A REPORT ON

PROMOTING POSITIVE PEACE THROUGH CIRCULAR ECONOMY PRACTICES IN WASTE MANAGEMENT AMONGST WASTE PICKERS IN ZOMBA CITY, MALAWI.

A SOCIAL CHANGE INITIATIVE CONDUCTED IN ZOMBA CITY, MALAWI

BY

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ABSTRACT

Zomba City in Malawi continues to face serious challenges in managing waste. About 115 tonnes of solid waste are generated every day, but only 29% is collected and dumped at Chikumbeni dumpsite. The waste recovery rate is 5% indicating that the majority of waste generated is dumped in rivers and open spaces, leading to environmental pollution and, spread of diarrheal diseases. The purpose of this social change initiative was to accelerate the adoption of circular economy practices in waste management, to address problems resulting from poor waste management, which undermine positive peace.

This initiative was guided by the systems theory which was developed by Ludwig von Bertalanffy. Waste management and positive peace framework are based on systems thinking. They are composed of various elements which interact and influence each other to produce an outcome which is greater than the sum of all the elements.

The main activities included training of eighteen waste pickers, as well as identifying two markets and linking them to the waste pickers. Between April and July, 11.2 tonnes of plastic materials were sold generating about $3,888, demonstrating that reliable and profitable markets are essential for stimulating and sustaining circular economy business. The initiative witnessed an increase in the volume of waste materials being sold. The circular economy business enabled the waste pickers to generate income and improve their livelihood. The initiative contributed to peacebuilding by addressing one of the key drivers of conflict, which is lack of economic opportunities.

CONTENTS

CHAPTER ONE

INTRODUCTION AND BACKGROUND

1.1 INTRODUCTION

Globally, the generation of solid waste continues to increase at alarming levels, outstripping the management practices. About 2.2 billion tonnes of municipal solid waste are generated every year, with an average per capital generation rate of about 1.42 kg/capita/day (Kaza et al., 2018). The total waste generation rate is expected rise to 3.4 billion tonnes by 2050 (Kaza et al., 2018).

Waste generation is not evenly distributed across the globe. Countries in the Organization for Economic Cooperation and Development (OECD) generate the majority of global waste at 44%, followed by East Asia and Pacific (EAP) at 21%, Latin America and Caribbean (LAC) at 15% (Kaza et al., 2018). Sub-Saharan Africa generates about 5% of the global waste, translating to 62 million tonnes every year, with an average per capita waste generation of 0.65 kg/capita/day (Kaza et al., 2018). Despite generating low volumes of waste, Sub-Saharan Africa faces serious challenges in managing waste due to limited resources, rapid population growth and inadequate enforcement of the policies.

The differences in total waste generation rates, indicate the disparities in the levels of economic development, urbanization and population growth across the globe. High income countries and urban residents generate more waste compared with low income countries and rural residents (Kaza et al., 2018).

Malawi is a landlocked country situated in the southeastern Africa. It is bordered by the United Republic of Tanzania in the north and north east, Mozambique to the east, south and south west, and Zambia to the west. Its current population is estimated at 21 million people (NSO, 2018).

1.2 BACKGROUND

Malawi just like most countries in Sub-Saharan Africa, faces serious challenges in managing solid waste, especially in the urban centres of Blantyre, Lilongwe, Zomba and Mzuzu. These four cities generate about 366,000 tonnes of waste every year, out of which only 30% is collected and disposed at the designated disposal sites (Njewa et al., 2022). Rapid population growth, urbanization, inadequate waste collection vehicles, poor community and private sector participation, and inadequate technical expertise by local authorities are some of the contributing factors to poor waste management in Malawi (World Food Programme, 2023).The current waste management system in Malawi follows linear economy model, which involves taking resources, processing into products and throwing them away after use (UNEP, 2024). The linear model results in depletion of natural resources, environmental degradation and health hazards (Ellen,

2023). While the linear economy model is still dominant, Malawi is beginning to embrace the circular economy model through policy adoption and initiatives. In circular economy materials are kept in circulation through reuse, refurbishment, recycling, and composting (UNEP, 2024) By minimizing environmental pollution, circular economy approaches help in reducing the incidence of diarrheal diseases (Ellen, 2023).

The Malawi Vision 2063, which is the long-term national development strategy for Malawi, identified environmental sustainability as a critical enabler of inclusive wealth and self-reliance. The environmental sustainability enabler focuses on promoting sustainable waste management practices such as recycling of waste, green economy, and production of energy from waste (National Planning Commission, 2021). The Environmental Management Act (2017), which is the overarching environmental law in Malawi promotes waste reduction through waste recovery and recycling which are elements of circular economy (Government of Malawi, 2017a). The Environment Management (Waste Management and Sanitation) Regulations (2008) promotes integrated waste management and adoption of waste management hierarchy, which are elements of circular economy (Government of Malawi, 2008). The National E-Waste Management Policy (2024) supports circularity in electronics through formal recovery and recycling infrastructure (Government of Malawi, 2024). The Malawi Local Government Act (2017) mandates local authorities to provide solid waste management services such as collection, transportation and treatment of solid and liquid waste. (Government of Malawi, 2017b).

Zomba City is the fourth largest urban centre in Malawi and is situated along the M3 road about 65 km north of Blantyre, and about 300 km south east of Lilongwe, the capital city. Zomba City has a population of 105,013 people with an annual growth rate of 2.5% (National Statistical Office, 2019). In 2024, Zomba City adopted a policy to transition from a linear economy model to a circular economy model in the management of waste (Zomba City Council, 2025). Following the transition to circular economy, several initiatives have been implemented in Zomba City, including the construction of composting facilities, biogas plants, circular economy competition in secondary school and capacity building and community awareness. Despite the policy framework and various circular economy initiatives, adoption of circular economy remains very low, at only 5% indicating a significant implementation gap (Zomba City Council, 2024) . Low adoption of the circular economy is attributed to several barriers including low levels of knowledge and skills , poor access to markets, limited financing for circular economy infrastructure and absence of producer responsibility schemes (EPR) (Njewa et al., 2022).

1.2 STATEMENT OF THE PROBLEM

Zomba City faces serious waste management crisis. About 29% of the waste generated is managed in a controlled facility (Zomba City Council, 2024). Plastic leakage is high at 10.1kg/capita/year (Zomba City Council, 2024). Poor waste management contributes significantly to burden of diarrheal disease (Worede et al., 2025). Diarrheal diseases are one of the leading causes of Disability and Adjusted Life Years in Malawi (Government of Malawi, 2023). During the 2023 cholera outbreak, Zomba City recorded about 750 cases and 28 deaths, resulting in an incidence of 89/100,000 and a case fatality rate of 3.689 (Chaguza et al., 2024). Most cases occurred among adults aged 15 to 49 years (Chaguza et al., 2024).

The waste management crisis is more pronounced in low-income settlements, where 65% of the people live (Zomba City Council, 2024). Inadequate resources, urbanization and limited expertise are the key factors responsible for poor waste management (World Food Programme, 2023). The linear economy model is worsening the crisis by driving environmental degradation and increasing health risks (UNEP, 2024). In response to the crisis, Zomba City Council adopted a circular economy model. However, its adoption remains low (Zomba City Council, 2024). Inadequate knowledge and skills, low incentives, and poor access to markets are the factors responsible for low uptake (Zomba City Council, 2024).

While implementing partners made progress in strengthening the capacity of community structures, waste pickers remain marginalized despite their essential role in waste management. This initiative targeted waste pickers to acknowledge their contributions and provide the necessary support.

1.3 GOALS AND OBJECTIVES

The goal of this social change initiative was to promote positive peace by addressing the root causes of conflicts associated with poor waste management practices in Zomba City. These include environmental pollution, spread of diarrheal diseases, community tension, depletion of natural resources and economic inequalities.

The specific objectives were as follows:

i. To identify lived experiences, challenges and opportunities faced by the informal waste pickers.
ii. To identify five reliable markets for recyclable and reusable materials and establish direct linkages between these markets and waste pickers.
iii. To train fifty waste pickers by building their capacity to implement circular economy practices in waste management.
iv. To strengthen stakeholder collaboration in the implementation of circular economy initiatives

1.4 CHALLENGES AND MITIGATION STRATEGIES

This initiative encountered the following challenges during implementation:

i. The informal waste pickers did not want to stay long during the training session as their daily survival depended on scavenging the recyclable materials at the dumpsite. To address this, the training sessions were limited to only two hours per day, but spread over a period of five days**.**
ii. All waste pickers operated without basic personal protective equipment (PPE) such as gloves, gumboots, and face masks, exposing them to frequent injuries, infections, and other health hazards. To address this challenge, the initiative reached out to Zomba City Council and stakeholders to support the waste pickers.
iii. Waste pickers faced challenges in transporting their recycled and recovered materials to markets in Blantyre. They could spend two or three nights on the road. To address this, Zomba City Council and stakeholders supported the waste pickers by facilitating transport.
iv. Plastic bottles were not favored by waste pickers due to their low weight-to-value ratio, compared to other waste materials. A bag of plastic bottles could weigh less than ten kg, fetching less money compared to a bag of white and black plastics. To address this, waste pickers were still being encouraged to carry some bags of plastic bottles alongside other waste materials.
v. Most waste pickers had psycho-social issues, which made it difficult to sometimes reach consensus. To address this challenge, psychosocial therapy was added to the training program.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This literature review examined the current body of knowledge on circular economy, waste management and positive peace, and linkages amongst them, within the context of an urban setting. It focused on peer-reviewed journals, policy documents and reports, conducted in Africa.

2.2 WASTE MANAGEMENT IN AFRICA

Africa faces a waste management crisis that undermines environmental sustainability, public health and social stability (IETC, 2019). Africa generates about 250 million tonnes of total waste annually, out of which only 10% is properly managed in controlled facilities, while the remaining 90% is dumped in undesignated sites (IETC, 2019). Rapid urbanization, unplanned developments, weak legislation, lack of enforcement, low public awareness, negative attitudes, inadequate resources and inadequate infrastructure are some of the contributing factors for poor waste management in Africa (Smart Cities Dive 2017; Chen 2018).

Waste management performances vary significantly across African regions. Sub-Saharan Africa records the lowest waste collection rate (36%) and waste recovery rate (4%), while North Africa achieves higher rates of 77% and 18%, respectively (UNEP, 2024). Globally, the average waste collection rate is 75%, demonstrating how far Africa is lagging behind. Generally, countries with higher Growth Domestic Products (GDPs) tend to generate more waste but also maintain higher waste collection and recovery rates (UNEP, 2024).

Significant disparities also exist within countries and cities. Municipal solid waste collection services tend to be better in cities than in rural areas (UNEP, 2018). Within the cities, low-income residential areas have lower waste collection rates compared to the central business districts and middle and high-income residential areas (Kumar et al., 2022; UNEP, 2018). This unequal distribution of municipal solid waste management services reinforces social inequalities and creates community tensions.

Municipal solid waste management services in most African cities follows a linear economy model which emphasizes on collection and disposal of waste (Kaza et al., 2018). Solid waste collection rates are generally low, and the predominant disposal method is crude dumping rather than sanitary landfills. Most African cities have only one disposal site, which often operates beyond design capacity (Kaza et al., 2018). Crude dumping poses significant risks to public health and environment.

In Africa, circular economy practices are mostly carried out by the informal sector such as the waste pickers who in turn sell the recyclables to recycling companies (*Waste Management & Recycling*, 2025a). The most recycled materials are metals, plastics, glass, and papers (UNEP, 2024). The circular economy has numerous benefits. Circular economy reduces the rate of waste generation at source which in turn reduces the volume of waste dumped in landfills. Circular economy can reduce about 15%–25% of total greenhouse gas emissions (UNEP, 2024).In Africa, it can reduce up to 60% of the greenhouse gas emissions.(ACEA, 2024; *Waste Management & Recycling*, 2025b) According to the African Circular Economy Alliance (ACEA), the circular economy sector in Africa has the potential to create over 11 million jobs by 2030. About 60% reduction in the emission of green-house gases by 2030.(ACEA, 2024; *Waste Management & Recycling*, 2025b)

In order to transition the African economies to circular model, the African Union launched the Circular Economy Action Plan (CEAP) on 17th July 2025(European Union, 2025). The CEAP requires that African cities should recycle at least 50% of the total waste generated. Despite various initiatives, the implementation of circular economy models in Africa remains limited. Inadequate financial resources, insufficient legislation, inadequate infrastructure, lack of incentives and limited markets are some of the contributing factors (Kumar et al., 2022; UNEP, 2024).

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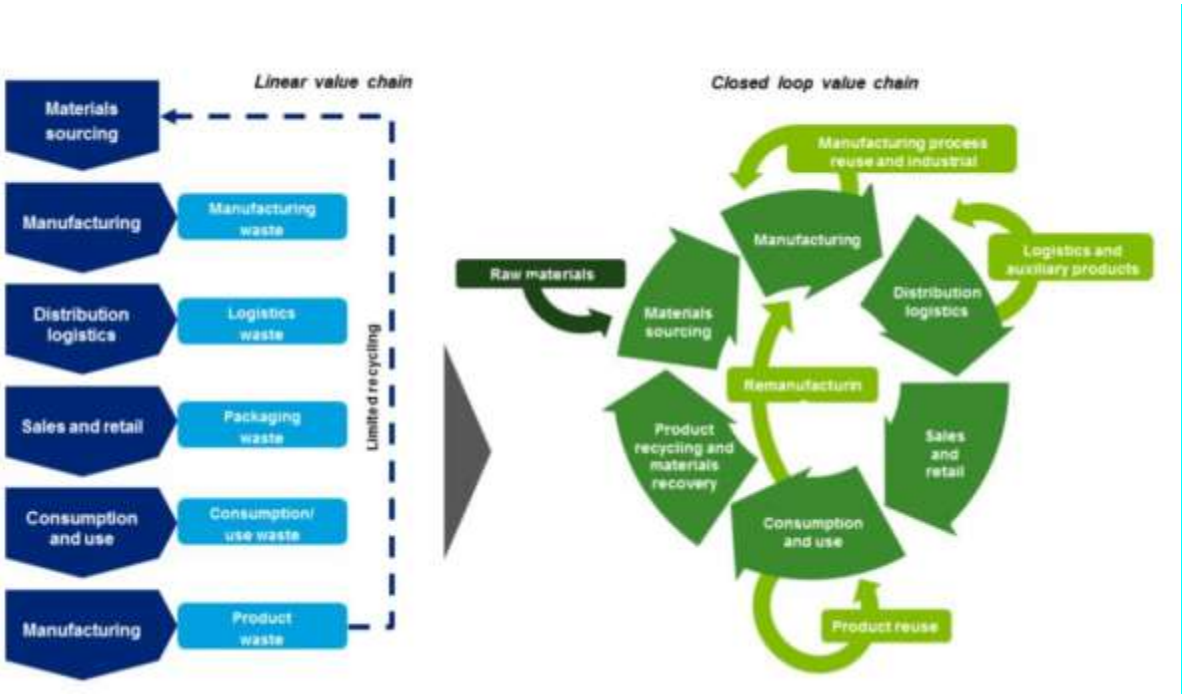
2.3 THEORETICAL FRAMEWORK

The theoretical frameworks provide a foundation for understanding how studies are conceptualized and analysed. In this study, the framework integrates circular economy model and the positive peace framework, each offering unique insights into understanding the waste management practices and positive peace.

2.3.1 CIRCULAR ECONOMY MODEL

The global economy is dominated by a linear economy model in which goods are manufactured from raw materials, sold, used and then discarded as waste (UNEP, 2024). However, the linear economy model is being challenged, because it leads to depletion of natural resources and environmental pollution, due to its emphasis on consumption (Ellen Macarthur Foundation., 2015; Mandpe et al., 2022). Circular economy is viewed as an alternative model, because of its emphasis on restoration and regeneration.

Circular economy refers to an economy system aimed at eliminating waste by keeping materials and products in use as long as possible through processes like maintenance, reuse, refurbishment, recycling, and composting (Ellen Macarthur Foundation., 2015; Tambovceva & Titko, n.d.). Circular economy tackles global challenges such as climate change, loss of biodiversity, waste and pollution (Ellen Macarthur Foundation., 2015).



(Tambovceva & Titko, n.d.)

Figure 2: Linear economy vs circular economy

As indicated in the figure 2 above, in linear economy, materials flow in a straight line from source to disposal. Recycling may be present, but very limited. As opposed to circular economy, materials flow in loops, where materials are continuously reused, recycled or remanufactured.

2.4 THEORETICAL UNDERPINNINGS

There are a number of theories that inform, guide and help people to understand waste management. However, it is only Systems Theory and Positive Peace Framework that are very relevant. Both theories have been thoroughly discussed in this section and how they can be applied in circular economy practices in waste management.

2.4.1 SYSTEMS THEORY

The development and implementation of this social change initiative was guided by the systems theory. The systems theory was developed by Ludwig von Bertalanffy, and provides a framework for understanding how various elements of a system interact and influence each other (Lai & Huili Lin, 2017). Systems theory views phenomena as a complex system of interrelated parts (Amadei, 2020). Systems have limits, but also interact with external environments. All systems have emergent properties or outcomes which arise from interactions of the elements, to create an overall outcome that is greater than the sum of all the elements (Amadei, 2020; Lai & Huili Lin, 2017).

Waste management is an open system, composed of inputs, processes, outputs, feedback and environment interacting with one another to achieve an overall goal of protecting and promoting public health, environmental sustainability, and socio-economic development (Adam, n.d.). The inputs of this system such as solid waste, financial resources, human resources, equipment, and technology, are converted into positive outputs such as cleaner and healthier environment and jobs creation through processes such as waste segregation, collection, transportation and disposal. The system can also result into negative outputs such as environmental pollution which leads to the spread of diarrheal diseases, reduces trust in local authorities and community conflicts. The waste management system is influenced by external factors such as existing policies, consumer behaviour, technology and population growth (Adam, n.d.). The waste management system is complex and adaptive, and the implementing institutions and stakeholders need to constantly adapt to changes in the environment.

2.4.2 POSITIVE PEACE FRAMEWORK

Quincy Wright and Johan Galtung are widely regarded as the founding fathers of peace studies, with Galtung regarded as the principal pioneer. Quincy Wright defined positive peace as a situation of integration

and cooperation between states in international relations (Quincy Wright, n.d.). Quincy's focused on international and national levels, neglecting community-based peacebuilding efforts. Johan Galtung later defined positive peace as the absence of structural violence or limitations of human potential. (Galtung, 1969). However, the definition by Institute of Positive Peace (IEP) has become increasingly popular. IEP defines positive peace is the 'attitudes, institutions and structures that create and sustain peaceful societies'(dlewis, 2020). Positive peace addresses root causes of conflicts (dlewis, 2020). The Positive Peace Framework is a system built on eight pillars as shown in Figure 1 below:

(dlewis, 2020)

Figure 1: Pillars of positive peace

The eight pillars are closely related where strengthening or weakening one pillar affects the outcome of the whole system. It is therefore necessary that for positive peace projects to be impactful, the interventions should be directed on all the eight pillars (dlewis, 2020; Scholten, 2024). Environmental sustainability is regarded as a missing pillar with Positive Peace Framework, as one of the criticism of the framework (Simangan, D., et al., 2022).

In the context of circular economy practices in waste management, the positive peace framework can be justified in the following ways:

i. WELL-FUNCTIONING GOVERNMENT

The circular economy practices in waste management are aligned with the existing laws and regulations such as the Environment Management (Waste Management and Sanitation) Regulations (2008), the National E-Waste Policy (2024) and the Zomba City Waste Management Policy (2024). Provision of quality waste management services creates trust between the community and government.

ii. EQUITABLE DISTRIBUTION OF RESOURCES

Circular economy practices in waste management creates employment and economy opportunities especially for the marginalized groups such as informal waste pickers, which in turn reduces inequalities.

iii. FREE FLOW OF INFORMATION

To accelerate adoption of circular economy practices such as waste segregation, reduction, recycling and recovery, it is important that intensive awareness campaign needs are conducted, to educate, engage and empower the communities.

iv. GOOD RELATIONS WITH THE NEIGHBORS

Healthier and cleaner streets and neighborhoods reduces conflicts between individuals and communities which arise from indiscriminate disposal of solid waste. Community clean up campaigns promote unity among residents.

v. HIGH LEVELS OF HUMAN CAPITAL

Capacity building initiatives for the waste pickers, private waste companies and institutions are important in improving their skills in circular economy practices.

vi. LOW LEVELS OF CORRUPTION

Transparency and accountability in managing the waste management budget and in procuring of works and services increases efficiency and public confidence.

vii. SOUND BUSINESS ENVIRONMENT

The Circular economy model creates entrepreneurship opportunities in waste recycling, reuse and recovery including composting, briquettes production and generation of bio gas.

viii. ACCEPTANCE OF RIGHTS OF OTHERS

Inclusive participation of marginalized groups such as informal waste pickers ensures equity, dignity and recognition of their contribution to waste management.

2.5 APPLICATION OF THE THEORY OF CHANGE

The theory of change explains how interventions or activities are expected to lead to specific development change, drawing on a causal analysis based on available evidence (United Nations Sustainable Development Group, 2017). Carol Weiss developed the theory of change in 1990s (United Nations Sustainable Development Group, 2017). The theory of change below illustrates the causal relationship between the activities, outputs, outcomes and intended result as applied in this social change initiative.

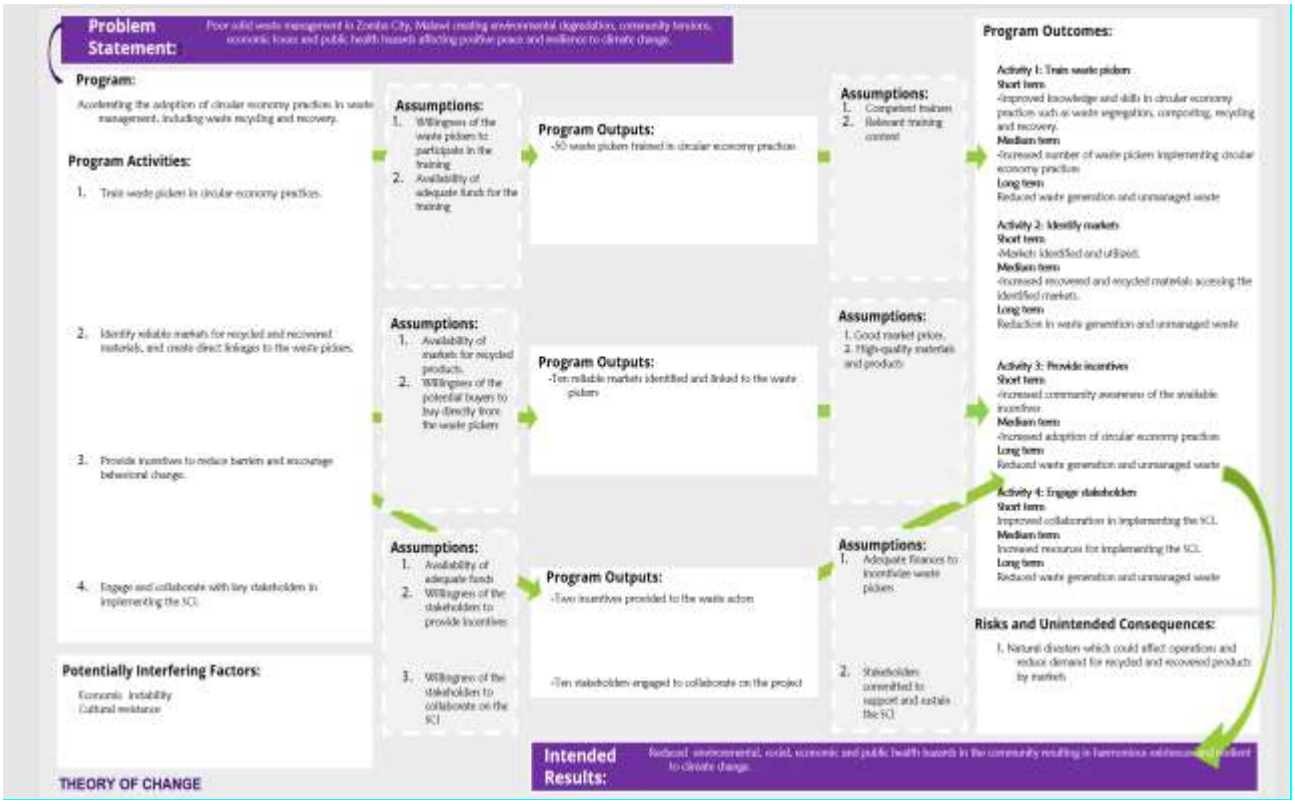


Figure 3: Theory of change

The following were the inputs for the initiative:

i. Funds for financing training, transportation and stakeholder engagement
ii. Skilled workforce for conducting the training, stakeholder engagement and mapping markets.
iii. Motor vehicles for the mobility of staff during the implementation of the initiative.

The enablers included the following:

i. Good collaboration between Zomba City Council, waste pickers, private waste companies business community and non-governmental organization, for creating leverages
ii. Enabling policies such as Zomba City Waste Management Policy and Zomba City Council By-Laws provided the regulatory framework to promote circular economy practices.

2.6 METHODS AND DESIGN

Participatory research and implementation design were used to better incorporate the voices, experiences and priorities of the waste pickers in the implementation of this initiative. Active involvement of the waste pickers is also essential for the sustainability of this initiative. The following methods were used to better collect insights and stimulate collaboration.

b. IN-DEPTH INTERVIEWS

In-depth interviews were conducted with waste pickers to understand their lived experiences, challenges and opportunities. Only waste pickers found at Chikumbeni dumpsite were eligible for selection. The interview guide included the following questions:

i. Describe your role as a waste picker?
ii. How do people in the community treat you as a waste picker?
iii. Describe the risks and dangers you face when handling waste?
iv. What support will you need to make your work safer?
v. Describe your experience in accessing waste at the collection or disposal sites within Zomba City?
vi. Describe the markets where you sell your waste materials?
vii. What challenges do you encounter in your work?
viii. What opportunities do you see for improving your work?

The findings informed the design of the social change initiative to respond directly to the needs and priorities of the waste pickers.

c. ROUND TABLE DISCUSSIONS

Separate round table discussions were conducted with critical stakeholders such as potential buyers, waste pickers, private waste companies, governmental institutions, and non-governmental organizations.

d. TRANSECT WALKS WITHIN THE COMMUNITY

Transect walks were conducted at Chikumbeni dumpsite waste to appreciate the waste management practices and environmental risks.

e. CAPACITY BUILDING IN CIRCULAR ECONOMY PRACTICES

The project conducted training sessions for waste pickers on circular economy practices. During the training session, theory was combined with practical demonstrations, for adequate understanding of the concepts.

CHAPTER THREE

INTERVENTIONS AND KEY FINDINGS

3.1 INTERVENTIONS AND ACTIVITIES

Table 1 shows the activities that were implemented in this initiative.

OBJECTIVES	INTERVENTIONS	ACTIVITIES
To Identify lived experiences, challenges and opportunities faced by the informal waste pickers.	Collect first hand data from the waste pickers	-Conduct in-depth interviews with selected waste pickers. -Analyse the findings -Use the findings to design the interventions
To Increase the knowledge and skills of waste pickers to implement circular economy practices.	Train the waste pickers on the circular economy practices, entrepreneurship and psychosocial therapy	- Conduct needs assessment to identify capacity gaps. -Identify an experienced trainer to facilitate the training sessions. - Develop training curriculum on waste segregation, composting, recycling, and resource recovery - Conduct training sessions including practical sessions on circular economy.
To Identify reliable and profitable markets for recycled and recovered waste materials	Facilitate market linkages between the waste pickers and buyers.	- Map potential buyers of recycled and recovered products and materials. -Conduct an engagement meeting with potential buyers.
To strengthen stakeholder collaboration in the implementation of circular economy initiatives	-Facilitate stakeholder collaboration in the implementation of this initiatives	- Identify and map relevant stakeholders involved in waste management in Zomba City. -Engage the stakeholders for collaboration.

3.2 KEY FINDINGS

This section presents the key findings of the initiative based on the interventions that were conducted.

This initiative was implemented in close collaboration with Zomba City Council and key partners. As the Director of Health and Social Services, it was easy to secure strong support from both the Council and its partners.

3.2.1 KEY INFORMANT INTERVIEWS

Three in-depth interviews were conducted with waste pickers to identify their lived experiences, challenges and opportunities.

The following were the common identified challenges:

i. Waste pickers experience stigma and discrimination, as community members do not want to be associated with them, simply because they handle waste.
ii. Waste pickers lack of personal protective equipment (PPEs) resulting in personal injuries due to sharp objects and fire.
iii. Low availability of waste materials during certain periods, especially during the rainy season when the dumpsite becomes inaccessible or when the municipal vehicles break down.
iv. Waste pickers face restrictions by municipal officials to access waste collection, such as markets.
v. Lack of profitable markets to sell recycled and recovered materials.
vi. Municipal garbage collectors often remove the most valuable materials before the waste pickers access them.
vii. Waste pickers lack training in occupational health and safety and circular economy practices

"……City Council workers do not allow us to access waste from markets and other collection points. They say that we are not recognized." ***(Male waste picker 1)***

*"……**.**Sometimes we do not find valuable materials when waste collection vehicles dump their waste here, because the City Council workers removes them."* ***(Male waste picker 2)***

"…There are times when waste collection vehicles don't dump here, especially during the rainy season. That's when our livelihood is badly affected. We are therefore requesting that your vehicles should continue dumping here." ***(Male waste picker 3)***

"…When collecting waste materials at the dumpsite, sometimes we get injured. Our feet are either burnt by fire, or pierced by sharp objects, as some hospitals also dump their medical waste here. Two years ago, I was pierced by a sharp object, and to this day I am still receiving treatment. We are therefore asking the City Council to provide us with personal protective equipment" ***(Female waste picker 1)***

The following were the opportunities identified by the waste pickers:

i. High volume of organic waste in the hotspots, for composting and waste-to-energy technologies.
ii. Increasing demand for recycled and recovered materials, especially plastics, metal and organic manure.
iii. Commitment by the national government, local authorities and some non-governmental organisations to scale up circular economy initiatives.

3.2.2 ENGAGEMENT OF STAKEHOLDERS FOR COLLABORATION

A mapping exercise was also conducted to identify relevant stakeholders for collaboration during implementation of this initiative. The mapping exercise included stakeholders from academic institutions, civil society organizations, business community and government institutions. The mapping exercise was followed by engagement meetings. At the end of the engagement meetings, the following institutions agreed to collaborate:

i. Zomba City Council
ii. Umodzi Green Collect
iii. Green Care
iv. Waste Advisers
v. Ladder Consultancy
vi. Green Pack

3.2.3 TRAINING OF THE WASTE PICKERS

The training sessions were held at Sambani Lodge which is located near Chikumbeni dumpsite and also homes for the waste pickers. Eighteen waste pickers participated in the training. The trainings were conducted for a period of five days, with each session lasting not more than three hours in a day. This was deliberately done to allow waste pickers to attend the training in the morning and return to the dumpsite to continue their work.

The training sessions were facilitated by the Programme Manager for Ladder Consultancy, as he has extensive experience and knowledge in waste management, entrepreneurship, and community empowerment. Apart from circular economy practices, the curriculum also covered entrepreneurship and psychosocial therapy. During the training, theory was reinforced by practical demonstrations, which were conducted at the dumpsite.

By the end of the five-day program, waste pickers demonstrated improvements in both knowledge and skills. Assessments indicated an increased understanding of circular economy practices, business skills, and increased awareness of psychosocial wellbeing.

3.2.4 IDENTIFICATION OF RELIABLE MARKETS AND LINKAGE TO WASTE PICKERS

Before this social change initiative, waste pickers sold their products to middlemen in Zomba City who offered very low prices. During the implementation of this SCI, mapping exercise was conducted to identify potential buyers in Blantyre City, located about 60 kilometres from Zomba City. Blantyre City is the commercial capital of Malawi, with a large number of industries. This exercise involved direct engagement with industries in Blantyre to determine their needs and requirements.

By the end of the exercise, only two potential buyers were identified. Green Pack and middle men. These were closely linked to the waste pickers. The following was the price list of the waste materials as of 31st July, 2025.

Table 2: Prices of the materials

NO	TYPE OF MATERIAL	PRICE (MWK)
1	LDPE White	800.00
2	LDPE Black	500.00
3	LDPE Mixed	500.00
4	Sacks	500.00
5	PET bottles	600.00
6	Basin	1,700.00
7	Plastic shoes	2,000.00
8	Rubber	2,000.00
9	Aluminum	6,000.00

The following is the summary of the sales between May and July 2025

Table 3: Summaries of the sales by the waste pickers

MONTH	LDPE (WHITE) IN KG	LDPE (MIX) IN KG
April	915	590
May	1104	911
June	2227	1026
July	2849	1594
TOTAL	**7,095**	**4,121**

In total, 11.2 tonnes of plastic materials were collectively sold between April and July, generating MWK7, 736,500.00 ($3,888) in income.

The money realized enabled the waste pickers to improve their standard of living.

"……..with the money I make from selling waste materials in Blantyre, I am able to pay school fees for my two daughters who are in secondary school. Before this, I used to struggle a lot to cover the fees. Now, some of our friends are even envious, and a few have joined us too." ***(Female waste picker 2)***

CHAPTER FOUR

CONCLUSION AND RECOMMENDATIONS

4.1 CONCLUSION

This social change initiative was designed to promote positive peace by tackling the root causes of conflicts associated with poor waste management practices in Zomba City. The initiative deliberately targeted the informal waste pickers, who are excluded in the formal waste management system, despite the essential role they play. Eighteen waste pickers were trained in circular economy practices to stimulate behaviour change. Two markets for recycled and recovered waste materials were identified and linked to the waste pickers. Between April and July, waste pickers collectively sold 11.2 tonnes of plastic materials to buyers in Blantyre, generating around MWK7, 736,500.00 ($3,888) in income. The money realized enabled the waste pickers to improve their standard of living. By creating a sustainable economic opportunity for the waste pickers, the social change initiative addressed one of the key drivers for conflicts and contributed to peacebuilding.

4.2 RECOMMENDATIONS / IMPLICATIONS FOR POLICY

Adoption of circular economy practices faces significant barriers in Zomba City, which include the following:

i. Lack of reliable and profitable markets for recycled and recovered materials.
ii. Lack of incentives and subsidies to stimulate the adoption of the circular economy practices
iii. Inadequate infrastructure for waste recycling and recovery
iv. Low levels of knowledge and skills on circular economy practices

To accelerate the adoption of circular economy practices, Zomba City Council and implementing partners should work together to address the identified barriers. The following are some of the recommendations:

i. Identify reliable and profitable markets for recycled and recovered materials, and create strong linkages with the waste pickers and private waste companies. Access to profitable markets will increase revenue for waste pickers and private waste companies, motivating them to continue participating in circular economy business. It will also stimulate other individuals to join.
ii. Provide financial incentives to the waste pickers, private waste companies and institutions to stimulate the adoption of circular economy practices. These could include waivers on licenses and municipal fees and rewards for those that are actively engage in circular economy practices such as organic composting, waste to energy technologies and briquettes making.
iii. Scale up community awareness and capacity building on circular economy practices. Knowledge and skills are essential for stimulating behaviour change. The primary beneficiaries should be

individuals, companies and institutions that are already engaged in waste management such as waste pickers and private waste companies.

iv. Construct additional waste recycling and recovery facilities such as biogas plants and composting facilities.

v. Integrate waste pickers into the formal waste management system. Waste pickers play an essential role in the management of waste, such as collection, segregation, recycling and recovery. Recognizing and supporting the contributions of waste pickers through capacity building, provision of personal protective equipment (PPE) and access to waste management facilities will enable them to scale up their operations.

4.3 SUSTAINABILITY PLAN

The Table below shows the plan that will be used to sustain the circular economy practices in Zomba City.

Table 4: Sustainability plan

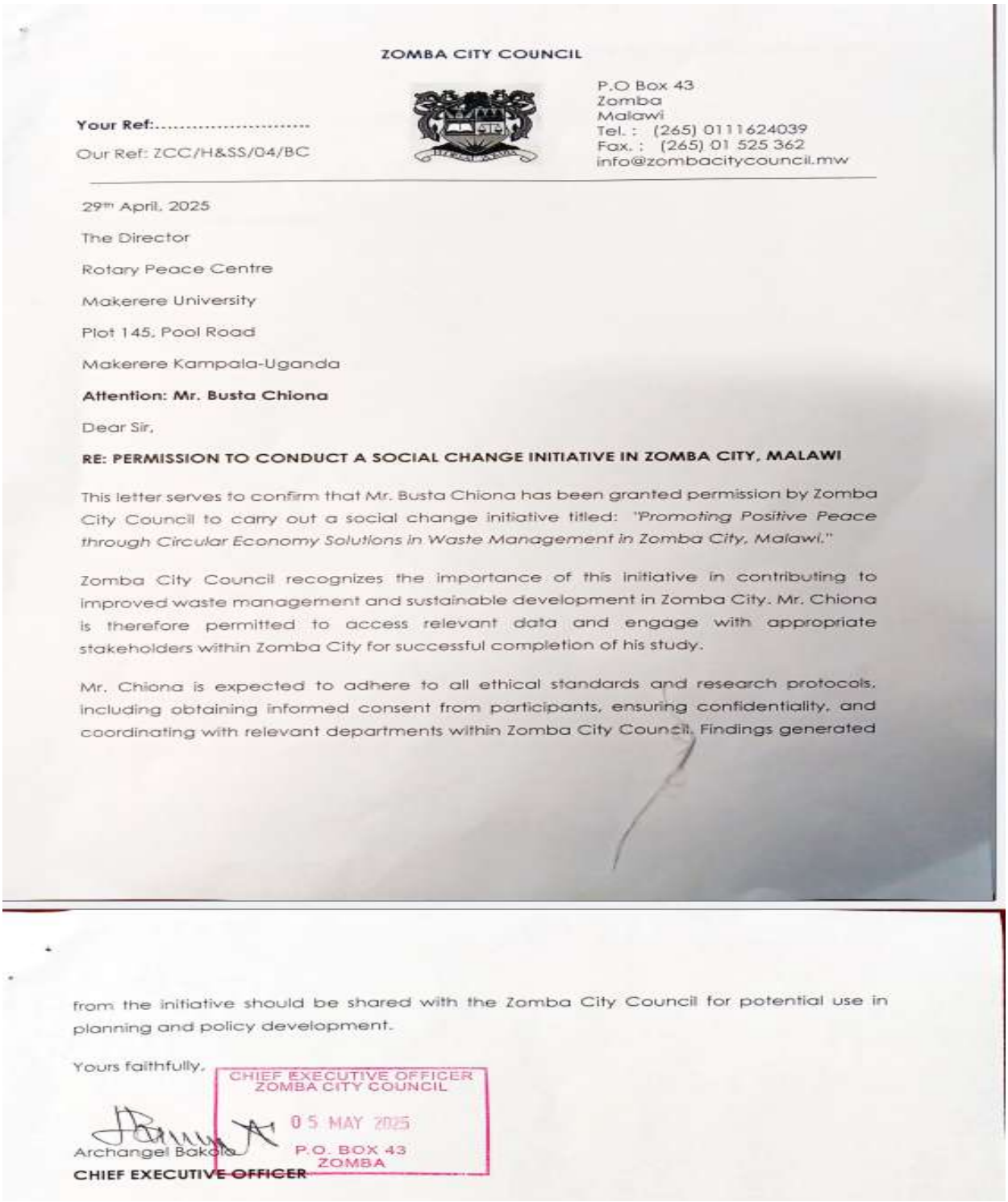
STRATEGIES	ACTIVITIES	OUTPUT TARGET	RESPONSIBILITY	TIME-FRAME
Provide financial incentives and subsidies to promote the adoption of circular economy practices	-Roll out financial incentives and subsidies to the community to stimulate the adoption of circular economy practices	5 incentives and subsidies rolled out to the communities	Zomba City Council and implementing partners	2025-2030
Improve access to markets for recycled and recovered materials	-Map potential markets -Establish linkages to the communities	10 reliable markets identified and linked to the communities	Zomba City Council and implementing partners	2025-2030
Improve stakeholders collaboration in the implementation of circular economy initiatives	-Identify relevant stakeholders -Establish partnerships	20 stakeholders engaged and collaborate on circular	Zomba City Council and implementing partners	2025-2030

		economy		
Develop a monitoring & system for circular economy initiatives	-Develop an effective M & E system to track progress	1 function M & E system developed	Zomba City Council	2025-2030
Improve infrastructure for circular economy initiatives	Construct additional waste recycling and recovery facilities	3 structures constructed (composting facilities, biogas plants)	Zomba City Council and implementing partners	2025-2030
Secure adequate financial resources for circular economy initiatives	-Develop and submit proposals to development partners - Engage the private sector to promote corporate social responsibility in waste management	-10 project proposals developed and submitted. -20 private institutions engaged in corporate social responsibility	Zomba City Council	2025-2030
Build the capacity of the community on circular economy initiatives	Train communities in circular economy practices	200 communities trained in circular economy practices	Zomba City Council and implementing partners	2025-2030
Promote circular economy practices in waste management	Conduct community awareness campaigns on circular economy	10 sensitization campaigns conducted	Zomba City Council and implementing partners	2025-2030

	initiatives			

APPENDICES

APPENDIX 1: PERMISSION LETTER



ZOMBA CITY COUNCIL

P.O Box 43
Zomba
Malawi
Tel. : (265) 0111624039
Fax. : (265) 01 525 362
info@zombacitycouncil.mw

Your Ref:.....

Our Ref: ZCC/H&SS/04/BC

29th April, 2025

The Director

Rotary Peace Centre

Makerere University

Plot 145, Pool Road

Makerere Kampala-Uganda

Attention: Mr. Busta Chiona

Dear Sir,

RE: PERMISSION TO CONDUCT A SOCIAL CHANGE INITIATIVE IN ZOMBA CITY, MALAWI

This letter serves to confirm that Mr. Busta Chiona has been granted permission by Zomba City Council to carry out a social change initiative titled: *"Promoting Positive Peace through Circular Economy Solutions in Waste Management in Zomba City, Malawi."*

Zomba City Council recognizes the importance of this initiative in contributing to improved waste management and sustainable development in Zomba City. Mr. Chiona is therefore permitted to access relevant data and engage with appropriate stakeholders within Zomba City for successful completion of his study.

Mr. Chiona is expected to adhere to all ethical standards and research protocols, including obtaining informed consent from participants, ensuring confidentiality, and coordinating with relevant departments within Zomba City Council. Findings generated from the initiative should be shared with the Zomba City Council for potential use in planning and policy development.

Yours faithfully,

CHIEF EXECUTIVE OFFICER
ZOMBA CITY COUNCIL
05 MAY 2025
P.O. BOX 43
ZOMBA

Archangel Bakola
CHIEF EXECUTIVE OFFICER

APPENDIX 2A: WASTE MATERIALS BEFORE DEPARTURE TO BLANTYRE

APPENDIX 2B: ARRIVAL OF THE WASTE MATERIALS IN LIMBE, BLANTYRE

APPENDIX 2C: BUYERS OF WASTE MATERIALS WAITING FOR THE PROCESS TO START

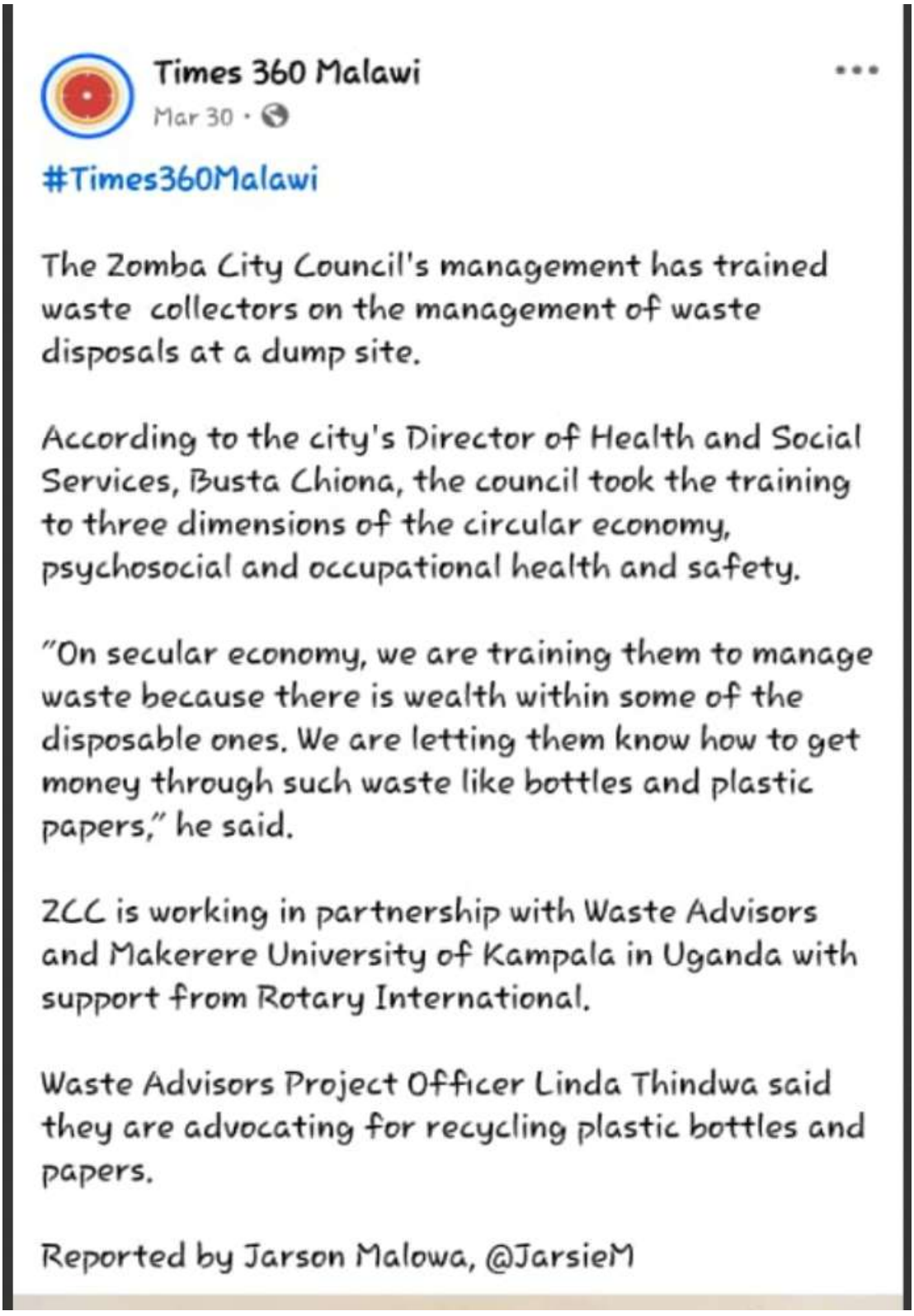
APPENDIX 2D: DISCUSSIONS BETWEEN THE BUYERS AND WASTE PICKERS

APPENDIX 2E: WEIGHING OF WASTE MATERIALS

APPENDIX 2F: LOADING OF WASTE MATERIALS INTO THE WEIGHING SCALE

APPENDIX 2G: TRAINING OF THE WASTE PICKERS

APPENDIX 3: MEDIA COVERAGE



Times 360 Malawi

Mar 30 ·

#Times360Malawi

The Zomba City Council's management has trained waste collectors on the management of waste disposals at a dump site.

According to the city's Director of Health and Social Services, Busta Chiona, the council took the training to three dimensions of the circular economy, psychosocial and occupational health and safety.

"On secular economy, we are training them to manage waste because there is wealth within some of the disposable ones. We are letting them know how to get money through such waste like bottles and plastic papers," he said.

ZCC is working in partnership with Waste Advisors and Makerere University of Kampala in Uganda with support from Rotary International.

Waste Advisors Project Officer Linda Thindwa said they are advocating for recycling plastic bottles and papers.

Reported by Jarson Malowa, @JarsieM

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