



Developing a Private Cost-Neutral Recycling System for the Residents of Ouagadougou

Alisha Chan, Esra Hawsawi and Kylie Walker

Original Problem Statement

We are Erska, Kylie, and Alisha and we are working with RAID the African Network of Engineers for Development. Our project is looking at the economic feasibility for recycling system in Burkina Faso, a landlocked country in West Africa, specifically in the capital city of Ouagadougou. Our client is looking to make a free solution for solid waste disposal while also trying to find a source of monetization from collected solid waste by turning it into interlocking bricks and street covers. He hopes to make a functioning waste system in Ouagadougou and eventually all African cities.

Final Problem Statement

Our project is looking to find a cost neutral way to process solid waste in Burkina Faso's capital city of Ouagadougou and generate revenue from recycled materials created from collected waste. This economic feasibility study will attempt to mitigate the amount of solid waste on the streets, and in doing so improve the health, natural resources, and the economy.

Research Findings

- Currently no specific regulations on the sustainable waste management in Burkina Faso
- There are regulations on municipal solid waste, there is a lack of infrastructure for waste separation and collection
- Although waste pollutes the countryside and harms agriculture, illegal dumping persists
 - Legislation for a plastic bag bans are unpopular



Research Findings



- Regulations on municipal solid waste exists but there is a lack of infrastructure needed for waste collection
- Most waste goes to landfills but some private recycling programs exist
- Capacity building and technical support would be required to develop and implement an integrated solid waste management strategy in Burkina Faso.

Methodology

There are other existing projects in place that are actively pursuing solutions that fall within the scope of our mission statement.

Existing Initiatives

The Borgen Project : An advocacy group focusing on combating poverty, with an emphasis on clean water and sanitation, goals which our project aims to expedite.

Weaving a Brighter Future for Burkina Faso: A product of the NEERE project funded by the EU that aims to improve sanitation, while helping the women and youth of Burkina Faso. It's responsible for the majority of work related to waste management and collection in Burkina Faso, while generating income.

Moving forward

1. What options will you take to finance your urban infrastructure project: Municipal revenues, loans, or intergovernmental transfers/grants?
2. How is the recycled materials superior to non-recycled materials in the market. Or what is the incentive for buyers to buy bricks of recycled materials instead of generic materials?
3. Have businesses been buying or using recycled materials in a large scale?
4. How does the client plan on working on the infrastructure in the city of Ouagadougou?
5. Is the funding to purchase land, buy supplies and hire workers to start the process before income from the recycling sales starts?
6. Will you teach the people of the city to sort trash or will you have workers to process it?