

STAGE: IMPACT ◆ NAIROBI, KENYA









Taka Taka Zero is a community-led impact enterprise empowering young people in Mathare to use innovative technology to convert waste into energy.

"FUELLING SUSTAINABLE FUTURES"

The Problem

In Nairobi, 3207 tonnes of waste is generated everday. The cost of disposing waste is more than what most earn in a day meaning it collects in dumpsites around the slum.

WASTE DISPOSAL

As waste management is an unafforable luxury, youth groups try to clear landfill sites in the community, but with infrastructure and support lacking, waste ends up in rivers or is burned.

FOOD INSECURITY

With the **cost of living** and **unemployment** high, many of the community suffer from **food insecurity** as they struggle to afford or obtain **sufficient nutritious food.**

Living in Mathare is one of the most difficult things as a youth. My community was very dirty. We need to overcome the challenge of the waste to help the community avoid diseases.

Felix, Youth Group Leader



Above: Child playing on a dumpsite



Above: Uncontrolled burning of waste

Entrepreneurial Leadership

IDENTIFYING NEEDS

We identified **FOUR** core needs of the community within Mathare.



Affordable Waste Disposal



Paid Employment



Affordable Food



Education on proper Waste Management



Abundance of waste which can be converted into thermal energy.



A pre-existing 'Community Cooker' with the potential to incinerate waste



A number of unemployed youth passionate about transforming their community.

CAPITALISING ON OPPORTUNITIES

The community had everything it needed to address its needs and create a meaningful sustainable impact but lacked the crucial support and infrastructure to unlock its full potential.

Our Innovative Approach

TakaTaka Zero is a scalable waste management solution that tackles poor waste management, youth unemployment, and food insecurity. We empower young people to drive behavioural change within their own communities whilst also tackling some of their most pressing needs.

We use a waste-to-energy technology, **The Community Cooker**, which incinerates no-value rubbish to generate thermal energy for cooking and heating water.



85% combustion efficiency.



Pure CO2 released - 80x better than CH4 released by waste.







Using the thermal energy produced by the community cooker, we established a **community-run bread-baking business.**



We **employed 30 youths** on a competitive wage to produce a high-quality and low-priced product to be sold to their community.

Business Model

Our simple bread-making business model allows us to provide affordable high-quality nutritious food for the community at a price, that by Jan 2024, will cover all operational costs.



Diversified our product range to provide choice, and attract additional customers.



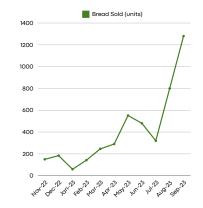
Increased **production capacity by 50%** through increased efficiency.

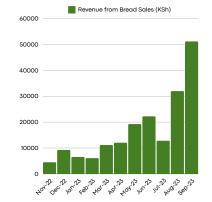


Implemented **Word of Mouth** marketing strategies increasing sales by **753**%.



Developed an **employee retention** and engagement strategy which led to an increase in **wages by 50**%.





To scale, we diversified our revenue stream and have increased our total revenue this year by €38,200

Sustainable Positive Impact

between August 2022 and September 2023



PEOPLE

- EMPOWERED 30 youths with basic waste management training, communication and teamwork skills.
- PROVIDED over 3223 loaves of bread to the community.
- children about waste management.



PLANET

- CLEANED the local community by collecting waste from 200 families and 4 institutions.
- of waste = SAVED 97
 TONNES of CO2.
- of methane EMISSIONS mitigating the risk of methane explosions.



PROSPERITY

- **EMPLOYED 30** youths and futher **UPSKILLED 12** individuals with dedicated roles.
- wages by 50% in line with cost of living.
- ✓ INCREASED bread sales by 433% since Nov. 2022.
- INCREASED revenue by 620% since Nov. 2022.
- products by JAN 2024.

PEOPLE DIRECTLY IMPACTED:

2000 individuals in the community.

PEOPLE INDIRECTLY IMPACTED: 6000 individuals in the community.

Future Planning



FUEL TRANSITION AT SCHOOL

Utilise the cooker to cater for Mathare School and reduce reliance on environmentally damaging firewood and provide a significant cost saving to the school.



EXPAND OUR WASTE COLLECTION

Work with new youth groups to collect from a larger radius and empower them to utilise a similar model to create impact.



TTZ is one of the **best projects that has ever happened to the community** in regards to waste management.







Future Location: Kibera

We have obtained a €34,000 seed investment from the Ford Family Foundation. We will replicate our model by repairing 5 new cookers by 2028 which will directly impact 10,000 individuals and save 2880 tonnes CO2.