GENDERED DESIGN IN STEAM (GDS) - PROJECT TEAM POSTERS

GDS, Carleton University

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IDRC GRANT / SUBVENTION DU CRDI : - GENDERED DESIGN IN STEAM (SCIENCE, TECHNOLOGY, ENGINEERING, THE ARTS AND MATH)

GENDERED DESIGN IN STEAM

ID74 Improving transportation systems for women in Rwanda

ENGINEERING

TRANSPORT & MOBILITY

Since the early 1990s, gender mainstreaming has been developed as a tool to help in implementing new policies in different areas, however, this tool has not been properly utilized in the transport sector. This project focuses on including gender mainstreaming in the research of the transport system in Kigali City, Rwanda. The gendered public transport project shows that there are tenacious and clear gender differences in transport patterns amongst women, elderly people, and people with disabilities. This research project shows that transport policymakers and researchers must pay attention to gender issues in order to incorporate gendered designs that will impact and improve transport policy and transportation systems.

Buses are the main source of public transportation in Kigali City, Rwanda. Other public transport systems include motorcycles and bicycles.

Team

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Outcomes

- Multiple versions of a questionnaire produced to address issues faced in the Rwandan transport policy regarding gender design. Multiple versions were produced due to the changing circumstances of Covid-19.
- Raised awareness among stakeholders and policymakers in the transport sector that address the needs of gender design for vulnerable populations such as pregnant women, elderly citizens, children, and people with disabilities.
- Training manual produced by the research team that guides the user on how to collect data ethically and successfully.
- Formed new partnerships with donors interested in improving transportation policies within their own cities and countries.
- The Rwandan Association for Women in Science and Engineering (RAWISE) advocates for, collaborates with and encourages younger generations of women to pursue a career in STEM. This project is an example of how women in STEM who are dedicated to changing policies can improve gendered designs that in turn positively impact social and economic structures.

Top: Research team developing a training manual prior to collecting data in the field. Location: Kigali, Rwanda
Bottom: Enumerators at a bus stop in Kigali City, Rwanda, conducting interviews.

"...Gendered design. It's research you do considering gender aspects to produce a product that is good for all genders, men, and women."

— *Didacienne Mukanyiligira*

Methods

- Prior to starting the project, the team applied for ethical clearance, as well sent in an application for authorization to conduct data collection within Kigali City.
- Workshop amongst the researchers was held to create three questionnaires, one for policymakers and the others for public transport users in English and the local language, Kinyarwanda.
- The research team held a workshop to develop a training manual that indicates the important and ethical protocols for interviewing participants. Later, a workshop was held using the manual to properly train enumerators before going into the field to collect data.
- The first questionnaire was administered to policymakers to understand who, how and what policies are developed in terms of the transport systems. Data was collected through interview processes.
- Other questionnaires collected information from public transport users by focusing on social, economic, health and safety of the participants. The questionnaire gathered data from all genders with a focus on vulnerable populations such as women and pregnant women, children, elderly peoples and peoples with disabilities. The questionnaire was administered through interviews at the bus stations and on the buses, as well as through a QR code so that participants could answer the questions in their own time.
- Covid-19 was an obstacle during data collection due to reduced capacity on public transport, lockdowns and curfews. The team had to postpone data collection, but was able to add questions on how the pandemic has impacted public transport systems. The results were used to encourage more changes to transport policies.

Lessons & Future Directions

- The training manual for data collection was successfully developed and can be adopted by other researchers looking to improve transport policies in their own cities.
- A report is being produced based on the data collected that will display the results of the project so that policymakers can use this information to improve the designs of the public transport system in Kigali City.

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