

GGGI Rwanda: Fact Sheet

Public Bicycle Sharing (PBS) Project

Challenges

Rwanda has a current urbanization rate of 4.1% with 17% of the population living in urban areas. The Government of Rwanda has prioritized sustainable urbanization processes in cities to facilitate national development. This cannot be achieved without significant investments in the infrastructure of Rwanda's cities with an emphasis on noncombustible forms of transportation. The public bicycle sharing project aims to enable investment into alternative forms of transportation. The aim of this initiative is to leverage private sector resources to establish a pilot PBS program in the most feasible location.

Public bike sharing (PBS) programs have been implemented in Europe, Asia, and North America, greatly reducing traffic and GHG emissions while increasing mobility. Rwanda aims to reach an urbanization rate of 35%, resulting in increased reliance on public transportation and pro-poor mobility policies. The implementation of a public bicycle sharing program would address three key issues: 1) increased mobility for the lowest socioeconomic strata, 2) alleviation of road congestion, and 3) reduction of GHG emissions from motorized transport. The project aims to capitalize on innovation and transformative change in addressing the challenge of sustainable mobility in growing cities including:

- Informal and underdeveloped road infrastructure for nonmotorized transport
- Increasing modal shifts to privately owned cars
- Road safety concerns

Approach

The project is aligned with key strategies of the Ministry of Infrastructure's National Urbanization Policy, Rwanda's

National Strategy for Green Growth and Climate Resilience, and with GGGI's Refreshed Strategic Plan 2015-2020. The public bicycle sharing scheme addresses the third strategic outcome of the strategic plan: Increased access to sustainable services, such as, clean affordable energy and sustainable public transport. According to Rwanda's National Strategy for Climate Change and Low Carbon Development, CO2 emissions are mostly from transport and industrial processes. By working closely with the Government of Rwanda and district-level representatives, the project aims to address green growth through sustainable mobility.

Public bike sharing (PBS) systems have been successful avenues for enabling green growth globally. PBS systems are often owned by local authorities, resulting in the collection of user fees that - once offset by the costs of maintenance, operating costs, advertising, and promotion - resulting in profitable and sustainable income-generation, improved air quality, and promotion of healthy lifestyle choices for mobility.

Activities

To achieve these outcomes, GGGI has worked closely with stakeholders in the District of Musanze and District of Rubavu to engage in a participatory design of a potential bike-share system that takes into consideration key GGGI values including inclusiveness. The first phase of the project consisted of four stages: 1) pre-assessment of six secondary cities including donor and private sector mapping, 2) stakeholder consultations in Musanza and Rubavu, 3) an onsite assessment (including data collection, site visit, surveys, matrix of trip origination and destination, average bicycle trip length, most popular routes, willingness-to-use and willingness-to-pay), and 4) study tour to PBS programme in operation in Nairobi. The study tour and workshop were carried out with key project partners and supported 8



Rwandan participants from the Rwanda Transport Development Agency (RTDA), the Private Sector Federation (PSF), AC Group, the Rwandan Women's Network, the Africa Rising Cycling Center (ARCC), the Rwandan Cycling Federation (FERWACY), and the Rwandan Development Board (RDB). Current activities of the project include:

- Analysis of options for ICT integration for tracking, tapand-go, and electric assist
- Resource mobilization and private sector engagement
- Testing of PBS at institutions and campuses in Musanze and Kigali

Overall Goals

Globally, the transport sector was responsible for 22% of total energy-related CO2 emissions globally in 2004.1 According to the UNFCCC, the transport sector was responsible for 34.21 of GHG emissions within the energy sector in Rwanda in 2005.2 As urbanization rates continue to rise and the population in cities increases, new models of sustainable transport and green mobility are critical for achieving sustainable development and increased economic opportunities for inhabitants. The project aims to contribute towards the following GGGI Strategic Outcomes:

- Strategic Outcome 1: GHG emissions reduction
- Strategic Outcome 2: Creation of green jobs
- Strategic Outcome 3: Increased access to electricity, improved sanitation, waste management services, and public transportation
- Strategic Outcome 4: Improved air quality

Implementing Partners

- UN Environment's Share the Road Programme
- UN-Habitat
- Institute for Transportation and Development Policy (ITDP)
- District of Musanze
- District of Rubavu
- Africa Rising Cycling Center (ARCC)

Results to Date

- Off-site assessment of feasibility locations for PBS in secondary cities
- On-site assessments of willingness-to-pay, willingness-touse, origin-destination surveys, manual traffic counting, and safeguards surveys in two secondary cities
- Stakeholders Consultations in Musanze and Rubavu on the design, financial model, and potential docking stations
- Knowledge Sharing and Technical Workshop carried out in Nairobi, Kenya with Implementing Partners gathering representatives from Egypt, Kenya, Uganda, Rwanda, Ethiopia, and Nigeria
- Engagement with the private sector: Mobike, PBSC Urban Solutions, Uber, and SMOOVE
- Upcoming insight brief on public bicycle sharing in African cities
- Sponsoring of e-mobility bicycles for use during the 2018 Africa Green Growth Forum (AGGF)
- Presentation of PBS to the City of Kigali with the option of electric-assist



