

Ecopreneurship Implementation and Environmental Sustainability in Nigeria

Dr. Anekwe Rita Ifeoma¹, Prof. Ardi Gunardi², Dr. Nwanna Patience Chizoba³

¹Nnamdi Azikiwe University, Anambra State, Nigeria.
E-mail anekwerita12@gmail.com

²Universitas Pasundan, Faculty of Economics and Business, Jalan Tamansari, Indonesia

³University of Nigeria, Enugu Campus

Abstract : *Ecopreneurship is related to the economic concept of the common good, which refers to fostering and imparting the human values of dignity, solidarity, sustainability, social justice, democracy, and transparency. The economy of the common good has a broad scope and covers principles that concern not only people but also the environment. The goal is for the firm to conduct its business activities without negatively affecting people and the environment. The study aimed to explore the relationship between Ecopreneurship Implementation and Environmental Sustainability in Nigeria. Specifically, the environmental challenges confronting Nigeria and strategies for achieving success in ecopreneurship was examined. Ecological modernization theory propounded by Social scientists such as Martin Jänicke, Volker von Prittwitz, Udo Simonis in the 1980s was adopted. The study concludes that Ecopreneurship has helped to create an economically viable business as well as retain core environmental sustainability and social values. It was therefore recommended that Ecopreneurship has been articulated as an alternative for handling environmental challenges and degradations, therefore the government should encourage the ecopreneurs to take up these challenges to maintain the ecological and environmental sustainability.*

Keywords: Ecopreneurship, Environmental Sustainability, Eco-Innovation, Eco-opportunity

Background of the Study

Ecopreneurship is a term devised to represent the principles of entrepreneurship being applied to create businesses that solve environmental challenges or function sustainably. The term began to be popular in the 1990s, and it is otherwise mentioned as "environmental entrepreneurship. The upsurge of interest in environmental degradation began during the 1960s, in Western Europe and North America because of the incidents of heavy smog in London caused by business activities Ernest (2018). The incident opened people's eyes to become more aware of the negative environmental consequences of business activities. Business response to the environmental concerns was antagonistic and sympathetic, with little attention to the cost of business activities to the environment (Utting, 2000). Environmental concern was seen as a nuisance to their businesses and opposed any effort to control performance (Tillery, 2009). Ecopreneurship is a relatively new area but offers several opportunities for business sustainability through innovations. Kainrath (2009) has assets that ecopreneurship has greater prominence from finding solutions to environmental challenges across the globe. Hence ecopreneurship relates to environmentally friendly ways of doing business. Ecopreneurship is distinguished from the form of company environment development and the company commitment for environmental improvements and strong will for business growth. The focus is on environmental sustainability to gain momentum in the business environment. This trend has created various opportunities for entrepreneurs: creating green technology, using technology to promote environmental sustainability (energy management for example) to make existing business environmentally friendly, thus profits and benefits can be obtained. An ecopreneur is not just a person determined by possibilities of making profits but also determined by environmental issues (Sasongko & Anggadwita 2016). There are three important elements to achieve success in ecopreneurship, which are: eco-innovation, eco-commitment, and eco-opportunity (Kainrath, 2009).

The environment is often abused through technological and infrastructural developments, degrading agricultural activities, deleterious economic blast activities and human nonchalant disposition towards environmental affairs. There is terrestrial aquatic encroachment, construction that has altered drainage and water channels, overlabouring of rivers and seas by waste, etc. Developmental structures are without concession or considerations of possible hazards. Further, deforestation and destruction of water bodies have led to suffocating alteration of the eco-system, our environment has lost many terrestrial and aquatic creatures that balance the ecosystem and engender good health of mind and body. Agunwamba, (2018) asserts that disposed plastics, toxic waste and industrial wastes on water bodies which most times decompose to micro-plastics and other chemical substances are ingested by fish which in turn is eaten by humans, endangering human health. Nigeria is now plagued by inconceivable environmental pollution and hazard which has extremely degraded our environment. Some of these include toxic waste, floods, erosion, fire disasters, etc. Environmental degradation is a danger to the lives of people, plants, and animals". It has not only brought natural disasters, such as storms, heatwaves, droughts, etc., but it has also diminished the vitality and sustainability of the

economy. The long term economic and financial impact of environmental degradation, therefore, may be very substantial because a large amount of the world's economic output depends on the sustainability of the natural systems (Kainrath, 2009). Also, Market systems have adversely affected the environment by failing to deal with negative environmental externalities and undervaluing natural resources, leading to their overexploitation and depletion. Governments have solicited to address the problem through a mix of command and control and market-based instruments, with bounded success. One of the powerful alternatives for dealing with such market failures is Ecopreneurship (Pastakia 2002). This paper x- rays how Ecopreneurship Implementation would help to address the environmental challenges to ensure Sustainability

Objectives of the Study

The study explores the effect of Ecopreneurship Implementation and Environmental Sustainability in Nigeria, but specifically seeks to:

- 1) ascertain the environmental challenges confronting Nigeria.
- 2) examine the strategies for achieving success in Ecopreneurship.

2.1 Conceptual Clarifications

2.1.1 Ecopreneurship

Ecopreneurs identify environmental innovations and their market opportunities to successfully change these innovations into new products or services (Lober 1998); (Pastakia, 1998). An ecopreneur is not just a person determined by possibilities of making profits, but also determined by environmental issues. An ecopreneur would like to make the world a better place by increasing or at least protecting the environment. Ecopreneurs show personal mastery (Senge, 2006) and consider their professional life as creative actions. Ecopreneurs are therefore entrepreneurs who found their business based on the principle of sustainability (Kirkwood and Walton, 2010). They are a new breed of eco-conscious change agents who are redesigning the way business is conducted and are introducing eco-friendly ideas and innovations in the marketplace (Pastakia, 1998). The four types of ecopreneurs according to Sasongko & Anggadwita (2016) are *Innovative Opportunists* who identify a green niche for economy exploitations and is mainly influenced by structural factors, such as government regulations; *Visionary Champions* who manage the business sustainability to change the world and the establishment business based on the environmental sustainability; *Ethical Mavericks* who are influenced by soft structural drivers (such as past experiences, network or friends) and sustainability-oriented; and, *Ad hoc entrepreneurs* who are encouraged by financial factors, but influenced by the soft structural driver. According to (Schaltegger, 2002), ecopreneurship is a combination of two words, ecology (eco) and entrepreneurship. Ecopreneurship is entrepreneurial activities through the environment lenses. Ecopreneurship is marked with several fundamental aspects from entrepreneurial activities which oriented to management system or technical procedures and more focused on the initiatives and personal or team skills to achieve market success with environmental innovations (Sasongko & Anggadwita 2016). Ecopreneurship can be described as a form of market orientation and innovative value creation driven through the environment and product innovations. Ecopreneurship is an entrepreneurship concept which is not profit-oriented only but also a concern to other aspects, especially the environmental aspect. Ecopreneurship is an entrepreneurship behavior that focuses on environmental sustainability in the future. A business that is capable to offer solutions for social problems and especially focusing on ecology issues is called 'Green Entrepreneurship' or 'Ecopreneurship' (Schaper, 2002). Ecopreneurship deals with carrying activities that keep the environment clean as well as achieving the business objective. Ecopreneurship implementation is used as a way to foster society's concern to the environment, to improve the environment condition, and to increase the economy by building an independent society to gain mutual benefits. For this paper, ecopreneurship means entrepreneurial action that contributes to preserving the natural environment.

2.1.2 Environmental Sustainability

Environmental sustainability is the process by which human and non-human activity on the environment is geared towards improving human living standards and protecting/preserving the environment in pari-pasu (Igbudu, & Amadi, 2017). It is a serious attempt to conserve and maintain the ecosystem vis-à-vis proffering and promoting modalities through which human living beings can enjoy a better malicious co-existence. environmental considerations deal with the exploration, modification, and manipulation of the environment to yield on expected envisaged result for the improvement of the human standard of living or achieve an economic goal, reputational goal or meet up with sociological stratification (within or outside the ambience of modernization)(Bassey & Pimaro, 2013). Environmental sustainability entails consciousness, an attitude, behavior or character approach towards the self and one's environment (Adebimpe et al, 2001). It takes cognizance of population, sustainable yield, sustainable waste disposal, and competitive development and industrialization. Environmental sustainability comprises of both natural and built environments; the natural environment serves the purpose of supporting human life and activities, while the built environment provides shelter and security for various human activities and also facilitates the activities especially in towns and cities (Folarin, 2003).

2.2 Theoretical framework

The study is anchored on Ecological Modernization theory propounded by Social scientists such as Martin Jänicke, Volker von Prittwitz, Udo Simonis in the 1980s. It has increasingly gained attention among policymakers and scholars in the last several decades globally. It is an analytical approach as well as a policy strategy and environmental discourse (Hajer, 1995). According to the theory, economic growth can be promoted by giving higher priority to the environment. It is no longer essential to trade off economic growth for environmental quality (Tillery and Young, 2009,). The capitalist system is having the capacity to develop and maintain sustainable solutions to environmental problems. Ecological modernization theorist believes that “the environmental challenges facing the world today, serve as a driving force for future industrial activity and economic development” (Murphy, 2000,). The modernization theory sees entrepreneurs as the central agents of change in the process of transformation to avoid an ecological crisis (Gibbs, 2009; Mol and Spaargaren, 1993; Chukwuka,2018). Entrepreneurial action, therefore, is considered as the best solution to environmental challenges because ecopreneurs are seeking to combine environmental awareness and conventional entrepreneurial activity to achieve entrepreneurial success. One basic assumption of ecological modernization relates to the environmental readaptation of economic growth and industrial development. Based on enlightened self-interest, economy and ecology can be favorably combined: Environmental productivity, i.e. productive use of natural resources and environmental media (ecosystems, soil water, air), can be a source of growth and development as well as capital productivity and labour productivity. Ecological modernization share an interest in industrial symbiosis, i.e. inter-site recycling that helps to minimize the consumption of resources via increasing efficiency (i.e. pollution prevention, waste reduction), typically by taking externalities from one economic production process and using them as raw material inputs for another (Christoff, 1996). Ecological modernization also relies on product life-cycle assessment and the analysis of materials and energy flows. Ecological modernization may be favored by business interests because they seemingly meet the triple bottom line of economics, society, and environment, which, it is held, underpin sustainability, yet do not challenge free-market principles. This contrasts with many environmental movement perspectives, which regard free trade and its notion of business self-regulation as part of the problem, or even an origin of environmental degradation.

Environmental challenges confronting Nigeria

In Nigeria, the environmental problems are characterized by soil erosion, high population pressure and increasing congestion in urban centers, which are further compounded by unplanned growth, and increasing problems of domestic and industrial wastes disposal and pollution. Human related activities since the 1980s, especially in the development projects of the oil and gas sector, have led to the acceleration in the loss of the topsoil and deforestation; loss of habitat, species and biodiversity; and degradation of wetlands (NEST, 1992).

Overpopulation is a state whereby, people living in an environment is greater than the number of resources available to meet their needs. It is an unpleasant situation where the number of the existing human population exceeds the carrying capacity of Earth. Overpopulation is one of the major challenges of predominant in Nigeria. It is necessary to note that regarding social well-being, the economic prosperity of a nation is dependent on its population growth rate. Demographically, Nigeria is running so fast that she has to stand still economically. Overpopulation is caused by several factors. Migration, depletion of resources, decrease mortality rate, better medical facilities: People migrate to better environments where best facilities are available in terms of employment, education, security, medicals. Lack of Family Planning: Most developing countries have a huge number of citizens who are illiterate, and have slightly or no knowledge of family planning. Thereby, getting their children married at a tender age and increase their possibility of producing more kids. The effects of overpopulation on the economy include Depletion of Natural Resources, degradation of the environment, a rise in the unemployment rate, a high cost of living, brain drain and low level of income per head (Mba, 2018), etc. Overpopulation causes stress on the environment. Environmental challenges, such as overpopulation, degradation, erosion, desertification, etc. are caused by man’s misuse of environmental resources (Abumere, 2002).

Pollution, on the whole, is caused mainly by human activities, though it can also be a natural process. It is usually classed according to the receiving agents of air as emission, water as affluent and land as dumps and disposal (Ukpong, 1994). Air pollution is the contamination of the air with unwanted gas, smokes, particles, and other substances. According to the World Bank Report (1980), air pollution is the presence in the outdoor atmosphere of one or more contaminants such as dust, fumes, gas, mist, odour, smoke or vapour in such quantities, characteristics, and duration as to make them actually harmful or potentially injurious to human, plant or animal life or property, or which unreasonably interfere with the comfortable enjoyment of life and property. Industrial activities are responsible for a wide range of pollution. Thermal power stations, burning fossil fuel and moving vehicles emit harmful pollutants like sulphur dioxides, nitrogen oxide and carbon dioxide that cause acid rain, global warming, and malfunctioning of human/animal’s haemoglobin.

{
Urbanization is the annual rate of change of the percentage of people living in urban areas, or the difference between the growth rate of urban population and that of the total population (Hope and Lekorwe, 2009). It is, therefore, a process by which urban areas increase in size and population density. Urbanization is a vital aspect of human activities in influencing the environmental system.

During the process of urbanization, the reflectivity of the land surface is violently changed when a large amount of natural or agricultural lands are converted to built-up surfaces. In many cases, a lot of factors like environmental degradation, poverty, religious strife, political instability and lack of basic infrastructural amenities push a lot of people from the rural areas to urban in search of electricity, qualitative water, education, good transport facilities as well as conducive living standard, although in many African countries the urban areas offer few jobs to the youths as well as amenities of urban life (Cohen 2004). Urbanization is caused by a high population growth rate and rural-urban migration. In Nigeria, it is characterized by city slums with serious environmental consequences. The problem is acute and exemplifies the inability of development measures to keep pace with the rate of population growth (Isife,2012).

Deforestation is the permanent removal of trees to make room for something besides the forest. This can include clearing the land for agriculture or grazing or using the timber for fuel, construction or manufacturing (Derouin, 2019). Deforestation happens when forests are destroyed and the land is used for another purpose. Ogundele and Adebisi, (2016) said deforestation is the conversion of forest to an alternative permanent non-forested land use such as agriculture, grazing or urban development. Forests cover more than 30% of the Earth's land surface, according to the World Wildlife Fund. These forested areas can provide food, medicine, and fuel for more than a billion people. Worldwide, forests provide 13.4 million people with jobs in the forest sector, and another 41 million people have jobs related to forests. Deforestation not only removes vegetation that is important for removing carbon dioxide from the air, but the act of clearing the forests also produces greenhouse gas emissions. The Food and Agriculture Organization of the United Nations says that deforestation is the second-leading cause of climate change. The factors that have been noted to contribute substantially to deforestation in Nigeria include; Expansion of Farming Land, Urbanization, Industrialization, and Infrastructural Development, Logging, and Fuelwood Collection, mining, etc

Strategies for achieving success in Ecopreneurship

Hence ecopreneurship relates to environmentally friendly ways of doing business. There are three important elements to achieve success in Ecopreneurship:

Eco-innovation: This relates to providing innovative solutions to solve environmental problems. Eco-innovation is the process of developing processes or services, new products, which provide customer and business value but significantly decrease environmental impact". eco-innovation is a means to achieve a more responsible and efficient use of resources and minimize the impact of human activity on the environment. Eco-innovation is any innovation resulting in significant progress towards the goal of sustainable development, by reducing the impacts of our production modes on the environment, enhancing nature's resilience to environmental pressures, or achieving a more efficient and responsible use of natural resources. Eco-innovation is also an opportunity for businesses. It leads to reduced costs, helps capture new growth opportunities and strengthens the company image in front of its customers. Environmental concerns for innovation are driven either by external pressures such as stricter governmental regulation and stakeholders or by the recognition that it can lead to a competitive advantage and increased performance through cost reduction and/or improved reputation. Furthermore, there is evidence that environmental innovations do not undermine economic performance, neither in the short run nor in the context of the global financial crisis (Cainelli, Mazzanti, & Zoboli, 2011).

Eco – commitment: This relates to creating and implementing policies that will help create a commitment to focusing on green activities. Environmental commitments have often been thought of as situations of rational choice. An individual who is committed to environmental protection will tend to propose creative solutions and promote participative approaches. (Wang, Huisingh, Hansson, et al 2013) noted that the importance of an environmental commitment and the ability to identify and resolve problems is often understated. Environmental commitments are driven by economic opportunities and stakeholders' influence, not only by personal values. Individuals weigh the costs and benefits of an action and choose the alternative with the highest personal benefit (Steg, Vlek, 2009). For the effectiveness of environmental commitments, Cialdini (2001) recognizes that individuals' commitments and behaviors are consistent with their commitment to behavior and follow-up.

Eco – opportunity: This relates to identifying the opportunities for innovation that will help to solve environmental problems as well as achieve sustainability in business. According to Cohen and Levinthal (1990), successful ecopreneurs recognize opportunities that others do not see because they have better access to information about the existence of the opportunities. Hermann (2011) also states that information availability and management help the entrepreneur or ecopreneur get closer to the opportunity i.e., where the market changes are and what is needed to access them. As ecopreneurship is a subset of sustainable entrepreneurship, we can infer that these phases can be applied to it as well, since the life cycle of these environmental businesses involves the identification, exploration, and exploitation of opportunities that provide both economic and ecological benefits to society. Opportunity exploitation can be considered a dynamic and continuous process, since it consists of adjusting the venture's strategic plans to the needs of the market and the current legislation, at the same time as contributing to value creation from the

outcomes of the enterprise. When it comes to environmental enterprises, these outcomes consist of solutions to an environmental problem identified as an entrepreneurial opportunity that can generate not only economic but also 'green' value (Thompson et al 2011

).

Conclusion and Policy Recommendations

Ecopreneurship has thus become a market-based approach for identifying opportunities for improving the quality of life through sound environmental practices. Entrepreneurial action can preserve the ecosystem, counteract climate change, reduce environmental degradation and deforestation, improve agricultural practices and freshwater supply, and maintain biodiversity. Ecopreneurship has helped to create an economically viable business as well as retain core environmental and social values. Entrepreneurs contribute to solving environmental problems by creating new, more environmentally sustainable products and services. The law regulations and industries supporting institutions should play important roles in making this activity successful. SMEs, venture investors, and local society can play important roles to ensure ecopreneurship success. The Ecopreneurship course should be incorporated into the current entrepreneurial education curriculum of the Nigerian schools' system to expose student entrepreneurs with ecological sustainability values. Ecopreneurship has been articulated as an alternative for handling environmental challenges and degradations, therefore the government should encourage the ecopreneurs to take up these challenges to maintain the ecological and environmental sustainability.

References

Abumere, S.L. (2002). Urbanization: In Africa Atlases. Paris: Nigeria Les Editions J.A.

Christoff, Peter (1996). "Ecological modernization, ecological modernities". *Environmental Politics*. 5 (3): 476–500. DOI: [10.1080/09644019608414283](https://doi.org/10.1080/09644019608414283). ISSN 0964-4016.

Chukwuka J.E (2018) Effect of Ecopreneurship On Organizational Performance Of Selected Manufacturing Firms In Africa evidence From Nigeria. Singaporean Journal of Business Economics, and Management Studies (SJBEM)

Cohen, W. M. & Levinthal, D. (1990). Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 36(1), 128-152.

Cohen, B., (2004). Urban growth in developing countries: a review of current trends and a caution regarding existing forecasts. *World Development*, 32 (1), 23–51.

Cainelli, G., Mazzanti, M., & Zoboli, R. (2011). Environmental innovations, complementarity, and local/global cooperation: Evidence from North-East Italian industry. *International Journal of Technology, Policy, and Management*, 11, 328–368.

Derouin S. (2019)Deforestation: Facts, Causes & Effects retrieved from <https://www.livescience.com/27692-deforestation.html> on 28th February 2020

Ernet J.C (2018). Effect of ecopreneurship on organizational performance of selected manufacturing firms in Africa Evidence from Nigeria. Singaporean journal of business, economics and management studies (SJBEM)

Gibbs, D. (2009). Sustainability entrepreneurship ecopreneurs, and the development of a sustainable economy. *Greener Management International*, 55 Summer, 6378.

Wang, Y.; Shi, H.; Sun, M.; Huisingh, D.; Hansson, L.; Wang, R. Moving towards an ecologically sound society? Starting from green universities and environmental higher education. *J. Clean. Prod.* **2013**, 61, 1–5.]

Cialdini, R.B. *Influence: Science and Practice*; Allyn & Bacon: Boston, MA, USA, 2001.

Mol, A and Spaargaren, G. (1993). Environmental modernity and the risk society: the Apocalyptic horizon of environmental reform. *International Sociology*, 8(4),431-59.

Murphy, J. (2000). Ecological Modernization, *Geoforum*, 31, 1-8.

Hajer, M.A., (1995), *The Politics of Environmental Discourse: Ecological Modernization and the Policy Process*, Oxford, UK, Oxford University Press, [ISBN 0-19-827969-8](https://doi.org/10.1017/CBO9780511527969)

Sasongko S., & Anggadwita G.,(2016) Ecopreneurship Implementation for Environment and Economic Sustainability. *Advances in Economics, Business and Management Research, volume 15*, 1st Global Conference on Business, Management and Entrepreneurship (GCBME-16)

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

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

Senge, P., *Die Fünfte Disziplin: Kunst und Praxis der lernenden Organisation (The Fifth Discipline: Art and Practice of the Learning Organisation)*, Stuttgart: Klett-Cotta, 1996.

Lober, D.J.,(1998) Pollution Prevention and Corporate Entrepreneurship, *Journal of Organisational Change Management* 11.1, 26-37.

Pastakia, A., (1998) Grassroots Ecopreneurs: Change Agents for a Sustainable Society, *Journal of Organisational Change Management* 11.2: 157-73.

Folarin B. A.(2003). "Behavioural techniques of environmental management". In, Adekunle V, et al. (Eds.). *Proceedings of the Conference on the Challenges of environmental sustainability in democratic governance*. Environment and Behaviour Association of Nigeria.

Kainrath, D., "Ecopreneurship in theory and practice: A proposed emerging framework for ecopreneurship", Faculty of Social Sciences, Umea School of Business, Umea University, Sweden, 2009. Retrieved from <http://umu.diva-portal.org/smash/record.jsf?pid=diva2:280302>

Kainrath, D. (2009). *Ecopreneurship in theory and practice: A proposed emerging framework for ecopreneurship*. (Bachelor's Thesis), Faculty of Social Sciences, Umea School of Business, Umea University, Sweden. Retrieved from <http://umu.diva-portal.org/smash/record.jsf?pid=diva2:280302>

Tillery, F., & Parrish, B. D. (2009). Introduction to sustainability entrepreneurship research, *Greener Management International*, 55, 5-11.

Utting, P. (2000). Business responsibility for sustainable development, UNRISD OccasionalPaper 2, January 20-30.Retrieved from [http://www.unrisd.org/80256B3C005BCCF9/\(httpPublications\)/1CA8A49E3513DE1C80256B610059BA0D?OpenDocument](http://www.unrisd.org/80256B3C005BCCF9/(httpPublications)/1CA8A49E3513DE1C80256B610059BA0D?OpenDocument)

Hope K. R. and M. Lekorwe, (2009). Urbanization and the Environment in Southern Africa: Towards a Managed Framework for the Sustainability of Cities. *Journ. Environ. Plan. Mgt.* 42:6. 837–59.

Steg, L.; Vlek, C.(2009) Encouraging pro-environmental behaviour: An integrative review and research agenda.*J. Environ. Psychol*, 29, 309–317.

Mba V. EM(2018). The Menace of Overpopulation in Nigeria. Retrieved on 12th February from <https://tunza.eco-generation.org/ambassadorReportView.jsp?viewID=43971>

Isife, C. T (2012) Environmental Problems In Nigeria - A Review. *Sustainable Human Development Review*, Vol. 4, Nos. 1&2

Hermann, R. R. (2011). *Cleaner shipping drivers as ecopreneurs opportunities* (Master's Thesis), Environmental Studies, Aalborg University, Denmark. Retrieved from http://projekter.aau.dk/projekter/files/52822263/2011_EM10_Roberto_Rivas_Hermann.pdf

Ogundele A. T and Oladipo M.O Adebisi O.M (2016).Deforestation in Nigeria: The Needs for Urgent Mitigating Measures. *International Journal of Geography and Environmental Management*