



**Promoting a socially inclusive freight transport sector through gender mainstreaming and empowering persons with disabilities**

Handbook 2024



**ESCAP**  
Economic and Social Commission  
for Asia and the Pacific

The Economic and Social Commission for Asia and the Pacific (ESCAP) is the most inclusive intergovernmental platform in the Asia-Pacific region. The Commission promotes cooperation among its 53 member States and 9 associate members in pursuit of solutions to sustainable development challenges. ESCAP is one of the five regional commissions of the United Nations.

The ESCAP secretariat supports inclusive, resilient and sustainable development in the region by generating action-oriented knowledge, and by providing technical assistance and capacity building services in support of national development objectives, regional agreements and the implementation of the 2030 Agenda for Sustainable Development.

**Promoting a socially inclusive freight  
transport sector through gender  
mainstreaming and empowering  
persons with disabilities**

## **Disclaimer**

The views expressed in this report are those of the author and do not necessarily reflect the views of the United Nations Secretariat. The opinions, figures and estimates set forth in this publication are the responsibility of the authors and should not necessarily be considered as reflecting the views or carrying the endorsement of the United Nations. The designations employed and the presentation of material including maps in this publication do not imply the expression of any opinion whatsoever on the part of the Secretariat of the United Nations concerning the legal status of any country, territory, city or area, or of its authorities, or concerning the delimitation of its frontiers or boundaries. Mention of firm names and commercial products does not imply the endorsement of the United Nations. This publication may be reproduced in whole or in part for educational or non-profit purposes without special permission from the copyright holder, provided that the source is acknowledged. The ESCAP Publications Office would appreciate receiving a copy of any publication that uses this publication as a source. No use may be made of this publication for resale or any other commercial purpose whatsoever without prior permission. Applications for such permission, with a statement of the purpose and extent or reproduction, should be addressed to the Secretary of the Publications Board, United Nations, New York.

United Nations publication issued by the Sustainable Transport Section, Transport Division, ESCAP.

Cover design credit: Mr. Sélim Denoux, Research Assistant, ESCAP. The cover image was created using Adobe Creative Cloud, Midjourney and Canva on 10 June 2024.

Report illustrations credit: Ms. Vinuki De Silva, Rathnavali Balika Vidyalaya, Gampaha.

# Acknowledgements

The present publication was prepared by the Transport Division of ESCAP under the overall guidance of Ms. Thanattaporn Rasamit, Sustainable Transport Section Chief, and led by Mr. Edouard Chong, Economic Affairs Officer, Transport Division.

The author of the publication was Dr. Lalith Edirisinghe, CINEC Campus, Sri Lanka; it was edited by Mr. Alan Cooper and graphically designed by Mr. Sélim Denoux.

# Content

<b>Introduction .....</b>	<b>1</b>
<b>1. Gender mainstreaming .....</b>	<b>2</b>
<b>1.1 The women workforce in the transport sector .....</b>	<b>2</b>
1.1.1 Background .....	2
1.1.2 Gap Identification .....	5
<b>1.2 Most common challenges for women’s participation .....</b>	<b>7</b>
<b>1.3 National-level best practices .....</b>	<b>8</b>
1.3.1 Case Studies .....	9
1.3.2 Networking and industry associations .....	13
<b>1.4 Policy recommendations and good practices .....</b>	<b>15</b>
1.4.1 Policy recommendations for governments .....	15
1.4.2 Recommendations for employers .....	20
1.4.3 Recommendations for industry associations, individuals and other stakeholders .....	21
<b>2. Empowering persons with disabilities workforce .....</b>	<b>23</b>
<b>2.1 Background .....</b>	<b>23</b>
<b>2.2 Employing persons with disabilities in the transport and logistics sector .....</b>	<b>24</b>
<b>2.3 Why and how persons with disabilities should be considered for employment? .....</b>	<b>25</b>
<b>2.4 Policies and best practices .....</b>	<b>27</b>
2.4.1 Afghanistan .....	27
2.4.2 Bangladesh .....	27
2.4.3 China .....	28
2.4.4 India .....	28
2.4.5 Indonesia .....	29
2.4.6 Japan .....	29
2.4.7 Republic of Korea .....	29
2.4.8 Malaysia .....	29
2.4.9 Mongolia .....	30
2.4.10 Nepal .....	30
2.4.11 Pakistan .....	30
2.4.12 Singapore .....	30
2.4.13 Sri Lanka .....	31
2.4.14 Thailand .....	31
2.4.15 Viet Nam .....	31
<b>2.5 Recommendations for country-specific guidelines and best practices to increase the persons with disabilities workforce in the transport sector .....</b>	<b>31</b>
2.5.1 Specific guidelines for employers .....	34
<b>References .....</b>	<b>37</b>



# Introduction

Leave no one behind is the central, transformative promise of the 2030 Agenda for Sustainable Development and the accompanying Sustainable Development Goals. Women hold fewer than 20 per cent of transport jobs and rarely have senior roles in the transport, logistics and infrastructure sectors in the Asia-Pacific region. Similarly, persons with disabilities are also underrepresented in the logistics and transport workforce. The overall employment-population ratio for persons with a disability was slightly more than 31 per cent in all employment sectors globally. The unemployment rate of persons with disabilities is usually double that of the general population and often as high as 80 per cent or more in Asia and the Pacific. Against this background, it is recognized that the Economic Social Commission for Asia and the Pacific (ESCAP) member countries need to address the burning issues pertaining to the shortages of female and persons with disabilities staff in the transport sector. Unless the specific needs of women and persons with disabilities are continuously identified and facilitated, it may be difficult to attract them to work in the transport and logistics industry or in any other sector of employment for that matter.

The Cambridge dictionary defines inclusivity as the inclusion of all types of people, things or ideas and treating them all fairly and equally. Gender inclusion is a concept that transcends mere equality. It's the notion that all services, opportunities and establishments are open to all people and that male and female stereotypes do not define societal roles and expectations (Maryville University, 2023). It is vital to discuss strategies to improve the participation of women and persons with disabilities and address issues behind the shortage of employment of qualified female and persons with disabilities in the freight transport sector.

The objective of this handbook is to advocate social inclusiveness of women and persons with disabilities through national-level policy recommendations. The handbook is comprised of two parts, one focuses on gender mainstreaming and the other on empowering persons with disabilities. It will be mainly useful to ESCAP member countries to address shortages of females and persons with disabilities in the transport sector through incentivizing them in a sustainable manner.

# 1. GENDER MAINSTREAMING

---

## 1.1 THE WOMEN WORKFORCE IN THE TRANSPORT SECTOR

### 1.1.1 Background

Labour force participation, as defined by the International Labour Organization (ILO), is “a measure of the proportion of a country’s working-age population that engages actively in the labour market, either by working or actively looking for work”. The global labour force participation rate of women is just under 47 per cent, while for men, it is 72 per cent. This means that a disproportionate majority of women remain outside the labour market with no access to the wages, pensions and other benefits tied to gainful employment. Gender norms also play a crucial role in influencing women’s participation in the labour force. Widening the discussion, literature points to wage inequality, work conditions and women’s career cycles. Wage inequality by gender is characteristic of labour markets around the world. In South Asian countries, such as India, Sri Lanka, and Pakistan, fewer than 35 per cent of women are engaged in paid work because of gender wage gaps. Women in some of these countries have the world’s lowest rates of employment overall, including in the transport sector. Female employment in the sector clearly lags male employment because the male share of wages is higher. In the ESCAP region, women earn less than men and this gap 54-90 per cent is discernible. Notably, only 75 economies mandate equal pay for equal work in all sectors. So, even though women have caught up with men in terms of productive characteristics, they continue to be paid less than men having the same skill, in the rest of the economies.

In the ten guiding principles for sustainable freight transport in Asia and the Pacific, introduced by ESCAP, three fundamentals are proposed to enhance inclusiveness of the freight transport sector by promoting women’s participation: (a) frame; (b) involve; and (c) encourage. The first principle is to frame and implement proactive strategies and policies to widen women's role in the freight transport sector across the region. The second principle is the involvement of academia and the private in taking an active role in imparting required knowledge and skills to women. The third principle is to encourage hybrid occupational models, such as working from home and other innovative solutions, to motivate women to increase their participation in the freight transport sector. These are essential factors in policy formation to approach the problem in a comprehensive manner. This handbook was drafted based on comprehensive desk research in 45 countries about the good practices and policies pertaining to gender inclusiveness. The findings were then subjected to an opinion survey of 15 stakeholders of the transport and logistics industry. Accordingly, this handbook provides recommendations on policy considerations and best practices to enhance women’s participation in the logistics and transport sector.



In the Asia-Pacific region, women hold fewer than 20 per cent of transport jobs. On top of that women are rarely found to have senior roles in the logistics and transport sector despite continuous efforts by respective governments and non-governmental global organizations to rectify that. Specifically, the ESCAP region countries have been struggling with gender inequality through a number of initiatives, but progress and the outcome of them should be closely monitored and continuously improved.

Women represent fewer than 20 per cent of the global transport workforce (ILO, 2019). Generally, male-dominated sectors are defined as the industries and occupations that women comprise less than 25 per cent of job incumbents. Based on this parameter, the transport and logistics sector is generally considered a male-dominated sector. It is, however, encouraging to note that some countries have been successful in introducing favorable policies to provide guidance, consistency, accountability, efficiency and clarity on gender equality in the logistics and transport sector. It is high time other governments and respective organizations understood the economic potential of women's participation in the logistics and transport sector workforce, which is usually unseen due to industry myopia. A comprehensive target-oriented strategic plan may help countries to increase the participation of women even if there are certain identified, inherent limitations to their participation in the logistics and transport sector. To cope with projected shortages of qualified staff and better respond to women's specific needs as users, the transport sector must attract, retain and train women at all levels (ITF, 2022).

Governments should focus building the capacity of women and handle or eliminate those factors hindering their participation strategically. A weakness reflects a constraint only when its potential remains unseen. Once the potential is made visible, it creates demand to explore a mechanism to overcome those obstacles. Given the increasing scarcity of resources in the world, people in this generation should consider ways to convert such weaknesses to strengths. To effectively do this, interest, research, awareness, creative thinking, innovations, and the patience and humbleness to learn from others are needed. Policy initiatives can not only provide the right direction to enhance women's participation in the logistics and transport sector, but they also can offer multiple benefits to industries and countries. In the transport workforce, women are dramatically underrepresented, and it is particularly rare for them to have senior roles in the transport, logistics operations and infrastructure sectors. As a result, gender perspectives are less likely to be considered in decision-making (ITF, 2022) and certain gaps will continue to exist due to lack of focus. An appropriate level of women's participation may help a country to ensure a sustainable logistics and transport sector.

Transport jobs can be well paid, rewarding and offer long-term career opportunities. Unfortunately, and unacceptably, few women are employed in these jobs (Turnbull, Lear and Thomas, 2013). Women remain underrepresented in most transport-related industries, comprising only 17 per cent female employees, on average, across a sample of 46 countries. Attracting them to take these jobs and retaining them remains a challenge for governments and the private sector (Ng and Acker, 2020). The general reflection about the transport sector is that it is considered as male-dominated because traditionally these activities have been maintained and controlled by men. Because of the rapid development of technology, information communication, in particular, gender inequalities are being closed at a slower rate compared to other sectors.

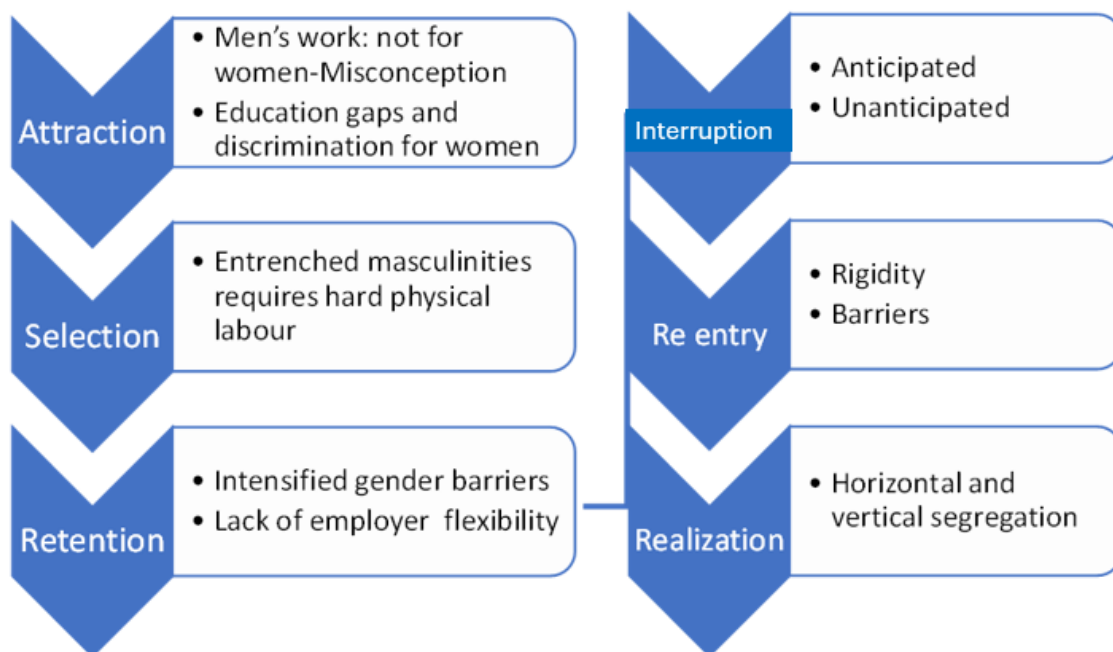
The participation imbalance between men and women are visible in employment opportunities, wages, availability of part-time jobs, professional recognition and decision-making positions. Usually, women are compelled to take on unpaid caregiving and other family duties. This factor creates a negative impact on their continuation of jobs, particularly after marriage, even if they are ready and capable of working. Among the key challenges for women's participation in the transport sector are social and cultural barriers, perceived limitation in physical strength and potential pressure from a male-dominated home front. Working in the transport and logistics sector often requires long business trips, participating in various networking events in male-dominated environments. Having to work in a male environment and fear of potential sexual harassment also support the negative perception for women working in the sector.

These "outside-the-office activities" are cited as inconveniences for women. Sometimes even if the respective women employees are confident of handling or controlling the situation in suitable manner, they are unable to move forward due to a male-dominated home environment in family decision-making. Having to network and socialize with business clients after working hours is in some countries is not compatible for women. This leads employers to depend on men even if they find more capable women to do the job. Enhancing inclusiveness of the freight transport sector by promoting women's participation is one out of the ten guiding principles identified by the ESCAP for sustainable freight transport in Asia and the Pacific. Goal 5. of Sustainable Development Goals calls for gender equality and empowering all women and girls. Accordingly, it is clear how important this subject is. In addition, Goal 10 calls for reducing inequalities including sex and disability, within a country, and Goal 8 refers to promoting sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all. Accordingly, every country has an obligation to ensure maximum efforts are taken to reduce gender imbalance in the work force and enhance the less abled, or disabled workforce. Successful achievements in these two tasks automatically ensure the attainment of Goal 8. Systematic participation of women at different employment levels in the logistics and transport sector will lead not only to economic prosperity, but it also will improve social well-being. Establishing this broader vision is key to enhancing gender equality in Asia and the Pacific.

### 1.1.2 Gap Identification

Many studies have identified poor working conditions as a primary cause of women's low participation in the transport sector. Working conditions, including time and place of work, are critical factors correlating with participation rates (Turnbull, 2013). Poor working conditions represent a physically dangerous environment, such as inadequate space utilization, bad lighting, working the night shift under unsafe conditions, non-ergonomic facilities for employees and anything that poses a hazard to employees. In addition, customers may sometimes be a challenge under the conditions, and handling equipment may be another condition that also needs to be considered. Women working in the transport sector in the Asian and Pacific region (as well as globally) are compelled to adjust to masculine-focused organizational structures, infrastructures and work-place cultures, which makes the logistics and transport sector unappealing to women. Turnbull (2013) proposes a generic framework about women's participation in the transport sector and ensuing challenges, which consists of six stages: (a) employment attraction; (b) selection; (c) retention; (d) interruption (e) re-entry; and (f) realization. Figure 1 shows how the obstacles may crop up against a fair distribution of employment between men and women at different stages.

**Figure 1: Six stages of challenges of employing women in transport jobs**



Source: Turnbull (2013) generic framework modified version by author

The negative impact of social misperception may occur at the "attraction" stage. Women's low access to education and early dropout rates from the education system is one reason for the low attraction. Education obviously influences cognition, and most women who do not have access to education may be excluded from the transport sector because they are unable to challenge societal norms and perception. Men dominate employment opportunities for transport and logistics jobs because of the discrimination against women by employers. Consequently, women are constrained

from gaining valuable skills and training, which, in turn, makes them less attractive as transport sector workers. Next comes the employment selection stage. Women are less likely to study subjects pertaining to transport because, in general terms, it is considered a highly technical study area. Accordingly, women tend to fail to move forward in this stage due to incompatibility with the selection criteria. The nature of work in the transport and logistic sector is generally perceived as “entrenched masculinities”, which necessitates hard physical labour. This stereotyping may negatively affect employees and employers at this stage. Third, retaining women in the transport sector is challenging due to multiple reasons. On one hand, employers feel more comfortable to employ men as transport and logistics are 24/7 jobs given the industry norms. To accommodate women, employers must invest in extra facilities, such as home transport for night shifts, safe restrooms and hire female supervisors. Accordingly, organizations should make special arrangements to accommodate women, by making the infrastructure and other facilities suitable for female employees. However, unless the employers display their commitment to retain (the third stage) women employees are unlikely to continue their career in this sector. Although the initial stages, namely, attraction and selection, have been successful, the ultimate goal of increasing women’s participation cannot be reached if they are not retained. Most of the time employment of women in this sector is a steppingstone and when they find a job elsewhere, they quit.

The fourth stage, namely interruptions to women’s careers in the transport and logistics sector, appears in two ways, anticipated and unanticipated. For example, childcare and elderly care responsibilities come under the anticipated interruption category, while incompatible working conditions with changing needs, or sexual harassment could be the unanticipated interruptions. The re-entry stage or the fifth sequence is incredibly challenging for women unless the organization has an inviting atmosphere for women. As woman more often take on roles related to family matters, children welfare and personal safety, among others, they are more likely to quit if the employer fails to offer workable terms of re-entry to the women employees. This approach should be very personalized because it is based on a woman employee not getting a positive response about returning to the workforce on humanitarian grounds. Some human resource managers are of the view that accommodating women’s ad hoc requests for special working arrangements sets a bad example to others. As a consequence, most human resource managers continue to adhere to a rigid process without giving special preferences at this stage. On the other hand, re-entering the transport sector after some time is challenging to the employee as well. The transport and logistics sector is an ever-changing and evolving sector, which requires that employees get updated and be involved in duties on a regular basis. For employees that take leave for an extended period, it is sometimes difficult for them to keep up with recent changes due to lack of skills, not being updated and missing out on training opportunities.

The realization stage refers to the understanding of an employee’s actual potential in the transport sector. This comes into effect as “horizontal segregation” and/or “vertical segregation”. Horizontal segregation refers to the limited opportunities for women in certain occupations, professions, departments and sectors because the sectors are

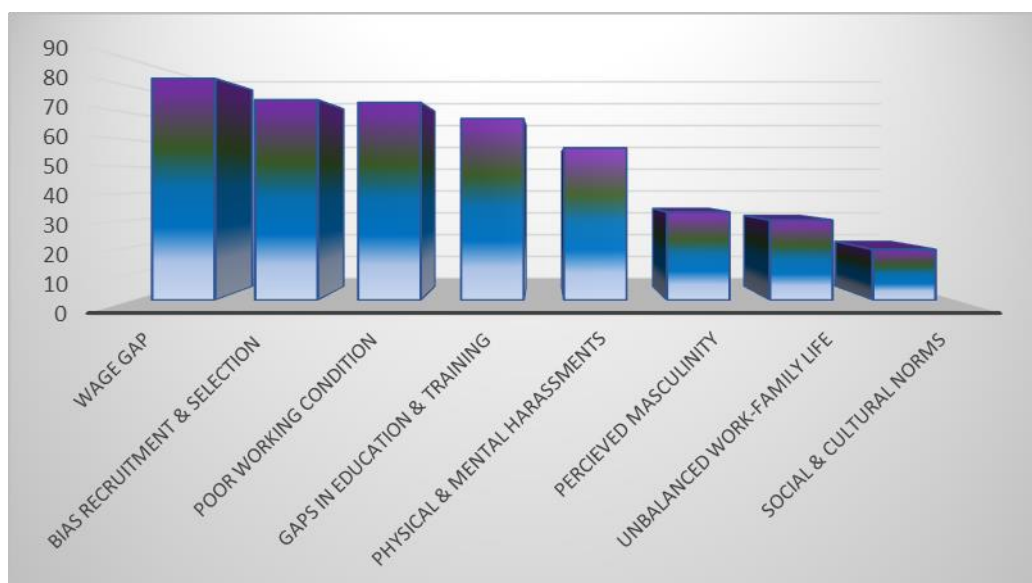
dominated by men. In contrast vertical segregation denotes the situation whereby opportunities for career progression for a particular gender within a company or sector are limited. This is different from horizontal segregation, which is characterized by the concentration of people in different kinds of jobs or sectors.



## 1.2 MOST COMMON CHALLENGES FOR WOMEN'S PARTICIPATION

For this report, based on desk research, eight key potential barriers that hinder women's participation in the transport and logistics sector were identified. These factors, namely, wage gap; bias recruitment and selection; inappropriate working condition; gaps in education and training; physical and mental harassments; perceived masculinity; unbalanced work-family life; and unfavourable social and cultural norms, were then analysed and ranked based on the number of actions initiated at the national level to address these issues through policy and good practices by the said countries.

**Figure 2: Barriers to women's participation**



Source: Author, based on research outcome.

The gender pay gap is a fundamental determinant of women's low participation rates in the labour market in general, including in the logistics and transport sector. The highest number of actions to address this issue have been taken at the national level. Bias recruitment and selection is a serious problem. Most of other seven factors may influence employers in their decision to keep women out or give men the priority for obvious reasons. For example, employers that recruit women may have to provide

maternity leave and personal security. They also may have to improve working conditions, especially if women are assigned to work night shifts. Unlike for male employees, transport facilities should be provided for females working after regular working hours. In addition, for female workers working after regular hours, hygienic rest rooms and, female security guards are fundamental as per the statutory regulations. Accordingly, drafting policies and practices favoring increased employment of women may inadvertently result in unfavorable outcomes. The third category in the order of rank is the working conditions that are perceived as unsuitable to women. Women may be less inclined to seek employment in the logistics and transport sector due to poor working conditions. Meanwhile, the lack of (or gaps in) education and training is a challenge for women's participation in freight transport. Without a basic education women find it difficult to enter the logistics and transport sector. Women who do get hired in the logistics and transport sector often face difficulties in getting the required training. Physical and mental harassments is another barrier to women's participation in the sector. The perceived masculinity tied to and assumed male dominance of logistics and transportation job is major reason behind the low interest of women to work in the freight transportation sector and low retention rate of women employees in the sector.

Incompatibility of work and family life results in unanticipated, voluntary, and involuntary, departure from their jobs. In addition, certain country-specific social and cultural norms may create restrictions for women.

*In a workplace, travelling facilities, hygienic rest rooms and female security guards are fundamental requirements if women are to be assigned in night shifts as per the statutory regulations. These requirements may be viewed as burdens to employers. Consequently, drafting policies and practices applied in favour of women without realizing the resultant industry perspectives and realities may inadvertently create unfavourable outcomes in the recruitment and selection process.*

### 1.3 NATIONAL-LEVEL BEST PRACTICES

Demand for the workers in the logistics and transport sector is derived from the demand for cargo and passenger transport in the respective country. In the case of logistics hubs where transshipment cargo plays a major role, such as Sri Lanka, the demand for a domestic workforce in the logistics and transport sector is also influenced by external factors. Transport is a "derived" demand in terms of economics theory and this demand is country-specific because of the variations among countries in terms of external business environmental factors. In other words, social, legal, economic, political and technological factors, referred to SLEPT are key factors that vary from country to country. For example, some transport modes are more prevalent and accessible than others in some locations and vice versa due to geographic and other reasons. The need for road transportation also differs greatly by country. For example, China has less person-kilometers travelling by road than the Republic of Korea despite having a larger land area and more than one billion inhabitants. Japan has a stronger economy in North-East Asia but a much smaller land area and larger population.

Compared to the residents of other North-East Asian countries, the average Japanese person travels substantially more by rail and road.

While the number of women working in the industry has grown over the years, gender diversity has not increased significantly. Men still tend to dominate the transport and logistics sector as well as the freight industry. There are obvious barriers to increasing women's participation in the logistics and transport sector. Countries are trying to overcome these challenges by implementing various strategies that lead to good practices. Governments have introduced policies to strengthen these practices. Given the uniqueness of the logistics and transport sector, the common approaches in other employments may not necessarily be suitable to the employments in freight transport sector. On the other hand, the approach should be tailor-made based on the SLEPT factors of a country. Accordingly, best practices adopted by countries may not necessarily be good for all. They should be reviewed with an open mind and then carefully assessed to determine their relevance and/or applicability in another country. The following case studies could be useful for this purpose.

### 1.3.1 Case Studies

#### 1.3.1.a China

*Logistics companies in China create an attractive scenario for women with good potential to move up the career ladder through motivational and leadership programmes. Most importantly, programmes about balancing work and family life have been initiated to make sure that the women in the logistics and transport industry are content and do not quit their jobs.*

China has one of the highest rates of female labour force participation in the Asia-Pacific region. However, women are still expected to be the major caregivers for their families and be compelled to give up their employment. According to a 2020 study, 47 per cent of women in the workforce are of the view that they are appreciated and respected for their unique perspectives and talents (Workplaces that work for women (2021)). Basic national policy in China reinforces the recruitment of women into higher positions to avoid gender gap in recruitments and break the misconception of logistics being a male dominant industry. The women employed in the logistics sector are recognized for their work and have earned a good reputation. Women leaders in the industry may disprove the misconception of logistics being a male-oriented industry. Initiatives, such as "Women in Technology" by Accenture, have created a platform for women in the information and communications technology (ICT) industry, which plays a key role in transportation planning and management. Logistics companies in China have created a common front, encouraging women with potential in the industry join hands with them and move up the career ladder. Motivational programmes, leadership programmes and work-life balance programmes are being initiated to ensure that the women in the industry are successful. Women in China work as forklift and equipment operators, warehouse managers and shift supervisors, among other jobs perceived to be male-oriented, without any discrimination. Majority of the women working in the logistics and transport sector are assigned to work in warehouses where such tasks as handling objects that are heavy are usually done by men. To avoid the reluctance

of women to be engaged in in such work, robotics technology is used to help women handle these tasks easily. At least 1 per cent of the company's annual payroll costs go toward training and staff members can benefit from funded education assistance programmes outside the workplace. (ILO, 2020).

### 1.3.1.b Japan

*Unconscious biases are stereotypes or assumptions that a person makes about a certain group of individuals outside of their own conscious awareness. Japan provides unconscious bias training to minimize the impact unconscious biases could create in the gender biasness.*

In Japan, the road freight transportation industry employed nearly two million workers in 2021. The road passenger transport segment had the second-largest workforce in the transportation industry. Many of the women working in the sector tend to take leave from work during pregnancy and after the birth of a child, and then re-enter the workforce after certain years. To ensure female employees are on track after their maternity leave and not lagging in terms of, for example, updated knowledge and technological advancement, self-assessment, counselling, resume-building and practice interviewing are examples of types of programmes offered to give them specific information and provide skill development. Unconscious biases are stereotypes or assumptions that a person makes about a certain group of individuals outside of their own conscious awareness (Clear Law Institute, 2012). Authorities provide unconscious bias training to minimize the impact it could create in gender biasness. Workers have access to education and support during their onboarding and transition into the workplace through special training centers. Establishing a clear evaluation criterion for women in logistics and increasing their exposure inside and outside the company helps increase women's participation in the sector. Capacity-building to develop technical skills has an impact on empowering women to improve the resource capacity and the workforce of the logistic sector. When women contribute ideas based on their areas of expertise, they use "amplification" strategies, in which they repeat each other's ideas during meetings and brainstorming sessions to improve their credibility. Corporate executives make a point to recognize and vouch for women's abilities. Large firms make it easier for them to advance to management and board positions (Stanford, n.d).

### 1.3.1.c Kazakhstan

Kazakhstan has maintained a steady female labour force participation rate even though female wages are far below the wages of males. However, women have less preference for employment in the transport and construction sectors in Kazakhstan. In addition, women are underrepresented in decision-making spheres in the transportation sector, despite the sector's significant contribution to the economy of the country (ADB, 2018).

*Kazakhstan has incorporated innovative strategies, such as the "women are welcome to apply" concept. Implementation of strong policies regarding female employment and*

*zero tolerance for sexual harassment are two other main strategies. The 2030 concept of family and gender policy promises the protection of females and bridges gender gaps in political and economic spheres.*

On the positive side, human resource management practices, and training and development have contributed towards the achievement of a high volume of female direct employees in the country's transportation sector, including, among other jobs, women drivers, technical maintenance engineers and managers (Sustainable Mobility for All, 2019). Kazakhstan has incorporated many different strategies, such as the "women are welcome to apply" concept for female job seekers. For example, female drivers are encouraged to apply for jobs through employers providing sufficient working facilities and improving the public profile about women's participation. Some of the strategies implemented to attract women to work in the transportation sector are setting a zero-tolerance policy for sexual harassment and establishing a proper monitoring system (FAO, 2023). An updated policy legal framework emphasizes the 2030 concept of family and gender policy for Kazakhstan to ensure the protection of females and bridge gender gaps in political and economic spheres. The framework focuses on protecting women and ensuring that the gender gap does not prevail in professional development and work-life balance. The legal framework enables the enforcement of gender equality and women's empowerment. Kazakhstan has set its laws, policies and programmes related to female empowerment by focusing on socioeconomic development goals related to the country.

#### 1.3.1.d Republic of Korea

*The Republic of Korea has an M-shaped employment curve for women. Employment increases significantly for women aged in their 20s, but declines in their 30s and subsequently, it rises again throughout their 40s. The Government implements policies and protocols to enhance female participation in the freight sector in line with these realities.*

Almost 81 per cent of women are employed in the human, health and social sectors and only 13.57 per cent work in the transportation sector. Although the number of women employed is less than the male employment rate, the gender gap is narrowing due to attempts by the government, and other industry stakeholders to narrow it. In the Republic of Korea, the M-shaped employment curve of women's job participation is visible. Under the "M" pattern of employment, the percentage of women employed in the transport sector increases significantly when the women are aged in their 20s, but it declines as women leave the workforce in their 30s due to marriage and/or to have children. Subsequently, it rises again as women gradually re-enter the workforce when they are in their 40s. By recognizing the different priorities and preferences accorded to men and women in the freight sector, the Government is implementing policies and protocols to enhance female participation in the freight sector. Gender considerations are put into practice by care centers and kindergartens at workplaces,

proper leave systems and office protocols that consider an adequate work-life balance of women at work.

#### 1.3.1.e New Zealand

According to the Ministry of Women, the overall labour force participation rate in New Zealand of females and males are 65.9 per cent and 76.5 per cent, respectively (New Zealand, Ministry of Women, 2017). The Government of New Zealand supports equality; women account for 30 per cent of important transport agency board members. In New Zealand, Fonterra, a public-trade dairy cooperative of farmers, employs 66 female tanker operators. The Women's International Shipping and Trading Association (WISTA) provides networking opportunities for women working in the country's marine, transportation and allied industries, and raises the industry's visibility as a viable career choice for women. Members, sponsors and supporters come from a diverse spectrum of organizations, including ports, shipping line operators, freight forwarders, logistics firms, importers and exporters, seafarers, maritime attorneys, maritime and logistics academics, marine insurers and maritime recruiters.

#### 1.3.1.f Singapore

*Women can better balance parenthood and work with more accessible and available childcare centers. Women's caregiving duties for youngsters also have been reduced through high-quality facilities. A similar constraint is applicable to elderly person as well. The Government of Singapore is upgrading its infrastructure to help care for senior citizens to meet the country's ageing population. This has lessened the pressure on women to quit their jobs and stay at home to look after their ageing relatives.*

Singapore has empowered women to balance their obligations at home and at work which is key to increasing the number of women in the workforce. Women should not have to choose between work and family. By allowing flexible, work schedules, women can fit their household responsibilities into their schedules. Flexible work arrangements such as flexi-load, flexi-place, and flexitime, and the improved Work-Life Grant was launched in 2013. Numerous businesses have benefited from subsidies by strengthening their virtual infrastructure, which enables employees to work remotely. Women's caregiving duties have been reduced through high-quality facilities for youngsters and the elderly. Working women who are pressured to care for the young and aged at home struggle invariably to stay in the workforce. Women can better balance parenthood and work with more accessible and available childcare centers. The Government of Singapore upgrades its infrastructure for providing aged care to meet the country's ageing population's growing demand. This has lessened the pressure on women to quit their jobs and stay at home to care for their ageing relatives. Another area that needs to be dealt with is the gender pay disparity. This violates the principle of equal opportunity for all. In the economy, unequal labour should not be compensated differently. It is highlighted that a law requiring companies to disclose their gender pay disparity will also boost public scrutiny of businesses that do not pay their employees equally for similar roles. Equal parental leave would offer

parents the option to decide who will be responsible for early childcare. Requiring parental leave, this helps stop discrimination against women at work.

### 1.3.1.g Sri Lanka

The female labour force as a percentage of the total labour force in Sri Lanka was reported to be as low as 33.46 per cent in 2021 (Trading Economies, 2023). The country is focusing on increasing women's participation in the labour force, especially in the logistics and transport sector. As Sri Lanka is geographically positioned at a highly strategic location for logistics and transport, there are many job opportunities for people with the right qualifications. The key strategy adopted is to increase social awareness about the potential of women as employees in the logistics and transport sector. The country's literacy rate is encouraging, with a net enrolment rate of 92.3 per cent for males and 89.8 for females at the secondary level education. A new educational concept, education vertical integration, has been introduced. The Government has opted to incorporate logistics and transport as a part of the school curriculum at the secondary level. Basic education in this special sector enables girls and young women to explore attractive job opportunities so that they can develop their skills and the confidence required to pursue careers in transportation.

Courses on logistics and transport were first offered at the university level in 2007. Later, in 2017, studying logistics and transport was incorporated into part of the schools' curricula. This has increased substantially, supported by strategic actions taken by universities and governmental authorities. To enhance this positive trend, a textbook on logistics and transport was published in the national language. The Government also had taken steps to declare a national day for logistics, which has helped increase social awareness about the potential of this lucrative industry.

### 1.3.2 Networking and industry associations

Industry associations play a pivotal role in promoting and attracting more women to seek employment in the freight and transportation industry. An aligned industry-associational body can go far beyond the traditional recruiting practices of individual organizations and promote the participation of women in the freight and transportation industry. These associations are more influential when they have international presence.

*Research indicates that some women leaders are even more inflexible to fellow women workers than men. This is a disturbing situation that demands frequent appraisal and corrective measures to overcome such hidden unfavorable scenarios that could adversely affect the overall impact on efforts to empower women.*

Among the many industry associations and forums in the freight and transportation industry at global and national levels are the Federal Logistics Association; Women

in Logistics and Transport (WiLAT); Women International Shipping and Trading Association (WiSTA); Women In Trucking Association, Ladies' Logistics Lunge; All China Women Federation (ACWF); Korea Women's Associations United; Korean Women Workers Association (KWWA); Hong Kong Women Professionals and e Entrepreneurs Association (HKWPEA); Hong Kong Federation of Women (HKFW); Japan Women's Leadership Initiative; and National Women in Transport (Australia) (NWIT). This handbook offers suggestion on some key areas of focus for the associations. Brief details of a few of these associations are given below.

### **The Federal Logistics Association (FLA)**

The Federal Logistics Association which has more than 11,200 members, serves as a link between business and science for scientists, students, and managers of logistics in industry, trade and services.

### **Women in Logistics and Transport (WiLAT)**

This association has organized activities to train and encourage professionalism in the transport and logistics industry through mentorship, leadership, empowerment and entrepreneurship for women with the objective to train and equip them to exhibit professionalism in their field of work.

### **Women International Shipping and Trading Association (WiSTA)**

This association connects female executives and decision makers from around the world. The National WISTA Association (NWA) is supported by fifty-four countries, each of which is a member of and supervised by WISTA International. NWAs create linkages within the sector by providing in-country and regional networking, business and skill-building opportunities, corporate visibility, and corporate visibility. WISTA members have global access to an immensely diversified network of shipping and trading professionals to whom they can turn to for referrals, connections guidance or commercial collaborations.

### **Women In Trucking Association (WiT)**

The Women In Trucking Association is a non-profit organization whose mission is to encourage the employment of women in the trucking industry, promote their accomplishments and minimize obstacles faced by women working in the industry. Each chapter has its own individual personality. 's encourages national chapters, apart from the ones in Canada and the United States of America, to pursue the mission. (WiT, 2023).



## 1.4 POLICY RECOMMENDATIONS AND GOOD PRACTICES

This handbook provides policy recommendations and good practices together for proposed targeted implementation groups, such as government, logistics and transport institutes and affected persons, namely women. Primarily the study presents a summary of actions taken at the national level under two categories, policy and practices. These policy recommendations are mainly focused on the eight factors illustrated in figure 2, concerning the barriers to women's participation in the logistics and transport sector. They are further divided into three implementation categories, namely government, industry, and individual. These categories represent the target groups that are supposed to study and evaluate the policy recommendations and apply and implement them at national or individual levels. The list mainly consists of policies and practices common to multiple countries, however some of them are country specific. Each country may select the suitable ones for them in consultation with their respective industry stakeholders.

*It should be established that women characteristics are not a burden to organizations in the logistics and transport sector, but they can create many advantages through awareness and add value to the organization, industry, the country, and the whole world.*

### 1.4.1 Policy recommendations for governments

- Ensure government intervention to increase female participation in the formulation and implementation of national policy to eliminate structural and legal obstacles that may hinder greater women's participation and ensure women's right to participation in the transport and logistics industry. Encourage the gradual elimination of jobs restricted to women, such as engine drivers, city bus drivers and underground terminal operators.
- Implement a zero-tolerance policy that prioritizes sexual harassment as a priority.
- Introduce and conduct regular programmes on women's entrepreneurship,

education and vocational training pertaining to the transport industry through public and private partnerships (PPPs)

- Enact rules pertaining to childrearing and establish policies for equal parental leave for both men and women with the option to decide who will be responsible for early childcare.
- Encourage the establishment of inexpensive day-care facilities through subsidies and technical assistance.
- Offer government incentives to establish accessible and affordable childcare centers to help women working in the transport sector to better balance parenthood and work and offer tax benefits to those who invest in creating child/adult care centers and maintain them satisfactorily.
- Evaluate the maternal and paternal leave regulations to reduce job turnover rates of women, increase female economic involvement in the transport sector and revise these policies to make the work-family balance more convenient.
- Upgrade infrastructure for providing care centers for senior citizens to meet the ageing population's growing demand globally through government interventions.
- Introduce innovative children and adult projects with the objective to free up women working in the transport sector from the duties that invariably keeps them out of the workforce.
- Encourage organizations to reduce lengthy working hours at the workplace.
- Conduct gender assessments for leadership positions and monitor the status of women in academic leadership roles.
- Introduce capacity-building programmes on gender mainstreaming concerning public and private sector institutes and ensure livelihood support for women.
- Enact legal provisions for flexible work arrangements and build awareness about women's rights and emancipation to combat prejudice against them.
- Encourage transport companies to set flexible work schedules for women, which enables them to fit their household responsibilities into their work schedules and monitor their work performance to determine whether employees and employers are benefiting from the new arrangements.
- Make sure international standard of equal pay for equal work is applied in legislation and in practices and monitor to ensure that objective wage setting is incorporated into institutional frameworks.
- Enact regulations pertaining to flexible work attendance during pregnancy and after the birth of the child, when appropriate
- Provide incentives to companies that offer more female-centered job opportunities in the logistics and transport sector. Funding grassroot-level organizations that support women inclusiveness and genuinely make efforts to build the capacity of women employees would give a strong message.
- Ensure safety features for workers in the transportation sector with a special reference to women.
- Ensure equality in gender and gender-based economic development

strategies.

- Establish a policy framework to protect women from external violence and trafficking, while they are employed in the sector. Women are more vulnerable to human trafficking, which occurs in every region of the world.
- Provide technical assistance and strategic leadership for women entrepreneurs in the transport and logistics sector.
- Create and maintain a human resources pool to ensure effective and efficient female participation at short notice in the transportation sector.
- Encourage relevant ministries and civil society to work together to set policies targeting gender inclusiveness in the transport and logistics sector.
- Provide leadership to conduct joint awareness programmes by government, employees, and industry associations to increase female participation in the logistics and transport sector.
- Offer tax benefits to companies that seek gender parity and establish an equal opportunity policy.
- Identify basic facilities for women in the transportation sector, while improving working conditions, and make those provisions visible in organizational profiles.
- Develop a comprehensive strategy to mitigate the gender gap in the freight transport sector by aligning a women-friendly working atmosphere with international and national standards.
- Develop a comprehensive strategic plan that leads to a professional pathway programme in the logistics and transport sector in collaboration with government and the private sector.
- Develop infrastructure facilities that encourage female entrepreneurship.
- Promote results-oriented PPPs in the transport sector that target increased women's participation.
- Encourage foreign investors that promote substantial women's participation through exclusive economic development initiatives.
- Recognize and promote the contribution of women entrepreneurs in the transport and logistics sector towards mitigating economic and sociological concerns.
- Encourage legal framework empowerment to ensure labour market equality for male and female employees.
- Ensure availability of preventive measures to reduce gender-based violence and improve women's confidence.
- Ensure proper application of provisions of human rights with reference to women.
- Ensure quality education at primary, secondary and tertiary levels to females and skills development.
- Introduce innovative concepts, such as "education vertical integration", to provide strategic and incremental links between schools, universities and the transport industry, and establish clear academic and professional pathways for educated females without discrimination.

- Promote capacity development of females through a participatory approach and implement strategies to increase opportunities for the employment women in the transport sector.
- Form leadership advocacy group to strengthen the working relationships of women in positions of leadership in transport sector.
- Promote investment in the transport sector and encourage the establishment of enterprises in rural regions through incentives and aid with the provision of infrastructure.
- Set a coordinated and strategic focal point for the transport sector and have it also served as an official channel between the government and the private sector.
- Invite service providers in the transport sector to collaborate with governments and civil society organizations to combat gender inequality, empower women and build more inclusive communities.
- Develop a long-term gender policy with an incremental action plan to develop women's employment and human resource capacity development in the transport sector.
- Provide incubator funding options to conduct research and development in the transport sector involving the participation of young women.
- Introduce an entrepreneurial financing package for women engaged in the transport sector.
- Increase maritime training and career opportunities, safe shipping and boating practices.
- Convert women's inherent characteristics (that are perceived as weaknesses) to strengths to benefit the logistics and transport sector through research.
- Establish a national policy on gender equality and women's empowerment in consultation with stakeholders of the logistics and transport sector.
- Appraise existing policies, business culture and practices in the country and recognize prospective factors that could be useful to increase women's employment in the transport sector.
- Create a country-specific gender policy matrix that may provide more opportunities and create places for women to participate in the development of the transport sector.
- Provide low-income women with business services, training and access to markets, information and technology free of cost.
- Empower women to balance their obligations at home and at work through counselling and increased financial benefits with the goal to increase the engagement of women in the transport sector.
- Ensure that women's concerns and issues in the transport sector are periodically addressed with the objective to attain favorable solutions and counselling by a formal statutory body and establish an effective complaint mechanism to address discrimination and sexual harassment for women and men workers in the workplace.

- Protect women from violence and impede the holding of forums that are gender biased and usually support only men.
- Create a statutory body to handle women's concerns at the national level in consultation with industry associations and other stakeholders in the transport and logistics industry and resolve numerous disadvantages experienced by women and help resolve them through a legislative framework in conjunction with suitable employment rules, standards, and guidelines.
- Facilitate industry stakeholders with gender-disaggregated data and gender-sensitive information in the transport sector and initiate regular dialogues about women's concerns.
- Improve women's accessibility to safe public transport by ensuring their presence in the operation at all levels of transport modes such as road, rail, sea and air.
- Establish a database covering women in the logistics and transport business at the national level to create visibility. As organizations may have their own interpretations and criteria for the data, seamless connectivity and moderation among them is required.
- Increase women's participation in the transport sector through extensive use of digital systems led by rapid changes and advancements in technology.
- Create gender-responsive guidelines for the transport and logistics sector based on the Gender Equality Law
- Enable laws for gender diversity and include gender inclusiveness as part of the effort to make the transport system sustainable.
- Ensure women's resilience through adopting concepts, such as "right to live without violence" by improving the existing law framework, such as the "Law on Preventing and Combatting Violence against Women and Children", when necessary to address the national status.
- Ensure strict compliance with the existing national legislations by respective authorities and take legal action if they refuse to do so.
- Encourage firms to develop innovative mechanisms to hire and retain women and introduce career comeback initiatives that accommodate possible academic and professional interruptions.
- Help women acquire the qualifications and skills that are in demand in the job market and ease their transition into productive employment in transport sector.
- Introduce productive employment rules that are more gender equal in consultation with the labor ministry and relevant departments.

### 1.4.2 Recommendations for employers

- Promote women in leadership and decision-making roles and encourage greater inclusion in executive positions and on corporate boards.
- Introduce a quota system and inclusive, gender-sensitive leadership pathways to bring women into political spheres.
- Restrict the prioritizing of a specific gender in the recruitment announcements and eliminate acts of gender discrimination in the hiring process.
- Encourage external training and networking by providing childcare for out-of-town attendees participating in such events.
- Provide opportunities for senior women to strengthen networks and advocate young women involved in social change and seek policy consultation and dialogue with government and industry associations.
- Create programmes to assist pregnant women and mothers in the workforce that reflect safety and care for them in the transport industry.
- Establish daycare centers within the office premises.
- Promote regular training and capacity-building programmes and ensure that women are aware of the initiatives. Implementing a reward system for incremental knowledge for females in the transport sector may be useful.
- Eliminate harassment of women through a participatory approach by allowing women to participate in the decision-making process.
- Introduce policies to retain potential women in the industry and develop them for the decision-making level jobs.
- Encourage activities, such as conducting self-assessments, counselling, resume-building, practicing interviewing and unconscious bias training, to eliminate the negative impact on women.
- Offer flexible work arrangements to assist women in entering and remaining in diverse jobs in the transport and logistics.
- Ensure equal working practices for men and women, while creating an environment that is comfortable for women.
- Research and develop more female-centered job opportunities in the logistics and transport sector by making use of advancements in technology.
- Provide required technical assistance and training to females to successfully perform out their jobs in the transport sector.
- Enhance the female voice in the logistics and transport sector development projects and when taking investment decisions.
- Ensure regular investment for gender equality in the transportation sector and make them explicit in the institution budget.
- Initiate skill development programmes to ensure females provide return on investment on a short-, medium-, and long-term basis.
- Enhance work prospects for women and facilitate loans and trainings, and support female led micro and small businesses in the transport and logistics sector that could be supervised by industry associations for high productivity.

- Create or enhance employer-sponsored childcare facilities for transport sector organizations.
- Encourage women to be committed and participate in decision-making processes that help resolve problems through modernized transportation infrastructure and become game changers in the transportation sector.
- Use internal staff to reduce participation gaps between men and women in the transport operations and practice "learn from others and do it even better".
- Establish policies and procedures for avoiding and dealing with sexual harassment and bullying.
- Recognize and reward employers in the transport sector who increase the number of women working in traditionally male-dominated fields.
- Strengthen the virtual infrastructure in offices to enable employees to work remotely and introduce proper monitoring systems to avoid the misuse of this flexibility.
- Seek ways to reduce women's caregiving duties by introducing high-quality facilities for youngsters and the elderly as a part of a national responsibility. Some countries do not consider this as a policy issue and leave the individuals to solve it.
- Establish women-friendly diversity policies and declare them in the annual reports.
- Ensure that a percentage of the annual payroll goes towards training of women and investing in training and personal development opportunities for women in the transport sector and assisting them in achieving work-life balance.

#### **1.4.3 Recommendations for industry associations, individuals and other stakeholders**

- Eliminate the social view of defining women as "home persons" and create a paradigm shift from male dominance through social awareness.
- Establish and strengthen the gender equality promotion office in educational institutions.
- Appoint a designated diversity officer in universities and transport firms.
- Encourage young women to become faculty members in universities and implement family-friendly policies.
- Conduct research on employers' best practices about flexible work arrangements for women and raise awareness about the effective work-life balance.
- Create a paradigm shift from the common view that "women can't do it!" to the "women can do it!" through systematic social awareness programmes.
- Establish family support centers and introduce awareness-raising programmes for workers in the transport industry.
- Initiate proactive and focused recruitment approaches for women. such as "women are welcome to apply", "open day for women" and "women can walk

in."

- Disseminate timely information that helps to recruit and retain women working in the transport sector.
- Conduct joint road shows organized by government and industry associations to raise awareness about women in the transport industry and encourage girls and women to choose a career at sea.
- Promote awareness about the professional route to commercial shipping with an emphasis on the life at sea for elementary and secondary school children and their parents, teachers, neighbors and community leaders.
- Establish networking forums among female employees so that they do not feel isolated in their industry.
- Help statutory bodies to ensure informed and evidence-based decision-making mechanism on gender related problems.
- Establish a drop-in center as a secure location for women to receive support and talk about any issues they may be facing while working in the transport sector and seek help.
- Publish case studies of successful women engaged in the transport sector and make their presence as ambassadors' accessible young women who wish to enter to the trade.
- Create social awareness about the benefits and advantages of working in the transport sector through popular programmes in the media, including the distribution of videos, posters and illustrated short reports that project strong, positive images of women in non-traditional vocational and leadership roles.
- Initiate and provide free access to gender-responsive employment counselling and mentorship.
- Foster networking opportunities for women and provide them with the opportunity to learn from the experiences of industry leaders.
- Initiate community-based pilot projects for women's economic and social empowerment and decent employment in the transport and logistics industry.
- Engage women icons in the transport sector to take on the role as an ambassador to motivate more women to begin working in the transportation sector at a young age and mentor them through their education and training.
- Conduct periodical workshops for children about books and educational learning materials to advance gender equality and combat traditional gender norms.
- Conduct seminars to deliver presentations on various topics, such as workplace respect and gender equality by popular industry icons.
- Initiate programmes to empower women to develop self-confidence and act against discrimination rather than create an artificial security cell around them.
- Increase public awareness of and media attention to the significant contributions made by women in the transport workforce in leadership and rank-and-file positions.

## 2. EMPOWERING PERSONS WITH DISABILITIES

### WORKFORCE

---

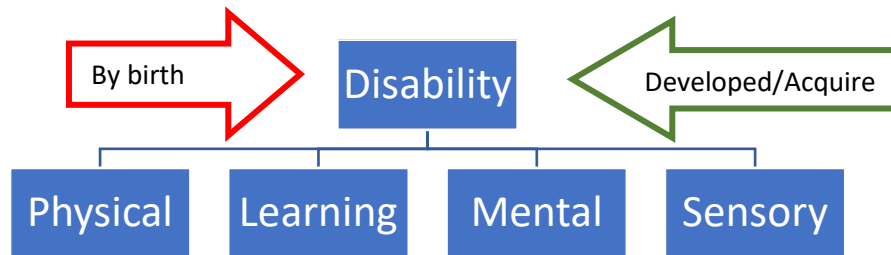
#### 2.1 BACKGROUND

Global awareness of disability-inclusive development is increasing. The United Nations Convention on the Rights of Persons with Disabilities promotes the full integration of persons with disabilities in societies. It specifically references the importance of international development in addressing the rights of persons with disabilities (World Bank, 2022). The 2030 Agenda clearly states that disability cannot be a reason or criteria for lack of access to development programming and the realization of human rights. The Sustainable Development Goals framework includes seven targets that explicitly refer to persons with disabilities, and six targets on persons in vulnerable situations, which include persons with disabilities (World Bank, 2022). A disability causes individuals to perform daily tasks differently (usually inconveniently) than others. It is a form of diminishing their contribution to society. Eighty per cent of persons with disabilities live in developing countries (United Nations Department of Economic and Social Affairs, 2023).

An estimated 1.3 billion people or 1 in 6 people worldwide experience a significant disability (WHO, 2023). In Asia, there are 472 million persons with disabilities of working age, but almost two thirds of them are outside the labour force (Tong, 2022). This represents a diverse group of talented potential job seekers that businesses should be actively seeking to employ (Hodge, 2017). These figures speak for themselves about the seriousness of this problem. This global estimate for disability is on the rise due to population ageing and the rapid spread of chronic diseases, aided by improvements in the methodologies used to measure disability (WHO, 2011). Persons with disabilities are more likely to experience adverse socioeconomic outcomes, such as less education, poorer health outcomes, lower levels of employment and higher poverty rates (World Bank, 2022).

There could be two main existences of human disability (figure 3). First, individuals may be born with certain disabilities and second, it may be developed or acquired during their lifetime. There are four main categories of disabilities, physical disabilities, learning disabilities, mental disabilities and sensory disabilities.

**Figure 3: Type of disabilities**



Source: Author.

These conditions may occur either as a single disability or as a combination of disabilities. Whether it is a single disability or otherwise the impact of it may create different conditions in the affected people. Physical disabilities can be either permanent or temporary and can be a result of an accident or pre-existing condition. They can impair an individual's ability to stand, walk or perform daily tasks, such as driving, cooking or writing. Learning disabilities cause individuals to have trouble communicating, understanding social cues and performing tasks, such as reading and writing. They may also have trouble interpreting and retaining information.

Learning disabilities can be caused by a variety of factors, such as genetics, living environments, injuries and other situations. Mental disabilities affect an individual's mind. They can further affect an individual's perception of reality. Some individuals are born with mental disabilities because of genetic conditions. Some disabilities are the result of traumatic events or unhealthy living situations. Sensory disabilities affect a person's senses, namely sight, smell, taste, touch and hearing. Individuals may be born with sensory disabilities or acquire them from an injury during their lives (Indeed, 2023).

## **2.2 EMPLOYING PERSONS WITH DISABILITIES IN THE TRANSPORT AND LOGISTICS SECTOR**

Transportation and logistics are one of the most far-reaching and integral sectors for maintaining the stability of the national economy. It is the driving force that keeps the wheels of industry in motion (Hodge, 2017). International transport is derived from global trading activities. The difficulty in filling warehouse jobs amid historic levels of e-commerce volumes is increasingly opening doors to people with disabilities (Campbell, 2022). Similarly, the freight transport sector offers many opportunities for persons with disabilities. Having a disability does not necessarily mean that the individual cannot become a driver, as many modifications can be made to help adapt a vehicle for specific needs. However, proper training on the controls and adaptation in the vehicle/equipment is needed as appropriate to enable them to drive/operate safely and comfortably.

The rapidly developing ICT transport and logistics sector continues to get automated. As a result, machines can handle many activities that earlier demanded physical involvement of people. This trend is favorable for those who are physically

handicapped. During the Covid-19 pandemic many jobs in the logistics and transport sector were converted to “work from home”, using technology. One of the key issues faced by persons with disabilities in getting employed is the travelling between the home and office. Consequently, working from home is a good option for employers in the logistics and transport sector to add persons with disabilities to their workforce.

Working at a call center is an incredibly good option for persons with disabilities, as it gives them flexibility. Given the barriers for systematic education and securing other managerial skills, a call center job is good a short and medium-term solution for unemployed persons with disabilities. Usually, it does not require much prior knowledge or education specific to the call center. With the right training, and systematic guidance and tools, such as a computer, a telephone, and a headset, the job can be carried out. Women with disabilities can have multiple disadvantages, as they may experience exclusion on account of their gender and their disability. In most Organization for Economic Co-operation and Development (OECD) countries, women report higher incidents of disability than men (United Nations Department of Economic and Social Affairs, 2023)

### **2.3 WHY AND HOW PERSONS WITH DISABILITIES SHOULD BE CONSIDERED FOR EMPLOYMENT?**

Persons with disabilities are a diverse group, and factors, such as sex, age, gender identity, sexual orientation, religion, race, ethnicity and their economic situations affect their experiences in life and their health needs. The average life expectancy of persons with disabilities is shorter, they often have health issues and experience more limitations in everyday functioning than others (WHO, 2023). In this competitive world, organizations ensure that they get the best value for what they spend on their employees.

The general perception is that persons with disabilities contribute less to an operation than those without disabilities. Paradoxically, the real business case reveals that hiring workers with disabilities can positively affect a company’s bottom line in multiple ways. First, persons with disabilities tend to be good, dependable employees. As a group, persons with disabilities perform on par or better than their non-disabled peers on measures such as productivity, safety and attendance. Second, persons with disabilities are more likely to stay on the job, reducing the cost of job turnover. Third, hiring persons with disabilities may increase overall workforce morale when they become part of the staff. Fourth, persons with disabilities are an untapped resource with skills and talents. Usually, they are differently abled and may have specific skills that businesses need. Psychologically, they develop the courage to live without certain physical abilities, which forces them to develop greater transferable problem-solving skills in daily life. The fifth and final reason to hire persons with disabilities is even more convincing. Persons with disabilities represent an overlooked and multibillion-dollar market segment. Having employees who know first-hand about the product and service needs of the persons with disabilities in the consumer segment is a real

advantage. Ignoring this market may mean losing indispensable market intelligence about the market for persons with disabilities (Perry, 2007). Accordingly, hiring persons with disabilities is a win-win case for the employee and employer. Getting them on board also reduces the burden on their families, society and governments.

Persons with disabilities have much in common with non-disabled persons. However, their disabled or less able parts are highlighted over their abilities and strengths. That said, a great, largely untapped resource for talent inherent in them is wasted. This scenario compelled to keep persons with disabilities isolated voluntarily or involuntarily. Persons with disabilities have twice the risk of developing conditions, such as depression, asthma, diabetes, strokes, obesity or poor oral health. It makes sense for industry and society at large to really lean in and find that talent (Campbell, 2022).

The barriers that exclude persons with disabilities from employment-related services and opportunities could be mainly categorized as social, economic, cultural and political. Among the main obstacles they face are discrimination, unequal access to education and training, inaccessible buildings, information and transport (Heron and Murray, 1997). This scenario leads to low self-esteem of the affected people. So, unless there is a supportive legal environment and ample policy support, disabled individuals become victims of circumstances.

Disability rates are significantly higher among groups with lower educational attainment in the OECD countries. On average, 19 per cent of less educated people have disabilities, compared to 11 per cent among those who are more educated (United Nations Department of Economic and Social Affairs, 2023).

*The main barrier in generating employment for vulnerable groups, especially in underdeveloped regions, is the lack of accurate data, and systems for training support and continuous monitoring.*

The type of job for which a disabled person is suited may be influenced by the above-mentioned categories of disabilities. However, as far as employability and productivity of the worker is concerned, these factors may be less important than his or her knowledge, skills and general abilities when it comes to performing a job (Heron and Murray, 1997). This is the result of the common negative perception about persons with disabilities in society. Employers look for the perfect person to recruit for all kinds of jobs, although some jobs could be successfully performed by persons with disabilities if they are assigned to the right job. It is more likely that uneducated or unskilled semi-abled or disabled people are unemployed. It is also possible that workers with a disability have long been underemployed even if they find a job after getting the required qualifications and skills.

The general perception of the employer about an employee with a disability is that the organization is extending a favour to persons with disabilities by hiring them, even though they can be more productive than other staff member provided they are assigned a suitable job under well thought out working arrangements. Similarly, a person who cannot walk employed as a software developer may work more hours consistently than an abled worker. A lot of people have presumptions about what

people with disabilities are able to do. Such biases can be pronounced in the distribution and logistics industries because the jobs often require lots of physical work and facility operators tend to be metrics oriented. This has resulted in a stigma about persons with disabilities that they cannot keep up, and consequently, it will have a negative impact on the organization. According to Campbell (2022), it's just the complete opposite, especially with people with invisible disabilities.

The real problem in generating employment for vulnerable groups, especially in underdeveloped regions, is the lack of accurate data and systems for providing training support and conducting continuous monitoring. The ability of these vulnerable groups to create and develop income generating activities – self-employment or wage-employment – could improve their living conditions (NHREP-SL, 2023). Another recurring issue is the lack of proper education. A person without a leg could be equipped with an artificial leg at any time but for a disabled person, lacking a basic education at childhood could be an added disadvantage. Excluding persons with disabilities from attaining an education due to the inability to travel. makes them more disabled. It is more serious than having been physically handicapped as it keeps them away from all future opportunities. Accordingly, those who guide persons with disabilities have a duty and responsibility to identify the best fit job for respective individuals and transform them through the education and training pathway at the right time. This requires social awareness about how to map the strengths and weaknesses of each person against the opportunities and threats at hand relevant to them.

## **2.4 POLICIES AND BEST PRACTICES**

Similar to women's empowerment efforts, governments, industries and employers have introduced policies or published formal statements that express their principles on diversity and/or non-discrimination in the workplace specific to hiring workers with disabilities. Below are some examples of how different countries approach this issue.

### **2.4.1 Afghanistan**

The Afghan Disabled Union takes a rights-based approach to enhance disability awareness and offers self-advocacy training for landmine survivors and other people with disabilities. It also provides vocational training, income generation programmes and microfinance to disabled Afghans. The Union has produced a list of qualified persons with disabilities for employment, which is available upon request from employers.

### **2.4.2 Bangladesh**

An estimated 3.29 per cent of the men and 2.34 per cent of the women in Bangladesh have some form of a disability and most among them are physically challenged. Although almost all of them enroll in primary education at the national level, only 40.55 per cent of the children with disabilities can go to school (Islam and Tajmim, 2022). Bangladesh Protibandhi Kallyan Somity (BPKS) is an organization for persons with disabilities that works to ensure equal opportunity and equal treatment for person with

disabilities regardless of the nature of their impairment. Its training programmes assess individual needs and from them, a detailed plan of services is developed.

### 2.4.3 China

Some countries encourage employing persons with disabilities through a quota system. China implemented the employment quota system in 2008, requiring public and private employers to reserve no less than 1.5 per cent of job opportunities for persons with disabilities. Employers that do not meet the quota must pay a fine to the Disabled Person's Employment Security Fund. The "guakao" phenomenon has emerged. That means, some companies employ disabled people without giving them actual work to complete, while other companies report paying the fine rather than complying with the quota and justify this by saying that finding candidates is a challenge (Vernon, 2018).

The China Disabled Persons' Federation facilitates links between government, society and persons with disabilities. For employers, the Federation offers disability awareness training, assists with job placement and provides funds and technical support for workplace accommodations and on-the-job training. It also provides vocational training in areas, such as information technology, sewing and tailoring, and can customize training to suit a particular employer's needs (Perry, 2007). Working in partnership with the Shanghai Disabled Persons' Federation, Panasonic China employs hundreds of workers with a range of disabilities throughout its 30 factories. As a result, Panasonic is exceeding the Government's quota for hiring workers with disabilities. Eliminating the levy assessed for not meeting the quota and gaining a competitive edge in the labour market are two advantages of the recent initiative of Panasonic to hire more workers with disabilities.

### 2.4.4 India

In 2017, the country's quota to hire persons with disabilities was raised from 3 to 4 per cent for government jobs and from 4 to 5 per cent for educational institutions. Penalties of up to Rs 500,000 (\$7,750) and potential imprisonment if the Disability Law is applied if not followed accordingly. However, there is no quota in place for private sector employers (Vernon, 2018). The Persons with Disabilities (Equal Opportunities, Protection of Rights and Full Participation) Act, 1995 came into enforce on 7 February 1996. The Department of Personnel and Training establishes a policy on promoting persons with benchmark disabilities in government posts, fixing 4 per cent of the total vacancies of the workforce within certain employment groups. The Association of People with Disability in India empowers people with disabilities to become active contributors to society. It helps employers make workplace accommodations to create a barrier-free environment, matches workers with disabilities to jobs and provides disability-awareness training (Perry, 2007). The National Centre for Promotion of Employment for Disabled People (NCPEDP) in India works towards creating employment opportunities for disabled people covering all of India.

#### **2.4.5 Indonesia**

According to the Act of the Republic of Indonesia Number 4, of 1997, concerning persons with disabilities, every person with a disability has the right to obtain (a) an education in all units, programmes, types and levels of education; (b) employment and a standard of living, befitting for human beings according to their disabilities, education and abilities; (c) equal treatment to participate in national development and to enjoy its output; (d) accessibility for their life independence; (e) rehabilitation, social assistance and social welfare standard maintenance; and (f) equal rights to encourage talents, abilities and social life, especially for children with disabilities living in their family environment and community (Disability IN, 2023). The Directorate of Social Rehabilitation and Services for persons with disabilities provides social rehabilitation and vocational rehabilitation services for persons with disabilities throughout Indonesia. Vocational training is offered in tailoring, welding, computers, handicrafts, automotive repair and carpentry.

#### **2.4.6 Japan**

Japan also applies a quota system for hiring persons with disabilities. Fines are taken from companies that do not meet the quota and are given to companies that meet the quota to help cover costs incurred through the employment of persons with disabilities. The Act on Employment Promotion of Persons with Disabilities was approved in 2005. Japanese ministries were recently found fabricating data regarding the number of disability hires made.

#### **2.4.7 Republic of Korea**

The Korean Employment Promotion Agency for the Disabled is the government agency that administers the country's employment quota system and provides job matching services to assist employers find qualified workers with disabilities. The Agency offers hiring incentives and partners with employers to assist in meeting labour needs. In addition, it provides customized training to meet specific employer requests, job coaching for certain populations of disabled persons, advice on workplace accommodations and funding for assistive technology and devices.

#### **2.4.8 Malaysia**

The Department of Labor handles the affairs and the welfare of the national workforce, which includes promoting the employment of persons with disabilities. For employers interested in hiring workers with disabilities, it offers an online registration service for job seekers and assists with job matching (Perry, 2007). The Malaysian Association for the Blind provides services to blind and visually impaired persons and the employers hiring them. It offers training for blind people between the ages of 16 and 45 at various locations. The Association's Job Placement Unit carries out job opportunity surveys with employers to assist them in filling positions with qualified blind job seekers.

#### **2.4.9 Mongolia**

The Labor and Social Welfare Service Office supports employers that hire persons with disabilities and implements the country's disability employment quota. Its primary goal is to implement the Mongolian legal framework for employment promotion, vocational training and social welfare services. The Office offers training in labour and occupational safety and health, monitors and evaluates activities of the local Labor and Social Welfare Service Offices, provides job counselling and job placement services, and entrepreneurship and vocational training to persons with disabilities.

#### **2.4.10 Nepal**

An estimated 7-10 per cent of the total population in Nepal have disabilities of one form or another (Panthi, 2004). The National Association of the Physical Disabled-Nepal (NAPD-Nepal) advocates and lobbies for social partners working on disability issues. It helps strengthen partner organizations and offers training to physically disabled people in vocational skills, such as tailoring, painting, secretarial services and cosmetology, counselling, access to assistive technology, capacity-building and leadership skills.

#### **2.4.11 Pakistan**

It is estimated that nearly 6.2 per cent of the people of Pakistan have some form of disability. The Association for the Rehabilitation of Challenging People develops skills-training programmes and community-based rehabilitation programmes for persons with disabilities and assists in matching trainees to available jobs. The Association also offers disability awareness trainings for employers and assists them in making proper workplace accommodations. The Special Talent Exchange Program is a cross-disability organization conceived and launched by persons with disabilities to mobilize workers with disabilities and job seekers with disabilities across Pakistan through capacity-building at the grassroots and state levels.

#### **2.4.12 Singapore**

The country does not have a quota to legally ensure corporations hire people with disabilities. The Government, however, offers incentives to lower the cost for apprenticeships, workplace modification and job redesign and support to accommodate hiring persons with disabilities. These incentives appear to be effective. According to the Disabled People's Association Singapore, "the employment opportunities for people with disabilities in Singapore have increased in the last two decades because of strong economic development" (Vernon, 2018). Bizlink, a local non-governmental organization, has a mission to promote the integration of people with disabilities into mainstream society through open and sheltered employment. Bizlink offers employers job-matching services and consultations on job and building accommodations, disability awareness training, employee counselling and follow-up services after an employee has been hired.

### 2.4.13 Sri Lanka

The Employers' Federation of Ceylon has introduced the Code of Practice on Managing Disability Issues at the Workplace to the media and a group of more than 200 employers, government officials and civil society representatives (Vernon,, 2018). It promotes employers' interests and provides a wide range of direct services to its members, including special services to build awareness and promote the hiring of persons with disabilities through its Employers' Network on Disability. From the corporate sector, CEI Plastics, which operates shifts 24 hours a day, has fully integrated persons with disabilities into its range of assembly and manufacturing lines.

### 2.4.14 Thailand

Thailand offers an unconditional disability allowance for all registered persons with disabilities regardless of age. The Bureau of Empowerment for People with Disabilities oversees the employment quota system in Thailand and maintains a list of disabled job seekers. The Bureau assists employers in finding disabled job seekers in Bangkok and can refer employers to local provincial offices of the Ministry of Social Development and Human Security to identify job seekers throughout the country.

### 2.4.15 Viet Nam

The Department of Labor and Employment oversees 170 employment service centers around the country that list employers' job openings. Many of the centers also offer vocational training for persons with disabilities and can customize vocational training according to labour force and employers' needs. The corporate sector also has linked up with the Government in this regard. For example, a contract footwear factory of Chang Shin in Viet Nam has been promoting employment for persons with disabilities since 2001; it started a one-year trial programme for disabled employees wanting to work full time and began helping to integrate employees with disabilities more fully into society as respected citizens (Perry, 2007).

## 2.5 RECOMMENDATIONS FOR COUNTRY-SPECIFIC GUIDELINES AND BEST PRACTICES TO INCREASE THE PERSONS WITH DISABILITIES WORKFORCE IN THE TRANSPORT SECTOR

Under the Convention on the Rights of Persons with Disabilities<sup>1</sup> there are eight guiding principles:

- Respect for inherent dignity, individual autonomy including the freedom to make one's own choices, and independence of persons.
- Non-discrimination
- Full and effective participation and inclusion in society

---

<sup>1</sup> See A/RES/61/106

- Respect for difference and acceptance of persons with disabilities as part of human diversity and humanity.
- Equality of opportunity
- Accessibility
- Equality between men and women
- Respect for the evolving capacities of children with disabilities and respect for the right of children with disabilities to preserve their identities. stop

Based on the above-mentioned principles, the following guidelines are proposed.

- The condition of a person with a disability is always a subjective matter. All human beings have some disabilities for that matter. The disadvantage to society begins when a disability is considered as a weakness. There is a social responsibility to convert those weaknesses (disabilities) to strengths. For example, human beings cannot fly. That disability led people to innovate the airplane or the helicopter.
- It is necessary to understand and build empathy about the feelings and constraints persons with disabilities face when dealing with the world and to be genuinely interested in assisting them.
- It should be accepted that persons with a disability are also ordinary human beings. Their disability factor comes second, and their inherent disability is not their problem. Nobody wants to be born with a disability and individuals with disabilities are not all the same.
- Develop a mechanism to scan personal attributes of persons with disabilities, such as their skills, interests, knowledge, ability and talents. See the person first, not the disability; listen to the person behind the disability; encourage decision-making to promote independence for persons with disabilities; and promote disability inclusivity (Nurse Next Door, 2023). Persons with disabilities can make their own decisions but can be helped by persons who are in a better condition than them. Accordingly, they want to be consulted on matters affecting them. Refer to figure 3: Type of disabilities; it maybe it is easier to assess the state of a disability more logically. Long- term and short-term disabilities should be identified clearly. A short-term disability is one that puts a person out of work temporarily, such as an injury, illness or procedure. (Disabledperson Inc., 2023).
- Enhance the employability of persons with disabilities. Identify the skills gap or the structural mismatch between the nature of the skills persons with disabilities have to offer and those required by the labour market under general terms (European Commission, 1998).
- The lack of data concerning changes in the labour market situation of persons with disabilities is a serious issue. Governments need to take steps towards forming exclusive statutory bodies to improve this situation. A more comprehensive database needs to be set up to improve the availability and accessibility of data on persons with disabilities and make accessible data on

vocational training facilities available for them and on their demand for jobs.

- Special concessions could be offered to firms that employ persons with disabilities, such as tax concessions, exemption from statutory payments, financial assistance to improve physical facilities for these persons and other incentives to motivate employers to engage persons with disabilities. Disability needs to be mainstreamed into development cooperation, and through this, in development practices (NHREP-SL, 2023).
- Adjust work organizations to the needs of individuals with disabilities and recreate suitable jobs for people with disabilities. Industries must recognize the potential of disabled or semi-abled people to the global economy. These people should not be dependent on abled people. Except for very few of them, persons with disabilities can contribute to global production in some way.
- The evolving technological advancements, which are resulting in the elimination of manual, routine and repetitive work, have a positive impact on persons with disabilities. Accordingly, Development of innovations should be encouraged using the evolving technologies that facilitate new job opportunities for persons with disabilities.
- Industries and business cultures are evolving. This, consequently, leads to changes in hiring practices. Discrimination against persons with physical disabilities will not be a big obstacle in future (Disabledperson Inc., 2023). The message about the prospects and welcoming job opportunities for disabled employees should be constantly conveyed, as this would encourage them to get the necessary education and skills to qualify for jobs.
- Bridge the skills gap by modernizing education and training systems and equipping them to take advantage of new job opportunities. Encourage persons with disabilities through prospective career development by developing a structure of incentives. There's nothing like the satisfaction of putting abilities to the test in a workplace. No matter what type of disability a person may have, there could be jobs that suit his or her abilities, experience, and skills, and can be performed by them. Companies are beginning to recognize the unique strengths of persons with physical limitations. Better yet, the laws are being adapted to match this culture.
- Facilitate, through a policy approach, startup micro or small enterprises run by persons with disabilities. In this exercise, the government and non-governmental organizations can help them by providing initial capital and other forms of commencement assistance. Training in microenterprise management is of extreme importance to them. Young people, in particular, can be motivated to become owners/proprietors of such ventures. Promotion of self-employment, particularly through microenterprise development, would be invaluable in creating employment opportunities for persons with disabilities. New partnerships with civil society and community-based organizations should be formed to enhance community development and social well-being.
- Build an equal opportunity framework and establish an equal treatment culture

for persons with disabilities not a one-time activity; it should be a long-term management process.

- An enabling physical environment needs to be created for persons with disabilities to enable them to access and participate in vocational training. Measures should be taken to improve institutional responsiveness to the needs of the persons with disabilities and to create a supportive environment in the workplace for them. Awareness training also needs to be initiated among persons with disabilities, their parents and their caregivers on the benefits of participating in training and employment of them.
- Persons with disabilities should not be engaged in carrying out hazardous activities. Such jobs for them should be eliminated on a priority basis through awareness-raising, legal education and coordinated multi-disciplinary collaboration involving the government, employers, workers' organizations and civil society organizations.
- Persons with disabilities have consistently described how transportation barriers affect their lives in important ways. With that in mind, travelling is an extremely important policy issue for persons with disabilities.

Developing a positive mindset among persons with disabilities is easier said than done. Persons with disabilities are generally vulnerable to discrimination especially when looking for a job. If every employer looks for only abled people, persons with disabilities will not have a chance because there is always unemployment even among those who are physically fit. The attitude of employers towards persons with disabilities needs a paradigm shift. On the other hand, not all employers can employ persons with disabilities for charity and the outcome should be a win-win situation. They must get a return on investment in their respective businesses. Taking a systematic and strategic approach would be key.

### **2.5.1 Specific guidelines for employers**

As the status of a disabled or less abled person is highly subjective, it is usually unfair to treat them with a uniform approach or generalize about their issues without carrying out a detailed evaluation. It may be difficult to judge or compare two less abled persons based merely on external observations. There is also the possibility that there could be different skill levels in certain activities because some persons with disabilities are highly capable in using their "able" parts of the body. This is a natural phenomenon.

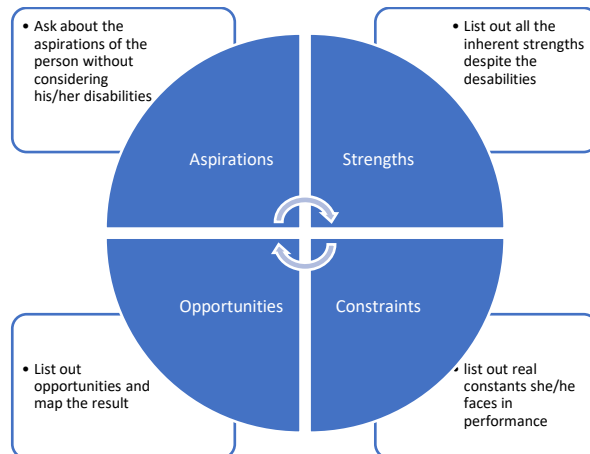
Usually, in a job interview, a panel compares the candidates with a common threshold about their physical and mental abilities. In fact, this is one of the main purposes of calling candidates for a physical meeting prior to the recruitment. This, however, may not be possible when considering persons with disabilities.

First, it is unfair to compare them using the same threshold used for abled persons. Second, the affects or status of the disability of a person with a disability may vary from person to person. For example, the abilities of two persons with defective hands

may differ. Accordingly, the recruitment scanning process should be done by a panel of experts and the respective person with a disability is the best individual to declare his or her abilities in detail. In addition, it may be advisable to conduct a detailed analysis about their real strengths and weaknesses. The observations can be subsequently mapped with opportunities and threats in the working environment before making a job selection. The simple SWOT model, which is used when selecting abled people for recruitment can also be used under these conditions for recruiting persons with a disability.

The Community Business Bureau (CBB), however, suggests applying a more suitable evaluation tool for persons with disabilities (CBB, 2023). In a SWOT model, the strengths and weaknesses of persons are looked at in terms of the organization’s internal perspective. For example, the strengths and weaknesses of a person in terms of interacting with an organization’s staff, systems, technology, products/services and marketing. A SOAR model stands for strengths, opportunities, aspirations and results. Usually, this model is used with a disability services client by CBB. Combining both views, it is recommended to use a new model to assess the "able" characteristics of a semi-abled person. If the strengths and capacity of a person with a disability are not identified, he or she will have to deal with negative attitudes towards him or her and barriers of exclusion. This is why some persons with disabilities come to believe the negative stereotypes about themselves. As a result, they develop low self-confidence, and do not believe in their ability to take charge of their own lives.

**Figure 4: ASCO analysis**



Source: Author.

It is encouraging to note that the market is more welcoming to disabled job seekers. This way their capability, suitability, and adaptability to the organizational culture is reflected in the ASCO matrix. Each candidate is evaluated by using a single criterion under this method, leading to results that are highly objective and focused. Once relevant data are obtained, they can be mapped with the requirements of the organization, taking into account the obvious constraints person with disabilities face due to a disabled part of their body. Common careers in the transport and logistics sector are data analysts, consultants, supply chain managers, procurement officers and logistics managers. The sector also contains roles related to information

technology, business management, engineering, and statistics. The transition to working life may be uncertain for persons with a disability. It is the sole responsibility of the industry leaders to use the ASCO model and open suitable jobs for physically disabled people for mutual benefits.

## References

- Andel, T. (2012). Logistics employment free of “Disability”. Material, Handling and Logistics blog, 2 April. Available at [www.mhlnews.com](http://www.mhlnews.com):  
<https://www.mhlnews.com/chain-of-thought/article/22053746/logistics-employment-free-of-disability/>.
- Asian Development Bank (ADB). (2018). *Kazakhstan - Country Gender Assessment*. Manila: ADB.
- Campbell, C. (2022, 02 08). Disability inclusion programs help warehouses hire overlooked talent. Supplychain Dive, 8 February. Available at  
<https://www.supplychaindive.com/news/disabilities-jobs-supply-chain-distribution-centers-warehouses-labor/618435/>.
- Clear Law Institute. (2012). What Is unconscious bias training for employees and why it's essential. 15 August. Available at  
<https://clearlawinstitute.com/blog/2021/06/07/why-unconscious-bias-training-for-employees-is-essential/>.
- Community Business Bureau (CBB) (2023). SWOT and SOAR. 27 May, Available at  
<https://www.cbb.com.au/news/2020/05/27/swot-and-soar/>.
- Disability IN (2023). Indonesia. Available at <https://disabilityin.org/country/indonesia/>.
- Disabledperson Inc. (n.d.). The 7 best jobs for physically disabled people in 2021. Blog. Available at <https://www.disabledperson.com/blog/posts/>.
- European Commission (1998). Raising employment levels of people with disabilities: the common challenge. Commission staff working paper, 22 September. Available at <chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://www.independentliving.org/files/ec1550.pdf>
- European Commission (2018). *Business Case to Increase Female Employment in Transport*. European Commission.
- Food and Agriculture Organization of United Nations (FAO) (2023). FAO Lex Database. Kazakhstan: The Concept of Family and Gender Policy until 2030. Available at <https://www.fao.org/faolex/results/details/en/c/LEX-FAOC192054/>.
- Heron, R., and B. Murray. (1997). *Assisting Disabled Persons In Finding Employment*. Bangkok: ILO.
- Hodge, p. (2017, 10 03). how to increase support for individuals with disabilities in the transportation sector, getting hired blog, 3 october. available at [www.blog.gettinghired.com](http://www.blog.gettinghired.com): <https://blog.gettinghired.com/2017/10/how-to-increase-support-for-individuals-with-disabilities-in-the-transportation-sector>.

- International Labour Organization (ILO) (2019). ILOstat, economic activity (by sex). Available at <https://ilostat.ilo.org/>.
- Indeed (2023) 15 careers working to help clients with disabilities. 20 July. Available at [www.indeed.com: https://www.indeed.com/career-advice/finding-a-job/careers-working-with-disabled](https://www.indeed.com/career-advice/finding-a-job/careers-working-with-disabled).
- Islam, J., and T. Tajmim (2022). Number of persons with disabilities twice than previously assessed. Business Standard, 15 June. Available at [https://www.tbsnews.net: https://www.tbsnews.net/bangladesh/health/number-persons-disabilities-twice-previously-assessed-440522](https://www.tbsnews.net/bangladesh/health/number-persons-disabilities-twice-previously-assessed-440522).
- International Transport Forum (ITF) (2022). ITF work on gender in transport. Available at <https://www.itf-oecd.org/itf-work-gender-transport>.
- Maryville University (2023). Definitive guide to all-gender inclusion. Available at <https://online.maryville.edu/online-bachelors-degrees/liberal-studies/guide-to-gender-inclusion/#:~:text=Gender%20inclusion%20is%20a%20concept,define%20social%20roles%20and%20expectations>.
- New Zealand, Ministry of Women (2017). Labour force participation. Available at <https://women.govt.nz/women-and-work/labour-market-participation>.
- National Human Resource and Employment Policy – Sri Lanka (NHREP-SL) (2023). Employment opportunities for vulnerable groups, disabled persons and those in underdeveloped regions. Available at [https://www.nhrep.gov.lk/index.php?option=com\\_content&view=article&id=108&Itemid=59&lang=en](https://www.nhrep.gov.lk/index.php?option=com_content&view=article&id=108&Itemid=59&lang=en).
- Nurse Next Door (2023). 5 simple ways to empower a person with a disability. *The Caring Journal*. Available at <https://www.nursenextdoor.com.au/blog/5-simple-ways-to-empower-a-person-with-a-disability/>.
- Ng, W-S, and A. Acker (2020). The gender dimension of the transport workforce. International Transport Forum Discussion Paper. Available at <https://www.oecd.org/employment/the-gender-dimension-of-the-transport-workforce-0610184a-en.htm>.
- Panthi, M. (2004, 8 24). *The Disability Situation in Nepal*. Retrieved from [www.blindcanadians.ca: http://www.blindcanadians.ca/publications/cbm/22/disability-situation-nepal](http://www.blindcanadians.ca/publications/cbm/22/disability-situation-nepal).
- Perry, D. (ed.) (2007). *EmployAbility : a resource guide on disability for employers in Asia and the Pacific*. Bangkok: ILO.
- Stanford (2017). Conference report offers 10 actions Japan can take to address gender inequality. All FSI News, 28 March. Available at <https://fsi.stanford.edu/news/conference-report-offers-10-actions-japan-can-take-address-gender-inequality>

- Sustainable Mobility for All (2019). *Global Roadmap for Action Toward Sustainable Mobility - Gender*. Washington, D.C.: Sustainable Mobility for All.
- Trading Economics (2023). Sri Lanka labour force – female. *Trading Economics*. Available at [https://tradingeconomics.com/sri-lanka/labor-force-female-percent-of-total-labor-force-wb-data.html#:~:text=Labor%20force%2C%20female%20\(%25%20of,compiled%20from%20officially%20recognized%20sources](https://tradingeconomics.com/sri-lanka/labor-force-female-percent-of-total-labor-force-wb-data.html#:~:text=Labor%20force%2C%20female%20(%25%20of,compiled%20from%20officially%20recognized%20sources).
- Tong, G. (2022, 4 14). 3 ways hiring this “under-tapped pool” of talent can benefit Asia’s workforce. CNBC, 14 April. Available at <https://www.cnbc.com/2022/04/15/why-hiring-individuals-with-disabilities-can-benefit-asias-workforce.html>
- Turnbull, P. (2013). Promoting the employment of women in the transport sector- Obstacles and policy options. Working Paper No 298. Geneva: ILO.
- J. Lear, and H. Thomas (2013). Women in the transport sector. ILO Transport Sector brief. Available at [https://www.ilo.org/wcmsp5/groups/public/---ed\\_dialogue/---sector/documents/briefingnote/wcms\\_234882.pdf](https://www.ilo.org/wcmsp5/groups/public/---ed_dialogue/---sector/documents/briefingnote/wcms_234882.pdf)
- United Nations (2023), “Factsheet on persons with disabilities”. Available at [www.un.org:  
https://www.un.org/development/desa/disabilities/resources/factsheet-on-persons-with-disabilities.html](https://www.un.org/development/desa/disabilities/resources/factsheet-on-persons-with-disabilities.html)
- Vernon, K. (2018). Increasing Employment of People with Disabilities in Asia: Beyond Employment Legislation and Quotas. Impact x blog series, 29 November. Available at <https://www.communitybusiness.org/latest-news-publications/increasing-employment-people-disabilities-asia-beyond-employment>.
- World Health Organization (2011). *World Report on Disability*. Geneva.
- World Health Organization (2023). “Factsheet on Disability”. 7 March. Available at <https://www.who.int/news-room/fact-sheets/detail/disability-and-health>
- Women in Trucking (2023). “About us”. Available at <https://www.womenintrucking.org/our-staff>
- World Bank (2022). “Disability inclusion”. Available at <https://www.worldbank.org/en/topic/disability>