



POPULAR TRANSPORT EXPLAINERS

Economics of two & three-wheelers



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Throughout the Global South, popular 2- and 3-wheeled (2&3W) transport provides millions of people access to mobility without relying on private vehicles to meet their daily accessibility needs. These modes of transport bring millions to their workplaces and create work opportunities for numerous individuals. Beyond generating income, the presence of 2&3W vehicles in urban areas fosters the growth of small businesses. For instance, [passengers and drivers typically stop at stations](#) to shop before continuing to their destinations, creating an [ecosystem of livelihoods](#) including drivers, food vendors and hawkers, waste pickers, mechanics, scrap dealers, etc.

This explainer shows how 2&3W in the Global South not only move people but also contribute to livelihoods and local economies. In addition, it will explore characteristics related to their operations and business models, including sometimes challenging working conditions, and how, if improved and strengthened, they could benefit users, operators, the transport system, and local economies. Finally, it will suggest considerations for designing policy and planning to boost the popular transport sector and make it more just, efficient, and resilient.

Key Trends

There is an interplay of transportation, trade, technology, and unique challenges and opportunities for workers in this vital industry. Key trends include:

1. Popular Transport as an Income source

Popular transportation is a source of work for millions globally. While reliable and recent [data on these livelihoods is scarce](#), statistics that do exist highlight how extensive popular and informal transport is as a source of work:

- In Dhaka, Bangladesh, it is estimated that popular transport generates around 30% or more of the total jobs in the city (Cervero, 2000). About [1,760,000](#) people's livelihoods depend on autorickshaws (Hossain et al., 2018).
- In Uganda, the boda-boda industry—with [120,000](#) operators reported in 2013—was the second largest employer after agriculture (Spooner, 2017). A study on the boda boda industry shows that 1.7 million people, or 7% of the Ugandan population, received part or all of their livelihood from the boda industry (Howe, 2003). Similarly, 25% of the population of the greater Kampala area directly depends on the boda industry for income (Mukwaya P. I., Kasaija, Mbabazi, Kisembo, & Nakanjako, 2022).
- In India, about 90% of the workers in the transport sector work informally, and informal transport workers comprise 4.5% of the total national workforce. In Delhi, about 6.6% of migrants are informal transport workers. About 48% of independent workers own the vehicles they use to work (Govindan Raveendran, 2018). In India, it has been estimated that there are 8 million auto-rickshaws and about 2 million cycle rickshaws providing transport and employment in rural and urban contexts (Gupta & Fedirko, 2020; PT, 2013).

2. 2&3W Connects Commerce and Commutes

There is a close link between trading and transport. Hawkers and vendors rely on high pedestrian flows to support their daily livelihoods. This concentration of foot traffic naturally occurs near major transit hubs—busy streets, station entrances, and terminals—where both formal (e.g., buses, rail) and popular (e.g., 2&3W vehicles, shared taxis) modes of transport intersect. For instance, a study at the [Baclaran LRT Station](#) in Metro Manila, Philippines, revealed a strong relationship between drivers, operators, and vendors. Official estimates indicate that 1,000 to 3,000 vendors earn a living around this station alone. These vendors benefit from constant foot traffic as travelers wait for, disembark from, or transition between various transport services.

A similar pattern emerges in Nallasopara, Mumbai, where a SPARC study [visualises](#) how mass transit, street vending, and popular transport services—especially shared auto rickshaws—mutually reinforce each other's economic viability. Passengers often stop to shop or purchase food, boosting vendor sales. Meanwhile, drivers benefit from an easily accessible customer base near vending clusters. This interdependence underscores how transport nodes function as focal points for commerce, creating economic ecosystems that support both commuters and local entrepreneurs.

3. New Technology Boosts Earnings and Safety

Digital tools have impacted the popular transport sector's business models and economic dynamics by optimizing operations, fare transparency, mapping and planning routes, enabling digital payments, and providing access to easy loans. For example, in 2010, Tugende Ltd, a digital platform, launched "Own Your Own Boda," enabling drivers to work toward ownership by building a digital credit profile from their daily earnings to ease the filling of the credit gap. (Mukwaya D. I., Kasaija, Mbabazi, Kisembo, & Nakanjako, 2022). In East Africa, there is a significant increase in ridership for drivers using mobile apps, and they report earning 29% more than drivers under more traditional modes of operation (Marin et al., 2023).

In many places, digital platforms have also changed the trip distribution and territorial notions previously established by traditional 2&3W popular transport systems. In conventional systems, ride distribution is usually allocated on a rotating basis among drivers in the same territory. Digital platforms, on the other hand, use GPS tracking systems to assign riders, extending the potential customer base beyond what a driver can see. This represents a departure from their traditional mode of operation, allowing them to operate independently of the waiting system. A study done in Jakarta showed that most smartphone users rely heavily on Gojek, a ride-hailing platform (Medeiros et al., 2018), which might drive traditional operators to use digital platforms to supplement their income from street hail and rank trips.

Further, women's work decisions are highly impacted by mobility. Many women face sexual harassment or assault on public transport, which may deter their economic participation altogether. Technological solutions like ride-hailing apps provide women with safer, more convenient, and more flexible mobility options, increasing their access to employment opportunities and better-quality jobs (Sodhi, 2024). Approximately 25% of women riders report that these apps have enhanced their sense of independence. Additionally, one-third of women in India and South Africa share this perspective (IFC; Accenture; Uber, 2018). In Latin America, Uber has found that women comprise a majority of its Uber Moto ridership, pointing toward the contributions that platforms can bring to improving security and autonomy through 2-wheel popular transport.

Besides the safety provided by the apps, there has been a huge demand for women drivers, as 44% of women users say they are more likely to use the apps if they can opt for women drivers (IFC; Accenture; Uber, 2018). As a result, [projects that focus on employing female drivers](#) in this traditionally male-dominated industry are becoming increasingly popular.

Key Challenges

Hurdles for workers in this industry include limited access to loans, lack of employment rights, and risks in an unregulated environment. Key challenges include:

1. Inadequate Regulation and Lack of Public Investment

Although running a public service that benefits and supports local economies, popular transportation modes are privately operated, with little or no investment from authorities. This reliance on private operations significantly affects their business models and services. As a result, it can be challenging to deliver high-quality services while ensuring fair working conditions and reasonable prices for users. Governments often do not recognize these services as legitimate or may impose heavy regulations. They may require standards that are difficult to achieve, especially since most operators are small- and medium-sized enterprises.

Additionally, there is a lack of support for these operators to help them comply with such standards, which often leads to higher levels of informality, with operators resorting to bribing authorities to continue operating (Whelligan & Spooner, 2017, p. 21) and the emergence of black markets to acquire permits (EPCA, 2019). These coping strategies elevate operation costs, ultimately impacting operators, workers, and users who rely on these essential services to mobilize.

2. Lack of Access to Financing

Due to the informal nature of their work and the lack of financial records, permits, or contracts to support their operations, popular transport workers often have difficulty accessing credit from financial institutions. As a result, they are frequently compelled to seek alternative sources of capital to purchase new vehicles or make repairs.

In India, for example, moneylenders have become the primary source of loans for popular transport operators. These lenders offer longer repayment terms but charge higher interest rates (Spooner, 2011). Ultimately, these moneylenders retain possession of the vehicle documents until the drivers repay their loans (Musil, Baffi, Bogey, Lannes, & Mene, 2022). These mechanisms support operation models where the vehicle must be in use many hours daily, resulting in long working hours (Whelligan & Spooner, 2017, p. 38).

3. Respect for Rights

Informal transport workers—ranging from drivers of 2- and 3-wheeled vehicles to loaders, porters, and dispatch assistants—often operate without formal licensing, registration, contracts or access to social protections. According to [WIEGO](#), this lack of formalization undermines their economic security and personal safety. In many instances:

- **Exposure to Harassment and Corruption:**

Without formal contracts or official registration, workers are more vulnerable to police harassment and demands for bribes. They also lack clear avenues for legal recourse when disputes arise.

- **Limited Access to Social Protections:**

While drivers in the formal sector may have some combination of health insurance, paid leave, or retirement benefits, informal transport workers rarely receive such coverage. As WIEGO notes, they are often excluded from social security systems due to their lack of legal employment status or the lack of access to social protections for independent workers.

- **Lack of Bargaining Power and Political Representation:**

Operating outside legal frameworks makes collective organization and negotiation more difficult. Without recognized associations or unions, informal transport workers struggle to advocate for fair wages, safe working environments, or public infrastructure investments that could benefit them (Spooner, 2011). This diminished political voice means that policy reforms often overlook their needs and contributions.

- **Gendered Challenges:**

Women transport workers face additional risks of harassment and marginalization, as they represent only a small fraction of the workforce. In some settings, cultural barriers or safety concerns further restrict their participation, perpetuating gender inequalities across the sector.

These factors illustrate how the informal status of transport workers not only jeopardizes their livelihoods but also narrows their opportunities for advancement.



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Policy Recommendations

Popular two- and three-wheeled transport services in cities across the Global South generate livelihoods for millions of people, stimulate local businesses, and offer flexible, low-cost mobility that complements formal transit systems. Despite these benefits, the sector still faces enormous challenges to continue to provide these services. By updating regulations, professionalizing operators, strengthening associations, recognizing their rights, improving access to finance, and formally recognizing these services in urban mobility planning, cities can unlock the full potential of 2&3W modes as catalysts for economic growth and more equitable, resilient transport ecosystems.

There are several ways in which policy can support and strengthen the livelihoods, economic impact, and business models of 2&3W popular transport services:

1. Update Regulations and Integrate Popular Transport Into Planning

Authorities should officially recognize 2&3W transport services as legitimate and essential modes of transportation. This formal recognition is crucial for integrating these services into city mobility planning. By acknowledging this sector, authorities can ensure it is included in policies and provided with a proper legal framework and institutional support. Such recognition would improve access to funding and enhance infrastructure, including parking facilities, charging stations, rest areas, and maintenance services. This, in turn, would strengthen business models and operations within the sector.

Experiences from around the world demonstrate the positive impact of better integration of popular transport services. For instance, in [Cape Town, South Africa](#), optimization of mini bus taxi routes has improved working conditions and livelihoods for workers. In [Uganda](#), pilot investments have made possible planning for new and improved routes, mainly benefitting women. [Montería, Colombia](#), has seen improved coordination of popular transport services with mass transit, benefitting both modes of transport's business models and reducing competition between them. In [Mexico City](#), the government has recognized, trained, and offered investment for popular transport

providers, enhancing their business capacity, quality of service, and livelihoods. These initiatives have significantly benefited local economies, workers, operators, and the broader transportation system by improving ridership and user satisfaction.

2. Professionalize the Popular Transport Sector

The recognition of 2&3W transport services needs to go hand in hand with supporting the professional development of their operators and workforce. Most successful transport operators globally are small and medium-sized enterprises. Therefore, authorities need to create policies and programs that enhance these operators' technical, financial, and business skills. This will improve their operations and reduce their chances of operating in a black market environment. To illustrate this point, consider the following examples:

- **Legal Support:** Authorities should provide legal advice to drivers so they understand how to operate their businesses legally and know their rights in cases of traffic incidents or fraud. Driver associations or unions can be valuable partners in spreading this information, similar to efforts in Benin (Spooner, 2011).

- **Census of Operators:** Conducting a census of popular transport operators can offer a clearer view of the sector's scale. This will help gather important data on vehicle types, their ages, and the workforce involved. Better data can enhance planning and policymaking and foster stronger relationships with operators, encouraging their participation in decision-making. Understanding the sector will also help identify specific needs and expertise within the city's transport system.
- **Practical Applications:** For example, in Bangkok, a registration initiative for motorcycle taxis in 2005 increased drivers' incomes by minimizing bribery and improving service quality (Oshima, Fukuda, Fukuda, & Satinnam, 2007). In [Mexico City](#), a census was conducted in 2021 to register popular transport operators, offering social security benefits for those who joined. Following registration, the city provided support and training to help these operators establish recognized transport companies, enabling them to upgrade their vehicles to comply with regulations.

3. Enhance Access to Finance for the Sector

Improving access to finance for the 2&3W sector is essential for advancing livelihoods and promoting economic development. One approach is creating tailored financial products, such as affordable loans with flexible repayment options and microfinance schemes, aimed specifically at small-scale operators who may not have traditional credit histories. To support this, efforts are underway to encourage financial institutions to collaborate with manufacturers and banks to reach out to new-to-credit customers, particularly vehicle owners.

In India, NITI Aayog, SIDBI, and RMI have proposed a comprehensive [guide](#) to facilitate and reduce the risks associated with financing electric 2&3W vehicles. This initiative aims to provide financial freedom to drivers by involving credible institutions to offer partial credit guarantees, thereby mitigating lending risks, reducing interest rates, and ensuring flexible repayment options. 



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