



## Challenges and Prospects of Small and Medium Ecopreneurs (SMEcos) in Contemporary Nigerian Circular Economy

Oludele M. Solaja

Olabisi Onabanjo University, Department of Sociology, Ago-Iwoye, Nigeria

### ARTICLE INFO

Received 05 December 2018  
Accepted 27 March 2019

Research article

Keywords:  
Challenges  
Circular Economy  
Development  
Small and Medium Ecopreneurship

### ABSTRACT

Small and Medium Ecopreneurs (SMEcos) are essential actors of the circular economy system and sustainable development agenda. This is fundamentally true since SMEcos are businesses and individuals who engage in socio-economic activity that is built on the principle of a circular system (reduce, reuse and recycle) which significantly promote sustainable utilization of environmental resources and mitigation of developmental challenges. For this reason, this paper examines the challenges and prospects of small and medium ecopreneurs in Nigeria's Circular Economy. The paper explains the concept of sustainable development, the circular economy as well as ecopreneurship. It also examines the roles of small and medium ecopreneurship (SMEco) in fostering a circular economy. The paper adopts the sustainability theory as the theoretical framework for the study. Extensive research was conducted using current and relevant academic publications and reports. The research design was descriptive with the use of qualitative data gathered through in-depth interviews (IDIs). A total of 15 purposively selected in-depth interviewees were engaged in the study. Responses from the interviewees were analysed using qualitative content analysis or direct quotes. The study found that small and medium ecopreneurship (SMEco) have huge prospects for the development of the circular economy in Nigeria. However, lack of adequate funding, government support, technical skills, modern facilities, as well as the market for eco-products serve as barriers to SMEcos in fostering Nigeria's circular economy. Based on these findings, the study recommends that government and non-governmental organizations should collaborate for the purpose of advancing Nigeria's circular economy.

### 1. Introduction

The sustainable development paradigm is fast gaining acceptance by governments, non-governmental organizations, academics, and entrepreneurs in today's global world. Its acceptance, as argued by scholars, had opened a window of business opportunities, ideas, and innovations for socio-economic advancement across the world (Morelli, 2011; Stoddart, 2011; Solaja, 2017). This

fascinating report is connected to the fact that sustainable development envelopes series of actions, ideas, and policies that are aimed at creating new ways in which environmental resources and human potentials can be utilized in achieving desirable socio-economic growth. Desirable socio-economic growth, to a large extent, can be achieved through the adoption and implementation of the sustainable development paradigm - that aims to lower the rate at which

# Corresponding autor: [postgraduatescholar@gmail.com](mailto:postgraduatescholar@gmail.com)

socio-economic activities contribute to environmental degradation and resource depletion in contemporary societies (Akanle, 2014; Solaja et al., 2015) and the insurance that the future generations will have the needed resources and opportunities for attaining desirable development (Brundtland, 1987; Robert et al., 2005). One part of this process is the involvement of individuals or groups of people (ecopreneurs) who engage in business activities that revolve around the 3Rs (reduce, reuse and recycle) or a Circular Economy.

A circular economy is one of the growing economic systems in today's sustainable development era. Circular economy involves the application of sustainable techniques in production, distribution, and consumption of goods and services (Ellen MacArthur Foundation, 2013; Ellen MacArthur Foundation, 2013a). Circular economy practically depicts a momentous change from the linear economic system to a cyclical economic system that covers a wide range of eco-friendly business initiatives that guarantee sustainable utilization of resources in improving socio-economic and environmental conditions (Zhu, 1995; Preston, 2012; Allwood, 2014). Thus, the circular economy is a novel economic ideal whereby materials and energy from unwanted products are re-introduced into the economic system (Ellen MacArthur Foundation, 2013; Lehmann et al., 2014). It includes the adoption of eco-design, renewable energy, refurbishment, remanufacture, product sharing, waste prevention and waste recycling initiatives (Banaïtè, 2016). However, an extensive review of the literature revealed that very little or no empirical research has been done to document the challenges and prospects of small and medium ecopreneurs (SMEcos) in advancing circular economy in Nigeria. This is the gap that this study aims to fill. The study is imperative because small and medium scale ecopreneurs play critical roles in the function and nurturing of a circular economy. It is based on this research gap that this paper set out to examine the challenges and prospects of small and medium ecopreneurs in Nigeria's circular economy.

The paper explains the concept of sustainable development, the circular economy as well as ecopreneurship. It also examines the role of small and medium ecopreneurship (SMEco) in fostering a circular economy in Nigeria.

## 2. Clarification of concepts

A brief description or meaning of some terms that are used in the study is necessary at this point for a proper understanding of the subject matter.

### 2.1. Concept of Sustainable Development

The term "sustainable development" has been explained by diverse viewpoints.

Historically, the concept materialized from the theoretical postulations of modern economists like Malthus and Ricardo who had predicted resource limitation as for the major impediment to future economic growth. This inspired the report given at the World Conference on Environment and Development (WCED) known as Brundtland Commission, on the concept "Sustainable Development" which has gained international recognition (Alao, 1995; Solaja et al., 2015). Sustainable development is a concept, goal, and movement towards building the capacity of the current generation to meet its needs and develop without jeopardizing the opportunity of the future generations to meet theirs and develop further (Brundtland 1987, Stoddart, 2011; Akanle, 2014; Solaja et al., 2015). In other words, sustainable development is a kind of developmental approach that promotes intergenerational equity, accessibility, compatibility and quality control of the environment (Solaja et al., 2015).

### 2.2. Concept of Circular Economy

Circular Economy was first introduced in 1976 in a report submitted to the European Commission (Banaïtè, 2016) and it has gain popularity and relevance among researchers in today's sustainable development epoch. Its relevance lays in the global desire to attain sustainable development by 2030 (Ellen MacArthur Foundation, 2013; Banaïtè, 2016). According to current literature, circular economy can be portrayed as an industrial economy that depends largely on the "invigorating capacity of natural resources" (Bastein et al., 2013) and intends to reduce - if not remove - waste, develop renewable sources of energy and end the use of harmful substances in production activities (Ellen MacArthur Foundation, 2013a).

The circular economy encapsulates different forms of eco-friendly ideas as well as the careful deployment of two different types of materials within a closed-loop economy. The first type of materials can be referred to as the biological materials which can return to the biosphere as feedstock (biological nutrients, e.g. forest products) and the other type is called the technical materials which cannot biodegrade and enter the biosphere (technological nutrients, e.g. plastics and metals) (Ellen MacArthur Foundation, 2013a; Vanner et al., 2014;). Hence, circular economy extend beyond the 'end of pipe' approaches of the linear economy (Ellen MacArthur Foundation, 2013a) and pursues transformational changes across the coverage of the value chain in order to preserve both biological and technological types of materials in the 'circular economy loop' and preserve their value for as long as possible (Vanner et al., 2014; World Economic Forum, 2014). In essence, the circular economy can be defined as an economic system that involves a cyclical process of "resources-design-production-distribution, consumption, collection and recycling" which make the

whole economic system to reduce or eliminate waste and guarantees improvement of socio-economic and environmental conditions. This information is diagrammatically represented below.

Furthermore, it is essential to note that the main goal of a circular economy is to protect the environment against any form of degradation and to improve the socio-economic conditions of a particular society. This goal can be deduced from its 3R principles (Reduce, Reuse and Recycle) that serves as a modus operandi for the running of socio-economic activities in a circular economy. Reduce principle necessitates that fewer raw materials and energy inputs should be used in production or consumption purposes. Re-use principle maintains that products and packaging should be repeatedly used to avoid the proliferation of one-time items. Recycling principles (Recycle) demands that productions should become available resources rather than useless waste after the completion of its function. Another important fact about the circular economy is the benefits or advantages it offers. These benefits can be categorized into three parts. First is the economic benefit which includes monetary (profitability) and non-monetary (competitiveness) gains (Ellen MacArthur Foundation, 2013; Banaité, 2016). Second is the social benefit which entails resource regeneration, responsible consumption, and availability of scarce resources for social prosperity (Banaité, 2016). The third benefit of the circular economy is the environmental impact which comprises the reduction of environmental pollution and degradation through activities such as reuse, remanufacturing and/or recycling (Lieder and Rashid, 2016; Banaité, 2016).

### 2.3. Circular Economy in Nigeria: A cursory examination

To trace the origin of circular economy in Nigeria is highly complex because some of the activities that revolve around 3R (reduce, reuse and recycle) have been in existence in Nigeria long before the popularity of circular economy as a pro-environmental strategy. Though, activities like reduction of resource consumption, reusing of products and recycling of waste was not too common in Nigeria prior to the implementation of structural adjustment programmes (SAPs) in 1986. It was the advent of SAPs that encouraged people's engagement in informal economic activities as an alternative source of employment and income generation in Nigeria. Also, structural adjustment programmes brought a significant change in the national economy which motivated individuals and business organizations to move toward a new economic paradigm which encouraged the re-introduction of waste materials and energy into the economic system (Ellen MacArthur Foundation, 2013; Lehmann et al., 2014). Nonetheless, it is important to note that the rate at which individuals and organizations are venturing into activities that include waste collection, mining and recycling is increasing due

to the growing level of awareness and knowledge about waste to wealth creation-ecopreneurship. Similarly, the emergence of a sustainable development agenda has significantly encouraged people with business initiatives to take up meaning businesses on climate change and environmental sustainability in contemporary society (Oluwatobi and Ogunrinola, 2011). Sustainable development era can be regarded as the boom of circular economy in Nigeria because a large number of unemployed youths, men and women move into informal businesses and activities such as waste collection, urban mining, environmental conservation, recycling and sales of handiworks made with eco-friendly materials in order to improve the socio-economic conditions in Nigeria.

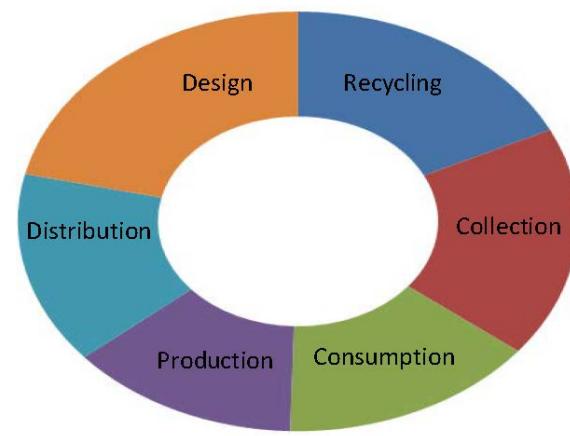


Figure 1. Circular economy (European Commission, 2014)

### 2.4. Concept of Ecopreneurship: The Small and Medium Scale Approach

The term 'ecopreneurship' is formed by stringing together two words namely, ecological (eco) and entrepreneurship (McEwen, 2013) to denote an innovation or entrepreneurial action that hinged on the motive to produce environmentally suitable products and services (Schaltegger, 2002), recycling and turning waste to wealth (Shane and Venkataraman, 2000), and fulfilment of environmental obligation in business activity (Volery, 2002). Ecopreneurship can also be conceived as pro-environmental behaviour committed to achieving sustainable development (Conding et al., 2012). This is because the primary goal of ecopreneurs is to carry out business activities as well as to minimize environmental footprint, that is, to improve the well-being of the people and the planet (Kainrath, 2009; Kearins and Collins, 2012). Similarly, ecopreneurship is an essential component of the sustainable development agenda because it enables entrepreneurs to focus on converting environmental threats into opportunities and solutions towards a sustainable world (UNEP, 2012; Solaja, 2017). It is, therefore, necessary at this point to define the word 'ecopreneur' in relation to scholar's

perspectives. An ecopreneur, according to Isaak (2002), is *a person who seeks to transform a sector of the economy towards sustainability by starting a business in that sector with a green design with green processes and with the life-long commitment to sustainability in everything that is said and done*. In this regard, an ecopreneur is a person who based his/her business philosophy on the sustainability (Kirkwood and Walton, 2010) due to strong interest for social and environmental values (Gibbs, 2009). Thus, an ecopreneur could be a person who owns or operates a company that fulfils both social and environmental requirements (Chopra, 2014), or is engaged in green businesses by producing green products and services, also a person who introduces clean production techniques to boost demand for green products and services, as well as a person who creates green jobs (Schaper, 2002; Rivera-Camino, 2007; OECD, 2011). Furthermore, studies have noted that ecopreneurship as a business concept can be carried out under three stages which are micro-small, meso-medium, and macro-large ecopreneurship (Kearins et al., 2010; Solaja, 2017). These stages ultimately vary in size and capacity in which they operate and contribute to socio-economy development.

#### 2.4.1. Micro-Small Scale

The micro-small scale ecopreneurship is facilitated by individuals that have the mind-set of creating small-scale eco-friendly goods and services in order to add value to the process of restoring the human environment and its resources. Micro or small-scale ecopreneurship involves collecting, sorting and trading of waste materials for industries or individuals who will transform them into usable products. It also includes setting up an eco-friendly business such as tree planting, horticulture, wall beautification, and production of green handcrafts on a small scale or at the grass-root. Small-scale entrepreneurship usually requires very little or no capital to commence. A typical example of micro or small-scale ecopreneurship are the urban waste miners, scavengers or private waste collectors that go to neighbourhoods or doorsteps asking for unwanted or waste materials. Studies have established that those who engage in micro-small scale ecopreneurship do so because they want to create employment opportunities and increase family income (Ebiringa, 2011).

#### 2.4.2. Meso-Medium Scale

The meso-medium scale ecopreneurship comprises of a group of individuals, networks or community of eco-minded business persons who consciously pull resources together to embark on eco-friendly businesses on an average standard in order to promote pro-environmental behaviour and conservation of resources. For instance, a community supported agriculture program designed to grow healthy food, and then sell memberships (or shares)

to consumers who in turn receive a designated allocation of seasonal produce throughout the farming season. In relation to entrepreneurship, meso-level ecopreneurship materialize in form of networking or clustering of entrepreneurs who are operating green business enterprises or interested in investing in eco-friendly business ideas. For example, meso-ecopreneurship has networks and clusters of investors who are willing to give loan, prize awards and technical assistance to small and medium enterprises that are innovating in green entrepreneurship to help them grow their businesses (Hamdouch and Depret, 2012). According to empirical studies, meso-medium scale entrepreneurship generates more employment opportunities (about 67 per cent) for interested individuals and unemployed youths across regions of the world (Schmeimann, 2008; Ebiringa, 2011).

#### 2.4.3. Macro/Large Scale

Macro or large-scale ecopreneurship entails corporate organizations or manufacturing companies based on large-scale environmental conservation and waste management activities. This form of ecopreneurship is literally called the “Green Goliaths” or “Green Capitalists”- large companies or incumbents that are determined to invest huge amount of resources on eco-entrepreneurship innovations and initiatives on a large scale with the aim of fostering autonomous trends, paradigms, and technical changes to the accomplish economic and environmental sustainability (Elkington and Burke, 1989). These sets of eco-entrepreneurs engage in mass production of eco-friendly products and services such as the production of hybrid cars, clean technologies, renewable power project, solar energy etc. In another dimension, the goal of macro-large scale ecopreneurs in the context of sustainable development also includes a desire to foster technological advancement, cultural change, resource efficiency and massive reduction of social vices stemming from the increasing abuse of environmental degradation across regions of the world.

#### 2.5. The Challenges of Ecopreneurship

This section examines some of the militating factors to the progress of ecopreneurship in the context of sustainable development. These factors are:

- Double externality: Ecopreneurship contends with several external forces emanating from technological and environmental landscapes (Rennings, 2000). Ecopreneurs are faced with financial uncertainties that usually characterized investment in green business (McEwen, 2013).
- Financial uncertainties: Access to funding is extremely difficult for ecopreneurs due to the immaturity of the market, the trouble associated

with accurately pricing the relative risk of the investment, and the lack of history or track record of success (McEwen, 2013).

- Risk-bearing: Given the challenges characterizing the current and future environmental issues, ecopreneurs are faced with enormous and unpredictable business risks. In particular, McEwen (2013) noted that the market in which ecopreneurs operate does not encourage efficient inter-temporal allocation of risk bearing and risk-aversion.
- Clean technologies and facilities: Ecopreneurship is often faced with the challenge posed by production, commercialization research and development costs of acquiring recycling technologies and infrastructural facilities (Grübler et al., 1999).
- Information, education, and knowledge: Lack of quality information is a major obstacle to ecopreneurship. This is inherently true because eco-innovations involve high technical operations which can only be accomplished when there is reliable information on nature and extent of the problems, the range of solutions available, costs and how to reduce them (Banks and Heaton, 1995).
- Government policies on the circular economy: The biggest challenge ecopreneurs encounter is policy insufficiency. Government at all levels, therefore, is expected to help to implement policies and programmes that will aid acceptance of eco-products in recent times (Banaïté, 2016).

## 2.6. Theoretical Framework

This study utilized sustainability theory as the theoretical guide. Sustainability theory emanated from the proliferation of intellectual approaches to connect and explain the issues of socio-economic development and environmental quality together in a sustainable manner.

Sustainability theory (ST) therefore attempts to arrange and integrate social responses to environmental and socio-economic problems (Wallis and Valentinov, 2017). In this regards, ST synthesizes polemic ideas about balancing the interaction between socio-economic factors and environmental resources in the context of attaining desirable development for the present generation and to also guarantee future generations their opportunities to develop (Robert et al., 2005; Morelli, 2011; Stoddart, 2011). It also emphasizes the idea of the long-term stability of the economy and environment (Cornel and Mirela, 2008) which is only achievable through the integration of economic, environmental, and social concerns relating to development agenda throughout the decision-making process (Emas, 2015). Following the proposition of sustainability theory, socio-

economic activity should be organized or designed based on the principles of mutual benefits (Popescu and Zamfir, 2011). That is, it should be done in a way that promotes positive improvement in the three distinct sustainability dimensions: environmental, social, and economic sustainability (Kozic and Mikulic, 2011). As such, developmental activities must not be carried out in contrast to sustainability principles otherwise there will be social disorderliness or dysfunctional effects on the people's well-being, livelihood and social development (Kiper et al., 2011). It is thus imperative to assess the social, economic and environmental impacts of developmental activities and to ensure that they conform to sustainability standards and principles.

## 3. Methodology

This study was conducted in Ago-Iwoye, Ijebu zone of Ogun State, Nigeria where a large number of small and medium ecopreneurs (SMEcos) operate. A descriptive survey design was adopted. The study employed both primary and secondary data sources. The primary data was gathered through in-depth interviews with SMEcos which have been doing the business for more than five years while the secondary data was collected from archival sources. The participants in the study consisted of SMEcos (which comprised of waste merchants and ecopreneurs) in Ago-Iwoye, Ogun State, Nigeria. There is no actual figure representing the total number of SMEcos in the studied area, however, efforts were made to investigate 15 SMEcos which were knowledgeable about the subject matter and were willing to share their knowledge with the researchers for in-depth interviews.

The purposive sampling method was used to select the participants. The criteria for being selected in the study was that each participant had to be engaged in solid-waste trading, recycling or mining for at least five years prior to the study. These participants were selected across political wards in Ago-Iwoye, Ogun State, Nigeria in order to accommodate the heterogeneous nature of the study area. Respondents who were below the age of 18 years were excluded from the study. This was done in order to have an in-depth view from adult's point of view on the problem of the study. Digital tape recorder was employed in recording information.

Data collected from the participants were critically examined, transcribed, and responses relevant to the objectives of the study were purposively applied on the basis of merit.

## 4. Results and discussion

The response of respondents in accordance with the stated research questions was presented below using content analysis to ascertain the opinion of respondents on each research question asked.

#### 4.1. The Role of Small and Medium Scale Ecopreneurship in Nigeria Circular Economy

From the findings, small and medium ecopreneurship (SMEco) contribute significantly to the growth of the circular economy in Nigeria. This fact cannot be overestimated as evidenced in the responses of the interviewees who state that:

“Small and medium ecopreneurship is a key source of socio-economic development in Nigeria. Because it creates a means of survival and jobs for people (educated and non-educated) who would have been a burden to their family members and the government” (IDI/Respondents/2017).

To support the above assertion, an interviewee affirmed that:

“I have been doing this business for close to 10 years now. I have about 3 centres where waste is being collected, sorted and sold in Ago-Iwoye alone. I have engaged more than 50 youths since I have started doing the business, though the majority of them are not well read, they have a basic level of formal education before joining the waste trading business. At least some of them are now self-employed running their own businesses still on waste collection, sorting and sales” (IDI/Respondent/ Maryam Junction/ Ago-Iwoye, 2017).

Another interviewee corroborates the above by stating that,

“...For instance, this waste business had been the means of my survival and the source of my family sustenance since I was not opportune to secure formal employment after I graduated from the Polytechnic (a tertiary institution)...I also sent my children to school and established my wife with the money I make from the waste business. Sometimes, I fulfil extended family responsibilities through my earnings from the business” (IDI/Respondent/ Ijesha Road/ Ago-Iwoye, 2017).

More positive impacts of SMEco on the growth of the circular economy in Nigeria were further revealed by the interviewees who asserted that:

“Engaging in waste mining as a business helps generate resource or materials that can be useful for the production of consumable goods and services. For example, some of the waste materials (aluminium, plastic, paper, bottle, iron,

cloths, leather and engine) that we collected and sorted in this place are useful for production activities in many industries (small and large) as well as local artisans (i.e. welder, mechanic, shoe cobbler)....We do supply some essential materials that we do generate from waste mining and sorting to manufacturing companies who do recycle them and sell them to consumers at an affordable price compared to if they have to import those materials from abroad” (IDI/Respondent/ Aiyegbami/ Ago-Iwoye, 2017 )

Investigating the issue further, an interviewee who is an artisan, disclosed that:

“Virtually all the products (toys, wall decorations, local lantern, folder, fetcher, and baskets) that you see here are made from waste materials such as textile, discs, wood, plastic, aluminium and iron. I made these products myself and with the assistance of my children who assisted me in collecting the materials I used in producing them...They go out to collect waste from house to house using wheelbarrow without collecting a fee from the disposers and bring them here for sorting and recycling. This initiative encourages many people to frequently dispose of their waste in an acceptable free of charge, and in a very convenient way. It also helps us too, because some material that we used to buy from the scavengers, we get it free of charge through the process” (IDI/Respondent/ Market Street/ Ago-Iwoye, 2017).

Furthermore, another interviewee admitted that:

“Small and medium ecopreneurship generates income for the government at all levels (Local, State, and Federal)... This is because we use to pay tax and other levies to appropriate officials who remit the money to government covers. Also, SMEco brings income to landowners whose land we use as a space for the waste collection, sorting and storing annually. Thus, SMEco encourages a circular flow of income among stakeholders” (IDI/Respondent/ Ijesha Road/ Ago-Iwoye, 2017).

Arising from the responses above, it is clear that small and medium ecopreneurship (SMEco) provides a way out of unemployment, poverty and family sustenance in Nigeria.

It has encouraged creativity, innovation, and the availability of raw materials for industrial development. Similarly, the development of SMEco ensures effective waste management and increases public health impact in Nigeria.

Scenery pictures that were taken at some of the waste collection centres are shown below:



**Figure 2.** Showing rubber and metal waste that have been sorted out for recycling or trade

#### 4.2. The Challenges of Small and Medium Scale Ecopreneurship in Nigeria

Studies have shown that small and medium scale ecopreneurship are faced with several challenges which hinder SMEco growth. With this in mind, the objective here is to examine the challenges associated with small and medium scale ecopreneurship in Nigeria. Interrogating the interviewees on the barriers affecting their businesses, brought the following responses.

An interviewee responded by stating that:

“The major challenge facing my business is capital or fund to expand the business and to get more workers to do the job for me. It is true that this job did not really require a huge fund to start but to expand it, one needs money. For example,

I use to pay my workers a thousand and five hundred nairas (an equivalent of USD \$4) per day and I am responsible for their feeding (breakfast and lunch) during work days. Aside from that when they are sick or sustain an injury during working hours I use to be responsible for their hospital bills... All of these factors require that one should have some level of financial support in the business” (IDI/Respondent/ Maryam Junction/ Ago-Iwoye, 2017).



**Figure 3.** Showing leather waste and a sample of hand brush made from recycled waste materials

Furthermore, another interviewee affirmed that:

“There are many challenges which small and medium ecopreneurship activities in Nigeria face. However, the most pervasive among the challenges are lack of manpower, poor attitude towards locally-made products, lack of adequate land space and modern facilities needed in

running the business" (IDI/Respondent/ Ijesha Road/ Ago-Iwoye, 2017).

In addition, an interviewee submitted that:

"Low political will and government support for the development of small and medium scale ecopreneurship in Nigeria is also part of the main challenges. The issues of market availability for eco-proof products and materials for recycling are imminent. Most of the times, the cost of advertising the products on the media platform discourage public awareness and sales of eco-supported products. This problem also reduces the level of patronage we get from our customers. Finally, economic instability also affects the growth of ecopreneurship and the circular economy in Nigeria" (IDI/Respondent/ Market Street/ Ago-Iwoye, 2017).

The inference that can be made from the above responses is that a lot of structural and financial constraints (ranging from the fund, lack of adequate government support, technical skills, modern facilities, and market for eco-products to low level of awareness) serve as hindrances to the development of small and medium scale ecopreneurship in Nigeria.

## 5. Conclusion and recommendations

This study examines the roles and challenges of small and medium ecopreneurship (SMEco) in Nigeria's Circular Economy in the context of the sustainable development agenda. The findings of the study revealed that small and medium ecopreneurship (SMEco) has huge prospects for socio-economic development in Nigeria. This is evident in the rate at which SMEco contribute to the employment creation, income and revenue generation, the source of livelihood and family sustenance, public health, efficient resource utilization, as well as environmental transformation. The prospects associated with small and medium ecopreneurship cannot be underestimated because it also provides new ways and opportunities for the growth of Nigeria's circular economy. Thus, the need for government at all levels to promote SMEco in Nigeria is evident. The study identified some constraints or challenges militating against desirable growth in SMEco in Nigeria. These problems can, however, be addressed if the recommendations provided below are given optimal priority.

- There is a need to provide financial support to small and medium ecopreneurs in order to be able to obtain funds or capital for running the business. This financial support should be a soft and non-political version of the fund in order to enable the SMEco the access to the funds when needed.

- There is also a need for training and education on how SMEco can better develop their ideas, initiatives, and products to meet internationally acceptable standards. The role of quality in product designing can be achieved if there is a platform for training and development. Furthermore, a periodic trade fair should be organized for SMEcos (local and internationally) to display their products and collaborate with one another to better enhance the circular economy in Nigeria and beyond.
- There should be public awareness and sensitization in regards to the socio-economic prospects that can be secured from the acceptance and utilization of locally made products in Nigeria. By doing so, the urge for international products by many Nigerian consumers would be averted and discouraged in favour of Nigeria economic development.
- Government and non-governmental organizations should invest in the provision of modern waste conversion and management facilities in Nigeria. A lot of effort is required in this aspect because waste collection and management is a big challenge facing contemporary Nigeria societies as available waste facilities are insufficient to meet the demand.
- A public-private partnership should be encouraged in securing a favourable market for the sales of eco-supported products and the exchange of raw materials required in the recycling process. More can be achieved if there is a favourable market for the circular economy to thrive in Nigeria and beyond.

## References

Alao J. A., Sustainable Rural Development for Rural Transformation - A Plea for Relevance, Proceedings of the 8<sup>th</sup> Nigerian Rural Sociological Association, Nigeria, 1995, 3-11,

Allwood J. M., Squaring the Circular Economy: The Role of Recycling within a Hierarchy of Material Management Strategies, Chapter 30, Handbook of Recycling State-of-the-art for Practitioners, Analysts, and Scientists, 2014, 445-477,

Akanle O., Virtue for Sustainable Development in Contemporary Nigeria: The Role of Women, Gratia Associate International, Ijebu-Ode, Nigeria, 2014, 12-18,

Banaité D, Towards circular economy: analysis of indicators in the context of sustainable Development, Social transformations in contemporary society, 4, 2016, 142-150,

Banks R. D., Heaton G. R., An innovation-driven environment policy. Issues in Science and Technology, 12 (1), 1995, 43-51,

Bastein T., Roelofs E., Rietveld E., Hoogendoorn A., Opportunities for a Circular Economy in the Netherlands, TNO, Drukkerij Holland, Alphen aan den Rijn, the Netherlands, 2013, 109, ISBN 978-90-5986-436-8,

Brundtland G. H., Our common future, Report of the World Commission on Environment and Development, United Nations Document, 1987, 374,

Chopra K., Ecopreneurship: Is it a viable business model? AE International Journal of Multidisciplinary Research, 2 (3), 2014, 1-6,

Condung J., Zubir, M. F. A., Hashim A. S., Sri Lanang A. N., A Proposed of Green Practices and Green Innovation Model in the Malaysia Automotive Industry, Environmental Management and Sustainable Development, 1 (2), 2012, 90-100,

Cornel L., Mirela L., The quantification of the sustainable development at local level, WSEAS TRANSACTIONS on BUSINESS and ECONOMICS, 6 (5), 2008, 310-319,

Ebiringa O. T., Synthesis of Literature on Small & Medium Enterprises Start-up Financing, International Journal of Economic Research, 2 (1), 2011, 85-95,

Elkington J., Burke T., The Green Capitalists, Orion Publishing Co, 1989, 256, ISBN-10: 0575045833,

Ellen MacArthur Foundation, Towards the Circular Economy: Economic and business rationale for an accelerated transition, Founding Partners of the Ellen MacArthur Foundation, 1, 2013, 96,

Ellen MacArthur Foundation, Towards the Circular Economy: Opportunities for the consumer goods sector, Cowes: Ellen MacArthur Foundation. Founding Partners of the Ellen MacArthur Foundation, 2, 2013a, 111,

Emas R., The concept of sustainable development: definition and defining principles, Brief for GSDR, United Nations, 2015, 1-3,

European Commission, Communication from the commission to the European parliament, the council, the European economic and social committee and the committee of the regions, Towards a circular economy: A zero waste programme for Europe, Brussels, 2014, 1-14,

Gibbs D., Sustainability entrepreneurs, ecopreneurs, and the development of a sustainable economy, Greener Management International, 55, 2009, 63-78,

Grübler A., Nakicenovic N., Victor D. G., Dynamics of energy technologies and global change, Energy Policy, 27 (5), 1999, 247-280,

Hamdouch A., Depret M.-H., "Green Entrepreneurship Networks and Clusters: When the Local requires the Global"? RSA Global Conference 2012, Beijing, China, 2012, 1-19,

Isaak R., The making of the ecopreneur, Greener Management International, 38, 2002, 81-91,

Kainrath D., Ecopreneurship in theory and practice: A proposed emerging framework for ecopreneurship, (Masters Dissertation), Umeå University, Faculty of Social Sciences, Umeå School of Business, 2009, 88,

Kearins K., Collins E., Tregidga H., Beyond corporate environmental management to a consideration of nature in the visionary small enterprise, Business and Society, 49 (3), 2010, 512-547,

Kearins K., Collins E., Making Sense of Ecopreneurs' Decision to Sell Up, Business Strategy and the Environment, 21, 2012, 71-85,

Kirkwood J., Walton S., What motivates ecopreneurs to start businesses?, International Journal of Entrepreneurial Behavior and Research, 16 (3), 2010, 204-228,

Kiper T., Özdemir G., Sağlam C., Environmental, socio-cultural and economical effects of ecotourism perceived by the local people in the northwestern Turkey: Kiyıköy case, Scientific Research and Essays, 6 (19), 2011, 4009-4020,

Kozic I., Mikulic J., An exploratory assessment of tourism sustainability in Croatian coastal destinations, FEB - Working Paper Series, 11-04, 2011, 1-12,

Lehmann M., B., de Leeuw B., Fehr E., Circular Economy: Improving the Management of Natural Resources, Swiss Academies of Arts and Sciences, (2014), 1-19,

Lieder M., Rashid A., Towards circular economy implementation: a comprehensive review in the context of the manufacturing industry, Journal of Cleaner Production, 115, 2016, 36-51,

McEwen T., Ecopreneurship as a Solution to Environmental Problems: Implications for College Level Entrepreneurship Education, International Journal of Academic Research in Business and Social Sciences, 3 (5), 2013, 264-288,

Morelli J., Environmental Sustainability: A Definition for Environmental Professionals, Journal of Environmental Sustainability, 1 (1), 2011, 1-9,

OECD Green Growth Studies, Fostering Innovation for Green Growth, OECD Green Growth Studies, OECD Publishing, 2011, 130,

Oluwatobi S. O., Ogunrinola I. O., Government Expenditure on Human Capital Development: Implications for Economic Growth in Nigeria, Journal of Sustainable Development, 4 (3), 2011, 72-80,

Preston F., A Global Redesign? Shaping the Circular Economy, Briefing Paper, Chatham House, London, 2012, 1-20,

Popescu R. I., Zamfir A., Strategic Role of Ecotourism for Romania's Regional Development, The Scale of Globalization, 5th International Conference on Globalization, Ostrava, Czech Republic, September 8-9, 2011, 250-258, Publisher: University of Ostrava, Ostrava, Czech Republic, ISBN 978-80-7368-963-6,

Rennings K., Redefining innovation - Eco- innovation research and the contribution from ecological

economics, Ecological Economics, 32 (2), 2000, 319-332,

Robert W. K., Parris M. T., Leiserowitz A. A., What is Sustainable Development? Goals, Indicators, Values, and Practice, Environment: Science and Policy for Sustainable Development, 47 (3), 2005, 8-21,

Rivera-Camino J., Re-evaluating green marketing strategy: a stakeholder perspective, European Journal of Marketing, 41 (11/12), 2007, 1328-1358,

Schaltegger S., A framework for ecopreneurship, Greener Management International, 38, 2002, 45-58,

Schaper M., Introduction: the essence of ecopreneurship, Greener Management International, 38, 2002, 26-30,

Schmeimann M., Enterprises by Size and Class: Overview of SMEs in the EU, Eurostat, Statistics in Focus, 31/2008, 2008, 1-7,

Shane S., Venkataraman S., The promise of entrepreneurship as a field of research, Academy of Management Review, 25 (1), 2000, 217-226,

Stoddart H., A Pocket guide to sustainable development governance, First edition, Stakeholder Forum Commonwealth Secretariat, 2011, 135,

Solaja M. O., Omobowale A. O., Alliyu N., The Dimensions of Environmental Pollution in Lagos Metropolis, Nigeria, Journal of Sustainable Development in Africa, 17 (3), (2015), 96-115,

Solaja M. O., Ecopreneurship and Green Product Initiative (GPI): An Agenda for Nigeria's Sustainable Development in the 21<sup>st</sup> Century, Studia i Materiały, 1 (23), 2017, 103-108,

UNEP, Green economy initiative, The United Nations Environment Programme (UNEP), 2012, Retrieved from: <http://www.unep.org/publications/>,

Vanner R., Bicket M., Hestin M., Tan T., Guilcher S., Withana S., ten Brink P., Razzini P., van Dijl E., Watkins E., Hudson C., Scoping study to identify potential circular economy actions, priority sectors, material flows and value chains, Publications Office of the European Union, Luxembourg, 2014, 220, ISBN 978-92-79-40166-4,

Volery T., Ecopreneurship: Rationale, current issues and future challenges. In Conference Papers of Swiss Research Institute of Small Business and Entrepreneurship, St. Gallen, Switzerland, 2002, 541-553,

Wallis E. S., Valentinov V., What is Sustainable Theory? A Luhmannian Perspective on the Science of Conceptual Systems, Foundations of Science, 22 (4), 2017, 733-747,

World Economic Forum, Towards the Circular Economy: Accelerating the scale-up across global supply chains, World Economic Forum, Geneva, Switzerland, 2014, 61,

Zhu G., On the relations between the people, Journal of population and economy, 88 (1), 1995, 18-24.

# Izazovi i mogućnosti malih i srednjih eko-preduzeća u savremenoj cirkularnoj ekonomiji Nigerije

Oludele M. Solaja

Univerzitet Olabisi Onabanjo, Odsek za Sociologiju, Nigerija

## INFORMACIJE O RADU

Primljen 05 decembar 2018  
Prihvaćen 27 mart 2019

Originalan rad

Ključne reči:  
Izazovi  
Cirkulativna ekonomija  
Razvoj  
Mala i srednja eko-preduzeća

## I Z V O D

Mala i srednja eko-preduzeća predstavljaju glavne učesnike u sistemu cirkularne ekonomije i programu održivog razvoja. Razlog zbog koga je to istina je činjenica da su mala i eko-preduzeća kompanije ili osobe koje učestvuju u društveno-ekonomskoj aktivnosti koja se zasniva na principu kružnog sistema (smanjenje, ponovna upotreba i recikliranje) koji promoviše održivo korišćenje ekoloških resursa i smanjenje razvojnih izazova. Iz ovog razloga, u ovom radu se ispituju izazovi i mogućnosti malih i srednjih eko-preduzeća u cirkularnoj ekonomiji Nigerije. U ovom radu je objašnjen koncept održivog razvoja, cirkularne ekonomije, kao i pojam eko-preduzetništva. Takođe je ispitana i uloga malih i srednjih eko-preduzeća u podsticanju cirkularne ekonomije. U radu je primenjena i teorija o održivosti kao osnova za istraživanje. Sprovedeno je opsežno istraživanje koje se zasniva na aktuelnim i relevantnim akademskim publikacijama i izveštajima. Istraživanje, koje je izvedeno deskriptivno, je urađeno uz pomoć prikupljenih podataka tokom opsežnih intervjuja. Učestvovalo je 15 namenski odabralih učesnika. Odgovori učesnika su analizirani putem kvalitativne analize sadržaja ili direktnih navoda. Došlo se do zaključka da mala i srednja eko-preduzeća pružaju mogućnost za razvoj cirkularne ekonomije u Nigeriji. Ipak, nedostatak odgovarajućeg finansiranja, podrške vlade, tehničkih veština, modernih objekata, kao i tržišta za eko-proizvode, predstavljaju prepreke za jačanje cirkularne ekonomije u Nigeriji. Na osnovu ovih zaključaka, u ovom radu se preporučuje da vlada i nevladine organizacije saraduju u cilju unapredjenja cirkularne ekonomije Nigerije.