

## A Perceptual Analysis of Oyo Environs' Populace Towards Waste-To-Wealth for Sustainable Development in Nigeria

Abiodun Akinola Oladiti  
Department of Social Studies  
Emmanuel Alayande College of Education  
[oladitibiodun112@gmail.com](mailto:oladitibiodun112@gmail.com)

Olamide Olutoke Ajogbeje  
Department of Social Studies  
Osun State College of Education  
[famobiwoolutoke@yahoo.com](mailto:famobiwoolutoke@yahoo.com)

### Abstract

Resources are characterised by by-products designated waste which developed nations of the world are converting to economic gains and sources of development through relevant education, right attitudes and skill acquisitions. This study examined the perception of Oyo environs' populace towards waste-to-wealth for sustainable development in Nigeria. Through a descriptive survey design coupled with the use of participant observation and in-depth interviews, 300 subjects were purposively selected from four local governments in Oyo environs across ten identified prospective small- and large-scale industrial and business outfits noted for waste generation and re-use. It was observed that by-products of these outfits can be re-invented in the environment to solve employment and health related problems; reduce poverty levels; increase production and skill acquisition; and reduction of social vices and youth restiveness. Recycling and re-use of waste is not much pronounced; however, conversion of waste generation is being harnessed for economic returns. Hence, more enlightenment campaigns should be pursued, while an enabling environment coupled with infrastructural facilities need to be provided, along with relevant education programmes and necessary acquisition skills in converting waste-to-wealth on a large scale for economic returns, and a safe environment with the reduction of health hazards needs be put in place.

**Keywords:** Sustainable development, waste-to-wealth, perception

### Introduction

Resources generally constitute human, natural and material resources distributed across the nation by nature. They are the hub of national growth and development. Confirming this stance, Ogwueleka (2009) describes resources as anything which has the capacity to offer value; hence, it is usually associated with terms such as: resource creation; resource destruction; resource control; resource consciousness and resource management. It is instructive, however, to note that these resources are broadly categorised into two kinds: renewable and non-renewable resources. Some resources are also bio-degradable while some are non-biodegradable. Hence, it is possible for some resources to become extinct if care is not taken. Nigeria is globally one of the most-blessed nations resource-wise. Little wonder, Adesina (2013) adduces that "Nigeria has no business being a food importing country, with vast water resources, abundant land and cheap labour, we should be feeding the world". The following observation attests to the foregoing: the nation is blessed with demographic dividends, flora and fauna, relief, water resources as well as other biodiversity. The country is endowed in both human and material resources spanning 74 million hectares of arable land; 2.5 million hectares of irrigable land, a teeming population, as well as a comparative climatic condition advantage (Oladiti 2011; Oladiti 2016).

The nation's resources by themselves could not generate national growth and sustainable development. The use to which the resources are put arising from creativeness and ingenuity of her citizens goes a long way in determining whether such resources could constitute a curse

or blessing to the nation. Buttressing this view, in its 9<sup>th</sup> Annual National Conference announcement, the School of Arts and Social Sciences, Adeyemi College of Education, Ondo, Ondo State states that: “The Nigerian economic environment usually known for its safe and conducive nature for investment and transaction of daily business is gradually becoming unstable and unpredictable, especially, would be investors both local and international economic players seems to be scared of the situation, especially with the current economic recession publicly acknowledged by the government. Most worrisome is the fact existing investments are daily threatened by the challenge of sustainability while new ones foreclosed the possibility of growth.”

In the event of the foregoing, there is every need to salvage the situation to promote development in the present and prepare for the unborn generation in terms of sustainable development. This requires education and requisite skill acquisition coupled with the right attitude through necessary enlightenment. To this, Junaid (2015) submits that education is a basic human right, a key to enlightenment and source of wealth and power. Education is therefore critical to industrial and technological development. More so, the various reviews of the National Policy on Education (NPE) from 1981, 1998, 2004, 2006, 2008 to that of 2013 have saddled education with finding recourse to the situation in the nation. This was captured by the Federal Government of Nigeria (2013) that review of the NPE is to take cognisance of the evolving events in Nigerian society and the world to make it relevant to global requirements and to address most of the challenging issues affecting development of the society (Ajere and Olorunmota 2015; FGN 2013).

Thus, the place of education, enlightenment and creativity cannot be over-emphasised. Reiterating this, Johnson (2011) in a survey adduces that knowledge about environmental issues and problems is on the rise. Associated with this is the fact that increased knowledge about the environment will lead to more action and empowerment. It has been ascertained that a country's most important resources are not only its raw materials or its geographical location but the skills of its people. Countries which fail to nurture these skills through effective learning face a bleak future, with human capital deficits hindering economic growth, employment creation and social progress (2010; Commission for Growth and Development 2008; Organisation for Economic Co-operation and Development 2000). More so that Lawrence (2015) avers that “our deliverance can only be ensured by ourselves”. Hence, translating what ordinarily constitutes “waste” to profitable ventures through enlightenment and skill acquisition becomes pertinent.

Nigeria has the capacity to be ranked amongst the developed nations of the world as she celebrates her centenary. However, the precarious situation of the nation, despite the extent of its rich potential in terms of resources – human, natural and material – continuously places the country amongst the developing nations of the world. The bottom line for such a classification is obvious: population and other resources notwithstanding, population explosion and poverty is the order of the day in the country, coupled with unemployment associated with high levels of crime-rate, youth restiveness, parochial loyalty culminating in unnecessary agitations leading to wanton destruction of lives and properties, coupled with increasing ethnic militia, insincere leaders and looting of the nation's treasury manifesting in money laundering as well as apathy to change slogans and agendas, wanton killing, trading in human beings as commodities under the guise of human trafficking, abduction as well as the use of human beings for money rituals.

The foregoing affects the nation's development since the country has been identified amongst the “red spot” constituting push away factors for potential foreigners wishing to partner with the country in her development bid through establishment of cottage industries to large scale ones. It is instructive to state that reasons for the foregoing are poverty, unemployment and a lack of the right attitude and entrepreneurial acumen as obtained in the developed nations of the world. The category of those things classified as “waste resources” is enough to solve most

of the population-driven poverty and associated social vices. Since enlightenment, which comes through education, remains the fulcrum of breaking fallow grounds and breakthrough development-wise, it therefore becomes pertinent to generate the necessary awareness. Hence, this study explores the proclivity of transforming the pile of waste, available in virtually all areas of Nigeria to further economic use. Thus, this study examined the perception of a traditional community populace in Oyo State towards waste-to-wealth for sustainable development.

Development is an all-encompassing phenomenon involving humans, materials and natural resources generally. It entails the working together adroitly of all the said factors under the right type of education. When such is put in place and development is achieved, both for the present and future, without tampering with generations to come, it implies sustainable development. Hence, it is of various dimensions. This is even more reason why Ogundiran, Ogunjimi and Olayiwola (2014) view this as a socio-economic concept with varying contents in line with such phenomena as culture, time and perspectives. Thus, sustainable development is understood properly through an integrative approach of ecological, social, political and economic considerations, amongst others.

Similarly, Age (2005) views sustainable development as a phenomenon which includes a long-term perspective that ensures the wellbeing of the future and present generations characterised by the tripartite pillars of economic growth, social development and environmental protection. This position corroborates the earlier position of Munasinghe, (2004) that it is a process of improving the range of opportunities enabling individuals and communities to achieve their aspirations and full potential over a sustained period of time while maintaining the resilience of economic, social and environmental systems. Hence, sustainable development implies development which meets the exigencies of the present time without jeopardising the lot of the future.

Sustainable development has some features with resource and environmental undertones. For instance, Age (2005) avers that sustainable development is expected to realise certain things, such as an increase in per capita income and employment; promotion of human welfare; satisfying basic needs; protecting the environment; consideration of the path of future generations; achieving equity between the rich and the poor; and participating on a broad basis in development and decision making. All these are akin to effective and efficient use of resources; hence, the waste-to-wealth sustainable development linkage. Gbadamosi (2012) also adduces that education for sustainable development as described in Chapter 36 of the United Nations' Agenda 21 is an indication that education – formal education, public awareness and training – should be recognised as a process by which human beings and societies can reach their full potential.

### **The Concept of Waste-to-Wealth**

Connotatively, waste can be regarded as a product of after-use of all kinds of materials and resources, be they natural or man-made. Such products are prone to being disposed of as they constitute a nuisance, and environmental and health hazards in some instances. Thus, as with the production cycle, when a product reaches its final consumer and is utilised, production is completed. The same applies for resources when they have reached the state of being throw away or disposed of; they become waste. Describing waste in a simple form, Ogwueleka (2009) regards it as those heavier, weathered and corrosive substances inherent in both developing and developed cities, with more of these found in developing countries.

Giving a comprehensive description of the concept of waste, Adewole (2009) advances that waste is any solid, liquid or gaseous substance or material which, being scrap or superfluous, refused or rejected, is disposed of or required to be disposed of as unwanted. He goes further to cite the Lagos State Environmental Edicts 1985 in describing waste to include waste of all

description; any substance which constitutes scrap materials or an effluent or other unwanted surplus substance arising from the application of any process.

Waste, according to Akinbola, Ojo and Hakeem (2015) constitutes what is often seen as something that is of no use, or anything useful that is considered less important. Omole and Isiorho (2011) earlier indicate that waste is an excess from a production process that can be used in the production of other components or materials. Waste comes in different forms; the more reason why Akinbola, Ojo and Hakeem (2015) affirm that waste may either be domestic, household, medical, solid or liquid waste, industrial waste such as waste engine oils, ashes, sewage sludge or industrial metals which governments seeks to manage effectively to preserve the environment and increase its economic value.

From all indications, when attempts are made to convert what is ordinarily deemed unused, unwanted, less important or no longer useful, which may come in different forms, by processing and converting it to economic use to generate further production and economic returns, waste in such cases has been converted to wealth, hence the term “waste-to-wealth”. In the words of Egun (2012), waste-to-wealth implies moving waste from a platform or exhausted utility to a valuable and desirable level which in engineering requires some form of energy and factors of production in economics. Thus, waste in itself can never be wealth, otherwise its generators would never discard it. Thus, it transcends delivery of services to provision of goods or value, such as energy. Hence, waste-to-wealth connotes an initiative which ultimately supports the reduction of environmental pollution from human waste through development of a management framework which harnesses potential post-treatment revenue.

Generally, waste-to-wealth belongs to two major categories: re-use and recycling. The two are all-encompassing in that materials are recycled for the purpose of being re-used. Buttressing this, Drew (2014) adjudges the practice of re-using materials in existing products to create new ones as recycling while re-using existing materials means that fewer new ones have to be produced which thus lowers factory emissions, reduces the need for new natural resources and lowers dependence on landfills. The six categories of waste-to-wealth identified by Adewole (2009) are: recycling; bio-treatment; incineration; neutralisation; secure sanitary landfills; and composting. Other studies have identified incineration and other forms of waste management with recycling and re-use in the lead as a lucrative means of managing resources (Agidee 2013; Olusegun 2012); thus, transforming waste to wealth.

Different typologies of waste-to-wealth abound. For instance, the European Union Waste Framework Directive (2008) identifies five steps of waste hierarchy which include: prevention; preparing for re-use; recycling; other recovery; and disposal, while Akinbola, Ojo and Hakeem (2015) classify waste-to-wealth in the order of environmental impact to include: reduction; re-use; recycling; and recovery. Giving statistics of the percentage compositions of municipal solid waste in Delta State, Egun (2012) lists, amongst other things, plastics/polythene products; paper products; metal/aluminium products; vegetable materials/organic compost; ceramics; textile materials; and others items such as batteries, foams, etc. All these and many yet untapped forms of “waste” can be turned around for wealth creation. In most cases, the operations of waste-to-wealth are carried out by “pickers”, initially referred to as “scavengers”.

### **Waste-to-Wealth and Sustainable Development**

A panoramic view of the discourse on resources, waste and waste-to-wealth is an indication of a commitment to sustainable development generally. Waste-to-wealth is all-encompassing when one considers economic, health, resources, environment, socio-cultural, development in the present time and sustainable development at large. This assertion corroborates that of Akinbola, Ojo and Hakeem (2015) who are of the view that the quest for wealth creation has being of major concern to both the government and individuals arising from the unemployment rate and poverty levels cutting across urban and peri-urban communities. Little wonder then the submission of Agba *et al* (2010) that in the last four decades, Nigeria has faced problems

such as widespread poverty, political violence, corruption, natural disasters, various epidemic diseases, communal clashes, unemployment, strikes and poor governance, with about 80 million living below the poverty line and 19 persons of her citizenry ranked amongst the 500 wealthiest men in modern market economies . A similar view is credited to Kolawole (2014) who describes the situation as excruciating pains which the country is going through presently. The implication of such for development is inimical which calls for concerted efforts, such as with waste-to-wealth.

In agreement with the foregoing, Adewole (2009) establishes a relationship between sustainable development and waste-to-wealth by stating that sustainable development is simply development without destruction, which entails the judicious use of non-renewable resources for present and future generations. Thus, non-renewable resources need be utilised at a judicious rate which should neither be fast nor slow. By this, the natural wealth that such waste represents is converted into long-term wealth. As such, sustainable development of waste management implies clearing of the environment of all types of waste with respect to physical and population development. Doing this effectively necessitates waste-to-wealth creation strategies generally. Coupled with the foregoing is the utility value of waste which must be recognised for sustainable development. Buttressing this further, Adewole (2009) affirms that there is no suggestion that wastes are of no value or intrinsically useless since substances or materials that may be categorised as unwanted, notwithstanding have some value capable of being processed and so converted to wealth to boost sustainable development. Daniel (2014) avers that, though considered a waste, metal scrap is a source of employment and revenue.

Closely associated with the earlier submissions is the need for poverty reduction as well as serving as an effective key to poverty alleviation strategies. Reasons for this cannot be far-fetched: one of the problems confronting sustainable development in Nigeria is poverty; hence, successive governments' poverty alleviation efforts branded in various forms. Thus, wealth creation using waste as employment generation is very relevant. This is pivotal to sustainable development. In like manner, waste-to-wealth creation no doubt increases sustainable development as it leads to increased economies of scale. This is the reason why Roberts (2004) avers that effective management of waste enhances economies of scale through the processing of a common source of raw materials as well as the exchange of surplus or waste products. Other benefits are inherent in waste-to-wealth and have the proclivity of aiding government in its bid to provide job opportunities for Nigeria's teeming population, especially the youth, if waste-to-wealth creation is encouraged. Subscribing to the same view, Akinbola, Ojo and Hakeem (2015) assert that entrepreneurship relating to waste-to-wealth, especially by Private Sector Participation (PSP) franchises has assisted government in creating jobs and new business for many in contemporary economies.

Be that as it may, sustainable development as a multifaceted concept has a resources and environmental undertone. Thus, apart from generating income and solving poverty-related problems and social vices, waste-to-wealth creation can ensure a safe environment generally where wastes are properly managed, and not ordinarily disposed of. Giving an analysis of the influence of waste conversion and behavioural change as having an impact on Americans, Johnson (2011) adduces that compared with 20 years ago, twice as many Americans recycle, with 58 percent doing so regularly as at 2011, 29 percent buying green products and 18 percent living in an environmentally friendly manner. The implication of such on sustainable development is obvious.

Similarly, waste management has generally been canvassed as having effects on the quality of life for the populace. As such, when wastes are properly taken care of through processing and conversion to productive use, it is possible to improve the quality of life for those involved which is a *sine-qua-non* of sustainable development. Where this is absent, major effects on the quality of life, according to Adewole (2009), arise such as environmental effects

culminating in health effects and hazards. Thus, in enlisting the advice of best practices, elements of waste-to-wealth were identified by Adewole (2009) as germane with such best practices. These include the need for action plans, as well as education, for the purpose of monitoring and control of waste; expansion of recycling programmes through the activities of pickers (otherwise known as scavengers); and landfill management and control through launching of waste-to-energy in terms of methane gas generation. All these are in the context of waste-to-wealth activities generally, and a pointer to its significance in sustainable resources, environment and development efforts at large.

### Methodology

The study adopted a descriptive survey research design, using both primary and secondary data for obtaining relevant information. The population for the study cut across the four local governments of Atiba, Oyo East, Oyo West and Afijio, constituting the Oyo environs of Oyo state, Nigeria consisting of small- and large-scale business, artisans, technocrats, academics, marketers and farmers, amongst others. Participant observation and IDIs constituted the instruments for the study. Purposive sampling techniques were employed to select 30 subjects each across 10 identified prospective small, medium and large-scale business such as gaari processing industries; refuse dumps; dung hills and solid waste sites; saw mills, poultry and animal husbandry; palm kernel processing sites; construction sites and tiles depots; fish ponds; slaughters' slabs; scrap sites; pickers sites for plastic, polythene, foam, nylon, waste papers, etc., making a total of 300 respondents altogether. Data collected were analysed through quantitative and qualitative approaches using tables, frequency counts, simple percentages, rank order as well as categorisation of ideas expressed and verbatim reporting.

### Data Presentation, Results and Discussion of Findings

The objectives of the study served as the basis of results and discussion of findings in this section.

**Table 1: Analysis of Local Governments and Prospective Wastes by Respondents**

S/N	LOCAL GOVERNMENT	WASTE LOCATIONS	F	%
1.	Atiba	Sabo, Owinni, Oroki, Awumoro, Ajegunle, Akunlemu, EACOED, Ori-Awo, Ofa-meta.	11	31.43
2.	Oyo East	Kosobo, Ogeese, Owode, Sawmill, Mabolaje, Agboye, Durba Area.	08	22.86
3.	Oyo West	Irepo market, Awumoro, Odo-eran, Ojongbodu, Olooro, Fasola, Aba Mogaji, Oyo London.	08	22.86
4.	Afijio	Awe, Akinmorin, Ilora, Eleekera, Fiditi, Idi-Igba, Jobele, Imini.	08	22.86
	<b>TOTAL</b>		<b>35</b>	<b>100.00</b>

Source: Authors' fieldwork 2018

The information in Table 1 indicated that 35 locations noted for possession of different wastes are located across the four local governments constituting the Oyo environs; i.e. the study area. Most of the wastes utilised for waste-to-wealth are concentrated in Atiba, while other sites shared similar proportions. The results obtained here attest to the views of Lawrence (2012) that Nigeria is rich in human, material and natural resources. Similar views are held by Adesina (2013), Oladiti (2015) and Ubong (2013).

**Table 2: Analysis of Potential Waste-to-Wealth Waste Resources inherent in the Study Area by Respondents**

S/N	SOURCE	LOCATIONS
1	Garri processing industries	Sabo, Irepo, Olooro, Opapa, Idoode, Odo-fufu, Ajegunle, Aba Busari, Ilora, Imini.

2	Broken bottles, off-cuts, broken tiles	Construction sites, Cocoa-cola depot, Bond chemical, Awe, Ayetoro scheme, Atiba local government scheme, Aba Mogaji, Ori-Awo, Elegbo, etc.
3	Scrap	Akunlemu, Awumoro, Idi-Igba Mechanic workshops, Aafin area, Dangote market, Eleekara, Odojide.
4	Slaughter slabs	Sabo market, Oroki, Odo-eran, Sawmill, Adikuta, Ilora, Akinmorin, Awe, Akesan.
5	Poultry and Animal Husbandry	Amobying, Awe, Babilonia piggery farm, Cattle ranch, Fasola, Sabo, Gaa Fulani, Otefon, centenarfarm, Ahinmorin, Ilora, Owinni, Ajagba, Ori-Awo, Soku, Oko-Oba.
6	Sawmills	Awumoro, Sawmill, Idigba, Sabo, Ilora, Akinmorin, Awe
7	Palm Kernel Processing Factories	Ilora, Agboye, Ogeese, Akinmorin, Awe, Idigba, Kosono, Fiditi, Mabolaje, Farade.
8	Polythene products, plastics, foam, old magazines, used papers	Ajgunle, Akunlemu, Sabo, Owode, Bond Chemicals Awe, Publishing companies, Tertiary Institutions, Eleekara, Isale-Oyo, Akesan, Sachet water factories.
9	Fishponds	OdoOgunmola. Ilora, Olooro, Winners, Sabo, Ola farms, Mobolaje, Ajgunle, Awe, Akinmorin.
10	Solid waste disposal sites, dung hills, refuse dumps	Local government solid waste disposal sites, Ojomgbody, Eleekara, Opapa, Oroki, Sabo market, Ajgunle, Oko-Oba, Jobele.

Source: Author's fieldwork 2018.

From Table 2, 10 prospective sources were identified from the study area as containing wastes which can be regenerated either through re-use or recycling and other means for economic gains. Factories, poultry and animal husbandry coupled with scrap, polythene products and solid waste disposal sites are notable for this purpose. Findings here support the findings such as those of Akinbola, Ojo and Hakeem (2015); Drew (2014); Olusegun (2012); Oyeniyi (2011); Agba *et al.* (2010); and Adewole (2009), amongst others.

**Table 3: Analysis of Waste-to-Wealth generation of Wastes in the Study area by Respondents**

S/N	Available Waste Generation	Bye-Product for Waste-to-Wealth	F	%	Rank Order
1	Garri factories	Cassava peels for livestock feeds, starch, acidic content, ammoniac acid through scrubbling.	4	5.71	9 <sup>th</sup>
2	Broken bottles, off-cuts, broken tiles	Design, decorations, fence security, flooring, recycling, pickers.	6	8.57	6 <sup>th</sup>
3	Scraps	Re-use, recycling, aluminum products pickings, blacksmithing, spare parts, environmental cleansing, metals.	8	11.43	4 <sup>th</sup>
4	Slaughter slabs	Bones, calcium, livestock feeds, plate, bone meal, bloodmeat, employment.	7	10.00	5 <sup>th</sup>
5	Poultry and Animal Husbandry	Poultry wastes, litters, maggots, fertilizer, poultry, acid, ammoniac gas, biogas (through cow and pig dungs through scrubbing), composite manure; to prevent animals from grazing on plantation, pickers, etc.	11	15.71	2 <sup>nd</sup>
6	Sawmills	Wood shavings for poultry, saw dust for sports, alternate heat for cooking; particle boards, rough planks	5	7.14	7 <sup>th</sup>
7	Palm Kernel Processing Factories	Palm kernel cake (PKC); Groundnut cake (GNC); livestock feeds; solvent extraction from PKC constructing 14 to 16% oil. De-oil cake, asbestos boiler, fuel e.g. stream; refined PK oil; Distilled Fatty Acid (DFA), soap making; carton making; slung.	12	17.14	1 <sup>st</sup>
8	Polythene products and plastics, foam, old	Re-use; recycling; mending of broken plastics and rubbers, flowerpots, decorations.	5	7.14	7 <sup>th</sup>

	magazines, used papers				
9	Fishponds	Construction of liters from poultry and other livestock products; water drainage can be converted to irrigation and nutrients therein as manure to increase agricultural productivity.	3	4.29	10 <sup>th</sup>
10	Refuse dumps; disposal sites, dung hills	Picking activities; methane generation, composite manure, fertilizer, pot-hole fillings; farming; healthy environment serving reservoir; ashes through incineration.	9	12.86	3 <sup>rd</sup>
	<b>Total</b>		<b>70</b>	<b>99.99</b>	

**Source:** Author's Fieldwork 2018.

The contents of Table 3 revealed that a total of 70 potential available waste generations which can be converted to waste-to-wealth are inherent in the study area. Exploration and extraction-wise, palm kernel and groundnut processing factories, poultry and animal husbandry and refuse dumps, dung hills and waste disposal sites topped the list (12, 17.14 percent, 11, 15.71 percent and 9, 12.86 percent) as they ranked first, second and third respectively. Followed in close succession are scrap, slaughter slab and broken bottles, louvers, off-cut tiles, etc. which ranked fourth, fifth and sixth respectively (8, 11.43 percent, 7, 10.00 percent, 6, 8.51 percent) while sawmills, plastic and polythene products had tied ranks in seventh position i.e. 5, 7.14 percent each, gaari processing factories and fish ponds were the least ranked at ninth and tenth (4, 5.71 percent, 3, 4.29 percent). Studies in support of the findings here include: Oladiti (2016); Akeusola (2016); Junaid (2015); Ajere and Olorunmota (2015); Akinbola, Ojo and Hakeem (2015); Daniel (2014); FGN (2013); Egun (2012); Oyenyi (2011); Johnson (2011); Oguwueleka (2009); and Roberts (2004).

In achieving the objectives of this study, information from the participant observation technique and IDIs was explored in analysing data obtained qualitatively through categorisation of ideas expressed by participants and verbatim reporting. The import of waste-to-wealth creation was categorised, amongst others things, as: reduction of poverty; key to poverty alleviation in Nigeria; increased employment generation; job creation for the population; increased economies of scale; boosting of food production; generation of foreign exchange earnings through large scale livestock production; and reduction of health hazards. Some of the respondents were of the opinion that "waste-to-wealth is of great utility value in a country like Nigeria"; "it will serve as assistance to government in job creation for restive youths"; "it is a means of securing our environment"; "waste-to-wealth is environmental friendly"; "it will ensure improved quality of lives of the inhabitants"; "through the concept of waste-to-wealth, the country will gain more raw materials or increased production"; and "waste-to-wealth will make us to follow global world best practices on environmental resources through re-use and recycling". The foregoing submissions are indications that waste-to-wealth is akin to development and a sustainable environment and development at large. Buttressing this are studies such as those by Oladiti (2016); Lawrence (2015); Ogundiran, Ogunjimi and Olayiwola (2014); Daniel (2014); Kolawole (2014); Agidee (2013); Adesina (2013); Egun (2012); Gbadamosi (2012); and Johnson (2011) amongst others.

### **Conclusion and Recommendations**

By all indications, this study has beamed a searchlight on the sustainability prospects of Nigeria as a nation, inclusive of its environment, resource usability and sustainable development. The richness of resources with which the country is blessed, if properly utilised are catalysts of development, employment generation and poverty reduction. The largest of the used resources designated "wastes" are yet another important factor capable of revitalising the nation's economy; put an end to youth restiveness arising from unemployment; boost the nation's productivity via production of needed materials through re-use and recycling; attain a secured environment through reduction of environmental hazards which can arise from



improper waste management; promote quality of life as well as align with global best practices in waste management generally. All these are key to the development of the present dispensation without unnecessarily tampering with resources meant for future generations; hence, sustainable development. The implications of the foregoing for corruption reduction, crime-wave reduction, social vices reduction and improved quality of life as well as life expectancy cannot be over-emphasised.

Thus, sustainable efforts at converting waste-to-wealth can assist the nation in the attainment of her great dream of Vision 20: 2020 to, by improved economy, become ranked amongst the best economies of the world. The implication for prospective foreign investors is enormous since there will be available material and productive resources coupled with an adequate labour supply from the country's teeming population.

It is instructive to state that in the study area there exist a few ready-made by-products of used resources which can be converted to wealth. Although the Oyo environs' populace tends to display a knowledge of waste-to-wealth generation, it has been at a lower priority, in most cases occasioned by little enlightenment, a small capital base, and the high cost of the technological equipment needed for transforming most wastes to economic gains.

There is also existence of lack of enough encouragement and mixed reactions from those venturing into some aspects of waste-to-wealth, such as those involved in pickings (scavengers) and litter collectors to mention a few, while government has yet to rise up to the challenges of encouraging more creative skills in the enterprise to inspire fresh graduates to venture into such activities rather than looking for the seemingly elusive "white collar jobs". It is therefore pertinent to reduce the afore-mentioned impediments to the use of wastes in creating wealth from individuals, communities, government as well as non-governmental organisations (NGOs). When these are put in place, the place of waste-to-wealth in the anal of sustainable environment, resources and development will become a force to be reckoned with in the nation's development strategies.

## References

- Adesina, F. 2013. Excerpts from a lecture delivered in Lagos at the Reverend Wilson Badejo Foundation Annual Lecture Series. Lagos, 21 May 2013.
- Adewole, A. T. 2009. Waste management towards sustainable development in Nigeria: A case study of Lagos State. *International NGO Journal*, 4(4):173-179.
- Agba, M. S., Agba, O. A. M., Okoro, J. and Agba, G. E. M. 2010. Wealth and employment creation among women in Idah local government area of Kogi state, Nigeria. *Canadian Social Science*, 6(1): 8-16.
- Age, E. 2005. *Objectives of Teaching Education in Nigeria*. London: British Council.
- Agidee, Y. 2013. The menace of plastic bags. *The Punch*. Available: <http://www.punchng.com> (Accessed 28 September 2013).
- Ajere, O. and Olorunmota, O. M. 2015. A critique of the review of Nigerian educational policy from 1914 to 2013. *African Journal of Historical Sciences in Education* 11(1):61-73.
- Akinbola, A. O., Ojo, O. A. and Hakeem, A. A. 2015. Role of waste management in wealth creation In Nigeria – evidence from Lagos state waste management authority (LAWMA), *Ife Centre for Psychological Studies/Services*, 23(1):120-130.

- Commission for Growth and Development. 2008. *The Growth Report: Strategies for Sustained Growth and Inclusive Development*. Washington DC: World Bank.
- Daniel, E. 2014. From waste to wealth. *The Nation*, March 12 Edition.
- Drew, L. 2014. Careers in recycling. Available: [www.bls.gov/green/recycling](http://www.bls.gov/green/recycling) (Accessed 25 June 2014).
- Education for All (EFA). 2010. *Reaching the marginalized. EFA global monitoring Report*. Oxford University Press.
- Egun, N. K. 2012. The waste to wealth concept: Waste market operation in Delta state, Nigeria. *Green Journal of Social Sciences*, 2(6):206-212.
- European Union 2008. Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives. European Commission.
- Federal Government of Nigeria. 2013. *National Policy on Education*. Yaba Lagos: NERC Press
- Gbadamosi, T. V. 2012. Effects of services learning and educational trips instructional strategies on primary school pupils' environmental literacy in Social Studies. Unpublished Ph.D thesis Department of Teacher Education, University of Ibadan, Ibadan.
- Johnson, S. C. 2011. The environment: Public attitudes and individual behaviour – a twenty-year evolution. Johannesburg: SC Johnson.
- Junaid, I. O. 2015. School quality and teachers' characteristics as correlates of outcome in History in Rivers State, *African Journal of Historical Sciences in Education*, 11(1):22-35.
- Kolawole, C. O. O. 2014. Curriculum issues and national transformation beyond 21<sup>st</sup> century in Nigeria. A lead paper presented at the 3<sup>rd</sup> National Conference of Emmanuel Alayande College of Education, Oyo. 17-20 February, 11-42.
- Lawrence, B. 2012. Jonathan and the challenges of development. *Tell Magazine* July 9 Edition, 61.
- Lawrence, B. 2015. Buhari needs emergency powers. *Tell Magazine*, June 8 Edition, 65.
- Munasinghe, S. 2004. Effective instructions through dynamic discipline. Ohio: Charles E. Merrill.
- Organisation for Economic Co-operation and Development 2004. Innovation in the knowledge economy: Implications for education and learning. Paris, Organization for Economic Cooperation and Development (knowledge management).
- Ogundiran, J. O., Ogunjimi, D. A. and Olayiwola, O. A. 2014. Social Studies education: A tool for sustainable development in Nigeria, *Nigeria Journal of Social Studies* XVII(1):174-185.
- Oguwueleka, T. C. 2009. Municipal solid waste characteristics and management in Nigeria, *Iran Journal of Environmental Health Science English*, 6(3):173-80.
- Oladiti, A. A. 2011. Nigeria nationhood and food security, *Journal of Arts and Social Sciences update* 4(1): 114-116.

- Oladiti, A. A. 2015. Social Studies and heritage resource promotion as emergent cultural studies and national unity. *Nigerian Journal of Social Studies* XIX(2):133-146.
- Oladiti, A. A. and Kamarise, B. T. 2014. Responsible environmental attitudes as recipe for sustainable environment in Nigeria, *Academic Journal of Interdisciplinary Studies*, 3(7): 67-73.
- Olusegun, A. A. 2012. An Evaluation of the interventionist reforms by the Lagos State Government towards achieving Millennium Development Goals (MDGS) in environmental sanitation and hygiene practice. *International Journal of Humanities and Social Sciences* 2(16):121-136.
- Omole, D. O. and Isiorho, S. 2011. Waste management and water quality issues in Coastal States of Nigeria: The Ogun state experience. *Journal of Sustainable Development in Africa*, 13(6):207-217.
- Oyeniyi, B. A. 2011. Waste management in contemporary Nigeria: The Abuja example, *International Journal of Politics and Good Governance* 2(2): 1-18.
- Roberts, P. 2004. Wealth from waste: Local and regional economic development and the environment. *The Geographical Journal*, 170(2):126-134.
- Ubong, B. 2013. National development: Can entrepreneurship be the beautiful bride? An inaugural lecture of the Federal College of Education (Technical), Omoku delivered on April 5.
- United Nations 1994. Earth Summit — Agenda 21: The United Nation Programme of Actions from Rio. New York: United Nations Department of Public Information.