#### THE SOCIAL INNOVATION IN HEALTH INITIATIVE

# CASE COLLECTION

# TRASH4HEALTH INITIATIVE

A pilot community-based health initiative based in a rural area in the Northern part of Nigeria that ensures the provision of affordable, equitable and accessible healthcare services through the exchange of domestic plastic wastes.

Continent Africa

Country Nigeria

Health Focus Primary Health Care

Areas of Interest Community engagement, access to

healthcare, quality healthcare, affordability

Health System Focus Service Delivery

This case study forms part of the Social Innovation in Health Initiative Case Collection. This case study was prepared by SIHI Nigeria, Nnamdi Azikiwe University, Nigeria. The research was conducted in July 2020. This account reflects the stage of social innovation at that time.

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| ABBREVIATIONS          |   |

| CAC - | Corporate | Affairs | Com | missio | n |
|-------|-----------|---------|-----|--------|---|
|       |           |         |     |        |   |

DBN - Development Bank of Nigeria

MoH - Ministry of Health

MSME - Micro, Small & Medium Enterprises

NCDs - Non-communicable diseases

NGOs - Non-Governmental Organizations

NHIS - National Health Insurance Scheme

UNFPA - United Nations Population Fund

WHO - World Health Organization

### **EXECUTIVE SUMMARY**

Nigeria is one of the biggest contributors of solid waste in Africa with an estimated 32 million tons each year. Solid waste management is the most pressing environmental challenge facing urban and rural areas. In Nigeria with a population of about 186 million, there are little or no available data on the use of plastic materials in relation to city populations, their disposal, collection, and recycling methods. More so, there are no sustainable regulatory policies by the government to address these problems. These plastic sachets of water, single-carrier bags, and other disposable plastic products end up on the land and in the marine environment because of indiscriminate disposal and the popular social practice of dumping waste on the roadside, under bridges, and in drainage channels (gutters) during periods of rainfall.

Nigeria's population is estimated to double by 2050 and that could mean more solid waste hanging around and more plastic for recycling. Recycling plastics reduces the amount of energy and resources (such as water, petroleum, natural gas, and coal) needed to create plastic. Recycling plastic for reuse saves energy compared with producing virgin materials; 1 ton of recycled plastic can save up to 130 million kJ of energy.<sup>2</sup>

The Trash 4 Health initiative by Queen Amina Medical Integration is set up to ensure equity in access to quality healthcare services, especially for women of reproductive age and subsistence farmers who cannot afford to pay for these services. This initiative entails the collection of plastic waste from them in exchange for drugs and services. In this way, Queen Amina Medical Integration also reduce plastic pollution of the environment by recycling these plastic wastes which are Eco-friendly.

## INNOVATION AT A GLANCE

#### **Organisation details**

Organisation Name Queen Amina Medical Integration

Founding year 2078

Founder name(s) Alh. Habibu Abdullahi

Im plementer(s) The founder, operations officers, Clinical Officers, Co-founder (Drug Sales

Person), Waste Scavengers, Plastic pellets Machine Operator and Women

who have benefited from the initiative (act as referrals)

Founder nationality Nigerian

The current head of the organization

Alh. Habibu Abdullahi

Organisational structure Non-governmental organization (Trash 4 Health Initiative)

Main value proposition The Trash 4 Health Initiative was set up to ensure equity in access to quality

healthcare services, especially for women of reproductive age and

subsistence farmers, who cannot afford to pay for these services as well as afford to be registered under National Health Insurance Scheme (NHIS). This initiative entails the collection of plastic waste from them in exchange for drugs and services. In this way, Queen Amina Medical Integration also reduce plastic pollution of the environment by recycling these plastic wastes. Thus, people improve their quality of life through the trash they generate in an eco-

friendly manner.

#### Project stage

Size 86 employees (68 employees are working on the project with 78 employees in

the organization) with about 200 women as volunteers that act as referrals from the community. The founder supervises the activities. A total of 5,400 community members (7,600 Males and 3,800 Females) have benefitted from

this initiative.

Main income stream

Proceeds from sales of the Plastic waste pellets, Grant from the Tony Elumelu Foundation and sale of drugs and provision of health services to members of the community who can afford to pay.

Annual income

N 5,000,000 (\$77,772)@ N 450/\$.

As of 2020, 25,000 tons of plastic waste were collected and 75,000 tons were crushed into pellets and sold to plastic industries for recycling.

#### Operational details

Country/countries of operation

Nigeria

Type of beneficiary

Everyone is open to being a beneficiary. But mostly consists of, elderly persons, women of reproductive age and subsistence farmers, who cannot afford to pay for these services as well as afford to be registered under the National Health Insurance Scheme (NHIS).

Number of the beneficiary (annually)

7,800

Cost per client

This varies per person and is dependent on the following factors namely, the type of health services or drugs needed and quantity of plastic waste submitted. 7 kg of Plastic waste= N40 (0.7cent)

Local engagement

The scheme is fully implemented and operated by the project staff (mostly the locals) and health centre staff, under the governance and supervision of the founder. About 200 women that had benefitted from the initiative, serve as referrals.

Innovative elements

This initiative is eco-friendly

Income is generated from Plastic waste used by the community members.

Positive health-belief and health-seeking behaviour change in the catchment areas due to increased awareness of the benefits of the Trash 4 Health initiative.

The establishment of multi-faceted collaboration between the community women who act as beneficiaries that have benefitted from the scheme has helped the organization to break the religious and cultural barriers women face when trying to access quality healthcare services.

Scaling Considerations

It can be replicated in many parts of the Country to help solve the problem of blockage of drainage systems by solid wastes from plastics. It provides an opportunity to train other interested people from different parts of the Country on the Trash 4 Health model with modifications from lessons learnt.

Take-off grant (for the procurement of more Plastic waste crushing machines and Office space). technical support/partnerships and collaboration with relevant government agencies, non-governmental organizations (NGOs) and philanthropists will be needed.

#### Sustainability Considerations

For the Trash 4 Health initiative, sustainability considerations require the provision of funds (for the procurement of more Plastic waste crushing machines, the opening of new counselling offices, trash banks (waste collection centres) and training of other health and paramedical workers on ways to generate income from their trash) preferably in other parts of the Country. Technical support/partnerships and collaboration with relevant government agencies, non-governmental organizations (NGOs) and philanthropists.

#### Key Lessons

Plastic wastes generated by community members can be used to access quality healthcare services.

Practical demonstration of the benefits of the initiative and testimonies of beneficiaries has a "snowballing effect" on inclusiveness.

This initiative addressed the issue of environmental plastic waste pollution as well as improving the quality of life of the community members that generate these wastes.

Despite the religious and cultural barriers to accessing quality health care services by these community members especially the women of reproductive age, the beneficiaries act as referrals and promoters of this initiative.



- Obiezu, T. (2019). Nigerian Recyclers Reduce Plastic Waste by Exchanging Trash for Cash. Accessed on 07/08/2021 from <u>Nigerian Recyclers Reduce Plastic Waste by Exchanging Trash for Cash | Voice of America - English (voanews.com)</u>
- 2. Garcia, J.M. and Robertson, M. L. (2017). The future of plastics recycling. Science, 358(6365): 870-872. DOI: I0.II26/science.aaq0324











