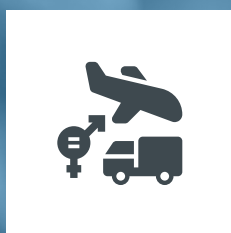


AUTHORS:

Genevieve Ankunda, Nikola Medimorec, Akshay Jamdade, SLOCAT

**SPOTLIGHT**

Gender-Responsive Approaches in Freight Transport in Asia

KEY FINDINGS



- The freight transport and logistics ecosystem is a vital, intricate network encompassing organisations, individuals and processes that facilitate the movement of goods from raw material sources to final consumers.
- Freight transport contributes greatly to a country's gross domestic product and employment, and is the backbone of global trade and economic integration.
- Despite its critical role in supporting economic growth, the freight transport sector remains heavily male-dominated, with significant gender disparities in employment and leadership roles that exacerbate gender inequality.
- Despite the significant limitations that women face in entering and thriving in the freight transport sector, some progress has been made in improving gender inequality in Asia's transport industry overall.
- Strategies for a gender-responsive freight sector include strict policies to address workplace sexual harassment and violence, and government subsidies or employer-sponsorship for inexpensive and good-quality childcare facilities – among many other policies that can be tailored to different country and employer contexts.
- The United Nations Economic and Social Commission for Asia and the Pacific highlights three fundamentals to enhance the inclusiveness of the freight transport sector in Asia-Pacific by promoting women's participation: 1) framing and implementing pro-active strategies and policies to widen women's role in the sector, 2) involving academia and the private sector to provide the required knowledge and skills to women; and 3) encouraging hybrid occupational models such as remote work and other innovations to motivate women to increase their participation in the sector.

Framing and implementing pro-active strategies and policies to widen women's role in the sector

- A key approach to widen women's role in the sector is to apply the principles of universal design to the design of freight transport vehicles and infrastructure.
- This includes incorporating features that enhance the safety and accessibility of public spaces and infrastructure, as these affect women's participation and experiences working as truck drivers, as delivery partners in the gig economy, and in facilities such as container freight stations and bus depots.
- Despite the notable gender gap in women's participation in the freight transport sector, the potential opportunities are tremendous. As of 2021, an estimated 2.6 million truck driver jobs remained unfilled across the Americas, Asia and Europe.
- Private sector involvement is required to effectively eliminate gender pay gaps and wage discrimination, enable labour and social protections, and strengthen corporate policies for handling grievances.
- In the private sector, as well as in public-private partnerships, it is important to highlight the financial and economic benefits of gender equality, in addition to its normative and moral imperatives.
- To improve their effectiveness, policy efforts must first be informed by extensive stakeholder engagement and input, followed by the building of institutional capacity for gender mainstreaming, and clear accountability practices.
- Network and industry associations have played a pivotal role in promoting and attracting more women to seek employment in the freight and transport industry.
- Encouraging hybrid occupational models such as remote work and other innovations motivates women to increase their participation in the freight transport sector.



Context, challenges and opportunities

The freight transport and logistics ecosystem is a vital, intricate network encompassing organisations, individuals and processes that facilitate the movement of goods from raw material sources to final consumers. This dynamic system integrates inter-dependent activities such as transport, warehousing, inventory management, and freight forwarding, engaging a diversity of stakeholders such as manufacturers, suppliers, distributors, logistics providers and customers. Advanced technologies – including transport and warehouse management systems, e-commerce, automation, artificial intelligence and blockchain – continue to shape the sector's evolution, as do innovations such as electric vehicles, autonomous trucks and hyperloop systems.¹ Understanding the role of gender-responsive approaches in this multi-faceted ecosystem is essential to foster inclusivity and optimise efficiency and sustainability.

Freight transport contributes greatly to a country's gross domestic product and employment, and is the backbone of global trade and economic integration. In 2023, freight transport accounted for an estimated 5-7% of global employment, while the wider logistics sector (covering transport, warehousing and storage) accounted for up to 10%.² In Asia, the demand for freight transport is projected to triple between 2020 and 2050, while urban freight demand could grow 3.7% annually between 2020 and 2050.³

Despite its critical role in supporting economic growth, the freight transport sector remains heavily male-dominated, with significant gender disparities in employment and leadership roles that exacerbate gender inequality. The share of women employed in Asia's transport and storage industries was 13.3% in 2023, well below the levels in North America (28.1%) and Europe (24.9%), and the second lowest share after Africa.⁴ Research in 2018 found that 6 of the top 10 jobs traditionally seen as "men's jobs" in transport were related to freight transport.⁵ These roles are often more secure and better paid, and they include drivers, airline pilots, security personnel, ship's officers, crane operators and harbourmasters. Meanwhile, the "top 10 roles for women" barely included any roles in the freight transport sector, in addition to being lower paid and precarious.⁶

The freight transport sector also has significant negative externalities, such as the high economic costs and health impacts associated with traffic delays and air pollution. Across Asia, urban freight accounted for only 15% of total freight activity in 2022 but contributed 43% of freight-related carbon dioxide (CO₂) emissions, due to frequent, small-batch deliveries in congested traffic.⁷ The need to decouple the projected growth in freight transport activity from the growth in emissions warrants the urgent involvement of all genders in developing effective equitable solutions.

Several regional and national frameworks seek to address the gender gap in employment in the freight transport sector;



however, challenges persist. These include: social and cultural barriers; perceived limitations in physical ability to handle goods or operate large commercial vehicles (often seen as male-dominated roles); personal safety and security risks; gender stereotypes and bias in education, training, recruitment and career advancement; and job loss or insecurity due to the roll-out of advanced technologies such as automation with limited consideration of the gendered impacts.⁸ Factors contributing to work-family conflict include rigid work schedules and long hours, long business trips associated with working in the sector, and the absence of family-friendly policies such as childcare support, flexible leave and adaptable shifts.⁹ Among world regions, women in Asia work the longest hours globally – averaging 7.7 hours a day, of which only 3.3 hours are paid and the rest is unpaid care work.¹⁰

Strategies for a gender-responsive freight sector

Despite the significant limitations that women face in entering and thriving in the freight transport sector, some progress has been made in improving gender inequality in Asia's transport industry overall. Examples at the national level include the Philippines' Magna Carta of Women and the Safe Spaces Act (enacted in 2009) and Kazakhstan's 2030 concept of family and gender policy. (See 1.5 Driving Gender Equality: Empowering Women and Transforming Transport.)

Strategies for a gender-responsive freight sector include strict policies to address workplace sexual harassment and violence, and government subsidies or employer-sponsorship for inexpensive and good-quality childcare facilities – among many other policies that can be tailored to different country and employer contexts. These are outlined in a 2024 handbook on Promoting a socially inclusive freight transport sector, published by the United Nations Economic and Social Commission for Asia and the Pacific (UNESCAP), aimed at governments, employers, and industry associations, among other key stakeholders.¹¹

UNESCAP highlights three fundamentals to enhance the inclusiveness of the freight transport sector in Asia-Pacific by promoting women's participation: 1) framing and implementing pro-active strategies and policies to widen women's role in the sector, 2) involving academia and the private sector to provide the required knowledge and skills to women; and 3) encouraging hybrid occupational models such as remote work and other innovations to motivate women to increase their participation in the sector.¹²

Framing and implementing pro-active strategies and policies to widen women's role in the sector

The freight sector, particularly urban freight, has been under-emphasised in many national climate and sustainable development strategies.

A key approach to widen women's role in the sector is to apply the principles of universal design to the design of freight transport vehicles and infrastructure. This includes incorporating features that enhance the safety and accessibility of public spaces and infrastructure, as these affect women's participation and experiences working as truck drivers, as delivery partners in the gig economy, and in facilities such as container freight stations and bus depots. Research shows that gender-responsive infrastructure, by adding female users, has the potential to increase the user base of a facility or service, thereby improving its financial outcomes rather than making it more expensive.

- ▶ Construction projects that account for accessibility and inclusion standards at the design phase add only an estimated 1% to the total project cost, compared to the much higher expenses of retrofitting.¹³
- ▶ A study in India found that female delivery workers using electric two- and three-wheeled vehicles were more likely to stay in their jobs if they had good-quality and safe charging infrastructure, with short waiting times, shaded spaces and waiting areas, and reliable technical information on how to use the chargers.¹⁴ The study also revealed that the female delivery workers preferred the less-heavy two-wheeled vehicles to the heavier models, pointing to the gendered effects of vehicle design.¹⁵
- ▶ The Philippines' Department for Transport integrated universal design principles into projects such as the North-South Commuter Railway Extension, including by providing accessible facilities like multi-purpose toilets, diaper-changing facilities in all restrooms and tactile paths for the visually impaired.¹⁶

Involving academia and the private sector to provide the required knowledge and skills to women

Despite the notable gender gap in women's participation in the freight transport sector, the potential opportunities are tremendous. As of 2021, an estimated 2.6 million truck driver jobs remained unfilled across the Americas, Asia and Europe.¹⁷ To support greater engagement, the UNESCAP



guidelines on empowering women in freight transport recommend integrated policies focused on industry-oriented education, higher education policy, and women's skills and entrepreneurship development.

- ▶ In Sri Lanka, the introduction of a suite of efforts – including the international logistics degree in 2007, the local logistics and transport degree in 2014, the education vertical integration strategy in 2017, and updates to school curricula – led to a more than 20-fold increase in demand for the Logistics and Supply Chain Management degree in the country between 2010 and 2019.¹⁸
- ▶ Logistics companies in China have created attractive work environments for women, with potential to climb the career ladder, through a combination of educational assistance, targeted recruitment programmes and motivational programmes on work-life balance.¹⁹
- ▶ In Japan, unconscious bias trainings are provided to minimise the impact of gender bias in the freight transport sector. Capacity building, including training women who return to the workforce after maternity leave, helps women develop and update their technical skills and improve their resource capacity.²⁰

Private sector involvement is required to effectively eliminate gender pay gaps and wage discrimination, enable labour and social protections, and strengthen corporate policies for handling grievances.²¹

- ▶ In 2023, Azad Foundation partnered with the European logistics company Baton Transport, under the Trucking for Equality initiative, to create dignified employment opportunities for women drivers by providing competent salaries (on par with male drivers), accommodation and social security.²² The company also invests in training women for work in the international job market; several women who received the training ranked among Baton's top drivers in 2023.²³
- ▶ In India's two- and three-wheeler industry, private sector initiatives include improving women's access to vehicles through tailored financial products, driver training and support with employment.²⁴

In the private sector, as well as in public-private partnerships, it is important to highlight the financial and economic benefits of gender equality, in addition to its normative and moral imperatives.²⁵ Gender-responsive financial reform should employ financial monitoring tools based on gender-disaggregated data and regular reporting to track progress on Gender Equality, Disability & Social Inclusion (GEDSI) targets.

- ▶ The Philippines' Department of Transportation (DOTr) links contractor payments to Gender Equality and Social Inclusion compliance, ensuring that contractors are financially motivated to meet gender goals.

To improve their effectiveness, policy efforts must first be informed by extensive stakeholder engagement and input, followed by the building of institutional capacity for gender mainstreaming, and clear accountability practices. Some good practices of this have been implemented in the passenger transport sector but can also be adopted for freight transport and logistics.

- ▶ In 2019, the International Transport Forum and the International Association of Public Transport (UITP) signed a joint agreement to strengthen women's employment in public transport by working with unions and employers in pilot cities. The organisations' "positive employer gender policy" identifies nine cross-cutting key elements for strong policies on women's employment and provides recommendations.²⁶

Network and industry associations have played a pivotal role in promoting and attracting more women to seek employment in the freight and transport industry.

- ▶ The International Transport Workers' Federation has a specific working sector on "Women", which advocates for equal rights, representation and opportunities for women in the transport sector.²⁷ This includes work related to freight transport and logistics, such as warehousing, railways, road transport, seafarers, dockers, inland navigation and aviation.²⁸

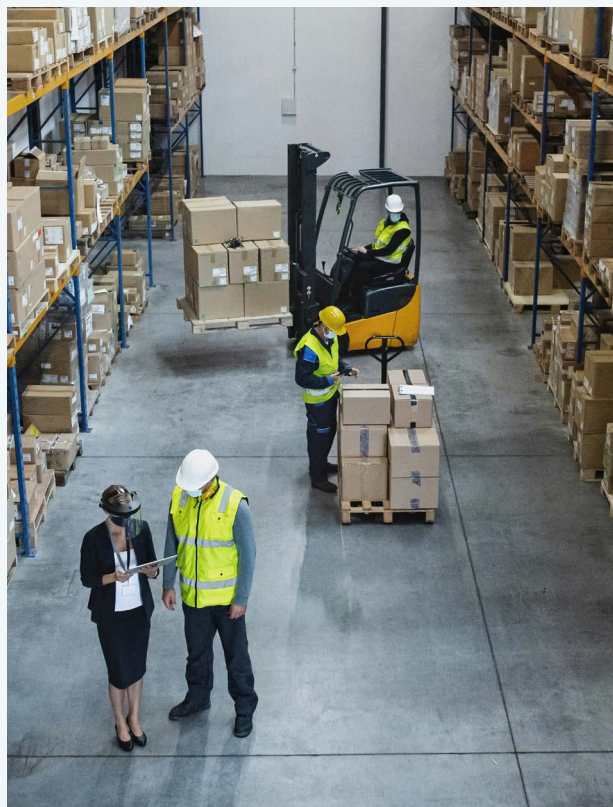


- ▶ The non-profit Women in Trucking Association aims to encourage women's employment in the trucking industry, promote their accomplishments and minimise the obstacles they face working in the industry. It hosts a careers centre that provides information on roles available across the sector, and also offers an online networking and career development tool that helps women in the sector find, connect and share experiences with others.²⁹
- ▶ The Women in Logistics and Transport network, launched in 2013, boasts more than 2,000 members in 20 countries across Africa and Asia. The network seeks to promote the status of women in logistics and transport, to bring together those who support women's talent and career development, and to provide a support network and mentoring opportunities for women in the sector.³⁰
- ▶ The Women's International Shipping & Trading Association (WISTA International) works globally to connect more than 3,800 female executives and decision makers from all sectors of the maritime industry. Its mission is to attract and support women, at the management level, in the maritime, trading and logistics sectors through: minimising the existing gender leadership gap; building a community by facilitating the exchange of contacts, information and experiences; promoting business relationships; facilitating professional development; and liaising with related institutions and organisations worldwide.³¹

Encouraging hybrid occupational models such as remote work and other innovations to motivate women to increase their participation

Encouraging hybrid occupational models such as remote work and other innovations can motivate women to increase their participation in the freight transport sector.

- ▶ India has the highest share of female pilots globally, which is attributed to progressive work policies such as flexible work contracts, maternity leave and provision of childcare facilities. Although these efforts are in the passenger sector, similar policies can be replicated in freight transport, and beyond aviation.³²
- ▶ In Singapore and the Republic of Korea, employers have prioritised care centres and kindergartens at workplaces; proper leave systems and office protocols; and flexible work schedules that allow women to balance parenthood and work.³³
- ▶ The Government of Singapore subsidises businesses for upgrading their virtual infrastructure to accommodate remote work.³⁴



Partnerships in action

- ▶ The NDC Transport Initiative for Asia (NDC-TIA), supported by the International Climate Initiative (IKI) and implemented by several national and international partners, aims to facilitate a shift to zero-emission transport across Asia.³⁵ The programme supports partner countries China, India and Viet Nam to develop comprehensive decarbonisation strategies and solutions to implement them.³⁶ The second phase of the programme will have a focus on women in freight transport in Asia.³⁷
- ▶ The Women on the Move – Transforming Transport in Asia network, launched at Transport and Climate Change Week in 2021, connects women across Asia from different backgrounds to exchange their experiences of working in the transport sector. The network aims to increase the number of women working in the sector and hosts a mentorship programme to advance this objective.³⁸
- ▶ The network Supporting Women as Leaders and as Employees is being established by the World Bank and its development partners – the Asian Development Bank, the European Investment Bank, the German Agency for International Cooperation (GIZ), and the International Transport Forum – to promote women's employment in transport. The network will initially be launched in the Europe and Central Asia region and the Middle East and North Africa region, then potentially expanded over time based on the initial lessons learned.

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SPOTLIGHT ON GENDER-RESPONSIVE APPROACHES IN FREIGHT TRANSPORT IN ASIA

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