

A vision for cycling as a key tool in urban development in the Global South

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As cities in the developing world face rapid urbanization, escalating traffic congestion, air pollution, and rising health issues, the need for sustainable and affordable transportation solutions is more urgent than ever. Cycling, a simple yet transformative mode of transport, presents an opportunity to address these challenges while simultaneously advancing social, economic, and environmental goals. By implementing cycling-friendly policies and prioritizing bicycle-infrastructure, cities can not only create more sustainable, livable environments but also contribute significantly to poverty reduction, economic development, and the achievement of a number of UN Sustainable Development Goals (SDGs).

This vision outlines the multifaceted benefits of cycling as a mode of transport, focusing on its health advantages, environmental impact, economic gains, and alignment with pro-poor development, all while advancing the green transition and creating safer urban spaces.

1. Health Benefits and Economic Advantages

One of the most compelling reasons to promote cycling is its profound positive impact on public health. In cities where non-communicable diseases (NCDs) like heart disease, diabetes, and obesity are on the rise, cycling offers an accessible and low-cost solution for improving cardiovascular health, reducing the risk of chronic diseases, and improving mental well-being. Regular cycling, even for short daily trips, can help combat these health crises and reduce healthcare costs.

The economic benefits of cycling extend beyond individual health. Studies show that a healthier population is a more productive one, with fewer sick days and lower healthcare expenses. This leads to significant economic savings for governments and businesses alike. A noteworthy example is Copenhagen's bi-annual bicycle account¹, which tracks the economic impact of cycling in the city. The account consistently demonstrates the impressive returns on investment in cycling infrastructure, from reduced healthcare costs, well-being and higher productivity. In fact, Copenhagen has shown that every kilometre cycled generates substantial financial savings for the economy, with the city seeing a return of around \$1 for every kilometre cycled, and around 1.45 mio. km are cycled daily! These figures highlight how cycling can contribute to economic growth by improving public health and reducing costs associated with healthcare, traffic congestion, and road maintenance.

For developing cities, where healthcare systems often face resource constraints, the promotion of cycling can thus offer a dual benefit: improving the health of the population while driving long-term economic development by reducing healthcare expenditures and increasing productivity.

2. Pro-Poor and Pro-Development: Cycling-Friendly Policies as a Path to Inclusive Growth

Cycling is a mode of transport that is inherently pro-poor. In many developing countries, the cost of car or motorcycle ownership and fuel consumption, costs of using motorcycle taxis or public transport fares are a significant burden for low-income households. Cycling provides an affordable and accessible alternative that can substantially improve mobility without incurring high costs. The upfront cost of a bicycle is low

¹ https://kk.sites.itera.dk/apps/kk pub2/index.asp?mode=detalje&id=2420

compared to motorized vehicles, and once purchased, maintenance costs are minimal. This makes cycling an ideal mode of transport for the urban poor, who often have limited financial means to rely on more expensive forms of transportation.

Moreover, cycling can be a tool for social inclusion. It enables women, children, and the elderly—groups who are often excluded from conventional transportation systems due to safety concerns or high costs—to move more freely within the city. In many parts of the developing world, women and girls are disproportionately affected by inadequate or unsafe public transport systems. By fostering a cycling culture and building cycling infrastructure that is accessible and safe for all, cities can empower marginalized groups and enhance gender equality and social equity.

Cycling-friendly policies also contribute to broader development goals, including those outlined by the United Nations SDGs. For example, cycling supports SDG 3 (Good Health and Well-Being) by promoting physical activity and reducing the burden of diseases. It contributes to SDG 11 (Sustainable Cities and Communities) by encouraging clean, low-emission transport and reducing congestion. Cycling also aligns with SDG 8 (Decent Work and Economic Growth) by stimulating local economies through the creation of jobs related to cycling infrastructure, bike manufacturing, and maintenance services. Finally, cycling supports SDG 10 (Reduced Inequalities) by providing affordable transportation options for the poor and marginalized populations.

3. Reducing Air Pollution and Environmental Impact

Cities in the developing world are grappling with significant air pollution, largely due to the growing number of motor vehicles. These vehicles release harmful emissions such as carbon dioxide, nitrogen oxides, and particulate matter, which contribute to respiratory illnesses, cardiovascular diseases, and environmental degradation. The World Health Organization estimates that air pollution is responsible for millions of premature deaths globally, particularly in urban areas.

Cyclists, in contrast, emit zero pollution, making cycling one of the most effective ways to reduce urban air pollution. By encouraging people to use bicycles rather than cars and motorcycles, cities can significantly decrease the concentration of harmful pollutants and decrease respiratory illnesses and premature deaths.

Furthermore, cycling is a key tool in the transition to a green economy. It reduces a city's dependence on fossil fuels and decreases its overall carbon footprint, contributing to **SDG 13 (Climate Action)**. By investing in cycling infrastructure and promoting non-motorized transport, cities can help mitigate climate change and transition toward more sustainable, low-carbon urban environments.

Cities that embrace cycling as a primary mode of transport can play a critical role in advancing the global green transition, while simultaneously addressing local air quality concerns.

4. Economic and Development Gains from Cycling

Cycling is not just an environmentally and socially sustainable form of transport—it also generates significant economic returns. This is particularly important for developing cities where limited infrastructure often leads to traffic jams and lost economic opportunities.

By investing in cycling infrastructure, developing countries can create a thriving cycling economy that generates jobs and supports local businesses. Bicycle manufacturing, repair services, infrastructure development, and even tourism related to cycling all offer economic opportunities. For example, local businesses can benefit from increased foot traffic as cyclists more easily than motorized transport can stop at shops, cafés, and restaurants along bike paths, further boosting local economies.

Moreover, the promotion of cycling creates a more efficient and productive urban environment. With less time spent stuck in traffic and lower transportation costs, businesses can operate more smoothly, workers can commute more easily, and cities can save money on expensive car-oriented road infrastructure and maintenance. This economic efficiency leads to a higher quality of life for urban residents and positions cycling as a key driver of sustainable development.

5. Safer Roads and Improved Public Space

Road traffic accidents are a major concern in many cities, particularly in low-income areas where cars and motorcycles are old and more polluting, and traffic safety regulations are poorly enforced. Cyclists, pedestrians, and other vulnerable road users are at high risk of injury or death in areas with inadequate infrastructure and heavy traffic. However, the introduction of dedicated cycling lanes and infrastructure can reduce accidents and create safer streets for everyone.

Studies have shown that when cities invest in safe cycling infrastructure—such as segregated bike lanes, traffic calming measures, and well-designed intersections—cycling becomes safer, and overall road safety improves. In addition to benefiting cyclists, these measures also slow down traffic, reducing the likelihood of collisions involving pedestrians or other vulnerable groups.

By adopting cycling-friendly policies, cities can create more pedestrian-friendly, safer urban environments, fostering a culture of respect for all road users and reducing traffic-related injuries and fatalities. Safer roads are not only a public health benefit but also a key component of **SDG 11 (Sustainable Cities and Communities)**, which calls for the creation of cities that are safe, resilient, and inclusive.

Conclusion

Cycling is more than just a sustainable form of transport—it is a powerful tool for achieving inclusive, healthy, and economically vibrant cities. By prioritizing cycling-friendly policies, cities in the developing world can address critical urban challenges such as air pollution, traffic congestion, and public health crises while simultaneously driving economic development and contributing to global sustainability goals.

The long-term benefits of cycling—ranging from health and environmental improvements to economic gains and social inclusion—make it a fundamental pillar of pro-poor, pro-development urban policy. As cities invest in cycling infrastructure and promote cycling as a mainstream mode of transport, they will create healthier, safer, and more prosperous communities, contributing significantly to the achievement of the United Nations Sustainable Development Goals.