

NON-MOTORIZED TRANSPORT

Sustainable strategy for achieving the
sustainable development goals



Share the Road Programme

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Introduction

The 2030 Agenda for Sustainable development recognizes the importance of transport in sustainable development. Unlike the Millennium Development Goals (MDGs), the Sustainable Development Goals (SDGs) have targets that bear a direct link to transport. Most countries have for a long time focused on investing in motorized transport to increase efficiency in mobility. This has led to a major neglect of the non-motorized transport particularly walking and cycling, yet, they are the most basic and accessible modes. Motorized transport especially the use of the car is now growing at a fast rate owing to the investment patterns in transportation. Unfortunately these investment patterns have proven to be unsustainable evidenced by the high traffic congestion experienced especially in cities and the growing carbon emissions from transportation activities.

Through the Sustainable Development Goals, there has been a shift and the world is now focused on pursuing sustainability in all spheres of development. Investing in clean transport modes is paramount to achieving sustainable growth, improving access to destinations and services and well-being of the people. One of the strategies for achieving the 2030 Agenda is pursuing low carbon development. Human activities such as industrialization and transportation are increasing the carbon emissions in the atmosphere and in turn the global climate is deteriorating. Low carbon development is therefore essential for ensuring that the global environment remains conducive for growth.

This paper discusses the link between non-motorized transport and the Sustainable Development Goals. It also suggests possible ways in which non-motorized transport can contribute in achieving the Goals. In addition, the paper draws some possible policy considerations to make non-motorized transport effective in contributing to the Sustainable Development Goals.

Role of non-motorized transport in achieving the Sustainable Development Goals



Ending Poverty in all its forms everywhere

Non-motorized transport especially walking and cycling enhance equity as it can be used by both the rich and the poor. They offer affordable access to work, education and other essential services to all especially the poor. In most developing countries, majority of the population especially in urban areas do not own a car and public transport is in most cases unaffordable. In African cities for instance, walking constitutes 30-35 percent of all trips (UN HABITAT, 2013).

Indeed, walking and cycling have been described as captive modes of transport (UN HABITAT, 2013), since the majority of urban populations have no other choice. Over 20 percent of the people in developing countries in 2010 lived on less than USD1.25 a day (World Bank, 2011).

This indicates that meeting daily needs including transport is a challenge for a significant number of people in developing countries.

Investing in safe and adequate infrastructure and facilities for walking and cycling therefore becomes paramount in achieving the Sustainable Development Goals.

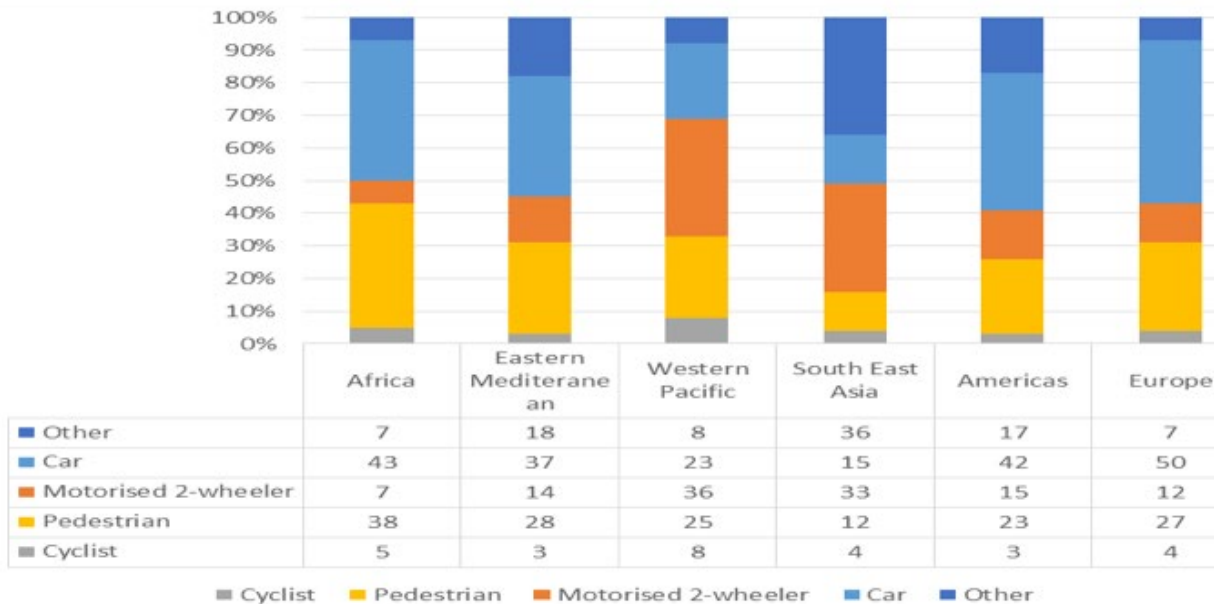
When people are able to access jobs, education opportunities, essential services and markets, they are able to improve their living standards



Ensure healthy lives and promote well-being for all at all ages

The Sustainable Development Goals Target 3.6 aims to bring down to halve the number of global deaths and injuries from road traffic accidents. non-motorized transport users- the pedestrians and cyclists are the most vulnerable to traffic fatalities. The design of most urban roads, particularly in the urban centers marginalize the non-motorized transport users increasing their vulnerability. Most roads are designed without provision for non-motorized facilities such as walkways, cycle tracks, safe crossings, footbridges and ramps for the wheel chair users and the disabled.

The consequence is high pedestrian deaths and injuries since they are forced to share the road with the high speed motorized vehicles and cross roads dangerously. Globally, 27% of road traffic deaths are pedestrians and cyclists, and 43% in Africa (WHO, 2013). [See Figure 1 below.](#)



Source: WHO, 2013. Global Status Report on Road Safety 2013

These statistics clearly show that non-motorized transport users have to be the primary focus in order to achieve the set target for halving the number of traffic deaths and injuries globally. Countries can easily achieve this target by ensuring the vulnerable road users are protected through the right physical infrastructure. Well-designed NMT infrastructure, with separate space for pedestrians and cyclists and facilities for crossing roads can significantly reduce the number of road fatalities. Safe pavements and accessible road crossings are particularly important for children, elderly and disabled people.

In addition, walking and cycling are active modes of transport and hence their benefits to health are immense, active modes increase blood circulation in the body and burn calories, stronger immunity, lower risk of coronary heart diseases, relieve from stress and anxiety and weight loss are some of the health benefits associated with such active modes of transport.

Investing in safe infrastructure for non-motorized transport will also contribute to achieving goal 1 of the SDG's. Often, road accidents push families to poverty especially when they suffer death or maiming of a bread winner through road accidents. For instance, a research in India and Bangalore in 2004 showed that road traffic injuries and deaths had pushed some families into poverty. In Bangalore, 71 percent (urban) and 53 percent (rural) of poor households were not poor before the breadwinner was involved in a fatal crash (Thomas et Al. 2004),

Target 3.9 of the Sustainable Development Goals aims to reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination. The transport sector has an important role in achieving this target as it contributes 23% of all CO2 emissions



In contrast, non-motorized transport is air-pollution free as it is powered by human energy. IEA estimates that a shift of 1 percent in distance traveled by car to non-motorized transport modes can help reduce energy consumption and pollution emissions by about 2-4 percent (Litman, 2007) Investment in non-motorized transport infrastructure is important in achieving such a modal shift. People tend to use cars even for short distances because they do not feel secure walking or cycling



Reduce Inequality within and among countries

Target 10.3 of the Sustainable Development Goals aims to ensure equal opportunity and reduce inequalities by promoting appropriate legislation, policies and actions. The transport sector exhibits a lot of inequalities, transport planning and development in most countries is focused on making movement of those who drive easy while neglecting the mobility needs of those who walk, cycle or use wheelchairs. These inequalities have adverse effects especially on vulnerable groups such as children, the elderly and the physically challenged.

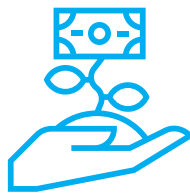
In terms of policy, most countries lack policies and legislation (see Figure 2) that protects and promotes the needs of the non-motorized transport users. Putting in place policies for non-motorized transport, whether as stand-alone or integrated with wider transport policies, and most importantly implementing them is one sure way of achieving the SDG target in question



Make cities inclusive, safe, resilient and sustainable

The Sustainable Development Goals Target 11.2 aim to provide access to safe, affordable, accessible and sustainable transport systems for all. This is by improving road safety through expansion of public transport while paying special attention to the needs for the most vulnerable groups such as women, children, persons with disabilities and the elderly. Safe and adequate walking and cycling infrastructure in cities including walkways, cycle tracks, ramps, crossing, foot bridges will facilitate safe and affordable access to destinations for such vulnerable group.

During the Conference in Quito, Heads of State and Governments, Ministers and High Representatives made specific commitments to prioritize non-motorized transport over private motorized transport by supporting investments in safe, efficient, affordable and sustainable infrastructure for walking and cycling. In addition, they committed to adopt, implement and enforce policies that promote and ensure pedestrian safety and cycling mobility in line with the United Nations Decade of Action for Road Safety



Take Urgent action to combat climate change and its impacts

Climate change and its impact is the single greatest challenge facing humanity in the recent times. Greenhouse gases released into the atmosphere from anthropogenic sources such as industries and transport are leading to heat being trapped in the atmosphere and consequently the global climate is warming. The transport sector is significantly responsible for climate change as 23% of all CO₂ emissions are from transport activities. Most of the energy used in the transport sector comes from combustion of fossil fuels- a major source of greenhouse.

Significant headway can be achieved in the fight against climate change by investing in clean transport modes such as non-motorized transport. This will require transport planning that not only provides infrastructure for non-motorized transport but also makes it attractive and comfortable to walk or cycle. For instance, Copenhagen is investing in vast infrastructure for cycling to achieve its ambitious target of becoming a carbon neutral city by 2025.

Box 1: Copenhagen Case study

In Western Europe, Copenhagen City has an ambitious target of transforming to a carbon neutral city by 2025. The city's strategy for achieving this target includes plans for green mobility. The City has invested in vast cycling infrastructure making bicycle the most preferred and used mode of transport in the city with about 50% of the residents cycling for their daily trips. In addition, the city has invested in an integrated and intelligent public transport system. It is estimated that using bicycle integrated with public transport saves Copenhagen approximately 90,000 tons of carbon emissions per year.

Source: City of Copenhagen, 2010 & 2014

Policy Consideration: Achieving the Nationally Determined Contributions to the Paris Agreement

In December 2015, countries adopted the Paris Agreement at the 21st Conference of Parties (COP). The Agreement came into force in November 2016 following its ratification by party states. Countries committed to take action against climate change by limiting the global temperature rise below 2 degrees Celsius. This is an ambitious target which requires great efforts in all sectors of development. Countries expressed their commitment to the Paris Agreement through the Nationally Determined Contributions (NDC's), in which countries outline the actions they will take to achieve the goals of the Agreement.

Countries have an opportunity to achieve their Nationally Determined Contributions and ultimately actions against climate change by investing in low carbon and less polluting transport modes such as non-motorized transport.

Some of the policy measures that can be applied to enhance non-motorized transports contribution to the action against climate change include:



Urban Planning

planning that encourages compact cities. This ensures that ensures that work destinations, services and residences are not segregated. Such planning will encourage greater use of non-motorized modes. segregation on the other hand will encourage dependence on motorized transport and especially the car



Development of non-motorized transport policies

Either as standalone or integrated with wider transport policies. It provides a basis for providing the relevant infrastructure, information and conditions to make walking and cycling conducive.



Integration of safe non-motorized transport

Motorized transport infrastructure with efficient public transport system such as bus rapid transport, rail, high capacity buses. Evidence shows that cities which have a large share of over 55 percent on average in public transport, walking and cycling emit 2.4 fewer tones of CO2 emissions per year from travel, compared to cities where private motorization is prevalent (UITP, 2006).

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