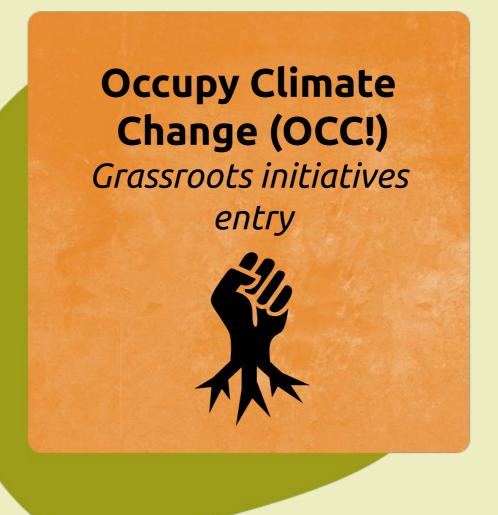
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#### Harare Active Mobility: Reducing carbon emissions from automobiles

#### Lynthia White

### Where is this grassroots initiative implemented? Who are the promoters? Who are the beneficiaries?

City of Harare continues to expand as more and more people relocate from the rural areas to the city in anticipation of better standard of living (Masimba, 2021, p. 6). The demand for more housing led to the opening up of new areas further out from the CBD for development (Zinyama et al., 1993). This lateral expansion of the city has resulted in increased travel distances and changed the form of urban infrastructure promoting automobiles, increasing greenhouse gasses emissions and pollution. In the concept of climate change and migration, migrants modify social, environmental and economic systems. In this case, more migrants in Harare are contributing to increase in automobiles which is a contributor of greenhouse gasses. Harare Active Mobility (HAM) is a city initiative of the Harare City Council in partnership with numerous stakeholders in the city of Harare aiming at promoting walking and itcycling. The supporters of the initiative include private organizations such as (Bikes for Zimbabwe; JM Busha Races; CaliGraph), NGOs such as (Inspire Zimbabwe; Miracle Missions; Road Safe Zimbabwe Trust) and citizens of Harare such as Jenna Hutchings who is helping to mobilize residents of Harare to support the initiative. The initiative intends to benefit all citizens of Harare because it is aim to restore vibrancy of the city through safer and sustainable modes of transport.

# How does the initiative engage with climate? Does it tackle mitigation, adaptation, both or other dimensions of climate change?

According to Dawson (2017), "Cities are one of the major drivers of climate chaos and they are also its principal victims" (p, 130). The Harare City promote use of automobiles which contribute 35% of the greenhouse gas emissions (Masimba, 2021, p. 6). The initiative aims to achieve Sustainable Development Goal (SDG) 11 of promoting sustainable cities and communities and also SDG 13 of climate action (United Nations, 2023, p. 2). It focuses on utilizing walking and cycling in order to promote a smart city with reduced emissions from

automobiles. HAM initiative engages with climate because it cares about reducing carbon emissions the major cause of climate change; with traffic contributing 25% of carbon emissions worldwide (Kamer, 2022, p. 15). Human energy or non-motorized transport such as bicycles and walking have a direct effect on mitigating climate change (Brand et al., 2021). The Citizen of Harare revealed that, "The air in the city of Harare is heavily polluted by poorly maintained vehicles as well as being predominately second- hand imports (dumping ground for Global North's waste vehicles)" (City of Harare, 2022, p. 9). This is a health risk to all citizens of Harare, but at risks groups include people with heart and lung disease, pregnant women, children and the elderly. This directly impacts to broad of human rights such as right to life and right to good health. Thus, the initiative promotes a sustainable and safe environment for all. This is derived from the subject of environmental and climate justice that links human rights with development and climate. Separated cycle lanes were constructed in the past but have not been maintained, leaving many people without access reliable, connected, safe and efficient public transport. Therefore, HAM connects clean environment and climate protection with safe and sustainable public transport. Active travel such as walking or cycling is the most sustainable form of personal transport (Brand et.al., 2021). Walking and cycling reduce the consumption of fossil fuels, helping to mitigate the effects of climate change and prepare the city to adapt to climate change. Each 7 kilometers travelled by bicycle will avoid 1 kilogram of carbon-dioxide over a year to the same distance covered by car (United Nations, 2023, p. 9).

#### What are the main objectives? What are the main values?

According to the findings from the Town Clerk of Harare City Council, HAM has the objective to:

- create and pilot a safe city of Harare through resuscitating bicycle tracks
- map the city from the perspective of person walking or cycling
- develop a master plan for the city's options for transportation and mobility
- create an advocacy campaign that change behavior and inspire citizens, local business and public entities to work together in promoting active travel.

HAM has the value of designing streets and roads for children in order to ensure safe roads for all. It also prioritizes active mobility routes for a healthier community for all journeys less than 5km. The initiative has the ability to co-create active travel solutions through person-privatepublic partnerships that ensure rapid transformation.



Image 1:Teachers and children from Borrowdale school in Harare encouraging active mobility through public art; image 2: Harare City Council maintaining roads in Harare for safe pedestrian movement. Image 3: Harare City Council encouraging active mobility in Harare, Zimbabwe through public art. Images used with permission by Jenna Hutchings.

#### What is the timeline? Are there already visible effects?

HAM initiative was launched in February 2022 and expected to end in December 2025. The initiative has already visible effects such as installation of 800m gravel walking or cycle track on Borrowdale road Harare. On the 4th of June 22 the city carried awareness campaigns like the Bike Day. On the Bike Day, 100 bicycles were distributed to the residents of Highfields in Harare who travel daily from home to work. The CaliGraphy private organization has already printed numerous novels and articles aiming at inspiring residents of Harare through eco-poetry on climate change and active travel.

#### Who are the actors? What are their backgrounds?

HAM involves various actors with the Harare City Council on forefront (City of Harare 2022, p. 4-21). These actors include;

- The Road Safe Zimbabwe Trust an NGO that is working with Harare City Council in pushing for road safety priority in Harare, thus strengthening active mobility routes by promoting safe walking or cycling.
- The Bikes for Zimbabwe which is supporting the initiative through aiming to improve the life of Harare citizens by use of bicycles. The company is importing used bicycles from the Netherlands to provide cost effective bicycle mechanisms and healthy means of transport for people of all ages in Harare city.
- The citizen of Harare Jenna Hutchings is encouraging individuals, corporates, public and private sectors to join together to co-create a sustainable city through active mobility.
- Cali-Graphy is supporting HAM through its mission of promoting public art. The
  company is encouraging people for active mobility through public art that impact and
  effect social and behavioral change towards cycling and walking. This is helping in
  reimagining spaces and giving new meaning and new function.
- Inspire Zimbabwe is a youth led organization that is inspiring the city through creating active mobility routes that enable safety and sustainability.
- The Mira Missions Trust for Clean and Green is supporting HAM through advocating for clean transport such as walking and cycling in Harare.
- The Germany Embassy is supporting the initiative through Harare-Munich active mobility project for sustainable and safe city.

#### Which limits does it encounter?

The initiative is facing several limitations for successful implementation. The built environment in Harare has limitations. The city and public alike continue to plan for more cars. This is an outdated and unsustainable model of city planning adopted in the 1950's when population sizes of cities were low, car ownership was normal, and climate change was not understood. The public transportation system is not built on a monopoly, hence, the competition in the city brings reckless driving and increasing automobiles to ferry passengers. According to Kodero (2005, p. 15) the Harare policies seem to be silent on equitable access for all road users (walking, cycling,

skating and motoring). Public spaces allow limited options and routes of transportation. Cycling is also facing gender stereotyping because women fear cycling. Most Africans think cycling is for men. This is resulting in many women resisting cycling. The initiative is also facing other social constraints. A lot of Zimbabweans view cycling as a sign of poverty, resulting in increase of automobiles. Other social and cultural myths point out that cycling removes virginity and reduce fertility, resulting in young girls resisting the initiative.





Image 1: Open Streets Day in Harare Zimbabwe that encourage active mobility; image 2: Harare Bike Day marching campaign in Glenview High Density Suburb. Images used with permission by Jenna Hutchings

#### How would it be potentially replicable in other settings?

The initiative in Harare strives to bring communities together to co-create sustainable and safe public spaces for all people living and moving in Harare. The lessons learnt from other cities worldwide such as Seattle, Copenhagen and Amsterdam could see it implemented rapidly and rolled out in other cities across Zimbabwe. The initiative is easily replicable in other cities around the world. The main challenge is securing partnerships to finance the initiative and provide assistance. The main criterion is to have collaborative financing that help in funding the initiative. Secondly, there is need for public art that help in mobilizing for change through narrative story telling. By creating public art, can potentially help in transforming minds of residents on how cycling can help to bring a sustainable city. This ensure participatory planning

and contribute social and behavioral change towards cycling and walking. People in climate action will help in decolonizing the view that active travelling does not play an important role towards mitigating climate change in Harare.



Harare City Council workers constructing a cycle lane along Ridgeway road in Harare Zimbabwe. Image used with permission by Jenna Hutchings.

#### Is this initiative conducive to broader changes?

The initiative can be conducive to broader changes to a lesser extent. However, to a greater extent the initiative faces shortfalls such as spatial and institutional constrains. The city's spatial arrangement limits the options and routes of transportation, while institutional constrains are linked to lack of funds of the Harare City Council to review current planning approaches. This will slow down progress on changes in law, institutional arrangements and long-term sustainability.

#### References

Brand, C. (2021). The climate change mitigation effects of daily active travel in cities. *Transportation Research Part D*, 93 (2), 1-6.

City of Harare. (2022). *Stakeholder Working Group for Active Mobility*. Organizational handbook. [Unpublished Manuscript]. Organizational Handbook, Harare City Council.

Dawson, A. (2017). Extreme Cities: The Peril and Promise of Urban Life in the Age of Climate Change. London: (Verso books, Ed.). British Library.

Kodero, K. (2005). *TransPolicy: Pro-Poor Transport Policy Meeting the Challenge in Zimbabwe*. Zimbabwe Forum for Rural Transport and Development, 96 (3), 15-26.

Masimba, G. (2021). *Harare City Scoping Study*. [Manuscript submitted for publication]. African Cities Research Consortium.

Zinyama, L.M, Tevera, D.S, Cumming, S.D. (1993). *The Growth and Problems of the City. University of Zimbabwe Publications*. (Original work published 978-0908307302)

Union Cycliste Internationale. (2022, April 22). Earth Day Take away: How cycling can help alleviate climate change. UCI.

## https://www.uci.org/article/earth-day-takeaway-how-cycling-can-help-alleviate-climate-change/1dABgQWTCS3fAWpPg4h4yM

Mutongwiza, L. (2022. May 22). Harare city drive to promote cycling to work. 263Chat.

#### https://www.263chat.com/harare-city-in-drive-to-promote-cycling-to-work/

Nyaude, S. (2022, November 1). Raising awareness for safer pedestrian walkway in Harare, Zimbabwe. Slocat Partnership.

#### https://slocat.net/raising-awareness-for-safer-pedestrian-walkways-in-harare-zimbabwe/

Suburban. (2022, December 7). City of Munich team visits Harare. Sub Urban.

#### https://www.suburban.co.zw/city-of-munich-team-visits-harare/

Kuhudzai, J. (2022, July 15). *The future of Harare: Roundtable meeting as part of Harare Bike Day*. Clean Technica.

 $\frac{https://cleantechnica.com/2022/07/15/the-city-of-harare-hosted-the-future-of-cycling-in-harare-notable-meeting-as-part-of-harare-bike-day/}{}$