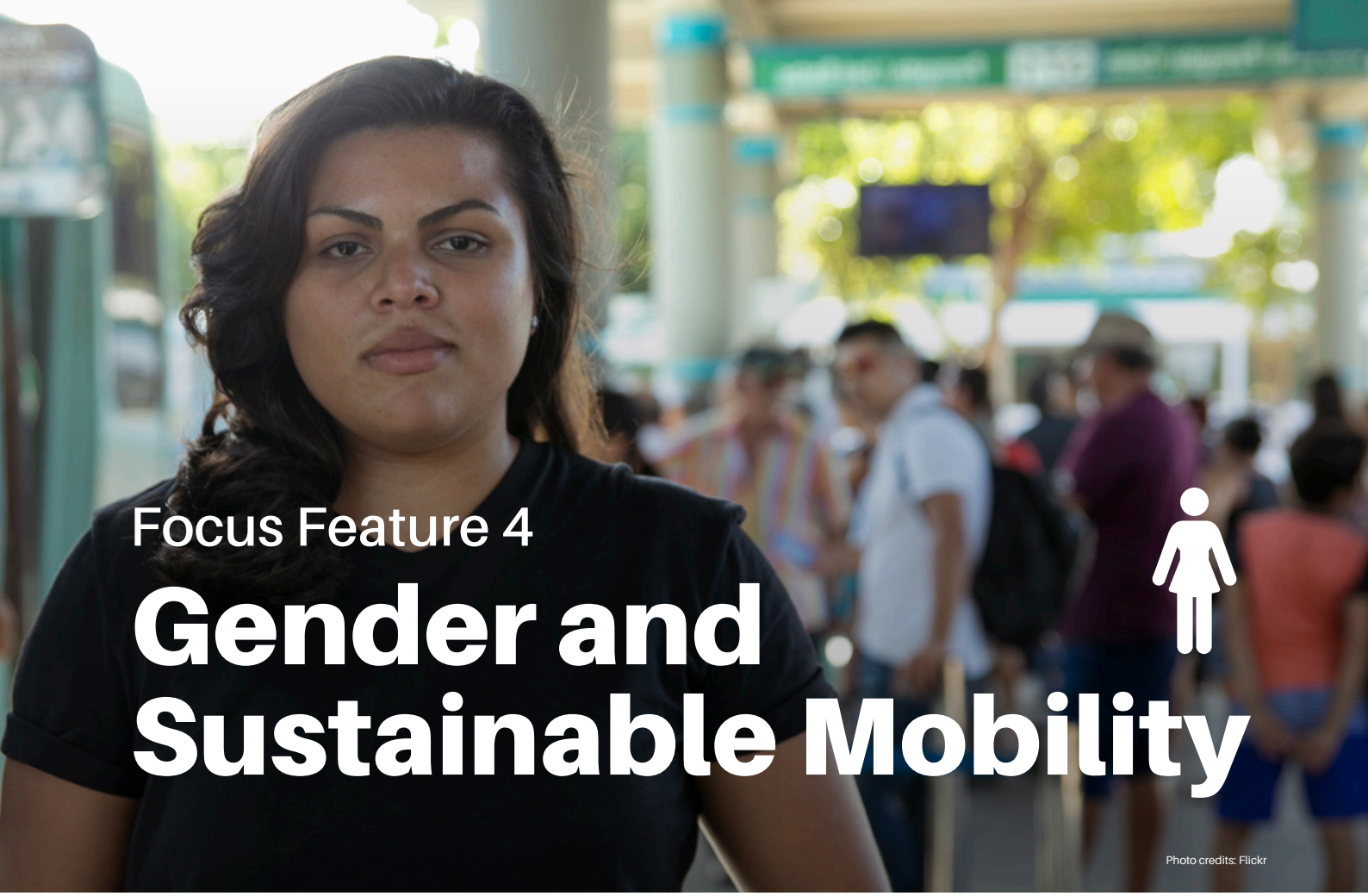

Focus Feature 4

Gender and Sustainable Mobility

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Why it matters

Women's mobility and collective action has huge potential to enhance the use of sustainable mobility and to help achieve low-carbon mobility targets. Evidence from around the globe demonstrates that women and men have different mobility patterns, needs and experiences.[1] Due to limited access to transport resources, women are also more likely to use more sustainable forms of transport. In many cities, women tend to take public transport with greater frequency than men, and also walk more.[2] India's 2011 census reported that 84% of women use low-carbon transport modes to travel to workplaces in urban areas.[3] Research also suggests that women's greater familiarity with varied trip patterns makes them more open to multiple and sustainable modes of transport.[4]

In turn, sustainable mobility can advance gender equality by broadening women's access to employment and education opportunities, participation in public life and women's right to the city. A recent study from the International Labour Organization showed that limited access to transport in developing countries was the greatest obstacle to women's participation in the labour market, reducing their probability of participation by 15.5 percentage points.[5] Recognising the crucial role of sustainable infrastructure in advancing gender equality, the 2019 session of the United Nations Commission on the Status of Women recommended the creation of inclusive transport.[6] To create more inclusive societies, efforts to achieve sustainable mobility should enhance the rights, dignity and capabilities of women. The first step is to identify and address barriers to women's mobility.

Barriers to women's mobility

Restrictive social norms – including gender roles, taboos, prohibitions, stigma and expectations – have been used as rationales to unfairly distribute resources and reinforce gender inequality, including in the transport sector.[7] Norms and attitudes on gender and mobility, such as the value assigned to care activities and whether or not women should be in public spaces, may affect access and use of transport modes.

Women face a complex interaction of financial, physical and socio-cultural factors.[8] Unsafe infrastructure, lack of physical distance, time poverty, limited information, skills, affordability and limited access to technology have been identified as key barriers to women and girls' mobility.[9] For example, a World Bank study showed that in Lima, Peru, women are more likely to make transport decisions based on safety.[10] In a UN Women study in Kigali, Rwanda, 55% of women reported concerns about using public transport to go to educational institutions after dark. Minority women face additional challenges and discrimination that affect their mobility options. In London, the under-representation of black women cyclists portrayed in the media and seen on the streets is a barrier for cycling for black women.[11]

Evidence suggests that women's decision-making power, self-efficacy and control of transport is more limited compared to men. Research suggests that men mostly have priority use of the family car or bicycle, even if women in the family have a greater need for it due to a more complex set of trips.[12] Women's ability to negotiate and control transport resources and budgets is limited not only in the household, but also within transport institutions and city planning offices, where women are overwhelming underrepresented in the work force, especially in decision-making positions. In the European Union, women make up only 22% of the transport sector workforce, and globally women represent only 18% of staff in infrastructure ministries, including energy, transport and communications.[13]

There is an untapped potential to transform these gender inequalities in mobility into opportunities to make women central actors in moving towards sustainable mobility.

Recommendations

In the last decade, the need to move away from gender-blind mobility has been recognised and has led to several calls for action, including an increase in research, documentation of practices, and strategies to enhance women's sustainable mobility.[14] Today, as cities respond to a health pandemic and rethink mobility policies, transport systems and public spaces, it is the perfect time to capitalise on gender-responsive sustainable mobility. Doing so requires a comprehensive and multi-pronged approach that addresses women's mobility challenges and mainstreams gender in sustainable mobility policies, plans and budgets. Failure to do this would be a missed opportunity for the environment and gender equality.

Recommendations for action include:

Governments and international community

- Ensure that mobility and urban policies and planning are gender-responsive and take into account the different needs of women and men.
- Conduct systematic assessments of the environmental *and* gender impacts of sustainable mobility and undertake gender analysis to understand the motivations, expectations and perceptions of different modes of transport and technologies.
- Engage equal participation and leadership of women, women's organisations and LGBTQI communities in policy dialogues and decision making relating to sustainable mobility.
- Incorporate a gender mainstreaming approach throughout mobility policies and transport infrastructure life cycles, especially during the investment and design stages.
- Identify and remove barriers to women and girls' access to sustainable mobility, such as space to physically distance from others on public transport, limited information, skills, unsafe infrastructure, stigma and discrimination.
- Ensure that progress in gender-responsive mobility is not undermined by budget cuts and austerity measures.

Civil society, environmental and feminist movements

- Raise public awareness of women's mobility needs with respect for local culture.
- Conduct safety audits of sustainable mobility investments to identify the safety needs of women and girls in and around transport systems.
- Promote an intersectional understanding and approach to sustainable mobility.
- Advocate for data collection on sustainable mobility, disaggregated by sex, age, ethnicity and race where possible in existing surveys and rapid assessments.
- Support sustainable mobility programmes for women and girls, racial minorities, and LGBTQI communities.

Transport operators / Private sector

- Set high-level and clear commitments to upholding inclusive and sustainable mobility.
- Strengthen the capacity of employees on gender and mobility.
- Continue to invest and collaborate with transport experts, women's rights organisations and female tech companies in the development of sustainable mobility solutions.
- Scale up investments in mobility infrastructure that is safe, affordable and gender-responsive.
- Monitor the uptake of different modes of transport with sex-disaggregated data and address accessibility barriers.
- Promote gender, race and ethnic diversity in marketing strategies.

Annex: Methodological Note

Data usage

Time period for data:
The report strives to utilise the most recent publicly available data and information just prior to the time of publication (as of 31 May 2021). The figures in the report were developed between September and December 2020 using the most recent data available.

Secondary data:
SLOCAT relies on secondary data and information collected and provided by SLOCAT partners and other entities and does not make use of any internal modelling tools.

Data on sustainable mobility: A call to action

The report benefits directly from data collected by a wide range of stakeholders working in different areas of transport.

Data are important for providing a comprehensive picture of the status of sustainable, low carbon transport and are essential for both policy and investment decision making. In these times of change, it is critical to upgrade data and policy collection and interpretation capacities to better understand progress and the hurdles that must be addressed.

The data limitations mentioned below are not new. Obtaining regular, reliable and public data across regions and transport modes remains an outstanding issue. When an increasing number of stakeholders are collecting data and policy information, more and better open-access data and capacity building efforts for data interpretation are supported by many multi-stakeholder partnerships in the sustainable, low carbon movement.

If you share our passion for open-access data and knowledge towards greater impact on policy and investment decision making worldwide and/or would like to contribute data or knowledge to our collective efforts on this report, **please reach out to the research team in the SLOCAT Secretariat at tcc-gsr@slocatpartnership.org**.

Specific data used in this report

Data on emissions

The data in this edition of the report point to the direct carbon emissions from transport activity; they do not cover the indirect emissions and land-use impacts associated with certain modes of transport. The report primarily utilises CO_2 emission data compiled in the Emissions Database for Global Atmospheric Research (EDGAR) from the Joint Research Centre of the European Commission, as this represents the most recent, comprehensive dataset on transport CO_2 emissions. However, this global dataset does not convey in full detail the unique situations of individual countries.

EDGAR provides estimates for fossil CO_2 emissions from all anthropogenic activities with the exception of land use, land-use change, forestry and the large-scale burning of biomass. The main activities covered are CO_2 emissions emitted by the power sector (i.e., power and heat genertion plants), by other industrial combustion (i.e., combustion for industrial manufacturing and fuel production) and by buildings and other activities such as industrial process emissions, agricultural soils and waste. Transport activities covered within EDGAR include road transport, non-road transport, domestic aviation, and inland waterways on a country level, as well as international aviation and shipping.[1]

For the world, regions and countries, the CO_2 emission data (provided by EDGAR) span through 2019. In a few places in the report, CO_2 data for 2020 are shown to illustrate the impact of the COVID-19 pandemic; however, these data are based on a different methodology than the EDGAR dataset and should not be compared directly with the data from previous years.

The latest CO_2 emission data for individual transport modes are for 2018 and have been compiled only at the global level. For passenger and freight transport, the data on global CO_2 emissions are for 2017, as this is the latest year with robust data. Data on passenger activity (passenger-kilometres) and freight activity (tonne-kilometres) – provided mainly in the country fact sheets – are based on the latest available year, as indicated in the report analysis.

Information on greenhouse gas emissions – provided in CO_2 equivalent (CO_{2eq}) – include not only CO_2 but also methane, nitrous oxide, and industrial gases such as hydrofluorocarbons, perfluorocarbons, sulphur hexafluoride and nitrogen trifluoride.[2] These data are less up-to-date. As of 31 May 2021, data on greenhouse gas emissions were not readily available for the period 2019-2020. In some cases, additional data sources were used to provide detailed information about other climate pollutants besides CO_2.

All data on CO_2 and other greenhouse gas emissions, as well as CO_{2eq}, are provided in metric tonnes.

Data on car ownership

Information on car ownership rates is based on a global dataset from the International Organization of Motor Vehicle Manufacturers (OICA), with the latest release (as of 31 May 2021) dating from 2015.[3] Although newer information is available for some individual countries, using these data would hinder accurate global comparisons. Data on passenger and commercial vehicle sales were available only up to 2019.

Policy landscape data

The policy-related information presented in this report is not intended to be comprehensive. The data for the policy landscape indicators provided in Section 3 were gathered through desk research unless otherwise indicated. Barriers to accessing such information include language and limited availability of information through online media (e.g., websites, press releases and news articles).

Data in country fact sheets

Information in the fact sheets is based on desk research and on contributions from the national focal points. The data were collected to the best of the authors' knowledge and based on data availability, and thus may not be complete or show the most recent status. When no information was available for a given indicator, the term "Not available" is used.

Data gaps

Major data gaps exist in areas where there is no globally accepted data collection methodology. For example, the mapping of cycling and walking infrastructure is not currently done in all regions. Also, the modal share can be surveyed through different methods, leading to inconsistencies in available data. In addition, data on paratransit (informal transport), a predominant form of transport in many parts of the world, are largely lacking. This results in an incomplete picture of the impact of transport on climate change and sustainable development.

Methodological approach

Countries and regions

The report follows the M49 Standard of the United Nations Statistics Division.[4] In total, 196 countries have official United Nations membership and are also party to the United Nations Framework Convention on Climate Change. The available data have been put in a common structure for the United Nations member countries, regions and income groups to enable a consistent assessment. Income groups are based on the World Bank's classification of 2019.[5]

Economic calculations

The per capita and gross domestic product (GDP) calculations are based on the United Nations World Population Prospects 2019 and on World Bank GDP data using constant 2010 USD.[6]

Spatial and temporal scales

The geographic scale (global, national, city-level, etc.) as well as time scale (annual, monthly, daily) used in this report depends largely on the available dataset, as noted in the relevant figures and text. The detailed data forming the basis of the calculations and analysis are provided in the SLOCAT Transport Knowledge Base.[7]

Criteria for selection

The report covers policies, targets, emission reductions (achieved or envisioned) and market measures. To merit inclusion in the analysis, the policies, projects and trends must have been announced or completed between 2018 and 2020. Significant developments from January through May 2021 were included when deemed relevant, with the understanding that the next edition of the *Transport and Climate Change Global Status Report* will cover a period starting in 2021.

Pre- and post-COVID-19 pandemic trends

The year 2020 was pivotal for the world, and the COVID-19 pandemic has had substantial impacts on many of the transport trends monitored in this report. This edition attempts to differentiate between long-term trends and impacts due to the pandemic. To the extent possible, the analysis notes "pre-pandemic" (up to the end of 2019 or latest by February 2020) and "during pandemic" trends (starting in March 2020 until the end of 2020), as in some cases the pandemic led to reversals in long-term trends, at least for a specific period of time. In each section, a box describes the impacts that the pandemic has had on specific regions and sub-sectors.

Assembling the report

Global Strategy Team

This edition of the report was guided by a global strategy team consisting of 20 experts in the field who provided inputs over the span of six meetings between September 2019 and October 2020. Additionally, small group consultations were organised in February 2021, following the peer review process.

Authors and contributors

The report was collaboratively drafted by 22 authors and contributors from 16 organisations, led by the SLOCAT Secretariat. This includes additions and high-level inputs from the copy editor and from the special advisor who also co-authored the Executive Summary. Authors researched and compiled relevant facts and figures for the five sections of the report, including the Focus Features, with supporting review and inputs from several other organisations.

Peer review: A peer review process was carried out from 18 December 2020 to 20 January 2021 with 1,700 comments received from 74 reviewers. Each comment was individually reviewed by the SLOCAT Secretariat and considered in finalising the report.

National focal points: The report benefited from the contributions of voluntary national focal points, or experts from various regions and countries who have been essential to overcome language and information barriers. A public call for participation to provide information on policies and data resulted in several hundred initial registrations. Out of these registrations, 78 national focal points provided inputs through a first survey from 24 January to 3 February 2020; and through a second survey (focused on the country fact sheets) from 6 to 30 August 2020. All national focal points that contributed to the surveys are listed in the Acknowledgements.

Endnotes

Focus Feature 4 | Gender and Sustainable Mobility

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Annex: Methodological Note

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Tracking Trends in a Time of Change: The Need for Radical Action Towards Sustainable Transport Decarbonisation

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