

*By Aimable Twahirwa;*

KIGALI: “I ride 10 km a day and I love it,” says Claver Kamana, a resident of Kicukiro, one of the suburbs of Rwanda’s Capital City Kigali.

A few months ago, Kamana, a business operator decided to switch his car for a bike, but public sentiment towards bicycles in Kigali was still mixed, with some seeing them as a symbol of low socioeconomic status.


Like Kamana, there is a growing number of residents in the Rwandan Capital relying on a bicycle sharing transport scheme using smart and green mode of mobility as municipality authorities emphasize to turn the urban area into a carbon-neutral capital.

During the implementation phase, municipality authorities have partnered with GURARIDE, a local smart and green mode transport company to promote non-motorized transport where modern green mobility bicycles at several ridesharing docking stations have been installed in the City.

Municipality officials are also confident the city can largely achieve its ambitious goals by implementing Sustainable Urban Mobility and help the country become a carbon-neutral economy by 2050.

The Rwandan government maybe looking to expand to other selected secondary cities in the country a carbon-free mobility, according to the Rwandan minister of Infrastructure, Claver Gatete. This’ aimed at addressing the uncontrolled urban sprawl – and the consequences of rising greenhouse gas emissions.

“We are encouraging and promoting carbon-free mobility in the country’s growing cities and urban centers,” the Gatete said.

According to Tony Adesina, founder and Chief Executive Officer of GURARIDE, the company has rolled out 80 smart bikes that are now docked at 12 stations in the City of Kigali. 

Each station has a provision of at least five bikes.

All the bikes are GPS-tracked and cannot be opened by anyone who is not profiled in the system. Those not registered and without authorization code will not be able

to open the lock of the bike. The locks are fortified with a barcode and can be tracked through GPS.

When residents and visitors are interested in using the bicycles they are given an option to order for one and pay online using the application connected to a digital payment platform.

When the payment is approved, a key is automatically generated and used to unlock the bike.

GuraRide, loosely translated as “buy a ride” has arranged three packages where clients can book a ride and be charged Rwf200 (US\$0.2) for 30 minutes, whole day goes for Rwf1,000 (US\$ 1) and booking the ride for a month will cost you Rwf10,000 (US\$ 10).

With now cycling described as a smart and green mode of transport Pamela Umuhoza, the Project Manager of GURARIDE says the deployment of mobile application is a critical step towards cost-effective monitoring of these bicycles in real-time.



“The deployment of the bikes on the streets is important but also we need to make sure that people can access them thanks to this user-friendly technology,” she said.

While managing mobility more efficiently is key to these innovations, Umuhoza also acknowledges that these solutions should also fit with urban residents’ desires and expectations.

“The biggest obstacle to the introduction of smart mobility solutions remains the users themselves, because most of urban inhabitants seem less acceptant,” she said.

In a move to encourage the rollout of this smart mobility solution, the city of Kigali has bet on the development of a widespread bike-sharing system, with bicycles available to users all throughout the city.

In a quest to promote non-motorized transport as one of the resource efficient travel modes that is environmentally friendly, environmental experts recommend bicycling as an innovative solution for cutting Transport CO2 Emissions.

Juliet Kabera, the Director General of Rwanda Environment Management Authority (REMA), says this is important. “The traffic situation in the country in general is increasing, and when traffic increases it has its associated environmental issues.”

Kabera notes that some of the harmful impacts of increased vehicle use includes carbon dioxide emissions and pollution from dust particles on dirty roads.

“To actually educate people to use bicycles rather than vehicles, I think it is good for the country and the world as a whole,” she underlined.

By swapping his car for a bike in Kigali, Kamana says it was mainly for health reasons,” because “you exercise without paying a single coin as in regard to the gym” and because “it is much nicer to ride a bike than to drive.”

For people like him, the Rwandan Capital is implementing a “master plan” to extend bike lanes to a total of 418 km. The city currently has 215 km of bike lanes, while there are few paths in adjacent suburbs.



As the city authorities continue to put plans in place for bike lanes this’ still a big challenge given the narrow roads in Kigali and will require massive investment to upgrade the infrastructure.

A recent study commissioned by the REMA found that vehicular traffic in urban centres is one of the two primary sources of air pollution.

According to an air quality inventory in Rwanda, in 2018, the main sources of anthropogenic air pollution are road traffic, domestic fuel burning and industry.

Official figures by REMA show that as of 2012, a total of 2,227 deaths were attributed to ambient air pollution in Rwanda and resulted in a total of 108,622 years of life lost.

Health estimates indicate that the top cause of morbidity in health centres in Rwanda was acute respiratory infections, accounting for 21.7% of all patients admitted to these facilities and 6.8% of patients admitted to hospitals. Respiratory infections are the largest cause of deaths in children under the age of five in the country.

The Government of Rwanda and its partners have taken significant strides in identification of air pollution sources and air quality monitoring at national level, with a particular attention to the City of Kigali.

Dr. Egide Kalisa, one of the air quality expert based in Kigali says traffic-related air pollution is a particular concern in African cities including Kigali, where there are high densities of older vehicles.

Other factors associated with this phenomenon, according to him, include the inadequate vehicle maintenance, poor traffic management, poor road conditions, and inadequate mass transport systems

In 2018, electric motorcycles and cars were introduced to the Rwandan market in line with clean transport through e-mobility initiatives, and now, two electric motorcycle companies (Ampersand Company Ltd and Safe Ltd) are registered to operate in Rwanda.

In the same year, electric vehicles debuted through a partnership between Volkswagen and Siemens under a pilot project. In addition to e-mobility, the government is heavily investing in renewable energies (Hydropower plants, methane gas power and solar power systems).

As part of wider efforts to further the growth of cycling as both a sport and a transport experience, the Rwandan government announced a 25 per cent tax waiver on the importation of bicycles.

Yet current efforts to promote green mobility aims to reduce both air and noise in urban areas, are yielding positive results in reducing emission in the City of Kigali, some users of bicycles believe that part of the problem is the lack of regulations protecting cyclists.

“If an accident happens, there is total impunity,” says Felix Gashugi, a petrol station worker who pedals 8 km a day to and from work.

Within this ecosystem of environmental protection and cycling enthusiasm, municipality authorities emphasize to mitigate the risk of worsening air quality.

Sharing his experience about using smart and green mobility, Jackson Nambaje, a secondary school teacher in Gikondo, a suburb of city of Kigali says that he and some other fellows are delighted that the urban transformation by upgrading major

urban streets with bike lanes has brought convenience to their lives.

“Smart and green mobility transition with bikes has multiple advantages, but one of the biggest challenge is that the city still need to fill in gaps in existing bike networks and infrastructure,” Nambaje said.

In the past, cycling used to be considered by most of urban residents a leisure activity and not so much a mode of transportation for commute in the city of Kigali.

Both Kamana and Nambaje are among those who are now going to work in Kigali with their bicycles. Before that, they had driven either a motorcycle or a car to commute, just like most of the residents in the Rwandan capital with a population of about 1.17 million, according to official projections.

“The growing number of colleagues and friends are being influenced by this cycling lifestyle in the city,” Kamana said. (END)