadat, Zaman, & Shamsuddin, 2018)

Reasonable accommodation, according to the UNCRPD, means necessary and appropriate modification and adjustments not imposing a disproportionate or undue burden, where needed in a particular case, to ensure to PWD the enjoyment or exercise on an equal basis with others of all human rights and fundamental freedoms. On the other hand, Article 13 of the UNCRPD also emphasizes on the ways as to how to ensure access to justice effectively. (Sadat, Zaman, & Shamsuddin, 2018)

### *Rights of Disabled Women*

Article 6 of the CRPD requires the State to take measures to ensure the full and equal enjoyment by women and girls of all human rights and fundamental freedoms and to take all appropriate measures to ensure the full development, advancement and empowerment of women, for the purpose of guaranteeing them the exercise and enjoyment of the human rights and fundamental freedoms set out in the CRPD. Section 16 of the 2013 Disability Rights Act secures the fundamental rights of all persons with disabilities, including women and girls. Section 36 (1) prohibits any discrimination or discriminatory behavior by any individual, organization,

institution or authority to any person with a disability (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Additionally, to ensure accessibility of PWDs into financial services, the Bangladesh Bank have issued a circular (See annexed GBCSRD Circular No: 01 dated 20th January 2015) announcing that under the Ministry of Social Welfare's 'Social Security Program', all PWD's can now use their National ID to open a bank account, apply for SME loans with a minimal interest rate and will also make available a dedicated bank personnel at every branch to assist PWDs and provide them with banking services. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

#### *Living independently and being included in the community*

Article 16 (1)(e) of the Rights & Protection of Persons with Disabilities Act 2013 specifies

*"To live in the society with parents or legal guardians, children and family, to marry and have families;"* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

Article 16 (1)(g)

*"To participate fully and actively, depending on the nature of their disability, in social, economic and state functions;"* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

and Article 16 (1)(n)

*"Receiving assistance and rehabilitation for the purpose of gaining physical, mental and technical competence enabling them to integrate with the society completely"* as inalienable rights of persons with disabilities. (Office of the High Commissioner on Human Rights (OHCHR), 2017)

#### *Personal Mobility*

Article 20(a) of the UNCRPD includes facilitating personal mobility of PWD in the manner and at the time of their choice and at affordable cost. In order to ensure accessibility, Article 9(2)(e) also requires the state to provide forms of live assistance and intermediaries, including guides, readers and professional sign language interpreters, to facilitate accessibility to

buildings and other facilities open to the public. Likewise, personal mobility has been discussed in detail in Clause 7 of the Schedule to the RPPDA, which includes rendering PWDs with assistive mobility devices of their choice as far as it is practicable, tax rebate on import of assistive mobility devices, training staffs on the mobility needs of PWDs. Also, Section 34 in the RPPDA incorporates accessibility into public infrastructure as far as possible and as soon as possible which is also relevant to personal mobility of a PWD. (Sadat, Zaman, & Shamsuddin, 2018)

#### *Training people dealing with persons having disability*

Article 20 alongside Article 4 and 9(2) (c) of the UNCRPD marks the importance of sensitization of persons and promotion of training of personnel providing assistance and services guaranteed in the UNCRPD. Clause 9 of the Schedule to the RPPDA includes that staffs in the education sector dealing with PWD should be trained. (Sadat, Zaman, & Shamsuddin, 2018)

#### *Freedom of expression and opinion, and access to information*

All forms of information and communication and all mediums of technology and language used for accessing information/communication must be accessible and user friendly for PWDs (Parts 4 and 6, Schedule). (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Communication as defined in Article 2 of the UNCRPD includes languages, display of text, braille, tactile communication, large print, accessible multimedia as well as written, audio, plain-language, human-reader and augmentative and alternative modes, means and formats of communication, including accessible information and communication technology. (Sadat, Zaman & Shamsuddin, 2018)

The Right to Information Act, 2009 gives every citizen the right to access ‘information’ (as defined in Section 2 (d) (f) of the Act) from any ‘authority’ (as defined in Section 2 (b)). It includes two disability friendly provisions. Firstly an ‘officer in charge’ of any missing word shall provide assistance to a person with sensory disabilities to enable them to gain access to information (Section 9(10)). Secondly, any information published or publicized by any authority under the Act, must be indexed in a manner accessible to all (Section 6(1)). Again, The National ICT Policy, 2009 expressly aims “to create mainstream social advancement

opportunities for disadvantaged sections of the society including persons with disabilities and special needs (Article E.1 “Social Equity”). In Article 3, it provides that everyone shall have the opportunity to access all electronic technologies used in creating, storing, processing, communicating and disseminating information. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

#### *Accessibility in Public Transport*

Article 32 calls for enforcing accessibility in all public transports, where public transports have been defined as

*“any transport on land, water or air that transports passengers in exchange for fare.”*  
(Office of the High Commissioner on Human Rights (OHCHR), 2017)

According to the law, five percent of the total number of seats in any public transport (on boats, airplanes and land transport) shall have to be reserved for persons with disabilities within the period specified by the government by notification in the official gazette. If the owner or the authority of any public transport contravenes this provision, or if any driver, supervisor or conductor does not help a disabled person to take a seat in the reserved seats, the registration of that public transport shall be cancelled upon investigation and recommendation by the committee. (Arif, 2014; National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) Penalties for any owner, authority, driver or conductor who fails to comply include revocation of the license of the public transport body in question, provided that the Transport Committee submits an application to the Bangladesh Road Transport Authority (BRTA) requesting this (Section 32(2)). (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

#### *Accessibility in Public Infrastructure*

Article 34 of the said Act is about enforcing accessibility in public places, where public places are explained as

*“such public and private buildings, parks, stations, ports, terminals and roads where the public has access to.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017)

To ensure accessibility for disabled persons in all public structures, Building Construction Act, 1952 and rules made there under shall be followed. After the commencement of this Act, necessary facilities have to be installed in all public structures for the disabled people to ascend, move and to make those easily accessible as soon and as much as possible. Here, public buildings mean all public and private buildings, parks, stations, ports, terminals and roads. (Arif, 2014)

Regarding accessibility to buildings, the Building Construction Act, 1952 have been supplemented by the more recent Building Construction Rules, 1996 and the Dhaka Metropolitan Building Construction (Construction, Development, Protection and Removal) Rules, 2008. Rules 5(5) and 13 of the BCR provide the specifications for construction of wheel-chair accessible ramp. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

The Bangladesh National Building Code 2008 also contains disabled friendly construction rules and guidelines. The definitions on ‘accessibility’ and ‘adaptability’ comprehensively cover facilities or any part of them that can be approached, entered and used without assistance by persons with temporary or permanent physical limitations. They also provide for adaptable spaces/features designed for persons with physical limitation to have access to adaptable toilets, kitchens, lifts and so on. (Part 3). (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

“Dhaka City Building Construction Act 2008” in article 64 also assures accessibility for the students with disabilities in building, infrastructures including 5% toilets which will be accessible. (Ubaed, 2016) Rule 75 of the Dhaka Metropolitan BCR 2008 provides for universal accessibility for all including persons with disabilities. Schedule 3 sets up the minimum standard and specifications to ensure barrier free access to a building through installation of ramps, handrails and lifts and by reserving separate parking space, washroom toilet and entry and exit points for the use of PWDs. Additional provisions lays down the requirement for all buildings to have at least one toilet or in the case of a building with more than one toilet on each floor, at least 5% of the total number of toilets should be reserved for people with disabilities (Section 64, Dhaka Metropolitan BCR, 2008; cited in National Grassroots and

Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015).

### *Work & Employment*

Based on the Constitutional provisions, and in the spirit of the CRPD, the Rights & Protection of Persons with Disabilities Act 2013 has established work and employment of persons with disabilities as their inalienable right.

Article 16 (1) has three separate sub-articles towards this end,

*(i) “To gain employment in public and private institutions” (ii) “In case of a person acquiring disability in the course of employment, to remain employed or receive appropriate rehabilitation and adequate compensation” and (iii) “Receiving reasonable accommodation in education, work and all other applicable fields.” Sub-article (k) “Protection from oppression and access to a secure and healthy environment” is applicable in this aspect.* (Office of the High Commissioner on Human Rights (OHCHR), 2017; Sadat, Zaman & Shamsuddin, 2018)

Article 37 of the Rights & Protection of Persons with Disabilities Act 2013 affirms

*“(1) Notwithstanding anything contained in any other law in force, a qualified person with disability shall not be deprived of or discriminated against in giving employment on account of his/her disability, depending on the nature of disability, provided he has the requisite qualifications.” and “(2) If a question arises as to whether a person with a particular disability is qualified for a particular work, the National Coordination Committee shall provide instructions on the subject and such instruction shall be considered as final.”* (Office of the High Commissioner on Human Rights (OHCHR), 2017; Arif, 2014)

Article 10 of the Schedules of the Act is also solely dedicated to employment of persons with disabilities. (Office of the High Commissioner on Human Rights (OHCHR), 2017; Arif, 2014)

Section 16 of The Disability Act provides for the right to employment in all government and non-governmental organizations and to benefits, pensions, maternity payment, compensation packages and other facilities in the event of a PWD not being able to continue employment, and prohibiting discrimination. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services

Trust (BLAST), 2015; Arif, 2014) Moreover, it is also mentioned in section 16(2) of the Act that no such organization can refuse employment to a disabled person on the basis of discrimination, () or as long as that person has the capacity to perform in that position. Part 10 Schedule of the Act sets out the duty of public and private organizations to identify positions within their organization suitable for an employee with disabilities; the duty to ensure employment and sole business opportunities, provide banking and commercial services on a priority basis and provide easy access to small loans and start up loans. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Finally, the Act also establishes a National Disabled Welfare Coordination Committee and empowers it to create employment opportunities and maintain quotas in the public sector for persons with disabilities and for orphans in selected grades of public sector jobs. (The Daily Star, 2013, cited in National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

#### *Administrative Procedure*

The UNCRPD gives a direction in Article 33 and its subsequent articles as to implementing and monitoring measures prevailing rights and protection of PWD at national level though it allows the states to design the implementation mechanism in accordance with their national system of organization whereby they shall designate focal points consisting one or more within the government itself and also mentioned that due consideration should also be given to the establishment of a coordination mechanism within the country. This Article also emphasizes on principles relating to the status and functioning of national institutions for protection and promotion of human rights whilst promoting, protecting and monitoring implementation of the present Convention. The UNCRPD also requires state to maintain, strengthen, designate or establish within its own territory, a framework, including one or more independent mechanisms in accordance with their legal and administrative systems. (Sadat, Zaman, & Shamsuddin, 2018)

As per the RPPDA, 5 layers of committee namely National Coordination Committee, National Executive Committee, District Committee, Sub-district Committee and City Committee are to be established to oversee implementation of this Act. It is commendable that the Government recognizes the implementation mechanism from the root level to the national level. The

government has successfully incorporated establishment of National Coordination Committee under Section 17 of the RPPDA and this Committee is to be chaired by the Minister of Ministry of Social Welfare and consisting 28 members out of which 21 members directly being Executive members of the Government, e.g. Secretaries of different Secretariats. (Sadat, Zaman, & Shamsuddin, 2018)

### *Gaps/Criticism in Policy*

The process as to how a particular disease can be recognized as a disability is not clearly mention in the RPPDA. (Sadat, Zaman, & Shamsuddin, 2018) In addition, Sections 31 and 36 of the Act (which provides for registration and provision of identity documents to all persons with disabilities and provides them with a legal remedy when being discriminated),) are not in force until so notified by publication by an official gazette (Section 1). Without this publication, disabled persons will have no remedy when facing discrimination. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

### *Accessibility*

Whilst Section 16(1) (f) includes accessibility as one of the rights of any PWD, this section or any other section in this Act does not specify any means of adapting ‘Universal Design’. In Clause 4 and 6 of the Schedule to the RPPDA, Bangladesh has expressed its ambition for production of such goods and rendering of such services, but did not state how it is going to do it. In the absence of any definite layout, much is left to speculation which again adds to the ambiguity of the law. Moreover, the UNCRPD in its Article 9 (under the heading of Accessibility) requires the obstacles and barriers to be enlisted so that the implementation mechanism can be mapped accordingly and the government still lacks such initiative. (Sadat, Zaman, & Shamsuddin, 2018)

### *Equality before law and Access to Justice*

The RPPDA leaves ambiguity in relation to seeking justice regarding discrimination whereby it is mentioned in Section 36 that an aggrieved person can make a complaint to the District Committee seeking compensation but the Act fails to define the ambit of discrimination. (Sadat, Zaman, & Shamsuddin, 2018)



### *Rights of Disabled Women*

The Rights and Protection of Persons with Disabilities Act 2013 fails to concentrate on issues specific to women with disabilities and are only addressed in two provisions of the 2013 Act mainly in Schedule 3 and 11. (67) Also, there is a lack of awareness of the various benefits and facilities that women are entitled to under the national policies establishing women's right. The 2013 Disabilities Act is also silent on the need to have reserved quotas for disabled women in the public and the private sector. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Under the Act, certain committee's i.e. national co-ordination committees, city committees have been formed which are responsible to ensure disability rights but there is no position for representative (from disabled women) is found. The Act does not protect WWD from all forms of exploitation, violence and abuse, including their gender-based aspect. Moreover, in cases of violence, exploitation and torture on disabled women, legal provisions related to summons of persons, trial in absentia, adjournment and appeals, means that Sections in Chapter VI, Section 339 B, Section 344 and Sections contained in the Code of Criminal Procedure should be strictly complied with. (Akter, 2016)

Government and non-governmental organizations/institutions such as banks reportedly often refuse to provide services including loans to women with disabilities. Although this will improve as a result of the recently issued circular, the financial barrier shall continue to be a problem unless awareness is raised about it in the community level. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

### *Accessibility - Personal Mobility*

Clause 7(d) to the Schedule states that there is to be seat allocation in all modes of transport and there is to be fare concession, however, 5% allocation is not enough given our status quo as a populous country. Also, the Schedule does not clarify if that allocation is to increase and does not state exactly what percentage of the actual fare is to be paid by a PWD. (Sadat, Zaman, & Shamsuddin, 2018)

### *Accessibility - Training people dealing with persons having disability*

Even though Clause 9 of the Schedule to the RPPDA includes that staffs in the education sector dealing with PWD should be trained, however, Section 26 of the RPPDA does not mention any special training or sensitization of people working in various committees. (Sadat, Zaman, & Shamsuddin, 2018)

### *Freedom of expression and opinion, and access to information*

The RTI Act does not specify how authorities must publish/publicize information in an accessible manner for PWDs. Also, since the Act only extends to government bodies, and NGOs meaning for profit organisations, and does not cover privately owned organizations/institutions, it cannot be used by a PWD seeking information from any such establishment. Government and NGO websites are not yet accessible for people with visual impairments. The ICT Policy does address many accessibility issues for PWDs but these provisions are rarely put into practice. As a result, barrier free access to information is still a challenge for PWDs. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

### *Accessibility in Public Transport*

The Disability Act addresses the issue of access to transport, but the lack of Rules or detailed guidelines prevents effective implementation. For example, while 5% of seats are reserved for PWDs by law, the lack of any rule or practice for allowing additional time for PWDs to board, or for ramps or wheel-chair access, means that access is denied for physically disabled people. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015; Sadat, Zaman, & Shamsuddin, 2018)

### *Accessibility in Public Infrastructure*

Regarding access to buildings, while Rules are in place, and do provide detailed measures to ensure disabled friendly access, they are not implemented. The Building Code Authority is yet to be established. (26, cited in National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

### *Work and Employment*

Firstly, it is unclear whether the Act prevails over other laws that affect persons with disabilities. For instance, the Labour Act 2006 of Bangladesh states that any worker who becomes disabled due to a workplace injury will be terminated from work, although entitled to compensation. The Labour Act<sup>144</sup> provides that an employee with a permanent disability is entitled to a compensation package of one lac twenty five thousand taka (approx. 1300 USD) while anyone incurring a temporary disability is entitled to compensation assessed for the period of their disablement or one year whichever is less. Thus the amount of compensation payable for the first two months will be the entire monthly wage, the amount of compensation for the next two months will be two thirds of the monthly wages and for the remaining months, it will be half of the monthly wages.<sup>145</sup> Neither sum is adequate in terms of covering the actual costs of livelihood, medical treatment and cost of dependents. This conflicts with the Act, which requires employers to make reasonable accommodation for all employees with disabilities. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) Moreover, in case of compensation, neither any quantum nor a standard is provided and the procedure to follow in order to seek such remedy is a far cry. (Sadat, Zaman, & Shamsuddin, 2018)

The government had declared about two decades back a 10 per cent employment quota for persons with disabilities and orphans. But this quota has never been properly implemented due to the lack of sensitivity of employers about the potentialities of persons with disabilities, contradictory employment policies, loopholes in the system, and a lack of proper monitoring system. (Alam, 2009) Although the Disability Act has empowered the National Disabled Welfare Coordination Committee to maintain quotas in the public sector for persons with disabilities, the reservation of quota varying in government jobs depending on the grade of the job for people with disabilities. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) For example, a 1% quota of 1st class government jobs are reserved for candidates with disabilities. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015; Alam, 2009) However, these quotas are still not being filled, (Centre for Services and Information on Disability in association with Action Aid Bangladesh, cited in National Grassroots and Disabilities Organization (NGDO), National Council for Women with

Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015) due to the lack of any proactive recruitment practices for disabled people. (The Daily Star, 2013, cited in National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Additionally, there are more visible discrimination for PwD in case of employment in the public sector. For example, according to Bangladesh Legal Aid and Services Trust, Schedule III of the Bangladesh Civil Service Rules, 1982 (BCS Rules) require candidates to have “good hearing in both ears”, to have hands and feet that are “well formed” and “developed with no congenital malformation or defect”, and to not suffer from any “squint or morbid condition of the eye”. Also, Schedule III of the Bangladesh Judicial Service Appointment Order, 2007 bars persons with disabilities from being eligible for employment in judicial services. (The Daily Star, 2013, cited in National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Also, the absence of laws addressing discrimination limit opportunities for PWDs’ employment in the private sector. For instance, there are no quotas required for employment of persons with disabilities in the private sector and no specific remedies available if a private sector employer discriminates against any employee. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

On the other hand, the RPPDA fails to follow the international standard as mentioned in Article 26 of the UNCRPD in protecting the rights of PWD, on an equal basis with others, to just and favorable conditions of work, including equal opportunities and equal remuneration for work of equal value, safe and healthy working conditions. Again, although the RPPDA refers to the Criminal Procedure Code (CrPC) applicable in the legal system of Bangladesh in case of discrimination faced by anyone on the ground of disability, however, it does not include any definition and clear provision of discrimination. Furthermore, career advancement as mentioned in the UNCRPD is also not considered in the RPPDA and enclosed Schedule itself which is significantly mentioned in Article 27 of the UNCRPD. (Sadat, Zaman, & Shamsuddin, 2018)

### *Accessibility - Administrative Procedure*

According to the Section 17, only 7 people (4 women and 3 men) are allowed in the National Coordination Committee from the civil society, i.e. non-government organizations, organizations of PWD or any other self-dependent organization which has to be selected by the Government. Thus, civil society has only 25% representation in this Committee whereas the UNCRPD specifically emphasizes in its Article 33(3) that civil society, in particular PWD and their representative organizations, shall be involved and participate fully in the monitoring process. (Sadat, Zaman, & Shamsuddin, 2018) Moreover, the lack of cooperation between the government and civil society and lack of representation of and collaboration with persons with disabilities means that the structure while detailed on paper, has limited application or effect in practice. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Article 34 and other subsequent Articles require a Committee to be formed internationally and provides a mapping as to how to keep check and balance between the Committee and the state parties who become the ratifying signatory acknowledging and incorporating this UNCRPD into their own state mechanisms. Government of Bangladesh has missed this part entirely in the RPPDA. There is no clause that expressly says which committee is answerable to which. (Sadat, Zaman, & Shamsuddin, 2018) None of the Committees empowered under the Act for ensuring implementation of government decisions and directions on disabled people ( Sections 17, 19, 21, 23 and 24) - such as the Jatiyo Shomonnay Committee [National Coordination Committee], National Executive Committee, Zilla, Upazilla and Shohor Committee [District, Upazilla and Town Committees] have yet been established. (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

Although the National Coordination Committee, National Executive Committee and other sub-committees formed under the RPPDA undeniably play the major role in implementing the rights and protection of PWD, however, the accountability of such committee is questionable as no such provision is mentioned in this RPPDA. (Sadat, Zaman, & Shamsuddin, 2018)

#### **4.2.6 Road Transport Act 2018**

As accidents is one of the root causes of disability so to ensure safety on the road and in transport, the Government of Bangladesh has a policy called “Road Transport Act 2018”.

The Preamble to the 2018 Act states that it is being passed with a view to replacing the Motor Vehicles Ordinance 1983 keeping provisions largely unchanged save where change was necessary to modernise the law and satisfy the demands of the day. (Huda, 2018) This act mainly deals with the drivers' discrepancies and due punishment. (Prothom Alo, 2018) The law introduces a provision where authorities will be able to limit the number of vehicles plying in a city or locality. (Bangla Tribune, 2018)

The salient features of this Act are that individuals who passed minimum eighth grade can obtain a driving license whereas the existing law does not provide for any educational qualifications. In addition, it is mandatory for the driver's assistants to have licenses as well and they have to clear at least fifth grade. The driver has been assigned a total of 12 points, which will be subtracted depending on particular offences and a zero-point will lead to cancellation of the license. (Bangla Tribune, 2018)

As per the proposed law, if anybody causes an accident by reckless and negligent driving, and kills or injures someone seriously, such person would face a maximum sentence of five years in jail or a fine of Tk five lakh or both under the proposed Act's Section 103. (Huda, 2018; Bangla Tribune, 2018) If the accident is caused due to the negligence of any government officials then action can be taken against them. On the other hand, if accident occurs due to faults in the design, manufacturing or maintenance of roads, then the construction firm, the maintenance authorities and assigned persons will be held responsible, and action can be taken against them. (The Daily Star, 2018) However, if road accident is found to be deliberate act to kill someone then the law proposes trial under the Penal Code's Section 302, which stipulates death sentence for murder. (Bangla Tribune, 2018)

The law mentions the amount to be paid as fines for each of the offences. For instance, using mobile phones while driving will result to a month in jail or Tk 5,000 fine, driving under the influence of alcohol or narcotics will result in up to three months in jail or Tk 35,000 fine or both, penalties for unfit vehicles plying on the roads have been doubled a year in jail or up to Tk 100,000 in fine, passengers wrongly occupying seats reserved for women, children, elderly and handicapped people on public transports will face a month in jail or Tk 5,000 in fines. Also, offences like driving on the wrong lane, obstructing traffic movement, transporting goods and passengers on the roof, carrying more than one pillion rider on motorcycles and riding without helmets as well as riding on the footpaths will cause up to three months in jail or Tk 35,000 fine or both. (Bangla Tribune, 2018)

### *Gaps/Criticisms in Policy*

Weak laws, of course, are not the main cause of the anarchy on the roads. The more important challenge for the government is not passing the law, but to ensure its implementation. (Prothom Alo, 2018)

The draft law retains the punishment of five years' imprisonment for causing death to a person by reckless driving, a sentence which road safety campaigners believe is insufficient. (The Daily Star, 2018) On the other hand, if the requirement of further infrastructure and workforce in the area is not met, it will not be easy to implement the law. For example, the government has only one inspector per 36,000 vehicles to check the fitness, that is, it collects Tk 5 billion from the car owners for the fitness check, against which it spends not more than Tk 100 million. This must be changed. (Prothom Alo, 2018)

The major issue with the Act is the non-operation of vicarious liability within compensation claims. It is very important to hold liable to the motor vehicle owners for the negligence of their employees and forced to pay damages for accidents arising out of negligence, for example, rash driving incentivised by payment per trip instead of weekly wages, shoddy recruitment of unqualified drivers and operation of unfit vehicles etc. because only then they will feel compelled to address these root causes of accidents. In contrast, the Section 57 of this Act shows that there is no imposition of specific compensation liability on the motor vehicle owner whose employee (i.e. the chauffeur) causes a road death or injury in any given case.

Moreover, Section 111 read with Section 128 of the 1983 Ordinance granted victims the right to sue for compensation not only from insurance providers but also motor vehicle owners in the event insurance coverage was inadequate. The Act also failed to impose a mandatory duty of insurance on motor vehicle owners (including third party risks) as section 109 of the 1983 Ordinance did (and in fact section 46(1) of the 2017 Road Transport Bill did as well). (Huda, 2018)

Although a victim of the accident has the right to claim the compensation, however, the Act has named 'Arthik Shohoyota Tohobil' i.e. 'Financial Aid Fund' under Chapter 9 (namely sections 52 and 53) to claim for this compensation, which is termed as in the form of charity. Section 59 sets down the procedure a claimant must follow when they 'apply for financial aid' from this fund. It means that the Act does not differentiate between 'compensation' and 'financial aid' though 'aid' is always gratuitous whereas compensation is an entitlement as of right. Nevertheless, a road accident victim's right to sue for compensation and their ability to

apply for financial aid are certainly not one and the same. (Huda, 2018) Hence, it shows that an accident which may cause a person to be disabled, the victim has not been given the entitlement of right rather places them in the charitable state.

#### **4.2.7 Budget for Protection of disability rights**

The national budget for the fiscal year 2014-2015 allocated Tk139.74 billion (about 1,797,485,402 USD 5.6 % of the total budget) for Safety Net and Welfare Schemes does not match the text) increasing funds for school stipend programs, special stipend programmes for physically challenged students, allowances for insolvent disabled persons, old age allowances, allowances for expecting and lactating mothers, food for works programmers, and food assistance for destitute mothers. It also put more emphasis on persons with disabilities and allocated Tk 200 million (2,572,614 USD) to the Trust for Persons with Neuro-Development Disorders and another Tk 50 million (65,000 USD) for those who are physically challenged. The budget also proposed to increase the tax exempted income threshold for physical challenged disabled people from Tk 0.3 million (approx. 3,858 USD) to Tk 0.35 million (4,504 USD). 21 (National Grassroots and Disabilities Organization (NGDO), National Council for Women with Disabilities (NCDW), & Bangladesh Legal Aid and Services Trust (BLAST), 2015)

For Budget FY 2018-19, the allowances for persons with disabilities and stipends for students with disabilities have increased in terms of coverage of beneficiaries as well as the sum of cash. The budget also has innovatively outlined a carrot-and-stick method—“carrots” by offering tax exemption on income from operating educational or training institutions for persons with disabilities and increasing the income tax threshold for persons with disabilities, and “sticks” by imposing 5 percent additional tax on medical service providers in case of failure to ensure access for those with disabilities to their medical services, to be effective from FY 2019-20. There is also an increased amount of resources allocated for social empowerment such as allocation for Neurodevelopmental Trust (from Tk 10.50 to 27.50 crore) and allocation for Bangladesh Autistic Academy (from Tk 5.36 to 30 crore). Also, the proposed budget contains some fiscal policy measures to incentivise disability inclusive service delivery in the medical sector, education, and vocational training for persons with disabilities. (Dio, 2018)

#### ***Gaps/Criticism in Policy***

Unfortunately, the National Budget for FY2018-19, placed during the 21st session of the 10th Parliament, has failed to uphold the government's commitment to ensuring their rights and



entitlements and have put those with disabilities into the social welfare box and making their lives and development dependent on “allowances”. The trend towards increasing allowances has rather cornered the development needs of the persons with disabilities, creating a “Disability Silo”. Hence, the budget revealed a focus on charity-based development rather than the rights-based approach promoted in the Persons with Disabilities Rights and Protection Act 2013, UNCRPD and SDGs. Most importantly, fiscal policy measures to incentivise disability inclusion in mainstream education, employment, livelihood development, disaster preparedness and risk management, and infrastructural development are absent in the budget. (Dio, 2018)

## **Chapter 5**

### **Result and Analysis (Barriers and Strategies)**

As it can be seen from chapter 4 that although a number of policies have been taken by the Government of Bangladesh, however, there are gaps in the policies and weakness in implementation leaving the people with disabilities in distress. Due to these gaps in the policies or due to the inefficient implementation of the laws the people with disabilities face inequality in accessing the public services, especially the public transport and infrastructure, which has been shown below. Particularly, the chapter is divided into 4 sections. The first section includes the incidence of disability in Bangladesh, particularly the urban area. The second section includes the infrastructural barriers according to the factors – accessibility, availability, acceptability which includes reliability and comfortability, and affordability. The third section includes the social barriers that the people with disabilities face and finally, the fourth section includes some probable solutions of the barriers in terms of accessibility, availability, acceptability and affordability. Thus, this chapter give a full idea on full infrastructure gap and social barriers and how the people with disabilities suffer due to lack of inclusive transportation system.

#### **5.1 Incidence of Disability**

It is very rare to find internationally comparable estimates of disability prevalence in Bangladesh which is also varied vastly within Bangladesh. In 1998, the disabled population estimated by Bangladesh Bureau of Statistics (BBS) was 1.6%, in 1996 Action Aid estimated 8.8%, in 2005 the National Forum of Organizations Working with Disabilities (NFOWD) and Handicap International (HI) estimated 5.6%, in 2010 Household Income and Expenditure Survey (HIES) by Bangladesh Bureau of Statistics estimated 9.07% (Bascom, 2017) and finally, in 2016, HIES estimated 6.94% and 6.04% is in urban areas (Rosenbloom, 2007).

For the present analysis, the disability data is drawn from HIES 2016 Preliminary Report. The HIES is considered as the most important household survey as it provides detailed information on household income, expenditure and consumption to determine the poverty profile, standard of living and nutritional situation in the country. It is also employed to identify the representative consumption basket, required to construct the Consumer Price Index (CPI) in the country. Again, it also provides information on health, education, socio-economic

characteristics, disability, migration, remittances, microcredit, disaster management practices and Social Safety Nets Program (SSNP) coverage of the nation. Thus, HIES provides relevant data for monitoring the poverty situation, implementation of the Sustainable Development Goals (SDGs) and the outcomes of the five-year plans and thereby indicate the success or failure of governments in various policy fronts.

The 2016 round of HIES surveyed 46,076 households where 13,980 households were from urban areas. In 2016, there is 6.94% of population with disabilities where 6.04% is from urban area. Although the percentage of disabled population has decreased from 2010 to 2016, according to HIES 2016 report, however, there is an increasing trend of chronic illness in terms of injury or disabilities from 2010 to 2016, 2.25% to 4.93% respectively, and the amount of aging population (age 60-64 years) are also increasing from 2.03% to 2.44% respectively in urban areas. (Table 2)

Six types of disabilities are mentioned in HIES report 2016 and among them, maximum population have the eyesight issue. (Table 3) Therefore, to ensure higher economic growth and promoting inclusive society, accessible transportation for this population need to be ensured which will help to ensure sustainability in the longer term.

	2016		2010	
	Total	Urban	Total	Urban
Total sample household	46,076	13,980	12,240	4,400
Number of disabled persons (in percentage)	6.94	6.04	9.07	7.49
Injury/disability	5.31	4.93	3.91	2.25
Age (60-64)	2.88	2.44	2.59	2.03

**Table 2:** Incidence of Disability in Bangladesh

Source: HIES (2016)

Type of Difficulty	Some	Severe	Fully Unable
Total	8.04	1.5	1.09
Eye sight	3.54	0.36	0.09
Hearing	1.31	0.14	0.1
Walking and climbing	1.11	0.33	0.16

Remembering and concentrating	0.75	0.23	0.18
Self Care	0.74	0.22	0.29
Speaking and Communicating	0.59	0.22	0.27

**Table 3: Percentage Distribution of Urban Population (all ages) having any difficulty in 2016**

Source: HIES (2016)

## **5.2 Infrastructural Barriers**

### **5.2.1 Accessibility**

It has been defined earlier in the paper that accessibility means whether transport exists between people and the services they require (availability); whether people know about all available transport service (reliability); whether they find it reliable and feel safe using it (acceptability/reliability/safety); whether people are physically and financially able to access it (affordability); and whether provide some facilities in the vehicles so that disabled persons can access the vehicles and ride on them in comfort (comfortability). The barriers that the people with disabilities face in the case of accessibility in terms of availability, acceptability, affordability, reliability, safety and comfortability would be discussed in detail in this chapter.

### **5.2.2 Accessibility - Availability**

**Availability** – It means whether transport exists between people and the services they require. However, the people with disabilities face barriers in getting into the public transport.

#### *5.2.2a Lack of available Public Transport*

Public transport system classified into road-based, rail-based, and water-based public transport. According to Dhaka Structure Plan (2016-2035), 30% of the population travel by bus and 19.80% by walking and by 2035 it is expected that the modal share by public transport will increase significantly and rickshaw trips will decrease by 20%. In addition, it is estimated that by 2035, bus trips will be maximum looking into the present scenario of the trip rate by each mode. On the other hand, the number of buses registered in Dhaka city by Bangladesh Road Transport Authority in 2017 was only 41,295, which has increased from 2011, but the number is still lower compared to the number of auto rickshaws, motor cycles and private passenger

cars in the same year. This clearly shows a lack of availability of buses, in terms of public transport, which hinders accessibility to the poor population leaving the option of being pedestrians to a higher population. In addition, the other mode like taxis and auto rickshaws is not seemed to be sufficient.

During the FGD with the people with disabilities, these barriers have come up in the discussion in various ways. Due to lack of available public transport the people with disabilities expressed dissatisfaction and told how they wait long duration to get a public transport and even if they wait the public transport providers do not let them get inside the transport due to disability. Some of the experiences are mentioned below:

*The public transport providers do not take me and even if there are seats the bus helpers would say that there are no seats available and would advise me to get on to the next bus that stops. On the other hand, even the autorickshaw drivers do not want to take me and the driver says that the rexin of the autorickshaws would torn with the wheelchair if it is kept inside. (Mohammed Muhidul Islam – a wheelchair user)*

*Sometimes I have to wait longer to get the transport. In addition, I often have to stand holding the outside railing of 'laguna' (public transport-human hauler) as I do not get available seat.*

*Often, the driver of laguna do no stand seeing me even after I wave to stop the transport. The transport providers do not stop because they often think that I will not pay the fare. The 'laguna helper' do not want to take me in the transport and tell me "do not get in the transport rather let someone else take the seat as you will not pay the fare". Then I have to assure them that I will pay the full fare and only then will let me enter. (Mohammed Khairul Islam- dwarfism disability)*

*Often when I wait for a bus with the wheelchair and wave even then the buses do not stop. It is only because I have a wheelchair with me. The 'bus helpers' think that it is hassle to take a wheelchair user inside a bus because they have to help me to get up in the bus, they will have to fold the wheelchair and take it inside.*

*In most cases, the bus helpers do not want to take us. It is also the case for autorickshaws. (Mohammed Sajjad Hossain – a wheelchair user)*

This is not just the people with disabilities experience but it is also observed by people who travel in the public transport like local bus service. Assistant Instructor for Electronic Assembly

Technician training who works at UCEP Bangladesh and have students who are people with disability has expressed in his interview:

*In my opinion, the bus drivers and helpers may also think that where to let them sit as the buses are usually very overcrowded. The transport providers may think that they have to give special services to the people with disability which prevents them to take them inside the bus. (Mohammed Abu Jafar)*

### **5.2.3 Accessibility - Acceptability (Safety, Reliability, and Comfortability)**

Acceptability means that mobility to all income groups of the society needs to be ensured without hampering environmental balance and road safety condition. It also means that whether all people including people with disability find it reliable and feel safe using it. This means that acceptability also considers reliability, safety and comfortability of the users of public transport.

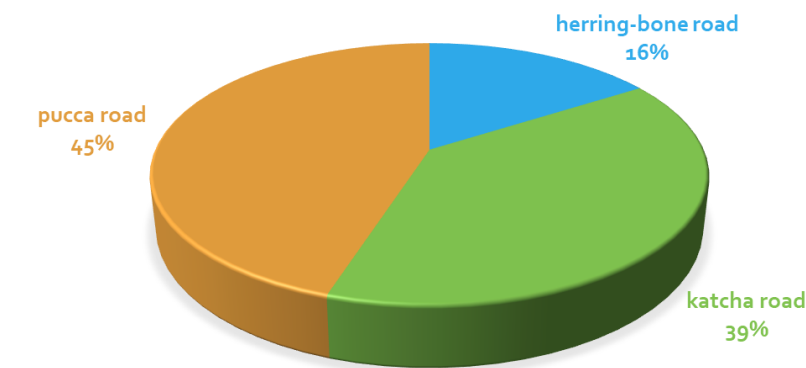
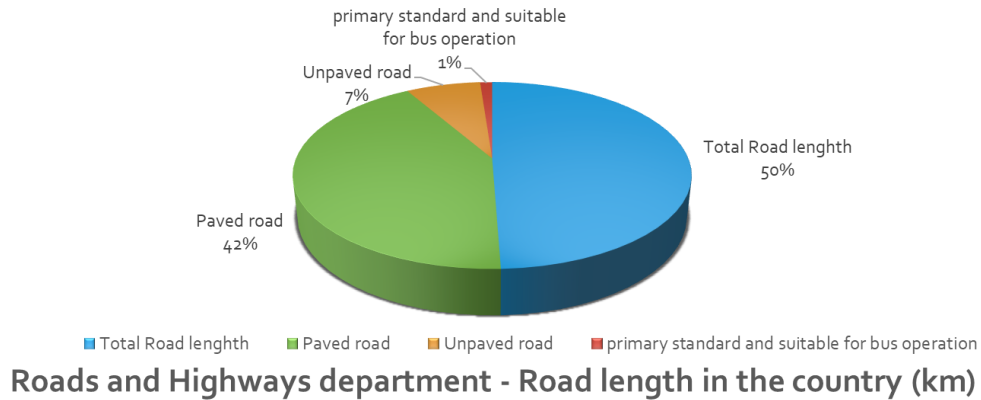
**Reliability** means to provide information in forms that are useable by everyone, and training for transport staff to understand the needs of disabled and elderly people. Streets, parks, and other urban areas must be designed in a way that enables people to move about **safely** and confidently.

**Comfortability** means to provide some facilities in the vehicles so that disabled persons can access the vehicles and ride on them in comfort

However, the scenario is different.

#### 5.2.3a Non-standard Roadways and road network

Under the management of Roads and Highways department, total length of the road in the country is 21302.08 km, out of which 18202.06 km is paved road in the country leading to 4167 km of paved road in Dhaka city, however, only 500 km is primary standard and suitable for bus operation. According to Dhaka Structure Plan (2016-2035), there is 16% of herring-bone road, 39% of katcha road, and 45% of pucca road in the existing road network of Dhaka city.



The data clearly shows that the roadways and the road network of Dhaka city is not in good standard for the local citizens of Dhaka city to travel which creates more difficulties for people with disabilities. This has created more dependency for the people with disabilities, in particular, while travelling during the rainy season. An experience from the people with disability due to non-standard roadways are given below:

*It is very difficult to travel during the rainy season especially for people who have disability on their legs. The roads are so slippery that I often slip on the road.*

*There is some portion on my travel distance which is unpaved road, that is, “katcha road”. During the rainy season, my father needs to travel with me and help me to walk on that road so that I don’t slip off.*

*There is waterlogged on the roads during the rainy season, which makes it more difficult to walk. (Mohammed Hanif Miah)*

#### 5.2.3b Inefficient Bus Service

5.5 million population travel by bus every day in Dhaka city. There are 152 bus routes, 5 bus routes operating east-west, 3 inter-district bus terminals, 12.5% of entire road network is

suitable for bus movement under 3,800 km of road network. It is proven that the higher the supply of public transport, the higher the availability of service and so is the quality of service so the current inefficient bus service degrades the quality of the bus services including unprofessional behavior of the drivers.

(i) *Poor condition of the vehicle of public transportation:*

The **condition and the infrastructure of the bus** is very poor, for instance:

- ❖ High entry steps with high risers (the distance from the ground to the first step is typically between 30 cm to 50 cm)
- ❖ No provision of ramps or at-grade boarding
- ❖ Lack of sufficient grab rails both at the entrance and within the vehicle
- ❖ Lack of color contrast at the place of offset and where change in grade is present
- ❖ Slippery or split-level vehicle floor surfaces especially during rainy season
- ❖ Narrow aisles and seat spacing (inaccessible leg-room)
- ❖ No place to keep the wheelchair
- ❖ Reserved seats are inappropriately used

This poor condition of the bus has created a challenging environment for the people with disabilities to use the public transport.

Assistant Instructor for Electronic Assembly Technician training who works at UCEP Bangladesh and have students who are people with disability has expressed in his interview:

*The public buses are very crowded. The condition of the public bus is so bad that sometimes even when abled people sit, the clothes torn due to the nails coming out of the seats and also while getting on and off the bus. (Mohammed Abu Jafar)*

Some of the experience of the people with disabilities have also demonstrated dissatisfaction due to the inefficient bus service:

*It is very difficult to use local bus service. While coming from Savar, a younger brother (cousin) comes with me to help me to get inside the bus. (Mohammed Khairul Islam)*

*There are no ramps. Not only for local bus service but also at the Railway Station. Again, at the airport, there are pillars around that I cannot get access using my wheelchair though it is an international airport.*



*And, if I try to take the bus then they are not that accessible. Sometimes the BRTC Buses usually take me, however, even then there is no place to keep my wheelchair.*

*In addition, though it is given in the law that there are reserved seats for the PwD but we cannot use them because other people usually sit there and the bus conductors do not help to vacant those places for us. (Mohammed Mohsin)*

*Although there are reserved seats, so if the reserved seats are already taken by few women, child, and PwD then what else to be done when there are more PwD in the bus is not mentioned in the law. (Md. Mithun)*

Not only that the reserved seats are not being able to used by PwD but also there is less awareness among the people about who are eligible for using these reserved seats. An experience of a person with disability during the FGD is given below:

*One day, when I sat on the reserved seat a woman came to me and told me “Why are you sitting here? The seat is for women only.” Before I responded another man from my side told her that I have the right to sit there as I have a problem on my leg. Now, the problem is I cannot keep a signboard by saying that I am disabled and cannot even explain to everyone that I have the right to sit on the reserved seats. Hence, to avoid this, sometimes I stand holding the hand rails and wait for someone from the abled seat to be vacant. It means that people are still not aware of the disabled rights and still today people think that those reserved seats are only for women. (Mohammed Hanif Miah)*

(ii) *Unprofessional and non-cooperative attitude of the transport providers:*

Not only the poor condition of the vehicle of public transport is hindering the mobility of the people with disabilities but also, they face unprofessional or rude behavior of the transport providers. During the FGD, many interviewees have shown discontentment about the rude and non-cooperative behavior of the transport providers that they usually face while travelling in the public transport.

*The ‘helpers’ or the bus conductors behave very rudely. They think that since I am a disabled person so I will not pay the fare.*

*Last time, one of the players from Tangail were coming to Dhaka and it was told to the bus helper to give a seat for him at the front. However, at the end he had to sit at the*

*back after almost behind 7 to 8 seats although it was difficult for him to move. That player even called me to request the bus helper, however, even then the bus helper did not agree and when I told the 'helper' that I would pay him extra only then he agreed to give a seat at the front. (Mohammed Mohsin)*

*Sometimes people in the bus also say "If you have disability why are traveling in a bus? Why don't you stay at home?" (Mohammed Hanif Miah)*

In addition, only providing the facilities inside the vehicle, for instance reserved seats, would not help the people with disabilities to ride in the public transport if the behavior of the transport providers is not cooperative and professional.

*The bus helpers are not properly trained as well and they are not instructed properly that when there is disabled person then the bus helper have to help them to get in the bus and get these reserved seats. I will only get the seat when the transport providers would give me time to get inside the bus. Hence, it needs to be ensured that whether the PwD are getting into the bus or not so reserving seat won't be of any help if the PwD are not being able to get in the bus. And, to enter the bus the transport providers have to give time to the disabled people, for instance, a wheelchair user might need 4 to 5 minutes to enter the bus and that needs to be ensured in the first place. In these cases, the reserved seats have no value for me no matter how many of them are there. (Md. Mithun)*

(iii) *Lack of Bus Layout on Roadside, Dangerous Alighting and Boarding and Unsafe Driving*

No bus layout or travel information is available, which creates difficulty especially for the people with visual impairment.

*I usually use Google maps but it is very difficult mainly for the visually impaired people. They always have to be careful on what the bus helpers are saying in every bus stop. (Mohammed Sajjad Hossain)*

*I usually check the map and ask my brother about a travel route before going. I do not ask anyone else because I do not feel safe. (Mohammed Khairul Islam)*

Most of the buses stop in road side haphazardly and alighting and boarding passenger dangerously which causes accidents like trip off or fell off while getting on and off the bus. Also, it creates crowded on road side and influence pedestrian to move on road.

*Once when I took a bus to travel from Tongi to Shahabag, when I just got up in the bus another bus horned from behind and the bus driver started abruptly and I fell down from my wheelchair. (Mohammed Mohsin)*

*When we get on the bus, the driver instantly accelerates and as we do not have the strength in our leg so we often fell off inside the bus. (Mohammed Sajjad Hossain)*

*Often the driver brakes so hard that I bash on the handle of the transport and get hurt. (Mohammed Khairul Islam)*

The unsafe driving not only causes difficulty for the people with disability to travel in public transport but also causes accidents on roads, which is a huge issue in the Dhaka city, creating more disabled people. In addition, the compensation fund that has been discussed in the policy section (chapter 4) that should be available for the victim to claim are not being received as well.

*Bayzid from our team has lost his legs from road accident. He was playing cricket so when the ball went on the other side of the road and he went to get the ball, while crossing back a bus hit him when he lost his leg. He did not receive any compensation and could not trace the driver who caused the accident. (Mohammed Sajjad Hossain)*

(iv) *Inaccessible Bus terminal and Bus Stops*

- ❖ Absence of audible sign for helping people with visual impairment
- ❖ Absence of curb ramp for wheelchair users
- ❖ Absence of tactile surfacing for guiding people with visual impairment
- ❖ No fixed position of stopping of bus
- ❖ No guidance path was found for blind people to reach the terminal for bus stops
- ❖ Waiting rooms, platforms, counters and parking bays of the stations are almost inaccessible
- ❖ Lack of accessible public toilets at the bus stops

The experiences of the people with disabilities also show the similar result creating demanding situation for them.

*Other than bus stops, the bus stops in a way that is not comfortable for me to get up on the bus which only an abled person may can as the bus do not stop fully and try to take the passengers while in the motion. For my case, the bus has to stop fully.*

*I do not take the risk to take the bus from anywhere else other than bus stops in the fear of falling while getting in or out of the bus. I would rather walk or take a rickshaw and wait for 30 minutes or so to get in a bus from a bus stop and the one that is convenient for me to get in.*

*Every time to get on a bus, I always have to walk to the traffic signal where the bus would stop fully. (Mohammed Hanif Miah)*

*Nowadays, public toilets are built at the bus stops but I have not seen any toilets which are disabled friendly. (Mohammed Mohsin)*

*In these toilets the space that is required for a wheelchair user is not present and it is difficult to move inside the toilet. Moreover, they are built in such a height that it's difficult for us to use. (Mohammed Sajjad Hossain)*

(v) *Problem during mode change*

The level of difficulty is huge for the people with disability. The distance between rickshaw stops and bus stops become difficult for disabled people specially wheelchair users. The path used to travel to rickshaw to bus is not accessible and not handicapped friendly.

*I usually use rickshaws, however, the places where there is restriction for the rickshaws on the road, in that case, I have to travel using wheelchair. This is very difficult for me to travel as the paths are very crowded. Moreover, there is no separate lane for PwD to move. (Mohammed Sajjad Hossain)*

*Sometimes I get the bus instantly where the UCEP Bus stops. Often, I walk or wait for around 10 minutes to get another bus. I have not seen any designated bus stop over there so it depends on whether a bus would stop there or not and I will get a bus over there or I would walk to get one. (Mohammed Khairul Islam)*

5.2.3c Inaccessible and unsafe Paths for Pedestrians

Around 20% of the population of Dhaka city are pedestrians. In education and health areas of Dhaka city, the width of sidewalks varies from 1m to 4m and the length of sidewalk is only 600 km. The survey done by DITS determined that there are 2231 kilometers of paved footpath in Dhaka Metropolitan City. The detail survey result is provided below in Table 4 and a summary of different types of pedestrian crossing facilities available in Dhaka city is shown in Table 5. It is found that most of sidewalks are occupied by vendors forcing the pedestrians to

take the carriageway, thereby creating traffic congestion and safety hazard. This clearly creates a more difficult situation for the people with disabilities to walk on the footpath.

Number of Lanes	Total Meters	Percent W/FP	Average FP Width
1 to 2	24594	6.80%	2.28
3 to 4	10166	54.80%	3.56
5 to 6	6762	76.10%	5.07
7 to 8	3439	96.80%	4.73
9 to 10	753	100%	4.62
11 to 12	123	100%	7.5
14 to 15	145	100%	6.3

**Table 4: Footpath inventory in Dhaka Metropolitan City**

Source: DITS, cited in Mahmud, Hossain, Hoque, & Hoque, in press

Serial No.	Type of Pedestrian Facility	Quantity
1	Walkways	167 km based on DITS report. According to DDC source, at present 210 km new footpath is newly constructed.
2	Zebra Crossings	No statistics is found from literature and DDC
3	Signalized Pedestrian Crossings	Most of the newly geometrically improved intersections are with this facility
4	Overpasses	20 nos. concrete footbridges and 15 steel footbridges
5	Underpasses	3 nos. in the city

**Table 5: Summaries of Different Types of Pedestrian Crossing Facilities Available in Dhaka City** Source: DITS, cited in Mahmud, Hossain, Hoque, & Hoque, in press

The people with disabilities particularly faces trouble while travelling is due to inaccessible footpaths and to use the overpasses and underpasses. The footpaths are not disabled friendly with no provision of ramps, they are unsafe to walk as the paths are crowded and filled with vendors, dirt and obstacles. In addition, the overpasses and underpasses are also not disabled friendly creating obstacle to use them while travelling especially for wheelchair users and visually impaired users.

(i) *Inaccessible Footpaths*

- ❖ Absence of footpath landing
- ❖ Discontinuous footpath due to frequent access from road adjacent abutting properties
- ❖ Illegal and nuisance parking on the footpath
- ❖ Uneven surfaces, signboards, merchandise and garbage on sidewalks
- ❖ Presence of unwanted obstructions
- ❖ Disordered movement of pedestrians
- ❖ Inappropriately installed ramps
- ❖ Absence of tactile paving for providing direction of visually impaired people

The experience of the people with disability is disheartening:

*We cannot use the footpaths properly. Last time, when I went to Kawran bazar for an interview at ABC Radio and wanted to keep my bike at the front. While entering the building there were 3 pillars and my wheelchair was not being able to get through them. Then I had to request two people to help me to get through it. In that case, even the person was struggling to help me as the height of the pillars were also very high so I had to get down from the wheelchair, folded the wheelchair and then moved to the other side. (Mohammed Mohsin)*

*This is very difficult for me to use wheelchair on the footpath as the paths are very crowded. Moreover, there is no separate lane for PwD to move. I also get lost sometime in the crowd. (Mohammed Sajjad Hossain)*

It is not only difficult and challenging to use the footpath for the people with disability but it is also unsafe to walk on the footpaths:

*The footpaths are filled with dirt, cha-wallas or vendors. It is impossible to walk in the evening. There are risks to walk on the road. For instance, there are workshops where welding is done, there are automobile workshops from where the automobile parts may blow on someone. (Mohammed Abu Jafar)*

(ii) *Problem in Overpass and Underpass*

- ❖ Some of the overpasses are encroached by the hawkers
- ❖ The underpasses of the city possess serious safety hazards especially at night time
- ❖ Various unsocial and criminal activities take place in the underpasses at night time although there are lighting facilities

- ❖ facilities are not designed to access by the wheelchair users
- ❖ For visually impaired people no deep colored marking are provided
- ❖ For comfort of the people a landing should be provide after every 12 steps.  
Most of the cases the landing is not provided
- ❖ Due to lack of maintenance the surface of stair of overpass became slippery

Again, the difficulty is not less in case of using the overpass and underpass. The overpass in Dhaka city are more prominent to be used by people than the underpass, and law has been passed for all people in the city to use them, however, these are not at all usable for the people with disability.

*There was a law passed that it is compulsory to use overpasses. The law is same for all, however, I cannot use the overpass. (Mohammed Mohsin)*

*I want to follow the law but why did not the law think that how would a disabled person would climb this 30-foot height of overpass. It is not only difficult for PwD but also for pregnant women and people who are older than 60 years. The overpasses are not at all disabled friendly. (Md. Mithun)*

*I feel very helpless when I go in front of the overpass. I feel that if I had 2 legs then I could climb the stairs and as I do not have them so I have to crawl to climb these stairs. The stairs are very steep. It is impossible to use the overpass during the rainy season because I can easily slip or trip off from the stairs. It means unless there is someone with me to support, I will not be able to use these overpasses. (Abdullah Al Mamun)*

#### 5.2.3d Others – Buildings

The people with disability are also facing difficulty in other public infrastructures other than public transport, for instance, buildings.

*Even the infrastructure of National Parliament Building is not disabled friendly. The parliament do not even think that there can be a parliament member who is disabled. So, it is not even in the National Parliament Building then how would I expect in other places! (Md. Mithun)*

*For example, in banks. I cannot use the ATM Booths. Even I have to climb upstairs inside the bank to get the service. In this case, though I have a bank account I will have to send someone else to get this service. (Mohammed Mohsin)*

*For instance, there is a ramp in the passport office, however, a wheelchair user cannot use it independently rather would need support of 2 people to push my wheelchair. (Md. Mithun)*

These difficulty in accessing the public infrastructures creates frustration among the people with disabilities raising questions:

*I need space for my wheelchair is 3 feet 11 inches, which is nothing big for not considering a separate space for the wheelchair users. (Mohammed Mohsin)*

*I want to be self-dependent, however, I always have to depend on someone to do my work. (Abdullah Al Mamun)*

#### **5.2.4 Accessibility – Affordability**

**Affordability** means the extent to which they can afford to travel when they want to. ability to make necessary journeys to work, school, healthy and other social services, and make visits to other family members

It has been discussed earlier and, particularly, in chapter 4 on how the people with disability face barriers in case of gaining employment though there are policies of a reserve quota for employment of people with disability. This creates a barrier for them to be financially stable.

*For few jobs, I am not eligible either due to my disability or due to educational or experience requirements. Due to my disability, the job sector for me is very limited as well.*

*I have tried for government jobs but have never been selected. I know a person who has been qualified for both written and viva exams of a government job but have not been selected in the beginning due to his disability. Then, as his father is an Advocate so they have complained and then he got selected for the job. (Mohammed Hanif Miah)*

This does not end here but also there is no funding for specialized transportation for work purposes keeping a large population with disabilities unemployed. So, people with disability who are employed when try to travel on the public transport they have to bear extra cost creating a barrier in the affordability. Moreover, when people with disabilities have no other choices than to take private mode of transport such as taxis, rickshaws, auto-rickshaws, or CNGs, drivers of these services sometimes claim up to triple the normal fare because of the additional assistance provided for getting on and off the vehicles



*I usually have to travel using autorickshaw. However, firstly, autorickshaws do not want to take me in their transport and even if they take me then they would charge me more fare, for instance, the driver would charge 1000 - 1200 BDT to travel from Tongi where the usual fare may be around 600-700 BDT. (Mohammed Mohsin)*

*I have to pay extra, for instance, 50-100 BDT to keep the wheelchair inside the bus. (Mohammed Sajjad Hossain)*

*The lives of wheelchair users have become very expensive. The public transport providers hesitate to take me and also do not have the time to think about me because they would have more income with a greater number of passengers. Hence, I am compelled to travel through rickshaws and also have to travel longer path, which means where I would have to pay BDT 10 in a public transport like bus whereas I am paying BDT 100 to travel in rickshaws. (Abdullah Al Mamun)*

*Although the bus would be stuck in the traffic jam for hours but they would not wait for me to get inside the bus. In that case, I have to travel through autorickshaws which is very costly. (Mohammed Muhidul Islam)*

Due to the expensive travel expenditure for the people with disability, it hinders their mobility and keep them inside their house.

*I usually do not travel while it is raining because it is very expensive and I may have to miss some important appointments or meet-ups with my family or relatives. (Md. Mithun)*

Moreover, because of the infrastructure and unsafe paths the travel expense of the people with disability increases more:

*For a person with disability, the transport expense is very expensive. For instance, the distance from my house to the CNG stand is not so far where an abled person could walk, I have to take a rickshaw to reach the CNG stand, which costs me 20 BDT. (Mohammed Hanif Miah)*

### **5.3 Social Barriers**

The change between abled and disabled is just a difference of few seconds. However, people with disabilities are often isolated and are not welcomed by the society though if they are given the opportunities, they have proven their lives to be as worthy as the abled ones.

*When I was in my Intermediate or Class 12 a ball has hit my knee while playing cricket and then it got swollen and gradually developed infection. In the beginning, much importance was not given as I thought that as I got hit by a ball so having a pain reliever would be enough as a remedy and taken some medications from the village.*

*In most cases, in the village, unless an injury is something very serious, we do not go to the doctor. So, after 6 months when I went to the medical to consult a doctor, the doctor said that there is an infection in the knee and I have already been late for the treatment and has to cut the leg. I have tried for the treatment for the next 1.5 years; however, nothing was improving and the doctor told me to operate immediately or I will lose my life. Then my family decided to operate.*

*When I was an abled person, I had a big friend circle whereas after my accident there was no friend with me. I even had 2 years of gap during my HSC Exam due to my accident. Then I completed my Degree exam. Today, when I play cricket and also play international tournaments, in this case, nowadays gradually the friends who used to avoid me now started to communicate with me and they feel proud of me as well. I used to be hurt from their behavior in the past and now I feel that I am in a better position. (Mohammed Muhidul Islam)*

People with disabilities have to face social barriers still in today's modern world. The perception and attitude of the people towards the people with disabilities is yet not cooperative and acceptable. People still think them as "others" which creates a lot of extra difficulties for the people with disabilities to live their dream and to be in a position where they want to be.

*Once I went to a place to meet someone to talk about playing cricket. The person used to sit on the second floor and I sat downstairs as I could not get up due to my disability. The officer talked to me from upstairs and did not bother to come downstairs. From there, he asked me about what I came for and I replied that I came for the registration of my organisation and would need your support regarding this. The official replied by saying that "you cannot even walk then how would you play cricket?" He said this while mocking me. I still remember this and today I have proven that how I can play cricket. From his position, he had the responsibility and I also expected his support but I have not received it.*

*When I started playing cricket people used to call me mad. People used to tell me that who cannot even walk would play cricket! This was the view of the people and they often had mocked me at various occasions.*

*We are not allowed to join the abled team and while selection in the cricket team being one of the criteria to play with the abled people is whether I have any mobility constraints or not. (Mohammed Mohsin)*

This perception of people with disability as a stigma is among the people of all classes and in all places. In addition, it is also present in the education system where the teachers should treat equally to all their students but the situation is very critical for the people with disabilities creating a social stigma.

*The school where I was studying, an English Teacher of mine always used to say that “lengra (who lost legs), lula (who lost hands), kana (visually impaired), khora (physically disabled), they are God’s enemy”. I was hurt and used to think that my classmates may also think the same about me. Due to this, I felt that even my classmates have neglected me.*

*Then I thought that as the teacher used to say these things so I should start coaching classes in his house and then realized that he suddenly stopped saying all these for a few days. Then when I stopped the coaching classes, the teacher started repeating the same words. I was hurt and realized that as a teacher, he should not have this kind of opinion towards people like me. (Mohammed Sajjad Hossain)*

This gradually causes frustration among the people with disabilities about their lives and lose their courage to move forward in life.

*The people, especially in the village, have a very narrow perception towards the people with disability. For instance, when I tell people that I am training on auto mechanic, the reaction is often “You will take the training on auto mechanic! The small shop that you have is enough for you. Why do you need to be auto mechanic?”*

*In village, people believe that in the morning one cannot see a disabled person because that is inauspicious.*

*When I was in my school, I have climbed 4 floors out of my mental strength and not physical strength. No one helped me and have not understood the reason back then as*

*well. If I would have understood what the perception people have on the disabled, I would have never studied. And, now the physical strength may have increased but the mental strength has decreased after understanding the situation. (Mohammed Hanif Miah)*

Where the society thinks people with disability as a stigma, the attitude and perception of the transport providers is no different, which I have shown above in the case of infrastructural barriers, which are:

- ❖ Bus operators, with their major focus on maximizing returns, are less inclined to accommodate the specific needs
- ❖ In a congested road, drivers compete with aggressive attitude to occupy limited front space within a glimpse so their behavior towards the people with disabilities is non-professional
- ❖ The helpers of the buses deny accessibility to the people with disabilities
- ❖ Disrespect by drivers of approaching vehicles while crossing roads
- ❖ The unwillingness of the taxi and auto-rickshaws to provide services to the disabled people

## **5.4 Triple Burden on the women with disability**

In this chapter, it has been clearly demonstrated that how the people with disability are facing barriers in terms of infrastructural barriers to access public transport and how they are treated as a stigma in the society creating social barriers as well. The situation of the women with disability is burdensome creating a triple burden on the women with disability.

Safety is a huge issue in the public transport of Dhaka city especially for the women and the situation of women with disability is unimaginable. The statements from the people with disability is no different:

*Safety is a huge issue in our public transport especially bus. Women cannot get in an empty bus due to lack of security and there is no question remain for women with disability. (Abdullah Al Mamun)*

The situation is not only challenging to get inside the bus but also to walk on the footpath.

*It is specially very risky for women to walk on the road. The footpaths are very overcrowded and there are people who stand in groups in front of the vendors which*

*makes it very uncomfortable and inconvenient for women to walk on footpaths. (Mohammed Abu Jafar)*

The women with disability do not only face to get access to the public transport and infrastructure but also faces extreme barriers from the society:

*There is a woman who works in an NGO but she did not let her mother know about it and have said that to me. So, you can imagine that where an abled woman is facing so much struggle to work outside so the struggle face by women with disability is much higher. It is because the woman with disability cannot move freely if she wants, cannot travel alone from far as she would always need a person to be with her which includes cost and not everyone has the affordability to bear this cost. (Mohammed Sajjad Hossain)*

*There are 17 women wheelchair users under the BD Wheelchair team. They are interested to play cricket but we still could not bring them in the mainstream yet. Already there is so much difficulty that an abled woman faces in our society and in the case of women with disability the difficulty level in our society is higher, in addition, to that a woman with disability will play cricket is unimaginable. (Mohammed Mohsin)*

## **5.5 Unresponsiveness of the authority**

Although there are policies and rights for the people with disabilities in our country for accessibility issues for all the public infrastructure including transport and buildings, however, they are not being implemented properly. In addition to this, there is unresponsive behavior of the authority towards the people with disability, which has also created a lack of faith for the authority among the people with disability.

*Last time, me and 2 of my colleagues went to Novo theatre. Among them, I am a wheelchair user, another person was visually impaired, and the other one was physically disabled.*

*We have sent a letter and requested to talk to the Director General of Novo theatre. He did not meet us but another official met us and told us that if this Novo theatre is now developed to be disabled friendly, then in that case, the structure of the building would be distorted. When I said that add a separate ramp for the wheelchair users but he replied that the structure cannot be redesigned now. (Md. Mithun)*

*I do not believe that even if I complain any action would be taken so I do not complain.  
(Mohammed Hanif Miah)*

## **5.6 SOME POSSIBLE SOLUTIONS TO ENHANCE ACCESS AND MOBILITY OF PwDs**

The strategies to enhance access and mobility of people with disability has been found from both secondary and primary sources. The recommendations that is received during the FGD and interviews have been stated here along with other recommendations in terms of accessibility, availability, acceptability (reliability and comfortability) and affordability. It was found during the discussion that people with disability are not asking something that is special for them, the facilities would be useful for everyone including the people with disability, that is, a few adjustments on the things that are already there and the perception of the people towards people with disability to be open and acceptable rather than a stigma. In addition, it has been demonstrated that acceptability, which includes reliability and comfortability, of the public transport need to be prioritized to enhance the accessibility of the people with disabilities. Finally, some policy recommendations along with a framework given by The World Economic Forum and Deloitte that governments and the private sector should take when building a more inclusive, sustainable, and equitable mobility system has been provided.

### **5.6.1 Infrastructural strategies**

#### **5.6.1a Recommendations from FGD and interview:**

- For the people with disability to access the transport, the transport providers have to give time to PwD to get in and out of the bus and need to stop at the designated places. This training to the transport providers should be given while giving the licenses.
- Separate bus service for PwD can be started to ease their mobility
- Train the transport owner, driver, and helper regarding the services that needs to be given to the PwD
- It is also necessary to aware people on how to support or help a disabled person on the street rather avoiding them.
- There should be separate shelters or bus stops for PwD to wait for the public transport. In this case, the transport providers will give time to the PwD to get on and off the bus.
- The buildings should be disabled friendly.

- The public transport should be accessible for wheelchair users by providing ramp and a space to keep the wheelchair inside.

#### 5.6.1b Other strategies or recommendations to increase accessibility

##### *(i) Strategies to increase availability of public transport - MRT and BRT Services*

According to the Budget Speech 2019-20, under the Revised Strategic Transport Plan (2015-35), the construction of the first Metro Rail in Bangladesh, MRT Line-6 from Uttara to Motijheel is in progress. Alongside, the implementation of Bus Rapid Transit or BRT from Hazrat Shahjalal International Airport to Gazipur is underway.

However, it needs to be ensured that for both MRT and BRT the infrastructure has to be disabled friendly, otherwise, we would again miss the opportunity to include the vast population of people with disability in our society. This would not only hamper to create an inclusive society but also would be a big loss in the economic growth of our country.

##### *(ii) Strategies to increase acceptability of public transport*

###### ➤ *Improved pedestrian environments with parallel to public transport systems*

- ❖ Safe and accessible sidewalks should have appropriate width (minimum 1200 to 1500mm)
- ❖ Good surface without obstructions such as potholes and tree roots, free from overhanging objects and ramped for wheelchair users and other persons who have ambulatory problems
- ❖ Keeping footpaths and roadways clear of rubbish, dirt, street works, parked cars and other obstacles
- ❖ Tactile guide way and tactile warnings should be installed for the use of visually impaired persons
- ❖ Pedestrian ways seating could be provided at regular intervals
- ❖ Curb ramps should be used wherever footways cross roads, pavements, medians, or other raised surfaces
- ❖ Raise public awareness against footpath grabbing
- ❖ The Government need to enact a pedestrian policy to ensure the construction of properly designed and continuous pedestrians with well-defined and maintained pedestrian routes in the city, the provision of pedestrian crossing facilities

giving the pedestrian priority over all other traffic and the prohibition of unauthorized encroachment on the footpath by street vendors and others.

➤ *Improved Bus Systems*

- ❖ Entrances can be improved through adequate design of steps and installation of handrails and grab handles
- ❖ Priority seats are especially important in overcrowded buses
- ❖ In buses that stop on request only, bell pushes can be useful to signal a request for the next stop
- ❖ Clear legible destination and route number displays on the outside of the bus
- ❖ Use of low-floor buses with extendable ramps, or high-floor buses with raised boarding platforms

➤ *Improved service of the public transport:*

- ❖ Modules on disability awareness may be developed which help transport staff to view their jobs in terms of promoting equality, rather than undertaking welfare work and involve disabled persons' organizations directly in the training
- ❖ Also train those who design, plan and manage transport systems
- ❖ Ensure that customer feedback to providers is heard and tracked

*(iii) Strategies to increase affordability*

- ❖ Particular opportunities become available to vulnerable population in terms of accessing markets, economic opportunities, healthcare, and education, thus increasing equity and reducing poverty
- ❖ Business organisations to provide special vehicles for disabilities would increase economic opportunities for PwDs along with the opportunity for the organisations to access larger labour pool.
- ❖ The public transport providers should be trained and be accountable on giving access to the people with disability in the public transport and the financial benefit to some extent based on the service they provide to the people with disability reducing the chances of taking extra amount for the people with disability and increasing the chances of getting the public transport for people with disability.



### **5.6.2 Social Strategies**

- ❖ Taking counselling up to the family level so that every child with a disability gets the opportunity to grow and explore his or her potential
- ❖ Promoting the people with disability who have achieved success despite the disability among the people of all classes creating a perception that people with disability are not different or a stigma

### **5.6.3 Strengthening Governance**

The governance need to be strengthened through improved planning and budgeting of limited resources by giving provision of equal opportunities, in particular, to the women, the poor and disadvantaged section of population and creating safer, cleaner and affordable public transport.

### **5.6.4 Some Policy Recommendations:**

- Breaking the Disability Silo is necessary to ensure holistic development for the persons with disabilities in Bangladesh. Specific resource allocation or specific direction for disability-inclusive policies, and planning and implementation of development activities under each ministry can be useful in mainstreaming the development of persons with disabilities, rather than silo-ing it to the Ministry of Social Welfare only.
- Consulting the persons with disabilities and Disabled Persons Organisations (DPOs) can be helpful in facilitating their meaningful participation in the budgeting process to ensure the reflection of their demands. Introducing a systematic consultation process may be useful rather than doing it on an ad hoc basis every time.
- A strong and appropriate monitoring mechanism for budget expenditure tracking should be introduced to monitor the extent to which the budget expenditure is impacting the livelihood and overall development of the persons with disabilities.
- After all, disability-inclusive development policies and their proper implementation are necessary to uphold the rights of the persons with disabilities in Bangladesh. The actors and duty-bearers at the government and non-government levels should follow the twin-track approach to address the strategic needs and make specific interventions to ensure self-empowerment in development planning and implementation.
- A database of PWDs should be created so that regular contact can be maintained with them. In the database there should be detailed profiles of PWDs so that employers can easily find suitable candidates.

- There needs to be a strong collaboration between all the stakeholders to improve the situation of PWDs.
- The dialogue with relevant stakeholders starting from government, the engineers, NGOs and PwDs should continue
- A policy to include disability graduation similar to poverty graduation can be included for countries, which may encourage the policy makers and the government to work more proactively on the accessibility issues for people with disabilities

#### **5.6.5 WEF and Deloitte's principles on disabled friendly transport**

According to Corwin (2019), The World Economic Forum and Deloitte's manifesto, designing a Seamless Integrated Mobility System, outlined 10 principles that can jumpstart a public-private partnership approach to significantly advancing a city's mobility system and the impact it delivers for its people.

To build on the 10 principles, a few key steps that governments and the private sector should take when building a more inclusive, sustainable, and equitable mobility system are:

##### **Step1: Understand, develop, and test**

Identify and understand who the underserved populations are in the community and what mobility they have and what is missing. Based on this analysis, a broad range of specific use cases should be developed that test, shape, and validate the potential mobility solutions to serve different segments. As part of this, prioritization should be given to solutions that contribute to less congestion, cleaner air, greater livability, and more affordability.

##### **Step 2: Collaborate and communicate**

Governments will need to be willing to meet the private sector halfway in terms of control and data access to advance innovative mobility solutions. Governments need to continue fulfilling their responsibility to hold the private sector accountable through policy and regulation, as necessary. And all parties should communicate with the public – for both transparency and recognition purposes.

##### **Step 3: Motivate**

It's important for all parties involved here to understand the mutually beneficial opportunities to be had in a public-private mobility solution, taking into account the true value of services – such as the positive community impact that comes from greater accessibility. Also, large

employers in a community looking to improve mobility for their workers can play a critical role in developing new tailored solutions.

#### Step 4: Don't forget the basics

While new technologies have a role to play in effective and efficient transit systems, the basics should not be overlooked – functional infrastructure, adequate transportation supply, and safe systems.

## **Chapter 6**

### **Discussion, Conclusion & Limitations**

#### **6.1 Discussion**

From this study, it is shown that Dhaka city lacks accessible, available, acceptable, reliable, safe, comfortable and affordable transportation system for people with disabilities creating barriers to their mobility. The study not only identified the main global and national policies that exist for the people with disability but also found major gaps in the policies. In addition, through focus group discussion and interviews, the paper analyzed the barriers that the people with disabilities face, in terms of, accessing transportation systems matching them with the policies that exist. The findings show that PwDs are facing infrastructural and social barriers hampering their mobility and creating inequality in the public services.

The prominent global policies that have been discussed in the paper are Universal Declaration of Human Rights (UDHRs) 1948, The Convention on the Rights of Persons with Disabilities 2006, and Sustainable Development Goal. It has been found that even though the UDHRs lays a foundation for the protection of rights of every individual in the aspects of economy, social, cultural, political and civil rights, it is not a legal instrument and has no binding force. It was in 2006 where the United Nations passed the landmark Convention on the Rights of Persons with Disabilities (CRPD). Although CRPD focuses explicitly on rights protections but it also ensures that the structures are in place to prevent discrimination, rather than redressing actual incidents of alleged discrimination. It has been able to change the attitudes and approaches to PWD from the viewing of charity, medical treatment and social protection towards viewing them with entitlement of rights, capable of claiming those rights and making decisions for their lives based on human rights and fundamental freedoms so as to become part of the society. However, the law outlines expectations on governments, public and private sector enterprises, but enforcement is exercised at the individual level, using a complaints-based approach.

In addition, the national policies were also discussed in the paper, however, even there seems to be gaps in them. The national policies discussed were The Constitution of the People's Republic of Bangladesh - National Constitution (1972), National Policy on Disability in 1995, Disability Welfare Act 2001, Protection of the Rights of the Persons with Disabilities Act, 2013, Road Transport Act 2018, and Budget for Protection of disability rights. The Constitution

mandates equality, non-discrimination and also creates room for equitable measures to ensure that all backward sections of the population interact with all, on an equal basis with others. However, the implementation of the rights of PWDs assured by the provision in the Constitution of Bangladesh are not being followed strictly. Furthermore, developer organisations are not conscious and don't care about the accessibility facilities for the PwDs and even the government is breaking the rules in building constructions. Again, the aim of the Protection of the Rights of the Persons with Disabilities Act is to guarantee the educational, physical and mental improvement of persons with disabilities and to support their participation in social and state activities by removing all sorts of discrimination and ensuring accessibility in building, roads, transports, educational institutions, hospitals, courts, police stations, rail stations, bus terminals, airports and other ports, shelter centres, cyclone centres, cultural centres, tourist spots, service centres, parks, libraries, historical places, spectacular spaces, public toilets, under pass and over bridges. The few relevant sections regarding this act has been discussed along with their gaps or criticisms regarding the policy, in comparison with the global UNCRPD policy. As accidents is one of the root causes of disability so to ensure safety on the road and in transport, the Government of Bangladesh has a policy called "Road Transport Act 2018". However, weak laws, of course, are not the main cause of the anarchy on the roads. The more important challenge for the government is not passing the law, but to ensure its implementation. Moreover, the National Budget for FY2018-19, placed during the 21st session of the 10th Parliament, has failed to ensure their rights and entitlements and have put those with disabilities into the social welfare box and making their lives and development dependent on "allowances". Most importantly, fiscal policy measures to incentivise disability inclusion in mainstream education, employment, livelihood development, disaster preparedness and risk management, and infrastructural development are absent in the budget.

Due to these gaps in the policies or due to the inefficient implementation of the laws the people with disabilities face inequality in accessing the public services, especially the public transport and infrastructure. Due to lack of available public transport the people with disabilities expressed dissatisfaction and told how they wait long duration to get a public transport and even if they wait the public transport providers do not let them get inside the transport due to disability. the roadways and the road network of Dhaka city is not in good standard for the local citizens of Dhaka city to travel which creates more difficulties for people with disabilities. This has created more dependency for the people with disabilities, in particular, while travelling during the rainy season. In addition, the current inefficient bus service degrades the quality of

the bus service including unprofessional behavior of the drivers. The poor condition of the bus has created a challenging environment for the people with disabilities to use the public transport. Not only that the reserved seats are not being able to be used by PwD but also there is less awareness among the people about who are eligible for using these reserved seats. Not only the poor condition of the vehicle of public transport is hindering the mobility of the people with disabilities but also, they face unprofessional or rude behavior of the transport providers. So, only providing the facilities inside the vehicle, for instance reserved seats, would not help the people with disabilities to ride in the public transport if the behavior of the transport providers is not cooperative and professional. No bus layout or travel information is available, which creates difficulty especially for the people with visual impairment. Most of the buses stop in road side haphazardly and alighting and boarding passenger dangerously which causes accidents like trip off or fell off while getting on and off the bus. Also, it creates crowded on road side and influence pedestrian to move on road. Again, the unsafe driving not only causes difficulty for the people with disability to travel in public transport but also causes accidents on roads, which is a huge issue in the Dhaka city, creating more disabled people. In addition, the compensation fund that has been discussed in the policy section (chapter 4) that should be available for the victim to claim are not being received as well. This does not end here and also include inefficient bus terminals and bus stops, and the difficulty faced during the transit.

The paths for pedestrians are inaccessible and unsafe. It is found that most of sidewalks are occupied by vendors forcing the pedestrians to take the carriageway, thereby creating traffic congestion and safety hazard. This clearly creates a more difficult situation for the people with disabilities to walk on the footpath. Again, the difficulty is not less in case of using the overpass and underpass. The overpass in Dhaka city are more prominent to be used by people than the underpass, and law has been passed for all people in the city to use them, however, these are not at all usable for the people with disability.

Affordability for the people with disability is also one of the major concerns. the people with disability face barriers in case of gaining employment though there are policies of a reserve quota for employment of people with disability. This creates a barrier for them to be financially stable. Moreover, there is no funding for specialized transportation for work purposes keeping a large population with disabilities unemployed. So, people with disability who are employed when try to travel on the public transport they have to bear extra cost creating a barrier in the affordability. Furthermore, when people with disabilities have no other choices than to take

private mode of transport such as taxis, rickshaws, auto-rickshaws, or CNGs, drivers of these services sometimes claim up to triple the normal fare because of the additional assistance provided for getting on and off the vehicles. Due to the expensive travel expenditure for the people with disability, it hinders their mobility and keep them inside their house.

The situation of the women with disability is burdensome creating a triple burden on the women with disability. Safety is a huge issue in the public transport of Dhaka city especially for the women and the situation of women with disability is unimaginable. The situation is not only challenging to get inside the bus but also to walk on the footpath. The women with disability do not only face to get access to the public transport and infrastructure but also faces extreme barriers from the society.

Although there are policies and rights for the people with disabilities in our country for accessibility issues for all the public infrastructure including transport and buildings, however, they are not being implemented properly. In addition to this, there is unresponsive behavior of the authority towards the people with disability, which has also created a lack of faith for the authority among the people with disability.

The people with disability do not only face infrastructural barriers but also faces social barriers. The change between abled and disabled is just a difference of few seconds, however, people with disabilities are often isolated and are not welcomed by the society though if they are given the opportunities, they have proven their lives to be as worthy as the abled ones. The perception of people with disability as a stigma is among the people of all classes and in all places. This gradually causes frustration among the people with disabilities about their lives and lose their courage to move forward in life. Where the society thinks people with disability as a stigma, the attitude and perception of the transport providers is no different, which has been discussed above.

Therefore, this study has provided strategies to remove the infrastructural and social barriers. It was found during the FGD that people with disability are not asking something that is special for them, the facilities would be useful for everyone including the people with disability, that is, a few adjustments on the things that are already there and the perception of the people towards people with disability to be open and acceptable rather than a stigma. The recommendations that is received during the FGD and interviews are mainly to train the transport providers regarding the services that need to be given to the PwD, separate bus shelters for PwD so that PwDs are given time to get on and off the bus, awareness, disabled

friendly public infrastructures. It has also been demonstrated that among other factors of public transport, acceptability, which includes reliability and comfortability, must be prioritized to enhance the accessibility for the people with disabilities because to improve the accessibility the public transport must be acceptable for the people with disabilities.

In addition to the recommendations given by the people with disability, other strategies were also mentioned. For instance, the Government of Bangladesh has taken the projects of developing both MRT and BRT services but it needs to be ensured that in both MRT and BRT, the infrastructure is disabled friendly, otherwise, we would again miss the opportunity to include the vast population of people with disability in our society. This would not only hamper to create an inclusive society but also would be a big loss in the economic growth of our country.

A few of the other strategies to remove infrastructural barriers can be, for instance, curb ramps for wheelchair users, pedestrian way seating at regular intervals, audible signals at signalized intersections for visually impaired, steps, handrails and grab handles to be installed at the entrance of buses, bell push system, cameras at stops and on transit for safety, fare cards etc. Providing rewards to the transport providers for safety can help to remove social barriers. Moreover, to increase the affordability of the people with disability, the business organisations can provide special vehicles for disabilities, which would not only increase economic opportunities for PwDs but also the organisations can have a wider access of labor pool.

The situation of the people with disabilities for urban mobility and inequality in public services in Dhaka city can be further analysed by the theories explained in this study. So, according to the Critical Disability Theory and Minority group model, it has been demonstrated that disability is socially constructed creating inaccessible environments for the people with disabilities in their life leading to marginalization and depicted them as inferior, explained by feminist theory. This marginalization occurs due to the capitalist society, Marxist materialist approach, which is reinforced by the state and through political economy perspective it is demonstrated that even the policies separate the deserving from non-deserving and the people with disability are systematically subjected to political, economic, cultural and social degradation, explained by Comprehensive Theory of Disability Oppression. Thus, according to capability approach, the idea of mobility as capability should be expanded into an understanding of accessibility as a combined capability and the policy should be formulated in a way that people's freedoms are increased, and not reduced. Therefore, the theory of equity



planning demonstrated that distinctive characteristics of the people should be considered while deciding how the people with disabilities should use the public resources, including public transport. Finally, the theory of transport's influence on aggregate expenditure level explains that high quality investment in transport infrastructure considering the accessibility issues of disabled people can increase the growth productivity resulting in growth of GDP and economy of a country.

Hence, taking into consideration the gaps in the policies, ineffective implementation of the policies by strengthening the governance and implementing the strategies will ultimately help the country to achieve the SDG 11 developing an inclusive and safe city.

## **6.2 Conclusion**

The inefficient transportation system of Dhaka city is keeping the people with disabilities away who can contribute immensely in the economic growth and society. Hence, the above strategies can be taken into account removing these barriers while promoting economic growth, reducing poverty and developing an inclusive society. Hence, along with above strategies, the dialogue with relevant stakeholders starting from government, the engineers, NGOs and people with disabilities should continue. Thus, the goal needs to be the inclusion of disabled people in the society increasing their accessibility and not to separate them.

## **6.3 Limitations & Way Forward**

Due to time constraint, the study has mainly considered the secondary sources to identify the policies and its gaps matching its implementation on the field through limited Focus Group Discussions and interviews. Hence, a large sample size can be taken to make the study more convincing.

Hence, for my higher studies, I would like to take this case forward to a bigger database of people with disabilities to find out the barriers they are facing in accessing the public services in Dhaka city.

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## **Appendix A.**

### **FGD with wheelchair cricket team**

**Date: 13<sup>th</sup> December 2019**

**Duration: 1:05:34**

**Number of people: 5**

#### **INTRODUCTION**

Mohammed Mohsin – BD Wheelchair Cricket Team Captain and Founder

Location: Travelled from Tongi

Education – Bachelor degree

Mohammed Sajjad Hossain – BD Wheelchair Cricket Team Opening Batsman

Location: Travelled from Uttara

Education: Bachelor degree – 3<sup>rd</sup> Year and could not continue due to financial crisis

Md. Mithun – BD Wheelchair Cricket Team Batsman

Location: Travelled from Mirpur

Education: Bachelor degree

Mohammed Muhidul Islam – BD Wheelchair Cricket Team All Rounder

Location: Travelled from Uttara

Education: Bachelor Degree

Abdullah Al Mamun - BD Wheelchair Cricket Team

Location: Travelled from Shyamoly

Education: Bachelor Degree

### **Have you taken cricket as a profession?**

*Mohammed Mohsin*

Based on the society in Bangladesh and due to not having much support from the government yet, cricket could not be taken as a profession yet.

Bangladesh Wheelchair Cricket team is registered from Ministry of Social Welfare and have received Joy Bangla Youth award in 2017. There are more than 200+ wheelchair users in BD and have 6 clubs.

We have played 2 national tournaments. The selected players from these national tournaments then play the international tournaments and have played 5 international tournaments. Among the 5 international tournaments, we won 3 international tournaments and in the rest 2 we were the runner-up. These international tournaments were played in India and Nepal.

### **How much support are you receiving from people?**

*Md. Mithun*

People find it very surprising seeing the people who are wheelchair users can play cricket. People still show their curiosity to know how we bat and ball. We used to feel very awkward in the beginning but now we are very used to it.

People think that how wheelchair users can play cricket rather people who are non-disabled can only play cricket.

### **Is this difference due to being disabled or non-disabled?**

People need to understand that everyone can play. I am comfortable in playing cricket sitting in the wheelchair whereas Sakib/Tamim from National Cricket team are comfortable playing the same cricket while moving. We enjoy in the same way as the non-disabled players but people view it differently.

### **How much support have you received from your family in regards to playing cricket in this team?**

*Mohammed Muhidul Islam*

My family has supported me a lot especially to move to Dhaka from Bogra and to buy the bat and ball for playing cricket.

**Who are there in your family?**

Father, mother and 3 brothers.

**Which are the family members support you the most?**

My father and mother.

**Why don't you feel awkward or sad anymore in seeing that people view us different from the abled cricket players?**

*Mohammed Sajjad Hossain*

Now we have taken this way of playing cricket in wheelchair very usual. In every case, I always think that everyone is a wheelchair user otherwise it would be difficult for us to live a life as disabled person.

Although it is a national team but there are not much supporter and sponsor yet. If it is patronized properly then this team may also bring good result at the end.

**Why do you think that there are not much sponsors yet and the successes are not properly publicized?**

*Mohammed Mohsin*

Sponsors will always think of their own PR. They will think that how many people would watch this game. However, we have always been able to properly highlight our sponsors. We do facebook marketing and use their logo in ever logistics including, t-shirts, wheelchairs etc. as well.

The last tournament was played on the field of ULAB where there was more than 70,000 people who watched the game and was live through ABC Radio. It proves that a huge audience was there to watch the game.

I believe that the negative opinion towards the disabled people playing cricket is changing slowly nowadays.

When I started playing cricket people used to call me mad. People used to tell me that who cannot even walk would play cricket! This was the view of the people and they often had mocked me at various occasions.

However, it was not my view and my dream were that people like me would play cricket in the mainstream.

We are not allowed to join the abled team and while selection in the cricket team being one of the criteria to play with the abled people is whether I have any mobility constraints or not.

We will fly on 16<sup>th</sup> December to India, Uttarakhand to play 4-nation cricket tournament. In the first tournament we were the champion and this would be our second tournament in this.

**How did you travel? How much disabled friendly it is?**

*Mohammed Mohsin*

I usually have to travel using autorickshaw.

However, firstly, autorickshaws do not want to take me in their transport and even if they take me then they would charge me more fare, for instance, the driver would charge 1000 - 1200 BDT to travel from Tongi where the usual fare may be around 600-700 BDT.

And, if I try to take the Bus then they are not that accessible. Sometimes the BRTC Buses usually take me, however, even then there is no place to keep my wheelchair.

The ‘helpers’ or the bus conductors behave very rudely. They think that since I am a disabled person so I will not pay the fare. Although it is given in the law that there are reserved seats for the PwD but we cannot use them because other people usually sit there and the bus conductors do not help to vacant those places for us.

Last time, one of the players from Tangail were coming to Dhaka and it was told to the bus conductor to give a seat for him at the front. However, at the end he had to sit at the back after almost behind 7 to 8 seats although it was difficult for him to move. That player even called me to request the bus conductor, however, even then he did not agree and when I told the ‘helper’ that I would pay him extra and then he agreed to give a seat at the front.

We also cannot use the footpaths properly. Last time, when I went to Kawran bazar for an interview at ABC Radio and wanted to keep my bike at the front. While entering the building there were 3 pillars and my wheelchair was not being able to get through them. Then I had to request two people to help me to get through it. In that case, even the person was struggling to help me as the height of the pillars were also very high so I had to get down from the wheelchair, folded the wheelchair and then moved to the other side.

*Mohammed Sajjad Hossain*

Often when I wait for a bus with the wheelchair and wave even then the buses do not stop. It is only because I have a wheelchair with me. The 'bus helpers' think that it is hassle to take a wheelchair user inside a bus because they have to help me to get up in the bus, they will have to fold the wheelchair and take it inside. In addition, I also have to pay extra, for instance, 50-100 BDT to keep the wheelchair inside the bus.

In most cases, the bus helpers do not want to take us. It is also the case for autorickshaws and even if the autorickshaw drivers agree to take me they would charge double the fare.

When a abled person gets up in the bus, if he/she is charge, say 10 BDT, then whenever a disabled person enter the bus the fare gets automatically doubled. I believe that unless this discrimination is eliminated it is very difficult for the people to move forward along with us.

*Mohammed Mohsin*

I think that when I am a citizen of Bangladesh why wouldn't I have the same rights as the abled person?

*Md. Mithun*

I work in a NGO and also working for the accessibility in every case for PwD including public transport. I think the accessibility means the right to enter in every government infrastructure.

Although there are reserved seats, so if the reserved seats are already taken by few women, child, and PwD then what else to be done when there are more PwD in the bus is not mentioned in the law.

The bus helpers are not properly trained as well and they are not instructed properly that when there is disabled person then the bus helper have to help them to get in the bus and get these reserved seats.

I will only get the seat when the transport providers would give me time to get inside the bus. When an abled woman struggles so much to get in the bus then the struggle you can imagine for a disabled person. A disabled person first need to get in the bus only then he/she can use the right to get the reserved seat.

Hence, it needs to be ensured that whether the PwD are getting into the bus or not so reserving seat won't be of any help if the PwD are not being able to get in the bus. And, to enter the bus

the transport providers have to give time to the disabled people, for instance, a wheelchair user might need 4 to 5 minutes to enter the bus and that needs to be ensured in the first place. In these cases, the reserved seats have no value for me no matter how many of them are there.

It means that firstly the transport providers have to give time to PwD to get in and out of the bus and need to stop at the designated places. This training to the transport providers should be given while giving the licenses.

*Mohammed Mohsin*

Once when I took a bus to travel from Tongi to Shahabag, when I just got up in the bus another bus horned from behind and the bus driver started abruptly and I fell down from my wheelchair. It happened twice.

*Md. Mithun*

PwD does not mean only wheelchair users. In every board on the road, it is only written “for disabled” which feels very bad because what does that signify whether that is disabled person or animal so it needs to be written “for people with disabilities”.

*Mohammed Mohsin*

There was a law passed that it is compulsory to use overpasses. The law is same for all, however, I cannot use the overpass.

*Md. Mithun*

I want to follow the law but why did not the law think that how would a disabled person would climb this 30 feet height of overpass. It is not only for PwD but also for pregnant women, people who are older than 60 years. The overpasses are not at all disabled friendly.

*Abdullah Al Mamun*

I feel very helpless when I go in front of the overpass. I feel that if I had 2 legs then I could climb the stairs and as I do not have them so I have to crawl to climb these stairs, which means that there would be so much dirt in my clothes that to wash them also I would need 3 to 4 people.

The stairs are very steep. It is impossible to use the overpass during the rainy season because I can easily slip or trip from the stairs. It means unless there is someone with me to support, I will not be able to use these overpasses.



The lives of wheelchair users have become very expensive. The public transport providers hesitate to take me and also do not have the time to think about me because they would have more income with more number of passengers. Hence, I am compelled to travel through rickshaws and also have to travel longer path, which means where I would have to pay BDT 10 in a public transport like bus whereas I am paying BDT 100 to travel in rickshaws.

**How do you travel during the rainy season?**

*Md. Mithun*

I usually do not travel while it is raining and because it is very expensive and I may have to miss some important appointments or meet-ups with my family or relatives.

Even the infrastructure of National Parliament Building is not disabled friendly. The parliament do not even think that there can be a parliament member who is disabled. So, it is not even in the National Parliament Building then how would I expect in other places!

**How do you travel while transport interchange?**

*Mohammed Sajjad Hossain*

I usually use rickshaws, however, the places where there is restriction for the rickshaws on the road, in that case, I have to travel using wheelchair. This is very difficult for me to travel as the paths are very crowded. Moreover, there is no separate lane for PwD to move.

**How do you get the information for a new travel route?**

*Mohammed Sajjad Hossain*

I usually use Google maps but it is very difficult mainly for the visually impaired people. They always have to be careful on what the bus helpers are saying in every bus stop.

**Do you do any leisure activities (meeting relatives, friends, going to cinema theatres etc.)?**

**If no, why not?**

*Mohammed Muhidul Islam*

I do not do much of the leisure activities because of mobility constraints due to transport.

The public transport providers do not take me and even if there are seats the bus helpers would say that there are no seats available and come to the next bus stop. Although the bus would be stuck in the traffic jam for hours but they would not wait for me to get inside the bus. In that

case, I have to travel through autorickshaws which is very costly. On the other hand, even the autorickshaw drivers do not want to take me and the driver says that the rexin of the autorickshaws would torn with the wheelchair if it is kept inside.

I cannot go to the cinema theatres to watch movie as well.

*Abdullah Al Mamun*

The buildings are built in a commercial sense. The engineers of these buildings think of the business and they think that how much space can be reduced and use for the rest for the business.

I believe that we need to go to different places and tell people that what our problems and needs are.

*Mohammed Mohsin*

For example, in banks. I cannot use the ATM Booths. Even I have to climb upstairs inside the bank to get the service. In this case, though I have a bank account I will have to send someone else to get this service.

*Abdullah Al Mamun*

I want to be self-dependent, however, I always have to depend on someone to do my work.

*Mohammed Mohsin*

Even in most shopping malls, disabled friendly logistics are not present.

*Abdullah Al Mamun*

Since all the infrastructures are now very modern so this disabled friendly logistics should be present.

*Mohammed Mohsin*

The law that has been passed recently for the PwD, it is clearly mentioned in the Building Code that in all the buildings it is compulsory to have wheelchair access and toilets for wheelchair users. I would blame the architects who are not keeping these in account while in the planning stage.

*Abdullah Al Mamun*

These architects think that rather than keeping space for wheelchair users this space can be used to build bigger shops in the mall or the flats can be bigger.

*Mohammed Mohsin*

I need space for my wheelchair is 3 feet 11 inches, which is nothing big for not considering a separate space for the wheelchair users.

*Md. Mithun*

For instance, there is a ramp in the passport office, however, a wheelchair user cannot use it independently rather would need support of 2 people to push my wheelchair.

*Mohammed Mohsin*

Another one is the Railway Station, there are no ramps. Again, at the airport, there are pillars around that I cannot get access using my wheelchair though it is an international airport.

**Have you ever complained for any of the problems that you faced?**

*Md. Mithun*

Last time, me and 2 of my colleagues went to Novo theatre. Among them, I am a wheelchair user, another person was visually impaired, and the other one was physically disabled.

We have sent a letter and requested to talk to the Director General of Novo theatre. He did not meet us but another official met us and told us that if this Novo theatre is now developed to be disabled friendly, then in that case, the structure of the building would be distorted. When I said that add a separate ramp for the wheelchair users but he replied that the structure cannot be redesigned now.

*Mohammed Sajjad Hossain*

**Did you ever had any accident inside the bus (trip off, fell off due to slippery, fell off while the bus driver abruptly started)?**

When we get on the bus, the driver instantly accelerate and as we do not have the strength in our leg so we often fell off inside the bus.

*Abdullah Al Mamun*

Safety is a huge issue in our public transport especially bus. Women cannot get in an empty bus due to lack of security and there is no question remain for women with disabled.

*Mohammed Mohsin*

**Do you know any women who are wheelchair users?**

There are 17 women wheelchair users under the BD Wheelchair team. They are interested to play cricket but we still could not bring them in the mainstream yet.

**Why these women still cannot play cricket in the mainstream?**

Already there is so much difficulty that an abled woman faces in our society and in the case of women with disability the difficulty level in our society is higher, in addition, to that a woman with disability will play cricket is unimaginable.

*Mohammed Sajjad Hossain*

There is a woman who works in an NGO but she did not let her mother know about it and have said that to me. So, you can imagine that where an abled woman is facing so much struggle to work outside so the struggle face by women with disability is much higher. It is because the woman with disability cannot move freely if she wants, cannot travel alone from far as she would always need a person to be with her which includes and not everyone has the affordability to bear this cost.

I would also like to talk about education. When I first went to a school to get the admission, I stood first among 320 students, however, I was not accepted in the school. The Principal of that school told my mother that if I go to school then he might fall anytime or get injured while playing with other students in the school so my mother even complain regarding this as well. So, the school did not give the value of my intelligence or capability to pass the admission test where I stood first.

Again, when I tried to get the admission in this same school in Class Seven, the Principal again disagreed to give me admission only because I might get injured while in the school.

So, unless the perception towards people with disability is changed nothing can be changed.

*Mohammed Mohsin*

Nowadays, public toilets are built at the bus stops but I have not seen any toilets which are disabled friendly.

*Mohammed Sajjad Hossain*

In these toilets the space that is required for a wheelchair user is not present and it is difficult to move inside the toilet. Moreover, they are built in such a height that it's difficult for us to use.

*Mohammed Sajjad Hossain*

Among these bad experiences, I would like to mention a good experience as well. Last time, when I went to Jamuna Future Park to get a visa for India and I saw there are every facility for PwD and even they have separate lines for PwD. PwD could finish the work by going to this Visa Centre directly. I felt good that there is at least one place where the PwD are given value.

*Abdullah Al Mamun*

I think that if the disabled people raise their voice then the changes can be created. Although I do not want any person to be disabled in future but if we can create a change now then we can develop a good future for the next generation.

**How did the disability happen to you? Was it from the beginning or it happened due to some accident?**

*Mohammed Mohsin*

I have become disabled from the Polio disease when I was only 6 months.

*Abdullah Al Mamun*

When I was 4 years, I had typhoid and due to that I had paralysis on my legs.

*Mohammed Sajjad Hossain*

I could move in my childhood. When I went to the doctor to get a Polio injection on the first day I had severe fever so I was not given the injection and asked me to come on the next day. When I went the next day, after I gave the injection instantly my legs have swollen and gradually the legs got weaker and have not been able to place my feet on the floor from that day anymore.

*Md. Mithun*

I have become disabled from the Polio disease when I was only 6 months.

*Mohammed Muhidul Islam*

When I was in my Intermediate or Class 12 a ball has hit my knee while playing cricket and then it got swollen and gradually developed infection. In the beginning, much importance was not given as I thought that as I got hit by a ball so having a pain reliever would be enough as a remedy and taken some medications from the village.

In most cases, in the village, unless an injury is something very serious we do not go to the doctor. So, after 6 months when I went to the medical to consult a doctor, the doctor said that there is an infection in the knee and I have already been late for the treatment and has to cut the leg. I have tried for the treatment for the next 1.5 years; however, nothing was improving and the doctor told me to operate immediately or I will lose my life. Then my family decided to operate.

**Is there anyone from your team who became disabled due to road accident?**

*Mohammed Sajjad Hossain*

Bayzid from our team has lost his legs from road accident. He was playing cricket so when the ball went on the other side of the road and he went to get the ball, while crossing back a bus hit him when he lost his leg.

After the accident, did he receive any compensation for the accident?

No, he did not receive any compensation and could not trace the driver who caused the accident.

**Please share a story with me, related to disability, which you will never forget.**

*Mohammed Sajjad Hossain*

The school where I was studying, an English Teacher of mine always used to say that “lengra (who lost legs), lula (who lost hands), kana (visually impaired), khora (physically disabled), they are God’s enemy”. I was hurt and used to think that my classmates may also think the same about me. Due to this, I felt that even my classmates have neglected me.

Then I thought that as the teacher used to say these things so I should start coaching classes in his house and then realized that he suddenly stopped saying all these for a few days. Then when I stopped the coaching classes, the teacher started repeating the same words. I was hurt and realized that as a teacher, he should not have this kind of opinion towards people like me.

*Abdullah Al Mamun*

As I was disabled, so I was homeschooled and there were different teachers for different subjects from my school. My school was near to my house. One day I thought of going to the school and tried to take a rickshaw to reach there. The first rickshaw puller said that he cannot take me in his rickshaw and the next rickshaw puller asked me whether I can get up in the rickshaw independently. I replied by asking for his help, however, the rickshaw puller said that he cannot help me due to his injury on his back. Then finally I got up in the third rickshaw. After reaching the school, the guard said that I am not a student of this school as he never saw me there and I have not done any classes in that school. The guard asked me why I was there and during this period no one would also help (financial support) people like me and should come after school hours. I told him to talk to the Principal about me and then I was allowed to enter.

*Mohammed Mohsin*

Once I went to a place to meet someone to talk about playing cricket. The person used to sit on the second floor and I sat downstairs as I could not get up due to my disability. The officer talked to me from upstairs and did not bother to come downstairs. From there, he asked me about what I came for and I replied that I came for the registration of my organisation and would need your support regarding this. The official replied by saying that “you cannot even walk then how would you play cricket?” He said this while mocking me. I still remember this and today I have proven that how I can play cricket. From his position, he had the responsibility and I also expected his support but I have not received it.

*Md. Mithun*

After HSC I had a dream to study at a private university but could not. Then I completed my Bachelor from Open University. Today, where I work, I coordinate the students of private universities for their internship programmes. This makes me feel very proud of myself.

*Mohammed Muhidul Islam*

When I was an abled person, I had a big friend circle whereas after my accident there was no friend with me. I even had 2 years of gap during my HSC Exam due to my accident. Then I completed my Degree exam. Today, when I play cricket and also play international tournaments, in this case, nowadays gradually the friends who used to avoid me now started to communicate with me and they feel proud of me as well. I used to be hurt from their behavior in the past and now I feel that I am in a better position.

### **Any Recommendation**

*Mohammed Muhidul Islam*

A separate bus for the PwD.

*Md. Mithun*

I do not want a new change but a few adjustments on the things that are already there. For instance, to train the transport owner, driver, and helper regarding the services that needs to be given to the PwD. And, I feel that if the driver say then the bus helpers are compelled to listen to them.

*Abdullah Al Mamun*

I would like to give the importance to the education. I think that PwD should firstly educate themselves because only then we can work and ask for our rights. I feel that the educational institutions are the biggest obstacles for PwD. When I started to work, I used to see that there were very less disabled people who were going to school. I feel that PwD do not have much courage or confidence to take a step for themselves.

In addition, it is also necessary to teach people on how to support or help a disabled person on the street rather avoiding them.

*Mohammed Sajjad Hossain*

There should be separate shelters or bus stops for PwD to wait for the public transport. In this case, the transport providers will give time to the PwD to get on and off the bus.

*Mohammed Mohsin*

The buildings should be disabled friendly.

The public transport should be accessible for wheelchair users by providing ramp and a space to keep the wheelchair inside.



## **Appendix B.**

### **FGD at UCEP Bangladesh**

**Date: 19<sup>th</sup> December 2019**

**Duration: 1:14:19**

**Number of people: 4**

#### **INTRODUCTION**

Mohammed Khairul Islam – Taking training for 6 months on Electronic assembly technician

Employment: Unemployed

Age: 19

Type of Disability : Physical (Dwarfism)

Education: Madrasa – Intermediate

Location: Monipur

Mohammed Rashed – Taking training for 6 months on Electronic assembly technician

Age: 16

Type of Disability: Intellectual Disability

Education: Not Known

Employment: Works at ISP office

Location: Shyamoly

Mohammed Hanif Miah – Taking training for 6 months on auto mechanic

Age: 29

Type of Disability: Physical (one leg disable)

Education: Post Graduate

Employment – A small shop of his own for the last 5 years

Location: Keranigonj

Dewan Tanjil – Taking training for 6 months on mobile phone servicing technician

Age: 20

Type of Disability: Hearing and Speaking

Employment: Unemployed

Location: Mirpur

**How did you travel from your location?**

*Mohammed Khairul Islam*

Firstly, I walk for 5 minutes to come to the stop to get on Laguna and then travelled using ‘Laguna’ (human hauler or auto tempo) and then walked for another 5 minutes to reach here.

*Mohammed Rashed*

I have travelled using UCEP Bus service.

*Mohammed Hanif Miah*

Firstly, I took a rickshaw, then took a CNG and then have taken a UCEP Bus service.

*Dewan Tanjil*

I walk from my home till UCEP. I do not travel anywhere else other than from home to UCEP so I do not use any public transport.

**How is the service of the transport that you use? What are the problems that you face to use the transport?**

*Mohammed Khairul Islam*

Sometimes I have to wait longer to get the transport. In addition, I often have to stand holding the outside railing of the transport as I do not get available seat.

Often, the driver of laguna do no stand seeing me even after I wave to stop the transport. The transport providers do not stop because they often think that I will not pay the fare. The ‘laguna helper’ do not want to take me in the transport and tell me “do not get in the transport rather let someone else take the seat as you will not pay the fare”. Then I have to assure them that I

will pay the full fare and only then will let me enter. Often the driver brakes so hard that I bash on the handle of the transport and get hurt.

*Mohammed Hanif Miah*

I think that the people with disability faces the most problems in case of transportation.

In case of taking local bus service I cannot take the bus from everywhere because the bus do not stop seeing me waving at the driver. This is because, in my opinion, the driver may think that it would take longer to take me inside the bus. In addition, they also think I might not give the bus fare.

Other than bus stops, the bus stops in a way that is not comfortable for me to get up on the bus which only an abled person may can as the bus do not stop fully and try to take the passengers while in the motion. For my case, the bus has to stop fully.

I do not take the risk to take the bus from anywhere else other than bus stops in the fear of falling while getting in or out of the bus. I would rather walk or take a rickshaw and wait for 30 minutes or so to get in a bus from a bus stop and the one that is convenient for me to get in.

Every time to get on a bus, I always have to walk to the traffic signal where the bus would stop fully.

One day, when I sat on the reserved seat a woman came to me and told me “Why are you sitting here? The seat is for women only.” Before I responded another man from my side told her that I have the right to sit there as I have a problem on my leg. Now, the problem is I cannot keep a signboard by saying that I am disabled and cannot even explain to everyone that I have the right to sit on the reserved seats. Hence, to avoid this, sometimes I stand holding the hand rails and wait for someone from the abled seat to be vacant. It means that people are still not aware of the disabled rights and still today people think that those reserved seats are only for women.

Sometimes people in the bus also say “If you have disability why are traveling in a bus? Why don’t you stay at home?”

**Do you use any other transport other than laguna?**

*Mohammed Khairul Islam*

I travel to my uncle's house to Savar using UCEP Bus service and local bus service. In this case, at first, I take the UCEP Bus service from UCEP to Savar, then from there I take a local bus to reach my uncle's house.

*Mohammed Rashed*

I do not travel anywhere else so I do not use any other transport.

I also work within the area because I am not allowed to go anywhere else. My brother told me not to go anywhere else.

During my work, a transport is given with me when I have to travel to different houses to repair or to provide the internet connection service to the clients.

**How do you interchange transport?**

*Mohammed Khairul Islam*

Sometimes I get the bus instantly where the UCEP Bus stops. Often, I walk or wait for around 10 minutes to get another bus. I have not seen any designated bus stop over there so it depends on whether a bus would stop there or not and I will get a bus over there or I would walk to get one.

It is very difficult to use local bus service. While coming from Savar, a younger brother (cousin) comes with me to help me to get inside the bus.

**Do you travel alone or with someone by your side?**

*Mohammed Khairul Islam*

I travel alone.

*Mohammed Rashed*

I travel alone

*Mohammed Hanif Miah*

I usually travel alone

*Dewan Tanjil*

My brother accompany me.

**How long do you work in a day?**

*Mohammed Rashed*

I work everyday from 4pm to 10pm.

**How much are you paid in this job?**

*Mohammed Rashed*

My salary varies from BDT 3000 – BDT 5000 a month. When I make mistakes in my work, I receive 3000 BDT and if no mistakes, then only I receive 5000 BDT as my salary.

**Who are there in your family?**

*Mohammed Hanif Miah*

I have father, mother and 2 elder sisters who are already married. I also have a wife and a son.

*Mohammed Khairul Islam*

I have father, mother, a brother and his 2 children. They stay in Mymensingh.

I live in Dhaka, Monipur, with my sister. Here, my sister, her husband, in-laws and her brother-in-law also stays.

*Mohammed Rashed*

I live alone in Dhaka. My parents passed away. My brother stays in Joydebpur Cantonment and my sister stays inside Dhaka Cantonment.

*Dewan Tanjil*

I stay in my aunt's house. Parents passed away. I have two elder brothers.

**How much support do you get from your family?**

*Mohammed Khairul Islam*

I have received a lot of support from my family but now it is my turn to support my family, which I am unable to do so.

My brother-in-law also supports me financially.

*Mohammed Rashed*

My brother is very busy so he does not have the time to communicate with me. Rarely, my brother comes to visit me.

*Mohammed Hanif Miah*

My family has supported me in every step of my life to make me what I am today.

**How the people around you behave with me?**

*Mohammed Khairul Islam*

In village, all the people know about me and they behave very well. However, in Dhaka, the people around me mock about me. I do not give my identity to the people in Dhaka as there is a tendency for people to come to me in groups and mock me.

*Mohammed Hanif Miah*

The people, especially in the village, have a very narrow perception towards the people with disability. For instance, when I tell people that I am training on auto mechanic, the reaction is often “You will take the training on auto mechanic! The small shop that you have is enough for you. Why do you need to be auto mechanic?”

In village, people believe that in the morning one cannot see a disabled person because that is inauspicious.

**Did you try for any (other) job?**

*Mohammed Hanif Miah*

I have worked at Robi Call Centre for some time and have worked part time in various work as well, for instance, private tuition etc. And, now I have built my own small shop near my house.

*Mohammed Khairul Islam*

I have given interview for a job but have not tried from UCEP yet as UCEP also supports in job placement. If I get this job I will have to travel a lot and would need to travel by local bus.

**Why did you choose this profession?**

*Mohammed Hanif Miah*

For few jobs, I am not eligible either due to my disability or due to educational or experience requirements. Due to my disability, the job sector for me is very limited as well.

I have tried for government jobs but have never been selected. I know a person who has been qualified for both written and viva exams of a government job but have not been selected in the beginning due to his disability. Then, as his father is an Advocate so they have complained and then have been selected for the job.

And, I do not prefer to work in private jobs and have always targeted for government jobs. In addition, I have also lost the courage on the way and have chosen this profession. People have discouraged me in many ways and even when I tried to take the training on auto mechanic in other places, which I am taking at UCEP, people around me have told me “You will take this training with this disability!” However, I was determined to take this training and have done it at UCEP.

When I was in my school, I have climbed 4 floors out of my mental strength and not physical strength. No one helped me and have not understood the reason back then as well. If I would have understood what the perception people have on the disabled, I would have never studied. And, now the physical strength may have increased but the mental strength has decreased after understanding the situation.

### **How much affordable it is for you to travel in Dhaka city?**

*Mohammed Hanif Miah*

For a person with disability, the transport expense is very expensive. For instance, the distance from my house to the CNG stand is not so far where an abled person could walk, I have to take a rickshaw to reach the CNG stand, which costs me 20 BDT. Then I took the CNG. In these kinds of autorickshaws, 5 people are taken in and each person pays 20 BDT. Sometimes I have to wait and some times not needed to wait.

Although it is not allowed in any autorickshaw to let any passenger sit at the front with the driver, however, in Savar area, 2 passengers sit with the driver. The driver, in the sense to help me, ask whether I can sit at the front beside the driver or not.

### **How do you travel during rainy season?**

*Mohammed Hanif Miah*

It is very difficult to travel during the rainy season especially for people who have disability on their legs. The roads are so slippery that I often slip on the road.

There is some portion on my travel distance which is unpaved road, that is, “katcha road”. During the rainy season, my father needs to travel with me and help me to walk on that road so that I don’t slip off.

There is waterlogged on the roads during the rainy season, which makes it more difficult to walk.

*Mohammed Khairul Islam*

I walk and get drenched while travelling during the rainy season.

**How do you get information on a new travel route?**

*Mohammed Khairul Islam*

I usually check the map and ask my brother about a travel route before going. I do not ask anyone else because I do not feel safe.

**Do you do any leisure activities?**

*Mohammed Khairul Islam*

Yes, I have been to different places with my friends, for instance, to the zoo, hatirjheel area etc.

*Mohammed Hanif Miah*

I have travelled alone recently to Coxs Bazar and Sylhet and also hang out with my friends at different places.

*Dewan Tanjil*

I play football near my house. My friend live in Mirpur 14 who comes to my house to visit me. I do not travel anywhere.

**Did you ever oppose or protest when you faced problems?**

*Mohammed Khairul Islam*

Sometimes I do and sometimes I don’t. Suppose, when I see that the people who tries to attack are in a group and seems violent then I don’t oppose or else if there is only one person who tries to mock me then only, I oppose by saying not to mock me in that way.

**Do you know of any disability rights? Did you ever complain?**



*Mohammed Khairul Islam*

I have been taught about the rights at UCEP. No, I did not.

*Mohammed Hanif Miah*

I do not believe that even if I complain any action would be taken so I do not complain.

**How did you get disabled? When?**

*Mohammed Hanif Miah*

It happened with me when I had Typhoid fever during my childhood.

*Mohammed Khairul Islam*

When I was 9 months old, I had diarrhea. Due to lack of treatment it went severe. I have not understood during the childhood but gradually when I grew up, I realized that my friends are growing physically but I am not. One of the homeopathy doctors said that the treatment is possible, which is very expensive and I cannot afford now but would do it once I can afford.

**Please share a story with me.**

*Mohammed Khairul Islam*

During my SSC Exam, when I went to the exam hall, the guard told me “Why are you here? You cannot come here. Leave now!” Then the Principal said from the back “He is my student!” It has shocked the guard and then checked my papers and let me enter the exam hall.

*Mohammed Hanif Miah*

During my HSC exam, in my village, there was a fair where I could not go. It is because due to my disability it is difficult to walk on the road as those are “katcha” road (unpaved road) and are broken or discontinuous.

**Do you have any bank account?**

*Mohammed Hanif Miah*

I have Bkash account. It is very difficult for me to use the ATM Booth, which is really far and is not convenient to use the ATM Booth as the place where the ATM booth is built is usually at a higher level from the road.

**Any Recommendation**

*Mohammed Hanif Miah*

The transport providers should be trained properly on how to provide the services to the passengers, especially the disabled people.

Awareness about disability is very important.

*Mohammed Rashed*

People should follow traffic signal otherwise it may impose life threat.

## **Appendix C.**

### **Interview at UCEP Bangladesh**

**Date: 19<sup>th</sup> December 2019**

**Duration: 23:42**

#### **INTRODUCTION**

Mohammed Abu Jafar – Assistant Instructor for Electronic Assembly Technician training

Number of students: 87 in one project (almost 50% are female) and 17 in another project (all are female)

Working at UCEP from 2010. In the Technical school I have started working from 2016.

Number of disabled students: 2 (out of 87 students). Last year there was 7 female students with disability.

#### **Does everyone use the UCEP Bus service?**

Students who stay nearby do not use the bus service and the service is also not available in all routes.

#### **Do you travel in public transport?**

Yes, I usually travel by local bus.

#### **Do you see people with disability to travel in the same bus where you travel?**

Yes, I do. But the buses do not usually stop seeing disabled people but if they stop then they take them properly.

In my opinion, the bus drivers and helpers may also think that where to let them sit as the buses are usually very overcrowded. The transport providers may think that they have to give special services to the people with disability which prevents them to take them inside the bus.

The public buses are very crowded.

The condition of the public bus is so bad that sometimes even when abled people sit, the clothes torn due to the nails coming out of the seats and also while getting on and off the bus.

**Are the footpaths friendly for pedestrians?**

The footpaths are filled with dirt, cha-wallas or vendors. It is impossible to walk in the evening.

There are risks to walk on the road. For instance, there are workshops where welding are done, there are automobile workshops from where the automobile parts may blew on someone.

It is specially very risky for women to walk on the road. The footpaths are very overcrowded and there are people who stand in groups in front of the vendors which makes it very uncomfortable and inconvenient for women to walk on footpaths.

**Any recommendation**

Separate bus service for PwD.