

ENHANCING SOLID WASTE MANAGEMENT FOR SUSTAINABLE ECONOMIC GROWTH IN AWKA MUNICIPALITY

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Abstract

This paper examines the green skills, jobs and entrepreneurial opportunities in solid waste management which are available for the youths in Awka municipality which in turn addresses the problems of poverty and hunger in the state and in the nation. Through literature review, data collection and participant observation, this study identified the great need for individuals, institutions and communities in Awka municipality to adopt proper solid waste management strategies which addresses the profound socio-economic effects of accumulated solid waste in Awka municipality. This study recommended and concluded with proper solid waste management strategies which has capacity to provide green skills, green technology and green jobs for youths in Awka municipality for our sustainable economic growth.

Keywords: Awka, Economic Growth, Municipality, Sustainable Development, Solid Waste Management.

1. INTRODUCTION

The term 'Sustainable Development' has been popularized by the World Commission on Environment and Development (WCED), in its 1987 report entitled, 'Our Common Future'. The commission defined sustainable development as 'the development that meets the needs of the present without compromising the ability of future generation to meet their own needs' (WCED, 1987). Waste is defined as any unavoidable material resulting from domestic activity or industrial operation for which there is no economic demand and which must be disposed of (Sridhar, 1996). "Poorly managed waste is contaminating the world's oceans, clogging drains and causing flooding, transmitting diseases, increasing respiratory problems from burning, harming animals that consume waste unknowingly, and affecting economic development, such as through tourism"(World Bank, 2018). Waste is defined as any substance which is discarded after primary use, or is worthless, defective and of no use. Examples include municipal solid waste (household trash/refuse), hazardous waste, wastewater (such as sewage, which contains bodily wastes (feces and urine)

and surface runoff), radioactive waste, and others (Anabaraonye, Chukwuma & Hope, 2019). Waste generation is expected to rise with economic development and population growth, lower middle-income countries are likely to experience the greatest growth in waste production. The fastest growing regions are Sub-Saharan Africa and South Asia, where total waste generation is expected to triple than double by 2050, respectively, making up 35% of the world's waste (World Bank, 2018). The materials that can be recycled include glass, aluminum, polyethylene (shopping bags, laundry bags, pure water sachets, yoghurt wrappers, soft poly bags, hospital drip bags, popcorn wrapper, bread wrapper, cellophane), plastic water bottles, metal scrap, different kinds of paper, electronics – computers, cellular phones, keyboards, batteries and other small electronic equipment, textile, wood, wire, cables, plastic product, rubber, etc. Apart from this industrial recycling, all the leaves, food leftovers, waste, twigs and other garden waste are decomposed by worms and converted into fertilizers (Bank of Industry, 2018). Waste generation is increasing at an alarming rate. Developing Countries like Nigeria are rapidly developing without adequate systems in place to manage the changing waste composition of citizens. According to the World Bank's "What a Waste 2.0 report", the world generates over 2 billion tonnes of municipal solid waste annually, with at least 33% of that are not managed in an environmentally safe manner (World Bank, 2018). A great percentage of materials are being recycled and are being used as household products and their number is increasing by the day. The most common recyclable material is plastic. Many plastic products and bags are in use nowadays. Plastic recycling serves as a solution to the earthly pollution. Plastics are polymers and are resinous and they are melted down to make other products. Most importantly plastic containers like water bottles, beverage containers, milk bottles, soap boxes, etc. are recycled (Bank of Industry, 2018). Uncollected waste and poorly disposed waste have significant negative health and environmental impacts. The cost of addressing these impacts is many times higher than the cost of developing and operating simple, adequate waste management systems. The World Bank is working with countries, cities, and partners worldwide to create and finance effective solutions that can lead to gains in environmental, social, and human capital (World Bank, 2018).

2. METHODOLOGY

Generally, this paper examined the socio-economic effects of accumulated solid waste in Awka municipality and innovative ways to achieve the sustainable development goals. This paper examined current progress with the solid waste management practices in Awka municipality which is a climate change mitigation strategy for sustainable development through existing literature review.

1.1. A BRIEF BACKGROUND OF AWKA MUNICIPALITY IN ANAMBRA STATE, NIGERIA

Anambra is a state in southeastern Nigeria. Its capital and seat of government is Awka. Onitsha, a historic port city from pre-colonial times, has developed as by far the largest urban area in the state. The state's theme is "Light of the nation" (ICTA, 2022). Anambra is the eighth-most populated state in the Federal Republic of Nigeria and the second-most densely populated state in Nigeria after Lagos State. The major urban centres of Anambra state are Onitsha, Nnewi, and Awka, the state capital. Anambra is state of rich history; great myths; giant strides; creative, hardworking and innovative people. The diverse perspectives to the origin of Anambra and Ndi Anambra are as mythical as the great people. Ndi Anambra are among the first set of God's creation on Earth, who migrated from the cradle of human civilization to their present

location. The History of Ndi Anambra is strongly linked to the history of the entire Igboland, as Ndi Anambra are perceived as the source of Igbo Civilization. Ndi Anambra existence dates as far back as 4500 BC as confirmed by archaeological findings unearthed in various locations in the state, including Igbo Ukwu, Aguleri, Awka, Ezira and Nri (ICTA, 2022). **Awka** municipality is a town and capital of Anambra state, southern Nigeria. The town lies along roads leading from Owerri, Umuahia, Onitsha, and Enugu. Formerly covered with tropical forest, the area around Awka now mostly consists of wooded grassland. South of the town on the slopes of the Awka-Orlu Uplands are some examples of soil erosion and gully. Awka is an agricultural trade centre (yams, cassava [manioc], corn [maize], palm oil and kernels) for the Igbo people of the surrounding area. Pop. (2006) local government area, 301,657 (Encyclopedia, 2023). Lack of proper solid waste management leading to air pollution, flooding, etc. are the major environmental problems associated with the impacts of climate change which is presently ravaging Awka municipality in Anambra State.

3. THE IMPLICATIONS OF SOLID WASTE MANAGEMENT IN AWKA MUNICIPALITY

Solid waste management presents problems in big cities like Lagos, and other major Nigerian cities such as Awka municipality which are linked with socio-economic development and population growth. The inability of municipal councils to properly manage the resulting rise in industrial and domestic waste is hazardous to the well being of the inhabitants. Haphazard industrial planning, increased urbanization, poverty and lack of competence of the municipal government are seen as the major reasons for high levels of waste pollution in major Nigerian cities. Some of the negative impacts have been disastrous to the environment, resulting in untreated waste being dumped in places where it can pollute waterways and groundwater (Ogbonna, Ekweozor & Igwe, 2002). Climate Change is a global challenge which we must of necessity tackle with urgency for our sustainable development (Anabaraonye, Okafor & Hope, 2018). Proper solid waste management is therefore a climate change mitigation strategy which will help to ensure sustainable development and socio-economic growth in Awka municipality in Nigeria. Lack of proper solid waste management in Awka has brought about profound socio-economic effects such as air pollution, flooding and erosion which are environmental problems ravaging communities in Anambra State. These environmental problems have led to increased mortality rate, displacement of citizens from their homes, loss of properties worth millions of naira, emotional and mental traumas, etc. in affected communities like Awka municipality.

4. GREEN ENTREPRENEURIAL OPPORTUNITIES IN SOLID WASTE MANAGEMENT IN AWKA MUNICIPALITY

Green Entrepreneurial practices are those activities that are related to products or processes that are involved in reducing, reusing and recycling of resources for economic, environmental and social sustainability (Fulvia et al, 2011). Entrepreneurs are individuals who conceive new business opportunities and take on the risk required to convert those ideas into reality (Ataman et al, 2018). Entrepreneurs play an important role as the engine of change in a market based economy since they are responsible for introducing innovation, adaptation and new ideas. Afolabi (2015) explained that the Global Economic Monitor indicates that nations with higher levels of entrepreneurial activity enjoy strong economic growth. According to Greent Project (2016), Green entrepreneurship is the activity of consciously addressing an

environmental/social problem/need through the realization of entrepreneurial ideas with a high level of risk, which has a net positive effect on the natural environment and at the same time is financially sustainable. Green entrepreneurs are valuable assets across various communities, cities and campuses in Nigeria today (Anabaraonye, Okafor & Eriobu, 2019). The Green entrepreneur sees the problems caused by climate change, environmental pollution and global warming; He/she also perceives the business opportunities in waste management and recycling and takes on the risk of engaging the process of waste recycling to ensure a sustainable environment and the sustainable economic growth of his community and nation (Anabaraonye, Okafor & Eriobu, 2019). The following are some of the green entrepreneurial opportunities in solid waste management accessible to the youths in Awka municipality today:

- A) Start A Plastic Recycling Plant
- B) Start A Solid Waste Collection Centre**
- C) Start A Scrap Metal Depot**
- D) Start A Bio-Fuel Production Business**
- E) Start The Sale Of Waste Management Equipment:**
- F) Start A Rubber Collection & Recycling Plant**
- G) Start A Mobile Toilet Rental Business**
- H) Start A Residential Garbage Collection Business**
- I) Start A Waste Management Blog**

5. RECOMMENDATIONS

The following strategies could be deployed towards maximizing the economic opportunities in solid waste management and recycling in Awka municipality, Nigeria:

- i) Radical awareness approach of information disseminations. The emergence of information communication and technology (ICT) around the world to a large extent has proven as very effective and efficient vehicle of letting people becoming aware of opportunities and benefits in solid waste management and recycling. These information dissemination platforms besides the internet include radio, television and telephone.
- ii) The State government should provide enabling environment and sustainable fund in form of grants and loans to the teeming unemployed and underemployed Awka youths who may want to be involved in the Solid waste management and waste recycling businesses in their different capacities. This approach when incorporated into long term policy planning in climate change mitigation in Anambra will go a long way in reducing unemployment among the youths in the State.

- iii) The use and involvement of non-governmental organizations that are environmental driven and climate change sensitive can go a long way in providing green entrepreneurial opportunities for a lot of youths in Awka, Nigeria. Awareness of the economic opportunities in solid waste management and recycling can be made known to communities and cities through the various outreaches, seminars and workshops initiated by these environmental sustainability driven NGOs in Nigeria.
- iv) Annual State budgetary allocation towards maximizing economic opportunities in solid waste management and recycling in Awka municipality should be increased.
- v) Building the capacity of the locals through adequate sensitizations, through the use of traditional and religious institutions in reaching the people through training and retraining of green entrepreneurs towards adapting to the socio-economic opportunities in solid waste management and waste recycling for sustainability in Nigeria.
- vi) Educational blogs can be used to inform, enlighten and educate researchers, entrepreneurs and interested individuals in Awka municipality especially the internet literate ones about waste management and recycling. These blogs which are meant to be highly interactive allows individuals to contribute their ideas, suggestions and feedback to the environmental sustainability driven educators and green bloggers.
- vii) Poetry has also been discovered as a great tool which can be used to educate individuals in Awka municipality about the socio-economic benefits of proper solid waste management and recycling (Anabaraonye, Nji & Hope, 2018).

6. CONCLUSION AND IMPLICATIONS

Proper solid waste management is one of those climate change mitigation strategies to ensure a sustainable future where our economy can thrive and good health is fostered in Awka municipality in Nigeria. There is great need for educational institutions and other companies in Awka municipality to engage in a more intensive research and disruptive innovation approach to devise the means of ensuring a cleaner and healthier environment by proper solid waste management strategies which will help to guarantee sustainable development and socio-economic growth. Furthermore, the attention of policymakers in government, non-governmental organizations and passionate individuals should be drawn to the need to seek for innovative ways of educating communities and encouraging proper solid waste management for sustainable development in Awka municipality in Nigeria.

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