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The Impact of Green Entrepreneurship on the Sustainable Development of African Nations

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Abstract

This study adopted a quantitative technique to examine the impact of green entrepreneurship on the sustainable development of African nations. It reviewed thematically proof from 45 previous works that examined the effect of green product or service offering on social progress index.in Africa. It also found that adopting a single theory is insufficient to explain the rationale of the relationships between green entrepreneurship and sustainable development. While most studies adopted secondary data, future studies may focus on using primary data and other methods instead of regression or multiple regression analysis. From the findings, product or service offering positively correlates the green innovation and green product. In conclusion, the priory expectations were found to be positive outcomes because of the correlations among the moderating variable, explanatory variable and response variables. Hence, the regression model revealed that the alternate hypotheses were accepted, unlike the null hypotheses. Based on the findings and conclusion, this study contributes to the knowledge that green entrepreneurship is perceived to foster sustainable development in countries through the SMEs activities. It therefore could be recommended that green entrepreneurs should develop and design an analytical framework to synchronized green product or

service offering with social progress index. Entrepreneurs should always facilitate continuous improvement on devising green innovation towards the sustainability, survival and success.

Keywords

Green entrepreneurship. Green Product or Service offering. Investment in environmental technologies. Environmental Reporting and Disclosure. Sustainable development

JEL Classification: M1, M10, M13, M16

Introduction

This study analyses how green entrepreneurship affect the sustainable development of countries in Africa. The world is now more than ever in need of a safer and more proper way to live, produce, and even set up entrepreneurial activities that would contribute to the effective and sustainable development of nations all over the world. African nations are aligning themselves in the same vector of globalization in order to build sustainable yet profitable economies for the safety of their population. Scholars have investigated this concept and define green entrepreneurship as the business enterprise of actively addressing an environmental problem or need through a financially sustainable business plan that has a positive impact on the environment, the environment, and the environment. They have looked into this concept and refer to green entrepreneurship as the business enterprise of actively addressing an environmental problem or need through a financially sustainable business plan that has a positive impact on the environment, the community, and society at large intervene as a strategic and non-negligible source through which African countries can but will also achieve sustainable and durable development (Muhammad et al., 2023).

Due to the ever-increasing capital-intensive production requirements that industries have today toward nature and its resources, the world has found itself in a situation where the constant need to produce in order to satisfy the needs of making ever-increasing profits is having a negative impact on the environment. Situations such as earthquakes, tsunamis, volcanoes, deforestation, and natural disasters, to name a few, have occurred on a regular basis in recent years, creating a scenario in which, if a solution is not provided, the peaceful living of humans may be terminated (Nizamudin & Syed 2022, Gulsan et al., 2022). Since we live in an era where we can only live by

what we produce and consume, and the process of production to consumption involves the use of raw materials and, in most cases, natural resources, it is critical to adopt a solution that will provide the world with an alternative. Green entrepreneurship is then considered a better alternative because through its three distinct factors which are the social, the economic and the environmental it not only generates profits for the enterprises, but it also has a responsibility to be beneficial to the sustainable development of nations through the indication of the economic growth by making careful and conscious use of the natural resources available in order to protect the environment's longevity (Severine et al., 2022, Salman et al., 2022, Pervin et al., 2022).

Therefore it is important before diving into the depth of our work to ask what is the impact that green entrepreneurship has on the sustainable development of African nations and how through the economic, social and environmental factors that composed the green business building nations in Africa can achieve a remarquable economic growth. Having elaborated on the factors above, there is a consequent responsibility to point that this study intends to make an impactful contribution to knowledge by reshaping the understanding of the green entrepreneurship concept and how it can be translated in our society in a more approachable way, to practice by establishing a proper framework that can become reliable specifically to governments, institutions, and authorized bodies by making them agents of change by how they contribute at working to ensure the safety of the African environment via the systematic implementation of rules and regulations by which private, public sector, and startup firms and organizations will abide in order not only to contribute to the GDP of the various African nations through their productions and benefit realizations, but also to environmental safety by promoting production that will not harm the ecosystem and, at the same time, protecting the lives of African citizens and fostering the well-being of the continent aside from the economic prosperity that the diverse entrepreneurial activities will bring through their respective goals at a micro economic level. (Ahsan et al., 2022, Jiya et al., 2023).

This study then examines and understands from various angles, locations, and countries how green entrepreneurship can significantly help mostly startups but also existing organizations of these countries produce in a respective way to environmental safety as well as contribute increasingly to the economic growth of their various nations as they achieve their various goals and objectives as organizations (Marco et al., 2022, Patima & Vimal 2022).

Literature Review

Green entrepreneurship is the process of developing new products and technology to address environmental issues. Green entrepreneurship is a new business model that emphasizes environmental stewardship. It combines a strong entrepreneurial spirit with a love of environmental movements and long-term sustainability (Sourav et al., 2023). As a result, environmentally conscious business operations can be considered a novel type of environmental business venture. As a result, green entrepreneurship has progressed from a purely commercial endeavor to a community effort to conserve and sustain the environment. Green entrepreneurial activities are viewed as a key player in responding to the diverse challenges that Sub-Saharan Africa is facing (Ioana & Ana 2023, Diana et al., 2023, Piotr 2022). In recent years, the impact that entrepreneurship has had on the transformation of society has been widely observed and acknowledged, to the point where the promotion of the startup for a favorable ecosystem as it impacts the sustainable development of our various countries, particularly in developing countries, has become increasingly important (Andrius et al., 2022) a favorable ecosystem has made a significant contribution to the sustainable development of our various countries, particularly in Africa.

Green entrepreneurship is now viewed as a solution that can assist the world, particularly the African continent, in addressing the continent's numerous challenges, whether industrial, technological, environmental, ecologically, economically, or politically. Because previous entrepreneurial activities were always aimed at profit maximization, this demonstrates the significance of the green orientation (Favourate 2022). When an entrepreneur is about to start his business, his goal is to make money because the activities he will undertake will help him to respond to the current market needs and, as a result, profit from the solution he will provide (Tino 2022). In the long run, this has been at any cost, including the environment, because since the market was designed in a way of demand and supply to respond to the demand in place, supplies through raw materials transformed to finished goods have become increasingly abundant, and since it has required more and more natural resources, environmental damages are perceived through diverse events that tend to affect lives, societies, economies, and countries (Benjamin et al. 2022). Green entrepreneurship is proposed as a solution that will, on the one hand, respond to a need in the consumption market through production, and on the other hand, unlike the capitalism-

oriented entrepreneurial setting, will carry out environmentally conscious activities which would be mindful of how their actions can benefit both them as a company and the environment as a whole. Startups, or early-stage companies, typically exist through the application of technological know-how to create long-term and sustainable solutions in a specific domain. Green entrepreneurship, as a term related to environmental stewardship, has specific dimensions that result from its application not only at the micro level as it relates to various startups, but also at the macro level as it relates to specific Sub-Saharan African countries. (Agnieszka 2022).

Green Product or Service offering is a sustainable product or service designed to minimize its environmental impacts during its whole life-cycle and even after it's of no use. The presence and market share of green products or services within an entrepreneurial venture can be used as a proxy for green entrepreneurship (Jenny 2022, Wenbo et al., 2022). It indicates a focus on developing and offering environmentally friendly solutions that contribute to sustainability.

Investment in Environmental Technologies is the level of investment in eco-friendly technologies, such as renewable energy systems, energy-efficient equipment, or waste management solutions, can be considered a proxy for green entrepreneurship. It demonstrates a commitment to adopting and utilizing technologies that minimize environmental impact (Michalis et al., 2022, Dan 2022). Once done in this aspect it helps contribute to the energetic development of lives communities even nations on the African continent and achieve a sustainable living through the index of the social progress (Qinghua et al., 2022).

Environmental Reporting and Disclosure is the publication of environmental reports or sustainability disclosures, which detail the environmental impact of business activities and the efforts undertaken to mitigate such impact, can be used as a proxy for green entrepreneurship. It demonstrates transparency and accountability in addressing environmental concerns (Zhang et al., 2022, Yanez & Jose 2022). And since it affects directly the concern of countries it helps in showing how the green activities implementation contribute to shift the sustainable development of the African continent through ventures that will adopt a greener orientation in their entrepreneurial activities.

Sustainable Development

Sustainable development, defined as economic development conducted without depletion of natural resources, is understood as a set of specific development standards met without jeopardizing future generations' ability to meet their own needs. The concept of sustainable development not only supports a country's economic development, but also believes that for a country to be properly developed, it must consider the environment for environmental protection and sustainability (Yousef et al., 2023, Ekaterina et al., 2022). Since sustainability is defined as the ability to maintain a certain level, it automatically entails sustainable development as the ability not only to achieve but also to sustain a country's economic development in terms of environmental protection, natural resource management, and individual well-being (Lingming et al. 2022).Countries and organizations today are all focused on creating an ecosystem in which sustainable development is met, so that both the structures established for resource utilization and the resources themselves benefit not only the population living in the country, but also future generations. Sub-Saharan Africa is one of the regions of the world that has been endowed with a diverse range of natural resources and endowments for generations to enjoy. The implications for sustainable development here will be for the proper utilization of these resources, as well as for them to be useful and available to future generations (Muhammad et al., 2023). This refers to long-term development. The concept of sustainable development has become a road map for scientific research on the environment, as well as a paradigm for development since its appearance in the Brundtland Report in 1987.

Sustainable development, like economic growth and human development, aims to achieve continuous development beyond economic development in a society. Sustainable development is a guiding principle that promotes the conservation of nonrenewable and limited resources for future generations (Btool et al., 2022; Shivani et al., 2022). Sustainable development is a process that ensures that living conditions and resource use meet human needs without jeopardizing the integrity, beauty, and stability of vital systems, thereby ensuring a desirable future for human societies. Sustainable development entails achieving economic and social development in a way that does not deplete a country's natural resources while also maintaining and improving the quality of life of humans who rely on the capacity of ecosystems around them. Sustainable development addresses structural, social, and economic mortal patterns of development to avoid problems such

as resource depletion, biological system degradation, pollution, climate change, excessive population growth, injustice, and deterioration of quality of life in the present and future (Nazrana et al., 2023). To summarize, sustainable development is the process of allocating resources, directing investments, developing technology, and implementing institutional changes that are compatible with current and future needs.

Social Progress Index

The SPI which represents a measure of the extent to which countries provides for the social and environmental needs of their citizens measures a country's social progress by considering indicators related to basic human needs, foundations of well-being, and opportunity. It serves as a proxy for sustainable development by focusing on social factors that contribute to a sustainable and inclusive society (Alysson & Marcelo 2022, Aristide 2022). This proxy helps in tracking and evaluating progress toward sustainable development goals at various levels, including national, regional, organizational, and project-based assessments. It provides valuable insights into the multidimensional aspects of sustainability, enabling decision-makers to make informed policy and development choices. The social progress index plays a vital role because it shows at which level a country’s sustainable development is appreciated. It is a comprehensive tool that serves as a holistic assessment of a country’s social progress at a national and subnational level (Anna 2022, Daniela et al., 2022). It represent as well the capacity of a society to meet the basic needs of their citizens, which means sustainable development can’t be properly defined without revealing how well the society is impacted whether positively or negatively by that development and how it can be sustained. The social progress indexes show the level and position of a country related to its development and how green entrepreneurship has contributed to impact the country positively (Mohammed et al., 2022).

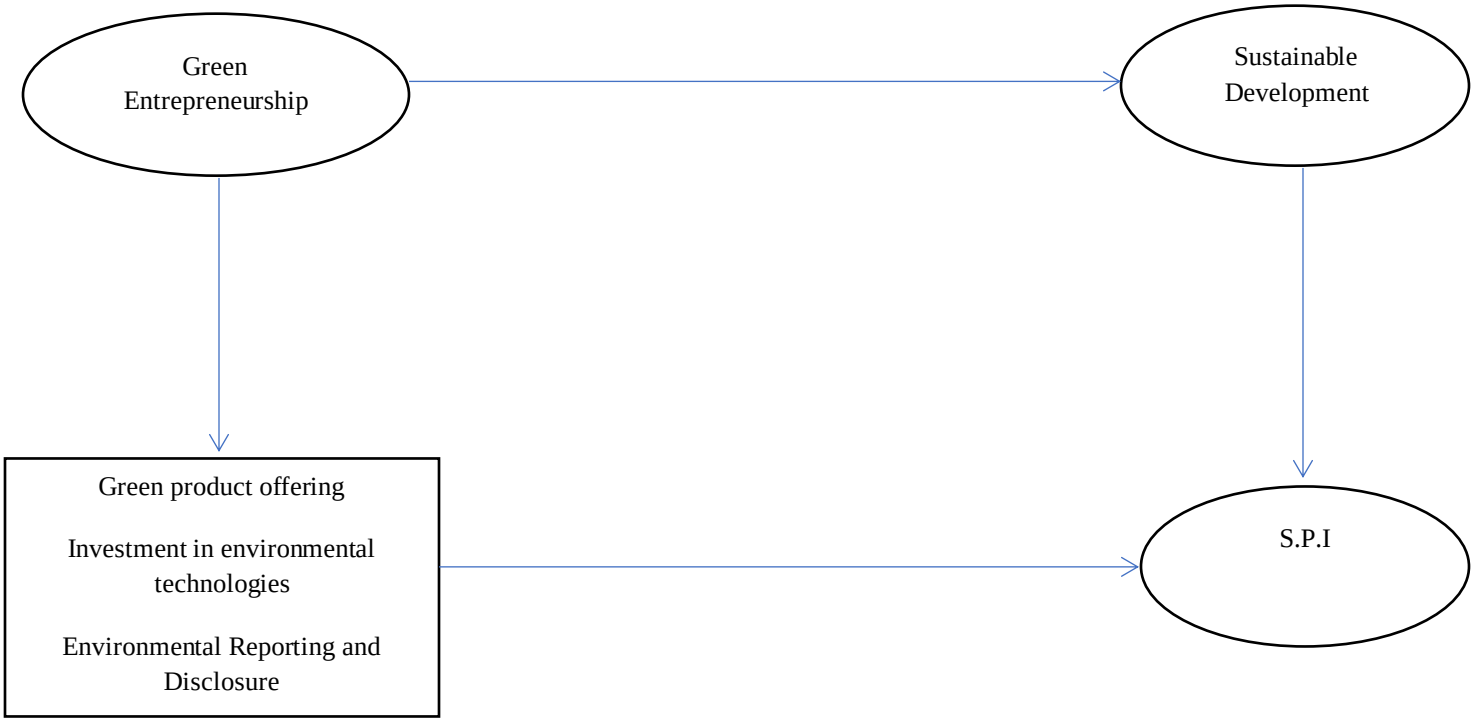

Fig1. Conceptual construct of research dimensions

These proxies can provide insights into the level of green entrepreneurship within an organization or sector, allowing researchers and stakeholders to assess the environmental performance and commitment to sustainability of entrepreneurial ventures.

Throughout this study many theories that support green entrepreneurship have been reviewed and these theories are; resource based view theory, institutional theory, stakeholder theory and diffusion of innovation theory. However this study anchored to the resource based view theory. Judging from the assumptions that are the homogenous assumption and the heterogeneous assumption. Resource based theory is an approach in business strategic management that emerged in the 1980s and 1990s. It is defined as a strategy in which the organization focuses on internal resources available with it to compete in the market and achieve superiority. It is also used by company has a tool in order to counter competition from their peers. The resource based view theory is suggesting that countries in Africa should look into their resources in order to find competent resources to gain competitive advantage instead of looking outside their scope. This theory is built on two assumptions which are the heterogeneous and the immobile assumptions.

The heterogeneous assumption refers to the variation in capabilities and skills from one organization to another; it states that if all of the companies have the same amount and the same type of resource, different strategies won't be employed by different companies and this way competitive advantage cannot be achieved by any of them while and it happen in a case of a perfect competition (Sebastian et al., 2022). Meanwhile the immobile assumption states that resources cannot move from one organization to another for a short term period because these companies are unable to copy from another one. The immobile assumption states that whenever an employee gets selected in an organization he won't leave for it first three to six months if the employee performs better then he will continue working in the same organization (Sara et al., 2023). Some authors believe that the resource based view theory focuses more on the internal aspect of the organization forgetting that the external environment is as well very crucial because internal resources alone won't give to an organization a good competitive advantage as long as the market exists and other startups and even small and medium enterprises are also working towards being the leader in their field the competitive advantage which is only one key aspect among many others from the external aspects will affect the outcomes achieved by the organizations that is why despite the internal factors the organizations should as well consider the external factors for their activities.

A number of studies have been reviewed in the course of this work. Some authors attest that green entrepreneurship has a significant impact on the sustainable development of countries in Africa (Walter et al., 2020, Antonio et al., 2022, Elsy et al., 2023). These authors established a positive relationship between green entrepreneurship and sustainable development believing that for a nation to attain sustainable development it has to be done through green entrepreneurship for it has served in these recent times as a major tool through which nations can attain economy prosperity while preserving the integrity of their environment. The green orientation of entrepreneurial activities is today considered in an urgent execution for it helps shaping a better future for the global environment. These authors understood the trend that the world has been shifting towards in recent years most especially when periods like the pandemic times are involved in how the holding on of factories and industries in very much part of the world has help restoring the environmental serenity, therefore authors believe that startups can positively contribute to the development of nations in Africa by adopting more ecofriendly ventures and technologies that will also be beneficial for the human index and social progress. Others as well (Sajjan 2019) believe that the African continent should be able to develop sustainable cities through infrastructure

because developing infrastructures are key factors indicating the sustainability of the development of a country affecting the social, political and economic angles. Meanwhile some authors as well believe that green entrepreneurship might not be the essential factor for a nation to attain sustainable development (Yu et al., 2022, Gulsan et al., 2022, Mohammed et al., 2022, Luo et al., 2022). On this affirmation they establish a negative relationship between the implications that green entrepreneurship may have on the sustainable development of any African nations. These authors believe that even though the green concept is a better alternative for a society to be built African nations do have diverse options to consider apart from the adoption of the green industry and entrepreneurship. The abundance of natural resources and landmass, the availability of a young population, the potentiality of industrialization through the resources that contain most of the countries in Africa are all factors that can create room for an economic prosperity and then lead eventually to a sustainable development for any African nations. These authors despite acknowledging the necessity of the adoption of a green industry which will be more ecofriendly for the sustainability of the African environment believe that nations in Africa have many other options to create a sphere for a durable development even if the green concept in entrepreneurial activities might fully not been adopted by small and medium enterprises who are essential contributors to the development of Africa both economically and socially.

Methodology

The primary goal of this review is to demonstrate the design of green entrepreneurship and to reveal how green entrepreneurship can effectively impact sustainable development in African nations. This study provides useful tools for nations to achieve sustainable development through green entrepreneurship. The dimensions are presented in such a way that they can assist nations in achieving sustainable development. Validating the model used for this work will require a case study or a quantitative study. Many studies from various journals were found in order to establish this work.

The Model Specification

This model was adapted from (Harry & Samuel 2022). The Multiple Regression Model is appropriate for the analysis because all the variables in this study are measured in ordinal scale.

Where: Green Product Offering (GPO), Investment in Environmental Technologies (IET), Environmental Reporting and Disclosure (ERD) and Sustainable Development (SD).

Algebraic Expression Equations

IETt= f(GPO)…….(1a)

ERPt= f(GPO)……...……(1b)

Linear Expression Equations

IETt= ao + a1(GPOt) + Ut……..……..(2a)

ERPt= ao + a1(GPOt)+ Ut……...(2b)

Data Analysis, Results And Discussions

Since, the split-half techniques were applied to determine the reliability by sub-cohort with entrepreneurs, the SpearmanBrown Prophecy and Gultman Split-Half Co-efficient were employed respectively.

Table 4.1: Reliability Statistics

Spearman-Brown Coefficient

Equal Length .964

Unequal Length .965

Guttman Split-Half Coefficient .951

a. The items are: GE, GPO, IET

b. The items are: SD, SPI.

The reliability statistical outcome revealed that SpearmanBrown unequal length was 0.965 (96.40%) and Guttman

Split-Half Coefficient (0.951). From the above, the response variables and moderating variable resultant outcomes, calls for authenticity and certification by confirmatory factor analysis, because

it reveals the sphericity and adequacy of the samples by adopting the Barlett test and Kaiser-Meyer-Olkin (KMO) by using the principal component analysis.

Table 4.2: Confirmatory Factor analysis test using the Barlett Test and KMO

Raw Rescaled	
Initial Extraction Initial Extraction	
GPO .358 .323 1.000 .903	
IET .366 .297 1.000 .813	
SD .345 .335 1.000 .972	
SPI .345 .335 1.000 .972	

Extraction Method: Principal Component Analysis.

Communalities

The communalities model was integrated to show the level sphericity and sample adequacy using KMO and Barllett test. Since, the rescaled value of KMO and Barlett test exceed 0.6 (60%) it could be seen as consistence and authentic because of the threshold demonstrated by the explanatory variable, response variables and moderating variable.

Statistical Analytical Test

The statistical analysis considered the univariate, bivariate and multivariate analysis. From the total 175 copies of questionnaire administered, only 162 were justified from processing, coding and data cleaning. The regression analysis was employed to analyze the three hypotheses whereas, the Partial Correlation Co-efficient was used to analyze the moderating variable.

Univariate Analysis

The univariate analysis was used to determine the descriptive statistics.

Table 4.3: Descriptive Statistics

N Minimum Maximum Mean Std.

Deviation Variance Skewness Kurtosis

Statistic Statistic Statistic Statistic Statistic Statistic Statistic Std. Error Statistic Std. Error

GPO 162 3.00 5.00 4.6000 .59824 .358	1.245 .512 .783 .992
IET 162 3.00 5.00 4.5500 .60481 .366	1.003 .512 .189 .992
SD 162 3.00 5.00 4.6500 .58714 .345	1.521 .512 1.636 .992
SPI 162 3.00 5.00 4.6500 .58714 .345	1.521 .512 1.636 .992

Valid N (list wise) 162

Based on the above table, from the mean statistic it can be easily identified that the highest values are GP and SDG (green product and sustainable development goals respectively). This posits that they have credible advantage especially because they also have low standard deviation. Hence, lean thinking and green innovation poses more riskiness and volatility is its policy and decision making. Thus, the thinking and innovation process should be streamline and compose to suit the purpose in the long-term and short-term to avoid sub-optimality and dysfunctionalism in the systems. As a rule of thumb, a skewness should be between -1 and -0.5 or 0.5 and 1. Any skewness less than -1 or greater than 1 show that the distribution is highly skewed. The average responses associated to these variables must most likely be evenly distributed over the five-point Likert scale. While for other explanatory variable, response variables and moderating variables, their respective actions could most likely be "highly" skewed negatively. Similarly, a skewness close to zero shows a non-normally distributed data which is not the case with our study variables. The kurtosis which shows the sharpness and height of the central peak is meant to be with the range of -2 and 2 and in some cases -3 and 3.

Bivariate Analysis

The bivariate analysis beneath is focused on the analytical framework that demonstrates the explanatory and response variables. Since the Adjusted R Square possesses the features of analysis the variables in the model with collinearity diagnostic and statistics test, the outcome was best fit in analyzing the hypotheses. Also, the Eigenvalue, VIF, Tolerance (reciprocal) and Condition index were utilized to confirm the plight of variance collinearity in the study based on increase or decrease of absolute limit of approaching infinity. Where R 2adj represent the Adjusted R Square value, whereas λ represent the Eigenvalue and VIF represent the variance inflated factor.

The entire test in the model displayed were based on significance value of 0.00 which is less than the 5% (0.05) significance level ($p = 0.00 < 0.05$) that leads to the acceptance of the alternative hypotheses.

Hypothesis 1

Ho1: Green product offering does not significantly correlate social progress index

4.4a: Model Summary b Model R R Square Adjusted R Square Change Statistics DurbinWatsonR Square Change F Change df 1. df2 Sig. F

Change

1 .929a .863 .855 .863 113.430 1 160 .000 2.530

a. Predictors: (Constant), GPO

a. Dependent Variable: SPI

4.4.b: Coefficients a Model

Unstandardized

Coefficients

Standardized

Coefficients T Sig.

Correlations Collinearity

Statistics

B Std. Error Beta Zero-order Partial Part Tolerance VI

F

1

(C) .456 .397 1.148 .266

GPO.912 .086 .929 10.650 .000 .929 .929 .929 1.000

1.

00

0

a. Dependent Variable: SD

4.4c: Collinearity Diagnostics a

Model Dimension Eigenvalue Condition Index

Variance Proportions

(Constant) GE

1

1 1.992 1.000 .00 .00

2 .008 15.841 1.00 1.00

a. Dependent Variable: SD

The model illustrates Adjusted R-square value of 0.855 (85.50%) correlates with GPO (green product offering) on very strong positive correlates revealed on SD (sustainable development). The F-statistics of 113.430 values at 0.000 alpha level of significance and the Durbin-Watson 2.530 value within the range of 1.5. to 2.5 means that the model is best fit at optimum. The resultant impact demonstrates that, unit increase in (Green product offering GPO) stimulates to 0.912-unit enhancement in green innovation. In the nut shell, regression outcome of Partial Correlation/standardized coefficient beta of .929 (92.9%) with the value of t-statistics of 10.650 (which is greater than the ±1.96 threshold level) revealed a very strong positive significance capture in the variables. Nevertheless, from the collinearity diagnostics the eigenvalue of 1.992 and condition index of 15.841 that trace with tolerance of the collinearity statistics of 1 among the proxies, shows the significance presence of very minute collinearity that seen to be worrisome, but does not affect the correlation. Since, the VIF is 1, It lacks the capacity because of the partial

correlation and adjusted R-square index. The model demonstrates that there is significant correlation between lean thinking and green innovation, meaning the null hypothesis is rejected and the directional hypothesis rejected. This further revealed that green product offering have the bona fide capacity to influence social progress index. Hence, firms in Africa and globally wise should adopt green product offering to foster the growth on innovativeness (product, process, market and technology).

Hypothesis 2

Ho2: Green Product Offering does not significantly correlate green product

4.5a: Model Summary

b Model R
R Square Adjusted
R Square Change Statistics DurbinWatson R Square Change F Change df1 df2 Sig. F Change
1 .796a
.633 .613 .633 31.105 1 160 .000 1.572

a. Predictors: (Constant), GPO

b. Dependent Variable: SPI

4.5b: Coefficientsa Model Unstandardized Coefficients Standardized Coefficients T Sig. Correlations Collinearity Statistics

B Std. Error Beta Zero-order Partial Part Tolerance VIF

1

(C) -.262 .867 -.302 .766

GPO 1.024 .184 .796 5.577 .000 .796 .796 .796 1.000 1.00

0

4.5c: Collinearity Diagnostics a

Model Dimension Eigenvalue Condition Index

Variance Proportions

(Constant) GPO

1

1 1.995 1.000 .00 .00

2 .005 20.561 1.00 1.00

a. Dependent Variable: SPI

The model above illustrated that adjusted R-square value of 0. 613 (61.30) is strong correlates between green product offering (GPO) and social progress index (SPI). This demonstrates that lean thinking obtains the capability to influence green product. This 0.387 (38.70%) represent the variation not captured in the model. The F-statistics of 31.105 value at 0.000 level of significance and Durbin-Watson 1.572 value demonstrate authenticity of the model fitness in the analysis.

The SPI (Social Progress Index) experience every unit increase from the intervention of green product offering (GPO) that leads to 1.024- unit. This revealed that the correlation between the explanatory variable and response variable in the long run and short run. The Partial Correlation/standardized coefficient beta of .796 (79.60%) with the t-statistics value of 5.577 (which is greater than the ±1.96 threshold level) and a probability level of 0.000 which is less than the 0.05 significance level that aligned with tolerance of the collinearity statistics of 1 among the proxies. In all, from the collinearity diagnostics the Eigenvalue of 1.995 and condition Index of 20.561 that there is significance presence of collinearity among the green product index and investment in green technologies that is worrisome and call for concern because the correlation impact is far highly than the threshold, which demonstrates the rejection of the null hypothesis. This is because certain occurrences in the long run and short run can dramatize to impact on long term or short term orchestration. This is in line with argument that lean thinking is a way forward toward focusing on customer satisfaction, just as research on using Iran map as model to address green products on consumers' segmentation basis towards environment sustainability.

Concluding remarks

The society has never been in greater need of a better transition than it is now. Because of the evolution of society, the capitalism system on which the world has been built is now resulting in being positive for the economic factor but primarily negative for the environmental factor. Green entrepreneurship today represents a solution to strike a balance between profit and environmental protection. This work concludes by stating that the adoption and implementation of a green entrepreneurship system in order to make economic and financial profits while also protecting and safeguarding the environment for sustainable living is therefore a must for all sectors for it is essential to do so in all areas of life. Nations, governments, and even institutions all over the world should work in this direction, focusing on the effective and long-term implementation of environmentally friendly entrepreneurial activities. As a result, policies and laws should be enacted to facilitate the implementation of green entrepreneurship capability. Corporations and startups in the private and public sectors, on the other hand, should contribute to the implementation of green entrepreneurship structures by working with policies and laws voted on by governments and institutions so that Sub-Saharan African nations can achieve a sustainable development that will not only impact the economy but also the environment factors of Sub-Saharan African nations can achieve sustainable development that benefits not only the economy but also the environment of Sub-Saharan African nations.

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