

KUMASI WASTE FREE PROJECT

Short Overview

This project addresses the pervasive problem of plastic waste in Kumasi, Ghana, by creating a sustainable, community-driven recycling model that fosters entrepreneurship, provides employment opportunities, and promotes environmental responsibility. Through the collection, processing, and transformation of plastic waste into valuable products like bins, school desks and re-usable bags, we aim to reduce plastic pollution, empower vulnerable populations, and build a more circular and sustainable economy.

Reflections

Goals: The project initial goals centered on reducing plastic waste through collection and recycling. This evolved to encompass sanitation improvement (Provide 50 waste segregation bins made from plastics for the short term), inclusive education (Produce and distribute student desks from recycled plastics to marginalized schools), fostering youth entrepreneurship through innovative plastic transformation as well as raising awareness about plastic waste management within the Pankrono-Adabraka community.

Goals: (How and why it shifted)

a) Policy Development

Pay for Your Household Waste Policy (PYHWP): Aimed at managing community waste effectively while ensuring equitable cost distribution among households. A survey was done in the community to understand waste generation pattern, socio-economic factors and spatial form and function (Through Geographic Information System, GIS) that influenced this pattern followed by analysis which informed the policy development.

b) Inclusivity Efforts

Engaged persons with disabilities in the project by involving them in product design and production processes, thus creating job opportunities.

c) Innovation Initiatives

- K.W.F.P Young Innovative Challenge: Launched a competition for local schools to encourage youth entrepreneurship through the development of products from plastic waste.
- Reduction of Single-Use Plastics: Introduced alternatives like leaves and paper bags for food vendors to minimize the use of polythene bags.

Challenges Faced

1. Transportation Issues: Difficulties in transporting plastic waste to recycling centers. It was overcome by setting up collection points for easy pick-ups.
2. Cost of Materials: Local molders exploiting the situation due to perceived financial backing. Engaged with persons with disabilities to mold the frameworks.
4. Health Issues: Personal illness impacted project progress in January. Planned alternative way of achieving January goals in the subsequent months.

Timeline and Process:

Phase 1 (Months 1): Community mobilization, stakeholder engagement, plastic waste collection pilot program and public education and awareness on TV station.

Phase 2 (Month 2): Volunteers recruitment and Training

Phase 3 (Month 3): Establishment of recycling and production workshop, training PWDs in bag sewing and bin frame molding.

Phase 4 (Month 4): Production and distribution of bins and school desks, launch of K.W.F.P Young Innovative Challenge, Public Education and awareness, Policy Implementation

Phase 5: (Month 5) Monitoring, evaluation, and community awareness campaigns, Waste Free Leadership Conference.

Key Learnings:

- Community ownership is essential for sustainable waste management.
- Inclusive employment models empower vulnerable populations and foster social cohesion
- Youth engagement is crucial for driving innovation and long-term environmental stewardship
- Collaboration with local government and community leaders is vital for scaling up impact.

Impact and outcome

- Each bin produced utilized approximately 143 plastic bottles (totaling 2,860 bottles for 20 bins).
- Each desk produced used around 49 plastic bottles (totaling 245 bottles for 5 desks).
- Approximately 900 kg of plastics have been collected and sent to recycling centers.
- Increased community awareness about the environmental and economic value of plastic waste through a network of community volunteers dedicated to plastic waste reduction
- Trained and educated over 1,000 young people about recycling and upcycling of plastics.

Potential for Ongoing Impact: The project's sustainable business model, community ownership, and focus on youth engagement create a strong foundation for long-term impact. I aim to expand the production capacity, diversify the product line, and replicate its model in other communities.

What I am Most Proud Of: The project's transformative impact on the lives of Persons with Disabilities, providing them with meaningful employment, economic independence, and a sense of purpose. Witnessing their skills and contributions flourish has been incredibly rewarding. Additionally, the enthusiasm and creativity displayed by the young participants in the K.W.F.P Young Innovative Challenge have inspired me and reinforced my belief in the power of youth to drive positive change. These moments demonstrate the power of community-led initiatives to address environmental challenges while simultaneously fostering social inclusion and economic empowerment.

Conclusion

The Kumasi Waste Free Project has made significant strides towards its goals, despite facing various challenges. The initiatives have not only contributed to better waste management practices but also fostered a culture of sustainability and inclusivity within the community. Continued efforts will be necessary to maintain momentum and further expand the project's impact.