ECOSYSTEM CONTROL AND CAPACITY UTILIZATION OF THE SELECTED AGRO-ALLIED BUSINESSES IN NIGERIA

Itodo, C. I. (UNIBEN), (MOUAU), Faruna, Omaye Stephen (KSU), & Ahmed Shehu Awak (KIU)

Abstract

This study assessed the effect of ecosystem control on the capacity utilization of the selected agro-allied businesses in Nigeria. The researcher adopted survey design. Data were collected by structured questionnaire in Five Point Likert Scale format. The source of data was through primary source. The target population of the study comprised of owners/managers of all agro-allied businesses in North-central, Nigeria. Sample size was derived from the population with the application of Taro Yemane's formula for finite population while Bowley's proportional allocation method was adopted to determine the allocation of questionnaire to each organization. A Cronbach Alpha method was used to determine the reliability of questionnaire. The hypothesis was formulated and tested using Ordinary Least Square Regression and Z-test at .05 level of significance. The findings revealed that ecosystem control have positive effect on the capacity utilization of agro-allied businesses in north central Nigeria. The study concluded that despite the changes in legislation and regulations to protect the environment, Nigeria and various other countries are still facing many environmental problems of climate change, population growth, overflowing landfills, water scarcity, fuel shortages, and water and air pollution. The study recommended that the Nigeria government should strengthen external forces, especially with respect to establishing national standards for the quality of environment and the implementation of these regulations; and that ecopreneurs, government and society at large should tap international standard in order to support the phasing-out of products and processes that are known to contribute to global warming and ozone depletion.

Keywords: ecosystem control, capacity utilization, agro-allied businesses

, agro-allied business

Introduction

Environmental degradation is perhaps the most prominent global issue of the 21st century. Academics, policymakers, non-governmental agencies and governments are all concerned about the increasing levels of land degradation, soil erosion, deforestation, and industrial toxins (Volery, 2012). For a company to have a positive environmental influence it must make a real and substantial contribution to environmental progress. A real improvement can be created only

if the production processes, products and services are environmentally superior. A substantial contribution requires that the company exert significant market influence by gaining a large market share or by influencing competitors and other market actors (such as suppliers) to 1 adopt superior environmental solutions. (Ecopreneurs run companies that fulfill both requirement Ideally, ecopreneurship pulls the whole market towards more environmental progress. Ecopreneurs strive for business success through environmental solutions for the mass market. To measure how well a company has •done, the dimensions of ecopreneurship can be further subdivided. The priority of ^environmental goal range from low priority (environmental protection is regarded as a v trustee duty), to medium priority (environmental issues are seen as supplemental to ^conventional business issues) and high priority (environmental issues are regarded as an integral part of core business activities). The market effect of the company and its businesses can be small (i.e. the alternative scene), medium (i.e. the successful occupation of an eco- ipiche) or large (i.e. through a strong influence on the mass market).

Much of the work that has been done to date on ecosystem control and capacity utilization has largely taken the form of anecdotal reports and case study analysis. Large sample studies are needed to demonstrate how ecopreneurship may or may not enhance the innovative ability land performance of organizations. The present study aims to bridge the gap by examining the ^implications of ecopreneurship activities in sustaining innovative performance in a sample of ;selected agro-allied businesses in Nigeria.

‘The business activities of agro-allied businesses in Nigeria are not without some inhibiting problems emanating from their various environmental factors such as land degradation, soil (erosion, deforestation, industrial toxins, ozone depletion, climate change, nuclear radiation, | and the destruction of biodiversity. Today, these problems are posing serious challenges to their

operational capabilities, survival and "performances. A cursory analysis of some of these problems prompted the crucial need for embarking on this proposed study. The environment factors in the agro-allied industry' in Nigeria tend to be harsh on indigenous firms and their operational activities nowadays. This has brought such consequences as low productivity, increasing risks, low profitability, and tensed competition, heavy investment on equipment, increased operational cost and high rate of business failures with many other threats.

In Nigeria, many local agric-businesses and small and medium scale enterprises have failed to fully imbibe the spirit of ecopreneurship in order to shun out those products that will be environmentally friendly and socially responsible. Only multinational enterprises have put this issue into concern in their want satisfying operations. Most agriculture related organizations complaint on lack of realistic estimates on how to successfully implement eco Market systems particularly in the area of agricultural related business have adversely affected the environment by failing to deal with negative environmental externalities and undervaluing natural resources, leading to their over-exploitation and depletion. Governments have sought to deal with the problem through a mix of command-and-control and market- based instruments, with limited success. One of the most potent alternatives for dealing with such market failures is ecopreneurship, which refers to a process by which entrepreneurs introduce eco-friendly (or relatively eco-friendlier) products and process into the market place. t is in the light of these problems that this work seeks to examine ecosystem control as a determinant of capacity utilization of agric-allied businesses in Nigeria. The following research questions guided the study: What effect would ecosystem control have on the capacity utilization of agro-allied businesses in Nigeria?

Conceptual Framework

Human activities which can also be referred to as marketing activities are inter-related. This is because any activity of man is done on the environment and the resultant effect is either if positive or negative to man. Human activities are diverse. The negative effects of man arise from economic and domestic activities. For instance, agriculture requires pesticides that pollute the atmosphere and enter drainage system via run off and sewers. Other activities which lead to pollution include thermal power stations, burning of fossil fuels, exhaust fumes. All this emit harmful pollutants like sulphur dioxide, carbon fe monoxide, etc, that cause acid rain, global warming, and the malfunctioning of the human 'haemoglobin, etc. Human activities capable of causing| environmental nuisance and the degradation was categorized as: Destructive logging of the forests; Over grazing and over-cropping of arable lands. All these human activities have combined deplete the ear - resources, degrade the environment and cause loss of biodiversity. The environment in which these human activities take place is the outer physical and biological systems in which man and the outer organisms live. Although complicated, there are many interacting components. The environment is the complex of physical, chemical and biotic factors that act upon organisms or an ecological community : and ultimately determines its form and survival. The environment was categorized into air, water, noise, biological, cultural and socio-economic environment. These views are all embracing. However, in a physical sense, The physical environment is made of air, water and land. From all indications, human activities I impinge on the environment, which is noted earlier, may have either positive or negative on man. However, the positive effects may be well taken by man, but what are of concern are the negative effects especially as it concerns degradation.

Ecological Modernization Theory also provides the rationale for environmental entrepreneurship (Hajer, 1995; Mol, 1955). According to the theory, it is possible to promote economic growth by

giving higher priority to the environment. It is no longer necessary to trade off economic growth for environmental quality (Tillery &Young, 2009). The capitalist system is seen as having the capacity to develop sustainable solutions to environmental problems; that capitalist drive for innovation can be harnessed to produce environmental improvements (Beveridge & Guy,2005). According to the environmental problems facing the world today, act as industrial activityand economic development". The theory calls for the modernization of the institutions of modem society. And as Joseph Huber the father of Ecological Modernization Theory sees it, entrepreneurs are the central point of change in that process of transformation to avoid an ecological crisis (Gibbs, 2009: Mol, 1995; Tillery& Young,2009). Entrepreneurial action, therefore, is the best solution to our environmental problems because this new generation of ecopreneurs are seeking to combine environmental awareness and conventional entrepreneurial activity to achieve entrepreneurial success (Anderson, 2008). Ecopreneurs have the potential to be a major force in the overall transition towards a more sustainable business paradigm (Schaper, 2002).

Empirical Review

The review of the work done by Oskamp (2000), agreed that the environment do present entrepreneurial opportunities. Despite the changes in legislation and regulations to protect the environment, the United States and various other countries are still facing many environmental problems, e.g., climate change, population growth, overflowing 511s, water scarcity, fuel shortages, and water and air pollution). The study found out that if we are to solve these problems, entrepreneurship is a major part of the answer.

Methodology: Model Specification

Model specification, the general formula for the Regression Analysis is:

$= a+ \beta x + e$

Where,

Y = Dependent Variable ,

X= Independent Variable

a = constant

β = coefficient of X

e = error margin

Model to be estimated is functionally stated as

CAU " = f(ESC)

This can be stated in econometric form as

$CAU=a+ \beta ESC+e$

Where,

CAU= Capacity utilization, ESC=ecosystem control

Results and discussions

One-sample statistic

	N	Mean	Standard deviation	Standard error mean
Decision on ecosystem control and Capacity utilization,	309	33.3100	28.34231	5.41121

Source: SPSS analysis of field data

One-sample Z-test: Test value =0

					95% confidence interval of the difference	
	Z	DF	Sig.2-tailed	Mean difference	Lower	Upper
Decision on ecosystem control and Capacity utilization	32.190	698	0.004	33.3100	20.8800	54.1900

Source: SPSS analysis of field data

The Z Value at 32.19 is higher than the critical Z value at 1.96 and therefore the null hypothesis is rejected to accept the alternative hypothesis that ecosystem control would affect the capacity utilization of agro allied businesses in Nigeria. This Z value is significant at 0.004 since it is less than 0.05.

In line with the data analysis, the following are the major summary of findings: Ecosystem control have positive effects on the capacity utilization of agro-allied businesses in north central

Nigeria. This work revealed that ecosystem control has positive effect on capacity utilization among agro allied businesses in Nigeria. This shows that there is high positive impact of ecological control system on the capacity building among agro allied firms. This agrees with the study of Zainab and Shafaat (2015) who were of the opinion that ecological management do not only enhance the scale of operation but also on capacity enhancement in agricultural activities. The study also in consonant with the work of McEwen (2013) who asserts that eco management in competitive agricultural industry facilitates technological exploitation, Cohen and Winn (2007), explained that it builds, transfers and knowledge sharing and assists organizations in enjoying efficiency of operations.

On the contrary, studies such as Hamsa (2014) have questioned the credibility of ecological control by arguing that new scenarios are constantly evolving and uncertainties may be difficult to ascertain. Bhide (2001) has also criticized the ecosystem from the light of natural disaster and global warming issues which are often unexpected, ascertaining that that the application of ecosystem has received much criticisms on the basis that it is highly volatile and subject to environmental disasters. However, despite the pitfalls alluded to the eco management, Mutura, (2016) argued that ecosystem control is still a popular option for enjoying favourable opportunities exploitation in the Nigeria agricultural industry.

Conclusion and recommendation

After a critical consideration of the finding and discussions so far, the following

recommendations were offered: The Nigeria government could do much to strengthen external forces, especially with respect to establishing national standards for the quality of environment and the implementation of these regulations. It could also take more proactive measures through

the state-level cleaner production centres. This will encourage the ecopreneurs to develop more environmentally friendly goods and as well enhance their level of involvement in green product.

Ecopreneurs, government and society at large could tap into international standard in order to support the phasing-out of products and processes that are known to contribute to global warming and ozone depletion. They could also strengthen the consumer movement in the country. Since environmental sustainability promote business growth, it is recommended that agro-allied business needs to build more on their sustainability concerns as it affect agricultural goods

During the next decade, the agro allied business in Nigeria will most certainly be marked by further disaggregation and aggregation due to the described shifts in the sector's value chain. In order to keep their status quo, agro-allied business must consider continued invention, innovation and creativity as the most viable method to get instant access to industry- or operations-specific knowledge and keep abreast with the pace of technological change. Non-innovative in nature may provide benefits to such firms only in the short term. Therefore, in the long-term an articulated developed ecological friendly innovation will control rival and give firms a sustainable and non-imitable competitive advantage.

Ecopractices must not just be a back-runner us agro-allied organizations anymore. It is the critical aspect of organizational turn-around and must be given its rightful place during policy making and through this process

That ecopreneurs can enjoy the long-run benefits without undue pressures and inconsistencies in Nigerian. Agro firms must therefore engage their managerial team, through training and development to know, understand, and apply, the principles of ecopreneurship practices and

ecological management in their daily decision making, especially as it concerns agro-allied operations.

In the final analysis, it is the education of producers, consumers and regulators that will pave the way for a major transformation of agricultural industry. This will stimulate the ecopreneurs to develop more ecoprenerial practices that would not only give them competitive advantage but will also go a long way in developing the sector.

References

Anderson, A. R. (2008). Cultivating the Garden of Eden: environmental enterpreneuring. Journal of organisational change management, 11(2), 135-144.

Beveridge, R. , and Guy, s. (2005). The rise of the ecopreneur and the messy world of environment innovation. Local Environment, 10(6), 665-676.

Bhide, U. (2001). Do ecopreneurship improves performance of small business? Evident from the Paramount Antitrust Case. Scientific Management Journal, 19(3), 293-317.

Cohen, B. and Winn, M, I. (2007). Market imperfections, opportunity and sustainable entrepreneurship. Journal of Business Venturing, 22(1), 29-49.

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

Hajer, M. (1995). The politics of environmental discourse: ecological modernization and the policy process, Oxford, United Kingdom: Oxford University Press.

Hamsa, S. (2014). Impact of innovation and managing technology-based business for enterpreneurs. Issues in General Management. 12(2), 51-55.

McEwen, T. (2013). ‘Ecopreneurship as a solution to environmental problems: Impecations for college level entrepreneurship education. International Journal of Academic Research in Business and Social Sciences. 3(5), 264-288.

Mol, A. P. J. (1995). The refinement of production: ecological modernization theory and the chemical industry, Utrecht, Netherlands: Van Arkel.

Mutura, S. A. C. , Nwangi, J. V. and Wambugu, K. L. (2016). Impact of ecosystem management of manufacturing firms in Nigeria. An International multidisciplinary Journal, Ethyiopia, 9(2), 156-167.

Oskamp, S. (2000). Psychological contributions to achieve an ecological sustainable future for humanity. Journal of Social Issues, 56(3), 373-390.

Schaper, M. (2012). The essence of ecopreneurship. Greener Management International, 45 (summer), 49 -60.

Tillery, F. , and Young, F. (2009). Sustainability entrepreneurs: Can they be the true wealth generators of the future. Greener Management of International, 55,79-92.

Volery, T. (2012). Ecopreneurship: rationale, current issues and future challenges. In U. Figlisteraller, H. J. Pietner, T. Volery, W. Weber. (Eds). Radical change in the world: Will SMEs soar or crush? St. Gallen: KMU Verlag,

Zainab, H. and Shafaat, I. (2015). Entrepreneurship and ecopreneurship on firm's reputation. A paper delivered at Brown University, UC Berkeley.