SUSTAINABLE HUMAN DEVELOPMENT REVIEW
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Editorial

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Author’s Guide
SUSTAINABLE HUMAN DEVELOPMENT REVIEW
(An international multidisciplinary academic research journal)

The aim of the Sustaintable Human Development Review, SHDR (an international multidisciplinary academic research journal) derives from the mission and objective of the Publishers, Welfare & Industrial Promotions (WIPRO) International, as follows:

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Objective: Using research, publication, conference, enterprise development and awareness creation to develop the total man in developing countries.

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EDITORIAL

Human development is a broad and comprehensive concept concerned with economic growth and its distribution, basic human needs and variety of human aspirations, and distress of the rich countries and the human deprivations of the poor. Going beyond economic development, which is concerned with income and growth, human development covers all human capabilities. It is “a process of enlarging people’s choices” created by expanding human capabilities.

Economic growth is essential for all human development because no society has been able to sustain the well being of its people without continuous economic growth. On the other hand, it is healthy and educated people that can contribute to economic growth through productive employment and increase in income. Thus, economic development is a means to human development. Hence, development theoreticians and practitioners must pay equal attention to economic development and human development.

Hitherto, emphasis has been on economic development – not on people’s adequate nutrition, access to safe drinking water, better medical facilities, better schooling for their children, affordable transport, shelter, secure livelihood and productive and satisfying jobs. It is to address this gap that the Sustainable Human Development Review (SHDR) was born January 2009 as an international multidisciplinary academic research journal. Its Volume 1 Number 1 of March 2009, Volume 1 Number 2 of June 2009, Volume 1 Number 3 of September 2009 and Volume 1 Number 4 of December 2009 kept to faith, courtesy of our esteemed contributors across the globe as well diligence and commitment of our dedicated reviewers and editors.

From SHDR Volume 2 Number 1 of March 2010, Editorial, which had been hitherto not considered necessary, was introduced, in conformity to the practice of globally acclaimed journals of academic research output. This Volume 4 Number 1&2 of March 2012 of SHDR presents another set of rich articles touching various topical human development issues.

The first article by J.I. Uduji (Ph.D., Ph.D.) of the Department of Marketing, University of Nigeria, Enugu Campus; M.I. Edicha and J.O. Oyaka of the Department of Marketing, Federal Polytechnic, Idah, Kogi State of Nigeria, convinced that brand perception and acceptance is critical to
enhancement of marketing of agricultural produce in Nigeria, undertook a
descriptive survey targeting Kogi – one of the agricultural States in Nigeria –
of cassava and yam branding and brand perception. The study population
comprised 400 farmers from nine Local Government Areas in Kogi State,
which has three senatorial districts. The instrument used for data collection
was a questionnaire designed to elicit information from respondents on
cassava and yam. Data were analyzed using Average Mean Score statistical
tool. The study recommended, among others, proper branding of agricultural
produce, establishment of processing mills, improvement in storage facilities,
and reflection of branding with organisation and product objectives.

In the second article, Mrs. Chima T. Isife, a Research Fellow with the
Institute for Development Studies, Enugu Campus, University of Nigeria,
Nsukka, explores the environment problems in Nigeria resulting from man’s
interaction with his environment and how far the environmental policies have
been implemented to control the negative impacts by man on the
environment. Suggestions are made for re-designing the objectives and
strategies of the Federal Environmental Protection Agency (FEPA),
Environmental protection techniques need to be cultured, home-grown and
the framework should be “bottom-up”. A number of communities should be
grouped together from the (political) ward level to local government level.
Environmental protection agencies at the local government level should be
empowered to punish offenders.

In the third paper, Paul Okeleke, a Banking & Finance consultant,
debunks the widely held view that ignorance of the masses was majorly
responsible for the sharp public reactions and demonstrations against the
removal of subsidy on pump price of petroleum motor spirit by the Federal
Government of Nigeria at the very wake of 2012. This cross-sectional
descriptive study employed primary data generated from petrol users
(bus/taxi drivers, bi- and tri-cycle commercial transport operators, civil
servants, and others) by use of questionnaire distributed in Enugu metropolis.
Five hypotheses were tested, using the chi-square statistical tool.

Significant findings include: the government adequately consulted
with the key stakeholders of the nation before embarking on the subsidy
removal; no time would be suitable for the subsidy removal in order to avoid
protest; subsidy is not a democratic dividend or benefit to the masses;
majority of Nigerians sided with the reversal of subsidy removal policy for a
Editorial

stepwise deregulation implementation; and the Government should repair the existing refineries and build additional ones to increase domestic supply.

The following recommendations were proffered: increasing in the supply of fuel in the NNPC designated filling stations; reversing the classification of over invoiced fuel imports which were erroneously nomenclated as subsidy to cure the misguided psyche of the electorates who ardently believed that there was benefits accruing to them; restructuring our educational curriculum contents to impart elementary knowledge on oil and gas studies, and reversing the public perception of government development policies by publicizing some of the implemented campaign promises with less rhetoric, and instituting adequate management and accounting control checks and balances to ensure proper verification of procurement vouchers and procedural compliances. Vacate the business interferences and save time for oversight and control functions which further create conducive environment for business deals.

In the fourth paper, Dr. J.J.O. Ezeugwu of the Department of Science Education, University of Nigeria, Nsukka developed an instrument for assessing the extent of e-learning acquisition by learners in tertiary institutions in Nigeria. The documentary research design was employed. Area of the study was the University of Nigeria, Nsukka. The entire population of academic staff was used in the study. Items of the instrument were framed based on a criterion-referenced basis, using the key platforms involved in e-learning.

In the fifth paper, Dr. C.D. Ngige of the Department of Business Administration, Faculty of Management Sciences, Anambra State University, Igbariam Campus, Nigeria, Dr. G.A. Emerole of the Department of Agric Business and Financial Management, Michael Okpara University of Agriculture, Umudike, Abia State, Nigeria and Dr. Ugwuanyi, U.B. of the Department of Accountancy, Enugu State University of Science and Technology, Agbani, Nigeria examined the concept, reality and challenges of Total Quality Management (TQM) with a view to enhancing the chances of success in its real application in contemporary organisations. Starting from the background history of TQM, the authors progressed to the concept of TQM, and then comparison of TQM with Business Process Reengineering (BPR) and Six Sigma. Further, they discussed challenges facing TQM implementation in contemporary organizations, and strategies/success characteristics/models for successful TQM implementation.
Recommendations include a culture review by management to accommodate TQM introduction/implementation and linking quality initiatives objectives with departmental and organizational strategy in order to minimise the likelihood of failure.

We pray that all those whose papers could not make it in this issue would understand, and try to send better-quality papers for our globally competitive review process in future. We most sincerely congratulate those whose papers made it. We heartfully thank all our esteemed contributors and enjoin them not to flag in their zeal for research and publishing, which are veritable tools for confronting abounding development challenges in developing countries to the development of the total man. We welcome contributions in all disciplines across the globe (see Author’s Guide).

Contributors are also encouraged to take advantage of our high-quality and globally competitive sister journals, Journal of Applied Sciences and Development and Technoscience Review to stagger their academic outputs in our highly rated academic Journals, which are also published online (see www.wiprointernational.org) for visibility and global ranking in line with modern practice.

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AGRICULTURAL PRODUCE BRANDING FOR CONSUMERS IN NIGERIA

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Abstract
The study of brand perception and acceptance is critical to enhancement of marketing of agricultural produce in Nigeria. The descriptive survey targetted Kogi – one of the agricultural States in Nigeria. The study population comprised 400 farmers from nine Local Government Areas in Kogi State, which has three senatorial districts. The instrument used for data collection was a questionnaire designed to elicit information from respondents on cassava and yam. Data were analyzed using Average Mean Score statistical tool. The study recommended, among others, proper branding of agricultural produce, establishment of processing mills, improvement in storage facilities, and reflection of branding with organisation and product objectives.

Introduction
The term “Agricultural Produce” is used in reference to basic food commodities that are either in their original form or have undergone only primary processing, e.g. cassava, yams, cereals, coffee, beans, sugar, cotton and rubber (Crawford, 2011). But the focus of this paper is centred on cassava and yam because they are some of the most important staple food crops grown in tropical Africa. They play some
role in efforts to alleviate the African food crisis because of their efficient production of food energy, year round availability, tolerance to extreme stress conditions, and sustainability to present farming and food systems in Africa (Hahn, 1992).

Branding of agricultural produce is a strategy that may be adopted in enhancing the marketing of agricultural produce in Nigeria. A successful brand is the most valuable resource that a producer or company has. Nzuki (2010) speculates that brands are so valuable that producer will soon include a “statement of value” addendum to their balance sheets to include intangibles, such as the value of their brands.

Branding of agricultural produce can be used as external clue to taste, design, qualify, prestige, value and so forth. In other words, consumers usually associate the value of product with brand, since branding of agricultural produce serve as a signal to the customer, the source of the product and protect both customer and the producer from competitors who attempt to provide product that appear to be identical (Nzuki, 2011). However, in order to achieve successful branding strategy of agricultural produce, traditional cassava and yam tubers are to be processed by various methods into numerous products and utilized in various ways according to local custom and preferences. For example, cassava products can be processed into garri, fermented and dried cassava pulp, smoked cassava balls (kumkum) chikwangu, starch, and dried cassava. Yam can be processed by milling into flour and fried yam. Each of them can be packaged using different branding strategies and sold in the store outlet. Therefore, improvement of cassava and yam processing and the utilization techniques greatly increase labour efficiency, income and living standard of both cassava and yam farmers and the urban poor, as well as enhance the shelf life of products, facilitate their transportation, increase marketing opportunities, and help improve human and livestock nutrition (Hahn, 1992).

But, to achieve the objective of branding strategy of agricultural produce, the economic problem associated with it must be determined. For example, the issue of standardized system of grading
Agricultural produce branding in Nigeria

and measurement, which enhances marketing efficiency, is not a feature of agricultural markets in Nigeria. Grades are determined arbitrarily by sizes, while measures come in various types of metal and plastic bowls, dishes, tin baskets and calabashes. Most of the measures are susceptible to manipulation to change volume, in an attempt to take the advantage of buyers. This is why quantities vary within and across market places (Adekanye, 1997). Therefore, the evaluation of product varying quality and size is greatly affected in the market.

Even though branding has become a central issue in any product strategy, including agricultural produce, selecting a particular brand name, which carries the agricultural produce throughout its life, has become a problem. It is important that the name selected must be the one that is capable of ensuring the success of the product in the market place (Kotler, 1999). In addition, standardized system of grading and measurement, which enhances marketing efficiency, is not a feature of agricultural produce in the market. The fact is that grades are determined arbitrarily by sizes, while measures come in various types. This constitutes a problem to a marketer because branding of a agricultural produce cannot take place without determining the level of standard and grading (Adekanye, 1977). Local processing also contributes to the problem traceable to its high cost and time-demand (Orebiyi, 2002).

Therefore, the study sought (i) to assess whether branding of agricultural produce may help to increase the incomes of the farmers in Nigeria, (ii) to determine if branding of agricultural produce helps to enhance the shelf-life of produce, (iii) to evaluate whether branding of agricultural produce may help to improve marketing efficiency of agricultural produce in Nigeria.

Theoretical review
Branding is one of the important activities in marketing. Its proper application helps to increase sales, maintain of increased company market share and eventually increase profit, which serves as an identity for the product (Uyebode, 2001). According to Nwaizugbo
(2004:113), branding is defined as “a process of establishing a product identity”. It is a concept adopted by companies to identify their products and distinguish them from those of competitors. A brand, on the other hand, is a distinguishing name and/or symbol intended to identify the goods or services of either one seller or a group of sellers and to differentiate those goods or services from those of competitors. A brand, thus, signals to the customer the source of the product and protects both the customer and the producer from competitors, who would attempt to provide products that appear to be identical (Peter, 2011 in Aaker, 1991, Stanton, 1994 and Kotler, 1996).

Branding plays some important roles in marketing, including:

- making shopping easy and time efficient, as it makes the brand stand out among competing products;
- assuring regular satisfaction, as many consumers prefer to buy product brands they are “sure” of rather than risking a new product trial, and are even willing to pay a premium for the brand they like;
- being a dependable guide to quality, as consumers use well-known brands as an indication of good quality, and are willing to buy brands without inspection when they are sure of quality;
- satisfying status needs, as some customers buy only prestigious brands while others are less concerned to the product (Nwaizugbo, 2004).

Branding also plays the following roles to the marketer (Nwaizugbo, 2004):

- it encourages repeat purchase and lowers marketing cost by making it easier to the consumer to adopt the product in a purchase decision process;
- it may develop customer loyalty because once a customer develops an interest in a particular brand, he may likely become a brand loyalist, which implies that he closes his eyes to other competing brands in the market;
Agricultural produce branding in Nigeria

- it may build good corporate image through good brands, and ensure speedy acceptance of new products marketed under the same name.

Agricultural production refers to the production of crops and animals for man’s use (Omoruyi, et al., 1999). According to Ubom (2010), agriculture had been variously described as a science, an art, a business tradition and a way of life. No matter how much structural transformation takes place in Nigerian economy for many years to come, agriculture will continue to play its dominant role. Beyond supplying foods and raw materials to the rest of the economy, the conventional and predominant roles of agriculture had placed it as resource reservoir providing the needed financial and labour to other sectors of the economy. Successive Governments in Nigeria had placed agricultural transformation in its cardinal agenda. Over the years, Nigeria had made concerted efforts aimed at agricultural development through such programmes as Operation Feed the Nation (OFN), Green Revolution, River Basin Development Authority (RBDA), Integrated Rural Development, National Economic Empowerment and Development Strategies and Land Reforms.

Some specific important roles of agriculture are:

Provision of food for the teeming population: Agricultural is the only source through which man can feed. A nation that can feed herself can save a lot of money for other goods and services, which cannot be provided through agriculture. If agriculture is allowed to lie fallow, then the country will depend solely on importation of food for her population. Such a country will certainly be bankrupt and this will lead to debt burden.

Employment for the working population: Agriculture and other agro-based industries provide employment opportunities for a greater percentage of the working population directly and indirectly.

Source of income to farmers: Agriculture generates income for the farmers through the sale of crops and animals as well as products from
them. People who work on the farms can earn their wages and salaries from engaging in farm work or being used as farm labour.

Sources of foreign exchange: Agriculture helps nations to earn foreign currency through the export of agricultural produce like cocoa, groundnut, kola, palm produce, rubber sheets and lump cotton, among others. The foreign exchange earned can be used, in turn, to purchase goods, such as machines necessary for the improvement of agriculture.

Market for industrial products: Agriculture provides markets for industrial products. Finished products from industries, such as farm tools, machineries, chemicals and storage materials, like sacks, are used in agricultural sector.

Therefore, building a brand for agricultural produce is important. Edicha, et al. (2010) observe that there are several branding strategies that exist to create brand equity and position for a brand in the mind of the consumer. An organization must therefore choose the strategy most likely to generate success from the product of service. They also identified traditional branding strategies which consist of brand expansion, brand leveraging, multi-brand and co-branding. But, in the case of agricultural produce, brand expansion is the appropriate branding strategy that has to be adopted. This is because brand expansion strategy aims at introducing a new product or service utilizing the established image of a core brand to gain acceptance for the new product or service in the market place.

According to Beneke (2010), consumer base judgment of brand quality is direct and indirect factors. Direct attributes include ingredients, taste and whilst indirect factors are represented by price and brand name. Direct factors are usually difficult for consumers to test without consuming the product, or completing various tests. Hence, reliance on indirect quality indicators such as brand name and price are more heavily relied upon. The authors suggest that a thorough understanding of how these indirect cues impact different consumer groups in their purchasing decisions may help retailers to improve success of private label brands. Through further investigation, they identified brand, package and advertising as indirect factors which
Agricultural produce branding in Nigeria

impact consumer perceptions and hence influence purchasing decisions. The success of a brand for agricultural produce in the long term is not based on the number of consumers that buy it once-off, but on the number of consumers who become regular buyers.

Consumers become brand loyal when they perceive some unique value in the brand that no alternative can satisfy. This uniqueness may be derived from a greater trust in the reliability of a brand from a more favourable experience when a customer uses the brand. Not only does the brand loyal customer buy the brand but (s)he also refuses to switch, even when presented with a better offer. Maintaining brand loyalty is becoming a critical component in the development of competitive strategy, thus highlighting the importance of developing methods to measure and elevate brand loyalty. Effective brands have been correlated with increasing market share, lending credibility to new product developments, giving a clear, valued and sustainable point of difference as well as commanding a premium. Most importantly, consumers appear less price-sensitive and more trusting toward these brands.

Research Method
The target population was 13,060 Local Government Council staff spread among the three senatorial districts of Kogi State. The choice of this group was based on the assumption that the staff were either consumers or producers of cassava and yam. The sample size of this study was determined using Yaro Yemane formula (1996) as stated below:

\[ n = \frac{N}{1+N(e)^2} \]

Where

- \( N \) = Sample size
- \( e \) = Level of significance (5%)
- \( n \) = Population
Since, there are 13,060 estimated Local Government Council staff in Kogi State,

\[
\begin{align*}
  n &= \frac{1}{1+ 13,060 \times (0.05)^2} \\
  &= \frac{1}{1+ 13,060 \times 0.0025} \\
  &= \frac{1}{1 + 32.6525} \\
  &= \frac{1}{33.6525} \\
  &= 99.96 \\
  &= 400
\end{align*}
\]

Questionnaire copies were distributed among the three senatorial districts as in Table 1.

Table 1.1: Questionnaire distribution by senatorial district in Kogi State

<table>
<thead>
<tr>
<th>Three Senatorial Districts</th>
<th>No of Questionnaire Distributed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kogi East Senatorial District</td>
<td>170</td>
</tr>
<tr>
<td>Kogi West Senatorial District</td>
<td>130</td>
</tr>
<tr>
<td>Kogi Central Senatorial District</td>
<td>100</td>
</tr>
<tr>
<td>Total</td>
<td>400</td>
</tr>
</tbody>
</table>

The distribution of questionnaire was based on the population from each senatorial district in Kogi State. In order to discuss the results of the study, Average Mean Score was adopted. The formula is (Ugoji, 1990):

\[
\bar{x} = \frac{\sum_{i=1}^{N} x_i}{N}
\]

Multiple sampling technique was used. First, purposive random sampling technique was applied in selecting Kogi State from the middle-belt of Nigeria, and three local governments from each of the three senatorial districts in Kogi State. Also, stratified random sampling technique was used to select a total of nine local governments from Kogi State, Nigeria.
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Finally, simple random sampling technique was employed to select males and females staff from each department or unit from the three local governments. In all, the sample consisted of three senatorial districts with total number of four hundred (400). In order to collect data and provide answers to the questions, a questionnaire was designed. It consists of two sections. Section (A) elicited personal information, while Section B elicited information on the branding strategy of agricultural produce in Nigeria. The B Section consists of 15 Likert scale items with four options ranging from Strongly Agreed (SA) to Strongly Disagreed (SD).

Data Analysis and Result
R.Q.1: Do you consider branding of agricultural produce a strategy to increase the income of the farmers?

Table 1.2: Branding of agricultural produce help to increase income of farmers

<table>
<thead>
<tr>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>( \sum FX )</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branding of agricultural produce helps to increase the income of the farmers</td>
<td>25</td>
<td>35</td>
<td>190</td>
<td>150</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Branding of agricultural produce attracts more customers</td>
<td>158</td>
<td>148</td>
<td>50</td>
<td>44</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Branding of agricultural produce adds value to a product</td>
<td>20</td>
<td>24</td>
<td>190</td>
<td>166</td>
<td>2.0</td>
<td></td>
</tr>
<tr>
<td>Branding of agricultural produce influences consumer’s perception</td>
<td>167</td>
<td>153</td>
<td>30</td>
<td>50</td>
<td>3.1</td>
<td></td>
</tr>
<tr>
<td>Branding of agricultural produce has promotion advantages</td>
<td>199</td>
<td>141</td>
<td>45</td>
<td>15</td>
<td>3.0</td>
<td></td>
</tr>
</tbody>
</table>

From Table 1.2, majority of the respondents firmly agreed on the items 2, 4 and 5. Calculations clearly indicate the positive views expressed by the respondents. They generally agreed that branding of
agricultural produce attracts more customers, provides promotional advantages and influences consumer’s perception. But, some respondents failed to agree on items 1 and 3. They disagreed on the matters relating to whether branding of agricultural produce tend to increase the income of the farmers, as well as adding value to a product.

R.Q.2: Can branding of agricultural produce helps to enhance the shelf-life of products?

<table>
<thead>
<tr>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>ΣFX N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branding of agricultural produce helps to enhance shelf life of products</td>
<td>18</td>
<td>17</td>
<td>180</td>
<td>185</td>
<td>2.0</td>
</tr>
<tr>
<td>Through branding of agricultural produce, the shelf-life of the product can be positioned</td>
<td>188</td>
<td>162</td>
<td>25</td>
<td>35</td>
<td>3.3</td>
</tr>
<tr>
<td>With branding of agricultural produce, shelf-life can be used to determine quality</td>
<td>21</td>
<td>19</td>
<td>200</td>
<td>160</td>
<td>2.0</td>
</tr>
<tr>
<td>Branding of agricultural produce tends to affect shelf-life of product</td>
<td>17</td>
<td>13</td>
<td>198</td>
<td>172</td>
<td>2.0</td>
</tr>
<tr>
<td>Branding of agricultural produce as a strategy assists shelf-life of products</td>
<td>12</td>
<td>13</td>
<td>225</td>
<td>150</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Majority of the respondents answered in affirmative. They disagreed in all the items except item 2. Their opinions showed that branding of
Agricultural produce branding in Nigeria

agricultural produce has no positive influence on the shelf-life of the product. However, a few respondents expressed their various views in favour of agricultural produce helping in product positioning.

R.Q.3: How does branding of agricultural produce help to improve marketing efficiency?

Table 1.4: Branding of agricultural produce help to improve marketing efficiency?

<table>
<thead>
<tr>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>∑FX N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Branding of agricultural produce help to improve marketing efficiency</td>
<td>199</td>
<td>453</td>
<td>56</td>
<td>22</td>
<td>3.3</td>
</tr>
<tr>
<td>Branding of agricultural produce helps to position the product in the minds of the customers</td>
<td>221</td>
<td>129</td>
<td>19</td>
<td>31</td>
<td>3.4</td>
</tr>
<tr>
<td>Branding of agricultural produce is a strategy to increase sales revenue</td>
<td>201</td>
<td>139</td>
<td>55</td>
<td>5</td>
<td>3.3</td>
</tr>
<tr>
<td>Branding of agricultural produce assures repeat purchases</td>
<td>19</td>
<td>17</td>
<td>189</td>
<td>175</td>
<td>2.0</td>
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<tr>
<td>Branding of agricultural produce help to maintain brand loyalty</td>
<td>191</td>
<td>15</td>
<td>08</td>
<td>50</td>
<td>3.2</td>
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Many respondents expressed their positive views on how branding of agricultural produce may help to improve marketing efficiency in addition to product positioning, increase in sales revenue and maintenance of brand loyalty. The results of the calculations clearly prove these facts especially items 1, 2, 3 and 5. However, a few
respondents disagreed on the view about whether branding of agricultural produce helps to assure repeat purchases. This means branding strategies of agricultural produce has no positive impact on the repeat purchases of the customers.

Discussions of findings
Majority of the respondents showed a greater positive response on the branding of agricultural produce for Nigeria. It was discovered from the findings that branding of agricultural produce helps to attract more customers and also to influence customers’ perception in addition to creating promotional advantages. Also, the findings revealed that branding of agricultural produce does not lead to an increase of the income of farmers and may not add value to a product. Again, majority of the respondents disagreed with the statement that branding of agricultural produce helps to enhance the shelf-life of products. The disagreement portrays the negative opinion expressed by the respondents. It, therefore, means that branding of agricultural produce has no impact on shelf-life of a product. Although very few respondents agreed that branding strategy of agricultural produce can only be used to position product before consumers.

Finally, the findings revealed that many respondents asserted that branding of agricultural produce helps to improve marketing efficiency as well as position the products in the minds of the customers. It also showed that branding as a strategy increases sales revenue and equally helps to maintain brand loyalty of the customers. It, therefore, means that branding strategy of agricultural produce has a positive effect on the marketing activities in Kogi State, Nigeria. However, some respondents were of the opinion that branding strategy of agricultural produce may not assure repeat purchases. By implication, it means branding strategy has no positive impact on the repeat purchases of the buyers in Kogi State, Nigeria. The result agrees with the work of Oyebode (2001) who suggested that proper application of branding strategies can increase sales, maintain or
increase company’s market share and eventually increase profit. Branding strategies facilitate memory recall and brand loyalty.

**Conclusion**

Based on the result of the findings, it can be concluded that branding of agricultural produce has a significant influence in consumers. This conclusion can be used to generalize the influence of brand on consumer in their purchase decisions. Brand name, if properly planned and promoted, will influence consumer’s attitude towards agricultural produce. Branding also aids manufacturers in competing effectively with competing brands in the market, as it will make sales promoting to be useful for building a demand for a product and consumer would be able to make selective demand.

**Recommendations**

The following recommendations are made in relation to the findings of the research.

1. **Proper branding of agricultural produce:** Brand name should be properly planned and promoted in order to influence consumer’s attitude towards agricultural produce. Any brand name chosen by manufactures of agricultural produce must be appropriate and easy to remember by any one of the average intelligence. This will make shopping easy. Without branding consumers will be thrown into confusion in a retail outlet since there will be nothing to serve as a dependable guide to quality.

2. **Establishment of processing mills:** Efficient and modern processing mills should be established as part of the government rural development policy programme throughout Nigeria. This will have a positive multiplier effect on the producers, marketers as well as the consumers, as it facilitates the quality and branding of agricultural produce for the producers.
3. **Improvement in storage facilities:** Since, branding cannot take place without storage facilities, there should be improvement in storage facilities for better preservation of agricultural produce. This is because lack of efficient storage facilities normally forces the producers of agricultural produce to sell off their farm produce during the harvesting season at rock bottom prices.

4. **Reflection of branding with organisation and product objectives:** Branding strategy to be adopted for agricultural produce must reflect the organisation’s objectives, marketing and product objectives. This is because it is an embodiment of the organisation and the product image.

**References**


Agricultural produce branding in Nigeria


ENVIRONMENTAL PROBLEMS IN NIGERIA - A REVIEW

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Abstract
People’s attempts to adjust their endless wants and desires for food, shelter, recreation, infrastructural facilities and others to the land and other resources available to them has resulted in the deterioration of urban and rural environmental quality in Nigeria, which is characterized by water shortages and floods that play a major role in the transmission of communicable diseases. The review is an attempt to x-rays some of the resultant impacts of man’s interaction with his environment with a view to outlining their contribution to environmental problems and how far the environmental policies have been implemented to control the negative impacts by man on the environment. Suggestions are made for re-designing the objectives and strategies of the Federal Environmental Protection Agency (FEPA). Environmental protection techniques need to be cultured, home-grown and the framework should be “bottom-up”. A number of communities should be grouped together from the (political) ward level to local government level. Environmental protection agencies at the local government level should be empowered to punish offenders.

Introduction
The environment provides all life support systems with air, water and land as well as the materials for fulfilling all developmental aspirations of man. As in most other countries of the world, the Nigerian environment today presents a grim litany of woes. The unwise use of
the natural environment due to ignorance, poverty, overpopulation and
greed, amongst others, has led to the degradation of the environment.
These negative impacts are referred to as environmental degradation,
which implies “abuse of the environment” due to improper resources
management. In Nigeria, the environmental problems are
characterized by soil erosion, high population pressure and increasing
congestion in urban centres, which are further compounded by
unplanned growth, and increasing problems of domestic and industrial
wastes disposal and pollution. Human related activities since 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).

Environmental degradation has resulted in the deterioration of
Nigeria’s urban and rural environmental quality, which is characterized
by water shortages and floods that play a major role in the transmission
of communicable diseases. These worsen the condition of the poor.
Also, drought and desertification threaten food security and nation’s
ecological integrity, and are drivers of population displacements
(Nwafor, 2006).

Nigerian population is more than 140 million with an average
density of more than 120 persons per square kilometer. Although, this
density may vary from one region to another, it is obvious that Nigeria
is already experiencing high population density. The interaction of
these millions of Nigerians with their respective environment has left
indelible mark on the landscape. The manifestation of these impacts
includes urbanization, deforestation, desertification, overpopulation
and all kinds of pollution. These impacts of man’s activities have both
positive and negative effects on the natural environment.

This paper x-rays some of the resultant impacts of man’s
interaction with his environment with a view to outlining their
contributions to environmental problems and how far the
environmental policies have been implemented to control the negative
impact by man on the environment. Suggestions are made for re-
designing the objectives and strategies of the Federal Environmental Protection Agency (FEPA).

Since, environmental problems have caused a lot of concern to both individuals and Governments, locally and internationally, the review will enable the concerned groups know how to tackle these problems in order to have a green environment. The study will also enable policy makers, project proponents, environmental authorities and other stakeholders to fully appreciate environmental concerns and give them due weight. It will also provide up-dates for policy makers regarding environmental problems, policies and policy implementation.

Conceptual and theoretical framework

The concept of environment has been viewed from diverse perspectives and defined in various ways (Singh, 2003). The variety of definitions and conceptions of environment is closely linked to the fact that the study of environment is multi-disciplinary, and thus each discipline tends to develop and adopt definition(s) in line with its interest. This multiplicity of definitions, concepts and usage of terms in various disciplines was clearly captured by Porteous (1977: 99) in the statement:

*The multiplicity of the usage and concept of the term environment have resulted in a variety of adjectival forms which include social environment, molar environment, physical environment, home environment, psychological environment, behavioural environment, geographical environment.*

For instance, a sociologist, Bain (1973), defined environment as all the external and non-personal conditions and influences that determine the welfare of a people in a given area. On the other hand, a geographer, Hagget, defined environment as the sum total of all conditions that surround man at any point on the earth’s surface (Efobi, 1994). Nigeria’s Federal Environmental Protection Agency (FEPA, 1989)
states that the environment includes water, air, land, plants, animals, and human beings living therein, and the inter-relationships that exist among them. However, a more comprehensive and all-embracing definition of the environment was offered by Keller in Efobi (1994: 67) as the:

Total set of circumstances that surrounds an individual or a community, these circumstances are made up of physical conditions such as air, water, and climate and landforms; the social and cultural aspects such as ethics, economics, esthetics and such circumstances which affects the behaviour of an individual or a community/"

According to these definitions, environment can be viewed as all physical, non-physical, external, living and non-living situations surrounding an organism that determine its existence, development and survival at a particular time. It encompasses constantly interacting sets of physical (natural and man made) elements and non-physical, living and non-living (e.g. social, cultural, religious, political, economic) systems, which determine the characteristic features, growth and sustainability of both the component elements of the environment and the environment itself (Johnson, 1992; Muoghalu, 2004). Hence, sustainability in this context relates to the ability of the ecological, economic and socio-cultural systems in a manner that does not limit the possibility of meeting the present and future needs of the various components and aspects of the environment. It can also be viewed as the carrying capacity of the supporting ecosystems (Marcuse, 1998).

Evidences suggest that the prevailing global environmental degradation poses serious threat to sustenance of capacity of the ecosystem. Therefore, environmental sustainability has taken priority position in housing, infrastructure provision, planning, land use and urban development among others (Marcus, 1998; Aribigbola, 2008).

Urban areas are centres of arts, culture, education, entertainment, technological innovations, specialized services and
Environmental problems in Nigeria

“economic engines” (Kadir, 2006; Kjellstrom and Mercado, 2008). The products of urbanization come with far reaching economic, and socio-spatial and health implications. The ecological and sociological “footprint” of cities has spread over wider areas and fewer places on the planet earth are unaffected by this phenomenon. Changes in the ecology of urban environment occasioned by increasing population, overcrowded habitations and uncontrolled exploitation of natural resources may have accounted for this wide ecological footprint of urban areas which is not peculiar to developing countries (Acho, 1998: 7; Marmot, 2006; Hales, 2000).

Agbola and Agbola (1997) and Areola (2001) clearly indicate that the spatial structure of Nigerian cities evolved before, during and after the colonial rule in the country made the introduction of modern infrastructural facilities very difficult and expensive, especially when dealing with areas having the bulk of ancestral homes of indigenous people. It is also opined by demographic experts that the high rate of urbanization put at 5.3 % in Nigeria, which is among the highest in the world, has the tendency of spurring up environmental degradation (Goldein, 1990).

Closely related to this is the fact that most urban areas in Nigeria have grown beyond their environmental carrying capacities and existing infrastructure (National Population Commission, NPC, 1998). For instance, the 2006 Nigeria’s national population census data (FRN, 2007) revealed that most of the urban areas in Nigeria with small land mass have their capacity to take further population increase already exhausted or extremely limited. With a population figure of more than 140 million and land mass of about 924,000 km², current estimates indicate that 10% of the land areas accommodated 28% of the country’s total population (Taylor, 2000). The implication of this is that there is disequilibrium between the population and the environment, and this has adversely affected the carrying capacity of the urban areas in the country, hence the increasing poor quality of the living conditions and the low livability index of urban areas in Nigeria.
Causes of environmental degradation in Nigeria

Several studies (see Nduka, 2004; Mba, 2004; Bulama, 2005; UN-Habitat, 2005; Agukoronye, 2004; Agbola & Agbola, 1997 and Areola, 2001) have identified many of the environmental problems in Nigeria. These problems include the high rate of urbanization, psychological orientation of urban residents on the environment as well as poor environmental management practices.

The true cost to the Nigerian economy arising from environmental degradation and the depletion of natural resources is unknown. World Bank estimate conveys an idea of the magnitude. A decade ago, the bank put the annual loss of Nigerian natural resources to environmental degradation, assuming that no form of remedial action is taken, at US 5 billion (World Bank, 1995). An understanding of the true cost of environmental degradation and the depletion of resources in Nigeria is important. Policies are made in order to solve environmental problems, but effective implementation is yet lacking and policy aims and objectives are yet to be achieved.

Every State of Nigerian federation suffers from one form of environmental problem or the other in varying degrees. The northern part of the country is being literally “blown away” by wind erosion, while the southern part is being washed away into the ocean, according to the description of Mr. McNamara, former President of the World Bank. Wind erosion could be quite severe in States such as Sokoto, Zamfara, Kebbi, Kastin, Kano, Jigawa, Borno and Yobe. Farmlands become inundated by drifting sands which bury young crops. Roads and sometimes huts and public buildings may be completely buried by active sand dunes rising sometimes up to 12 metres high.

The major environmental problems and their causes in Nigeria are highlighted here-under.

Urbanization:
This is caused by 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. Environmental conditions in cities have gradually deteriorated due to the rapid growth of the cities and the attendance inability of social services and infrastructures to keep pace with the rate of growth. The problem of the disposal of refuse is quite serious because of the rapid rate of generation of non-biodegradable materials, such as plastics. Inadequate storm drains, dumping of refuse in drainage lines and construction of houses close to or even on the natural water channels have been shown to be responsible in that order for the increasing cases of flood in the urban centers. Environment problems associated with the increasing growth of urban slums, including overcrowding in squalid housing conditions, poor quality or unavailability of basic infrastructures and social services, such as water sewage facilities, and even lack of access routes (NEST, 1992).

**Overpopulation**
Population is a major factor in all environment-related issues. Overpopulation causes stress on the environment. Environmental problems, such as overpopulation, degradation, erosion, desertification, etc. are caused by man’s misuse of environmental resources (Abumere, 2002). Until very recently, Nigerians regard their “large population size” as a symbol of greatness, power and prestige and tend to resist attempts to reduce it drastically. It is only just becoming clear, that over population is forcing traditional societies to abandon age-old production systems and resources management techniques that allowed them to produce enough food for themselves at minimal impacts on the environment. There are evidences everywhere of rapid decline in environmental quality and human living conditions by rapid increase in human numbers. Under such stressful situation, “it will be easy for people to become so exigent, worrying only about what to get out of the environment for their own immediate needs and uses, without caring very much for the consequence, especially, for succeeding generations (Mabogunje,1985: 13).
Nigeria’s National Policy on Population for Development also made the observation that “the present high rate of our population growth is already contributing substantially to the degradation of the ecology of the country. It observes that land fragmentation, over-farming and over-grazing have led to soil erosion and desertification and that overcrowding has led to the spread of shanty towns and urban slums, all of which would worsen if the present population growth continues (FGN, 1988; NEST, 1992).

Deforestation

A forest is a large area of land with trees and noticeable in area with sub-equatorial and monsoon types of climate. The importance of the forest to man cannot be over emphasized. They act as sanctuary for rare and/or endangered animals. Forests act as storm breaks, thereby protecting the towns and villages from destruction. They provide useful products, such as wood and charcoal for fuel, fibre for paper and textiles, and medicine from the bark and leaves of some plants. Forests are breeding ground for animals, erosion checks, and sources of food and materials for building houses.

Deforestation is a process whereby trees are felled for several purposes, but without replanting to replace the ones felled. Deforestation is dangerous to man, animals and properties. It leads to erosion of the soil and storm, which can cause destruction of properties, crops and animals. When forests are cleared, the soil are exposed to erosion devastation, floods occur, and rivers and lakes are filled up with silt. The water becomes dirty and impure for mankind. The removal of tree canopy (particularly the leaves) has effect on the rainfall of that area, as there is less leaf surface area for the transpiration of water, which in turn affects the relative humidity of the atmosphere. The repeated cultivation of crops on cleared area of plants tends to exhaust the soil of its mineral content.

Deforestation in general - for agricultural development, urban growth, industrial expansion and pressure from an increasing population - has reduced the extent, diversity and stability of the
Environmental problems in Nigeria

Nigerian forest. The Food and Agricultural Organization (FAO) estimated that Nigerians destroy about 600,000 hectares of her forest every year through careless exploitation and husbandry. This has been implicated for a number of worsening environmental problems in the country, including soil erosion and infertility, desertification and flooding.

**Desertification**

Desert is a barren, waterless, treeless and often sand-covered land, such as Sahara, which spreads across Africa continent. Desertification is, therefore, the encroachment of the desert on the land that was once fertile. Desertification can be induced either by natural process or by the action of man. Natural hazards, such as drought and deposit by winds, are prime factors in the desertification process. Desertification is more pronounced in the northern part of the country, where the Saharah desert has eaten deep into the once fertile land. The Lake Chad basin which is situated in the area is not left out of desertification. The lake basin has 24,000 km² in 1963 to about 3,000 km² in 1984. This is due to natural hazards (drought and sand particles transported by winds to the area) and man’s unwise use of the lake environment.

Desertification is dangerous to man. It leads to famine, diseases, and destruction of crops, livestock and man. It can be controlled through irrigation, terrace ploughing and planting of trees and grasses.

**Pollution**

Environmental pollution can be categorized into three groups. These are air or atmospheric pollution, aquatic or water pollution and land or surface area pollution. The World Health Organization (WHO, 1990) defined air pollution as “limited to situation in which the outer ambient atmosphere contains materials in concentrations which are harmful to man and his environment”. Man’s activity on the earth surface has largely degraded the quality of the lower atmosphere. The growth and
development of industries and urbanization has contributed greatly to the excess carbon monoxide produced by combustion and other human activities. Carbon monoxide reacts with the blood vessel and prevents it from taking up oxygen and the people are suffocated. In Nigeria, several rural towns that had in the past enjoyed fresh and dry air are currently experiencing air pollution problems due to industrialization process and expansion in human activities (Obajimi, 1998).

Aquatic or water pollution is the discharge of unwanted biological, chemical and physical materials into water bodies from man’s environment. The pollutants are usually chemical, physical and biological substances that affect the natural condition of water. This incidence is responsible for the wide spread water contamination in most Nigerian cities. Also, solid wastes have equally flooded the water ways in these urban centres.

Land surface pollution is the occurrence of unwanted materials or waste on land. The commonest pollutant on land is the waste products that are often scattered on land area in the cities. According to Onwioduokit (1998), most environmental problems are due to the production or consumption of goods whose waste products translate easily into pollutant. It is believed that the emergence of urbanization is responsible for the rapid accumulation of solid waste. However, it would appear that the growth of urbanization and industrial development coupled with improper waste management control have added a great dimension to land area pollution in Nigeria.

How far has Nigeria fared in it’s policy?
The environmental policy is the foundation of the environmental management system (EMS) through the provision of a framework for action and the setting of environmental objectives and targets. Maintaining the quality of the environment is of high priority in Nigeria. Commitment to safeguarding the environment and the prevention of pollution through effective implementation of environmental policies is crucial for the protection of the environment.
According to Nwafor (2006), the generic process of project-level environmental impact assessment (EIA) was institutionalized in the United States (US) as a requirement of the country’s National Environmental Policy Act of 1969 (NEPA), which was signed into law at the beginning of 1970. In the three and half decades of its existence, project-level EIA has evolved considerably in scope, tools, techniques and methodology. However, the generic aspects which characterize all impact assessment work, such as public participation or involvement, screening and scoping, impact identification, prediction, monitoring and evaluation, have persisted. By the 1970s, the environmental movement that began in the 1960s had built up public awareness about the interactions between the environment and development. As a result, a tide was created which few elected office holders would dare to miss or oppose. First, President Richard Nixon responded to the movement in May, 1969, by establishing a President’s Council on Environmental Quality (CEQ), with himself as Chairman, to implement environmental policy decisions. Then, the Congress, which would not accept to be outdone in this environmental enterprise, decided to set in motion the legislative machinery to make the relevant law.

Congress passed the National Environmental Policy Act (NEPA) to ensure that environmental concerns would be considered in all federal agency decisions which were in any way related to resource management. Oversight of this expansive mission was assigned by NEPA to the newly formed CEQ, which was to reside within the Executive Office of the President. With CEQ oversight, a regulatory infrastructure began to take shape after NEPA. Congress formed the U.S Environmental Protection Agency (EPA) and passed important legislation underlying the current US system of environmental laws.

The Federal Government Protection Agency (FEPA) Decree 58 was passed on 1988 in Nigeria. This was to work out rules on how to handle the environment. But, before this, there were other laws and acts of Government relating to environmental protection. These include the Mineral Act of 1969, 1973 and 1984, the Oil in Navigable

These Laws and/or Acts were promulgated to address specific and identified environmental problems. They were narrow in scope and spatially restricted. Decree No. 58 of 1988, as amended by Decree 59 of 1992, which gave birth to FEPA (Now Ministry of Environment) empowers the agency (now ministry) to have control overall issues relating to Nigeria Environment, its resources, exploitation and management (Eneh & Agbazue, 2011).

Despite the legal backing and funding, which FEPA enjoys from the Federal Government of Nigeria, the level of success so far recorded by FEPA is a far cry from her set objectives and goals. This is because the rate at which the environment is being degraded is growing worse than what it was before the establishment of FEPA. For example, urbanization, deforestation, desertification, and pollution are now more remarkable than ever before. If appropriate techniques and technology of environmental protection and management are not put in place, Nigeria may become a difficult country to live in the next 15 years.

FEPA, as an institution or agency, is foreign to the people of Nigeria. It is not indigenous. The concept or idea did not evolve from the people’s tradition or way of life. FEPA is very far from the people and the environment. Its officials are like tax collectors of the olden days. As a development strategy, FEPA is “top-down” and not “bottom-up”, which is more popular. For FEPA to succeed, certain basic ideas about environmental management have to be conceptualized.

Before modernization came our people were tied too close to their environment. They have the technology of utilizing the resources within the environment, and protecting same from despoliation. In this regard the concept of FEPA should be community-based. In the dissemination of modern and scientific methods of agriculture, the agency creates what is called “Agric cell”. Agricultural officer
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attached to each cell goes to educate the people about modern methods of crop cultivation. In a similar vein, environmental protection officers should be sent to one or group of communities to enlighten them on modern methods and techniques of environmental protection. The framework, which should be community-based, will be organized at the following levels:

1. Ward (a group of communities, or streets in the case of urban centres);
2. At the Local Government level there should be some power to punish erring offenders;
3. State level; and
4. Federal level.

Community participation is very important and where ever it is adapted, remarkable success has been achieved.

Recommendations
Environmental protection techniques need to be cultured, home-grown and the framework should be “bottom-up”. It should be community based. The framework should be organized at the village or community level. A number of communities should be grouped together from the (political) Ward level to Local Government level. Environmental protection agencies at the local government level should be empowered to punish offenders.

The environmental protection officers should be fluent in the local language(s) of the area of their jurisdiction. This is because a majority of those who are engaged in tilling and ploughing the soil do not have the western education (Omofonmwan, 2000). When the people become aware of the effects of their unwise use of the environment, the goals of the National Policy on Environment will be easy to achieve. The addition of environmental awareness education courses to the curricula of primary and post-primary schools is important.
From the evaluation of the country’s past programmes on policy on environmental problems, policy discontinuities and weak institutional capacity have impacted more adversely on the poor than physical developments and their biophysical impacts. The mandate of the Federal Ministry of Environment (FMENV) could be upgraded to promote and support poverty alleviation as an integral part of the environmental management.

**Conclusion**
The environmental problems in Nigeria are acute, pervasive and increase rapidly. This should be a source of great and justifiable concern for all today. The effect of pollution on air, aquatic or water and on land has adverse impacts on health and economic activities. The increasing population pressure, the decline levels of water tables and more airborne and water-borne pollution from industries and domestic waste. Underpinning all these problems are poor management capabilities and corruption which hinder effective government policies. Allied to these is the fact that in Nigeria the environment has so far not been seen as an important matter by the politicians, companies and individuals. The re-examination of the environmental problems provides the avenue for the EIA to be seriously involved in all the issues concerning the environment in order to make and implement policies to tackle the various environmental problems.

**References**
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Environmental problems in Nigeria


Abstract
Ignorance of the masses is widely believed to be majorly responsible for the sharp public reactions and demonstrations against the removal of subsidy on pump price of petroleum motor spirit by the Federal Government of Nigeria at the very beginning of 2012. This cross-sectional descriptive study employed primary data generated from petrol users (bus/taxi drivers, bi- and tri-cycle commercial transport operators, civil servants, and others) by use of questionnaire distributed in Enugu metropolis. Five hypotheses were tested, using the chi-square statistical model. Significant findings include: the government adequately consulted with the key stakeholders of the nation before embarking on the removal; no time would be suitable for the subsidy removal in order to avoid protest; subsidy is not a democratic dividend or benefit to the masses; majority of Nigerians sided with the reversal of subsidy removal policy for a stepwise deregulation implementation; and the Government should repair the existing refineries and build additional ones to increase domestic supply. The following recommendations were proffered: increasing in the supply of fuel in the NNPC designated filling stations; reversing the classification of over invoiced fuel imports which were erroneously nomenclated as subsidy to cure the misguided psyche of the electorates who ardently believed that there was benefits accruing to them; restructuring our educational curriculum contents to impart elementary knowledge on oil and gas studies, and reversing the public perception of government development policies by publicizing some of
the implemented campaign promises with less rhetoric, and instituting adequate management and accounting control checks and balances to ensure proper verification of procurement vouchers and procedural compliances. Vacate the business interferences and save time for oversight and control functions which further create conducive environment for business deals.

Introduction
The deregulation of the downstream sector of the petroleum industry is not new in Nigeria. The Obasanjo administration (1999-2007) had removed the subsidy on gas. In 2011, the Goodluck Jonathan-led Federal Government of Nigeria muted its intention to remove the subsidy on the petroleum motor spirit (PMS). It consulted with various groups in the country, before the implementation at the tail end of the year. But, the Nigerian market has a way of responding instantaneously without regard to reality of market factors. In the wake of the subsidy removal, independent marketers shot up prices from =N=65 per litre to between =N=150 and =N=200 per litre. Consequently, transport fare shot up by rates varying from 100% to 600% in various parts of the country. Most people who had traveled to their villages for the Christmas 2011 celebration were trapped and could not afford the high fare back to their workplaces and places of abode. The prices of other goods and services also automatically rose upward.

Certain odds against the government in pursuance of the removal policy implementation include the distrust of the government development intentions resulting from the inability of the past leaders to fulfill their campaign promises and outstanding cases of corruption on the part of politicians and the bureaucrats. Secondly, many Nigerians may be graduates but the refinement in attitude and character that accompany academic discipline was lacking in some of them, and the biting unemployment coupled with the scourge of hardships, and poverty could cause bewilderment and berserk among them. The next was the political opponents who lost in the elections of 2011 that
brought Goodluck Jonathan to power. Their presence introduced a kind of bias that tended to hyper-criticism with ultra-sensory reactions. The fourth challenge was the peculiarities of the markets and the communication deficiencies that accompanied the announcement of the removal.

The controversy that ensued attracted contributions from every segment of Nigerian society and those with dissenting voices seemed to be more in number, and in most cases were hyper-critical about the issue. Another worrisome aspect of the controversy is that those who should have been better informed also joined the bandwagon of dissenting group, thereby, sending conjectured signals to the less-informed members of the society. The masses in the guise of workers under the auspices of the Nigerian Labour Congress (NLC) and the Trade Union Congress (TUC), went on a nation-wide protest. The protesters who were initially believed to be composed of NLC and TUC worker-group representatives were infiltrated by disgruntled politicians who hijacked the protest to paint negative pictures of the government’s good intentions. Consequently, the federal government declined to negotiate with politicians except with labour-leaders, occasioning a deadlock.

On its side, the government rolled out a number of palliative measures to alleviate the sufferings of the masses. Some key stakeholders in the governance of the country claimed that they and the masses were grossly uninformed or ill-informed about the objectives of petroleum subsidy as a fiscal policy. Although uneasy calm existed in the five South-east states of the federation, tensions emanating from Lagos, Northern States and other cities of the country, coupled with the bombings and killings in the northern region created a very high sense of insecurity over-hang. The mass media (print and electronic), as information disseminating channels, were at their peak of labouring.

The resulting near-anarchy situation that attended the subsidy removal requires indept study, which is lacking in the academic circle on topical issues that appear transient. Usually, journalists take advantage of this and similar gaps to write inflammatory reports that
sell their newspapers and stations to the gullible public. This cross-sectional descriptive study was aimed at examining the controversy that ensued, with a view to mitigating the widespread disillusionment with government. The researcher interacted with PMS users, guided by the following research questions:

1. Did the government adequately consult with the key stakeholders of the nation before embarking on the removal?
2. Would anytime be suitable for the subsidy removal in order to avoid protest?
3. Is subsidy a democratic dividend or benefit to the masses?
4. Should the subsidy removal policy be reversed?
5. In what way should deregulation be proceeded with?

The corresponding hypotheses, which were tested at the end of the study were:

H1: The government adequately consulted with the key stakeholders of the nation before embarking on the removal.
H2: Timing for the subsidy removal was wrong.
H3: Subsidy a democratic dividend or benefit to the masses.
H4: Subsidy removal policy should be reversed.
H5: Deregulation programme should be pursued.

**Literature review**

**Petroleum subsidy in Nigeria: Meaning, origin and controversy**

Ukpong (2004) contended that the introduction of the subsidy on petroleum product was borne out of the need to remove disparity in pricing of the products across the country as well as the genuine desire to improve the economic well-being of all citizens. However, it may seem that adequate analysis of the economic consequences of subsidizing petrol consumption, instead of agriculture (production),
PMS subsidy removal in Nigeria: Issues and challenges

was ignored. Again, as a fiscal policy tool, subsidy is not expected to have lasted too long (from 1973 to end of 2011). Interventionist measures, such as subsidy should be administered in the hope that the market conditions would replace such policy by its removal, after creating the enabling environment for market conditions to thrive. Todaro and Smith (2006) defined subsidy as payment made by government to producers or distributors in an industry to prevent the decline of that industry as a result of continuous unprofitable operations. The subsidy as a fiscal tool was expected to support production as against consumption. But, Nigeria’s case was wrong ab-initio. Perkins et al (2001: 429) stated that, “In virtually all developing countries employing budgetary subsidy, the stated purpose has been income redistribution… even if the ultimate effect is not always what was intended.” Just as in the case of Nigerian subsidy, now at stake, the intention of the past military rulers who introduced the subsidy in 1973 was “… shrouded in secrecy”, while the economic sense of it remained controversial, and is nothing but “Rape of the Nation” (Atojoko, 2009: 5).

Sanusi, in Iba and Otti (2011: 5), speaking on continual perpetuation of subsidy, stated:

*Nigeria is heading for serious economic crisis. If the oil price crash again then Nigeria will now face a serious economic crisis… the next administration would be saddled with a debt burden that would be difficult to manage.*

There is, therefore, certain vital information that should be properly communicated to the citizens, especially as the issue of subsidy removal is sensitive and critical to human development. At the initial stage of growth and economic development, government fiscal actions or interventions by way of subsidy may be needed to stimulate investment in vital economic sectors, which may not be left to chance and to the vagaries of a market economy. In such a case, the state-owned-enterprises (SOEs), such as the Nigerian National Petroleum
Corporation (NNPC), would need to be subsidized to prevent it from continuing in unprofitable ventures. Subsidy was applied as an antidote, but has out-lived its usefulness in the petroleum industry because of the abuse by embedded interest groups, who have been described as subsidy cabals. It is the responsibility of the government to adequately inform the citizens and carry along the majority of the key stakeholders by properly communicating the hard facts.

According to Nwosu and Nkamnebe (2006), the hard facts should be the basis of disabusing the minds of the Nigerian populace from the impact of the conjectured information transmitted through the various news media in the country by detractors on the issue of subsidy removal. In development economics, subsidy is not expected to span beyond five to ten years, but the subsidy in question in Nigeria spanned over three decades. It was, therefore, decayed and overdue for removal, for adoption of a market-oriented approach.

A market-oriented approach would seek to divest government pecuniary interests in the industry to allow private investors to participate in the down-stream oil and gas industry. The fears and apprehension of the Nigerian public against this market liberalization or deregulation has continued unabated because of weak communication and the intrigues of the subsidy cabals on the media, which combined to blur the perception of many Nigerians. The inflammatory messages were not only unprecedented in Nigerian leadership history, but reminiscent of the vicissitudes of democratic leadership. The civil society organizations (CSOs) in some cities concealed heinous motives supportive of the objective of embedded interest groups.

The apprehension may be seen in the uncertainty surrounding the impact of the removal on the living conditions of the electorates. World-wide, increases in pump price of fuel is directly correlated with increase in prices of foodstuff, transportation, clothing, shelter and every other goods and services with popular demand. However, Nigeria’s President and his team believe that the complete deregulation of the downstream oil sector would enhance the construction of more
refineries in Nigeria, besides the contacts already made with the original builders of the four refineries to keep them in full capacity production status. Nonetheless, these machineries ought to be concluded before the subsidy removal.

At full operational capacity, the four refineries would increase supply of available petroleum products locally, instead of being imported. If adequate supply of the product is locally produced to satisfy the internal demand (presently put at 35 million litres per day), the pump price per litre in different parts of the country by the independent marketers would adjust to a market-determined price.

**The weak domestic production base**
Most productive sectors of the economy are weak and crawling, almost stagnated. The Apex Bank of the federation captured it as follows: “The growth rate of the real Gross Domestic Product (GDP) has been very low in the last five years” (CBN: 1995:80). The critical factors in this situation are quite many. In terms of capital formation, the Nigerian economy generates very low saving and investment ratios. Experts lamented that while the emerging economies of Asian Tigers have track records of saving and investment ratios of 60-70% of the GDP, Nigeria’s case showed ratios that were less than 20% of the GDP. Ten years later, CBN (2004: 106), recorded gross fixed capital formation of the GDP as 7.3, 7.2, 9.1, 12.0 and 16.2% for 2000, 2001, 2002, 2003 and 2004 respectively. The Federal Office of Statics (FOS) and National Planning Commission (Table 3.1) stated that the oil and gas industry barely contributed up to 32% between 2000 and 2004, whereas the Non-Oil Sector contributed about 68% within the same period. The average manufacturing capacity utilization was about 40%.

| Table 3.1: % contribution to GDP (1990 constant basic prices) |
|---------------------------------|---|---|---|---|---|
| **SECTOR**                      | **2000** | **2001** | **2002** | **2003** | **2004** |
| OIL Crude Petroleum (%GDP)      | 32.45    | 32.65    | 29.75    | 33.44    | 32.56    |
| Non-Oil (%GDP)                 | 67.55    | 67.35    | 70.25    | 66.56    | 67.44    |

45
A situation where Nigeria exports crude oil to be refined outside the shores of the country, with the associated job opportunities lost, creates imbalance in our economic system. This was vividly captured by Eneh (2006: 28): “When there is imbalance between inputs and outputs, a functionality or productivity signal results”. This is evident in the very low GDP experienced perennially in the country. Continuing, Eneh (2006), asserted that a positive productivity signal occurs when outputs out-weigh inputs, while a negative productivity or danger signal occurs when inputs outweigh outputs. If the former situation persists, productivity grows; but if the latter persists, ebbing productivity results and the system is heading for imminent collapse, comatose and eventual death.

The Goodluck Ebele Jonathan administration may have observed the continual and persistent stagnation of the economic growth as observed in the low GDP, and so introduced the dreaded “removal of subsidy”, in order to enhance domestic productivity envisaged in Eneh (2008), as “a moral justification for the existence of anything,” (including Nigeria as a developing nation). This means that if the subsidy continues to be in place, the country may be plunged into untold hardships and unsustainable human development. If the Nigerian economy is not functioning enough for sustainable development, then there is no justification for continued existence of the nation. This justifies the removal of the petrol subsidy, which was misconstrued by the citizens because of knowledge gap. But improving productivity must result from attitudinal changes and calls for concerted efforts of all those directly or indirectly involved in the production process.

According to Mkpozi (2008: 54-55), acquisition of skill goes beyond merely instructing our students to acquire the required skills, but also the development of correct attitudes and quality of character that will enable them to understand their job and perform effectively
and satisfactorily. Before the reforms, previous governments paid lip service to the development of local content, which led to the loss of over 85 percent of in-country jobs to other countries (SweetCrude, 2011). The productive deficiencies or inefficiencies of the domestic sector may have been substantially due to the inability to refine the crude petroleum locally, as domestic supply was constrained. The exportation of the crude outside the frontiers of the nation provided employment to foreign countries that refine it, but created wide employment gap in our country. This imbalance or dysfunctionality or supply gap may only be redressed by revamping the existing four refineries with a combined capacity of 445,000 bpd and additional new ones designated as Green-Field refineries in order to meet a total domestic demand of about 35 million litres per day of petrol consumption by Nigerians.

The weak productive base of the domestic economy may be a causative factor of many negative influences which characterized a typical African economy. The ineptitude of many Nigerian workers many have been contributory to the weak performances of the domestic economy. Generally, people abhor drudgery. Decrying, the poor attitude of Nigerians in the work place, Eneh (2006) postulated that the workers should rather have reasons to perform than excuses to fail to perform. This involves cultivation of positive work attitudes, burning with desire to perform, to go the extra-mile, he adjured. Unfortunately, most workers hardly have enough love for their work and job satisfaction to cultivate the positive work attitudes. They rather distance themselves from job ethics. The indolent disposition to work attitudes of our citizens may have evolved overtime, as the get-rich-quick syndrome, corruption and dysfunctional placement of personnel into sensitive positions, may have been seminal to the ineptitude which grew during the thirty years of graduate unemployment. This may explain some of the reasons why Nigerians love too many public holidays without regard to the counter-productive force of work-free days. Little wonder, the thought of strike or work-to-rule often thrive swifter than negotiation or dialogue, and the street
protests over the fuel subsidy removal was not too extra-ordinary, except that political opponents of the incumbent government gained access into the crowd on the street by subterfuge, for a vendetta.

**Planning for sustainable development in developing countries**

The results of development planning in developing countries, especially Nigeria, have been generally disappointing. The poor performance of most African government development plans has created the quest for a more free-market oriented economic system. Most government planning decisions were barely supported by the actual planning experience. Thus, the gap between public rhetoric and economic reality has been wider, concealing fraud and economic crimes. Todaro and Smith (2006; 530), lampooned the less developed countries (LDC) as follows: “While supposedly concerned with eliminating poverty, reducing inequality, and lowering unemployment, many LDC’s planning policies have in fact unwittingly contributed to their perpetuation.” Some of the reasons for government failure are inadequacies in their planning process.

**Over-ambition**

In this case, the government tries to accomplish too many objectives at once without considering that some of the objectives may be competing or even conflicting, and most of the time unsustainable. Ukpong (2004) found no cogent economic reason for introducing uniform pricing of all petroleum products. The defunct military government, concealing a heinous plot, alluded their reasons as “…the need to remove disparity in petroleum products’ prices across the country, as well as genuine desire to improve the economic well-being of all citizens…” These reasons were economically unethical as many other products essentially critical to the health and survival of the masses were not so treated or subsidized. For example, disparity in the prices of pharmaceutical products and even the prices of foodstuff
were not subsidized by the same governments. The top government officials (military rulers) cooked this disguise for their bunkering activities.

**Insufficient and unreliable data**
The economic value of a development plan depends, to a very great extent, on the quality and reliability of the statistical data on which it is based. Data on Nigeria are weak, unreliable, or non-extent, as in the case of Nigeria during the period of introduction of the subsidy. Kupolokun (2004) stated that, “…with the change in the ownership structure, the pricing policy was modified and controlled to encourage national distribution at uniform prices. This incidentally introduced the issue of bridging and price equalization at government expense”.

**Conflicting policies**
The NNPC merely inherited the issue of subsidy as imposed by the military administration. It was not a market-determined variable. Consequently, the mounting subsidy bills prevented the routine turn-around maintenance services, which were performed on three-yearly basis. Since it was no longer possible to fund the turn-around maintenance routine, the four refineries dropped in their capacity utilization/production level to about 4-20% level (Oniwon, 2011). Moreover, the subsequent vandalization of the pipelines conveying the crude oil to the refineries from the oil wells exacerbated the situation and resulted in the total breakdown of the local refineries. This was how the subsidization of petrol consumption truncated the funding of the local refineries which held the prospects of job creation. Refinery workers were laid-off, as the four local refineries became moribund. This also led to low contribution to the GDP from the oil sector.

**Institutional weaknesses**
The weaknesses of the planning processes is another factor that may be causing Nigerian planning module to fail. The planning agency is
distanced from the day-to-day decision-making machinery of government, leading to failure of planners, administrators, political leaders and workers’ representatives to engage in a continuous dialogue with the masses and internal communication about goals and strategies instead of street protests or strike actions. The protest would not have been infiltrated by the civil society organization (CSOs) believed to contain some elements of the shadow of subsidy cabals. Moreover, the incompetent and unqualified civil servants coupled with cumbersome bureaucratic procedures, excessive caution and resistance to innovation and change may be unleashing havocs to the good intents of the subsidy reversal. Another factor is the inter ministerial personal and departmental rivalries. The finance ministries and planning agencies are often conflicting rather than becoming complementary forces in national development.

Lack of political will
Political will entails much more than high-minded purposes and noble rhetorics. It requires an unusual ability and great deal of political courage to challenge powerful elites and vested interest groups, such as the secrete beneficiaries of the petroleum subsidy, and to persuade stakeholders that such policy reversal was in the long-run interest of all citizens even though some of them may suffer short-term discomforts. Todaro and Smith (2006:531) submitted that, “In the absence of their support, be it freely or coerced, a will to develop on the part of politicians is likely to meet with staunch resistance, frustration, and internal conflict.” This accounts for the calls by the NLC and the TUC on their members and all Nigerians to embark on a nation-wide strike.

The penalty of subsidy on the domestic economy
Subsidy payment led to financing consumption instead of production of fuels. Economic planning may be described as a deliberate governmental attempt to co-ordinate decision making over the long-run and to influence, direct, and in some cases even control the level and growth of a nation’s principal economic variables (income,
consumption, employment, investment, saving, exports, imports, etc) to achieve a pre-determined set of development objectives (Todaro and Smith, 2006). A deliberate fiscal action, officially induces saving and investment into productive sectors of a market economy. For example, the budget for payment of contractors to build roads, schools, bridges, etc. enables or induces demand for other goods and services, represents payment for value received. The contractors, in turn, pay workers, save or buy more machines or build additional factories which further create employment opportunities. This is a typical example of an induced expenditure or money supply for productive activities, into the economic system. Induced expenses are, therefore, payments incurred in return for contribution to current output. However, if payment was made without any commensurate value received (like payment on the subsidy saga), it merely served as a form of transfer payment (Lipsey and Chrystal, 2007; Samuelson and Nordhaus, 2010). This type of money supplied into the system is an autonomous variable which impacts negatively on the domestic economy.

Lipsey and Steiner (1981) showed that induced expenditure variables create value and human development by stimulating productive activities, while the autonomous expenditure variables (transfer of payments) necessarily increase the volume of money in circulation without creating value for money disbursed, thus penalizing the domestic economy, as a causal factor of double-digit inflation, which has been perennial and intractable in Nigeria. This is why the monetary policies of CBN were, most of the time, ineffective. Paradoxically, more money was being infused into the system, whereas banks in Nigeria were experiencing problems of illiquidity, because so much of the subsidy fund paid out found exit into foreign accounts of the individual beneficiaries. The proceeds of corruption were not even reinvested in Nigeria.

Distraught with the turn-out of events, the CBN declared excess liquidity, and brought down deposit interest rate to a nuisance rate in 2010/2011 fiscal year. In Keynesian Theory of money supply, interest rate is inversely related to the supply of money. The subsidy claims
constituted injection of money into the economy, which justified the reduction of interest rate. If the subsidy payment stops, interest rate may be reviewed upward (Sanusi, 2012). Hence, an increase in the money supply reduces the rate of interest and increases desired investment expenditure. The upward review may increase bank deposits which may in turn stimulate lending as loanable funds increase.

The necessity for deregulation and subsidy removal

Amidst the reversal of the subsidy removal is the need to deregulate the petroleum and gas industry to attract liberalized inflow of private foreign direct investments (PFDI) through the international oil companies (IOCs). These multinational companies (MNCs) seek out best profit opportunities and are largely unconcerned with issues, such as poverty, inequality, and unemployment alleviation. Yet, they have the technologies of production, tastes, and styles of living, managerial philosophies, advertising and transfer pricing (Todaro and Smith, 2006:708).

Deregulation of the downstream oil and gas sector would attract professional economic managers for development for the needed foreign direct investment (FDI) through international corporations that specialized in oil and gas. So far the country has recorded very low and perennial capital formation for over three decades. For example, an average saving and investment of barely ten per cent of GDP was recorded over a five-year period (CBN, 2004). This was too low compared with the high saving and investment ratios of the newly industrialized countries of Asia (60-70% of GDP).

The CBN (1995) attributed the low saving and investment ratios partly to institutional factors and partly to inappropriate macro-economic policy environment, especially monetary, credit, and exchange rate policies. This wrong fiscal policy was instituted about forty years ago and has outlived its usefulness. It might have as well contributed to derailing macroeconomic policies. For investments to take place, it is essential to influence economic environment by
adopting market related strategies on fiscal and monetary actions, as the CBN (1995) had recommended.

Klein and Hadjimichel (2005:1) opined that, “There just is no articulated alternative to some form of market economy”. Again “Studies on the effect of foreign direct investment, the most powerful mechanism to transfer best practice across borders, suggest that its contribution is most significant when domestic capability is high”. Openness and competition provide opportunities and incentives to improve performance throughout an economy and across borders. Yet, without the capability of agents to respond effectively, performance will be suboptimal. The real issue is that Nigeria is in dire need of not just employment, but more of productive employment that enhances the needed rise in living standards. There is no justifiable evidence in Nigeria, that the subsidy benefits the poor masses. Whatever the merits and demerits of regulation and deregulation, various government documents characterize the government-owned enterprise, such as NNPC, as having monopoly, low and declining productivity, capacity under-utilization, feeble financial structure coupled with chronic indebtedness, considerable over-staffing, and very weak sense of accountability and financial discipline (Eneh, 2005, 2007, 2009). Iwayemi (1992) and Ayodele (2005: 27-28) corroborated the weaknesses of government-controlled enterprises:

Some analyses have linked the ineffectiveness of the PEs-cum-government budgetary resource flows with the sources of the regulatory policies in Nigeria – the subsidization, debt guarantee, foreign/local borrowing, tax and subvention policies. These policies culminated in substantial tariff distortions, significant operational and technical inefficiencies and varying internal socio-economic imbalances in the overall economy.

From the foregoing, it is obvious that the reversal of the subsidy regime is prerequisite for moving into deregulation of the oil and gas
industry and a prelude to the pathway to industrialization and sustainable development in Nigeria.

**The challenge of subsidy removal and public perceptions of the role of Government in sustainable development in Nigeria**

At the initial stage of growth and economic development, government fiscal actions (interventions) may be needed to stimulate investment into certain economic units or areas which may not be left to chance and the market forces. Such fiscal interventions remain in force until appropriate time as may be deemed necessary by the authorities. As a result, when discussing development in the less developed countries (LDCs), Jhingan (2007: 414) maintained that:

> It is universally recognized that in order to overcome the rigidities in inherent in an LDC, the state must play a positive role. It cannot act as a passive spectator. The problems of LDCs are of such magnitude that they cannot be left to the free working of the economic forces. Private enterprise is unable to solve them because it does not exist in the modern sense of the term. State action is, therefore, indispensable for the economic development of such countries, in the sense of the term.

As a country strives to develop, the existence of certain soft infrastructures, such as constitutional practices and existence of law and order to guarantee conduct of business deals, are paramount. This means that such documents as the Petroleum Investment Bill (PIB) must necessarily be passed for investors’ confidence to rise. With the subsidy in place, no IOC would like to participate in the upstream or downstream sectors. International investors would want to be sure that every government interest is divested before they come in. Every government desires may only be represented on the PIB. Leaders should pursue policies that may attract foreign direct investment (FDI), and part of the process is deregulation by removal of subsidy or controls.
Part of the challenges facing the masses when the path to positive development (subsidy reversal) is chosen, is temporary hikes in cost of foodstuff and other necessary goods and services. The government is mitigating the transportation difficulties, but time is require to see the effects. Therefore, the Nigerian people have confidence in the government. The government ought to sensitize the masses in such a critical matter as this.

The following diagrammatic illustration in Figure 3.1 (Development Continuum) and graphical presentation were supportive to elucidating the boom and doom, and the price swings respectively, and typified peculiar market characteristics. The left hand side (LHS) of the continuum depicts doom if subsidy regime is followed, while the right hand side (RHS) depicts boom.

Time Frame: 2012 – 2020

<table>
<thead>
<tr>
<th>Subsidy Regime</th>
<th>LHS</th>
<th>RHS</th>
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<tbody>
<tr>
<td>(-)</td>
<td>DOOM</td>
<td>(+) BOOM</td>
</tr>
<tr>
<td>Unemployment Conundrum</td>
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<tr>
<td>Low Capital Formation</td>
<td></td>
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<td>Rent seeking and corruption</td>
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<td>Smuggling</td>
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<tr>
<td>Backwardness</td>
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<tr>
<td>Enriching the few rich</td>
<td></td>
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<tr>
<td>Bourgeoisie</td>
<td></td>
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</tbody>
</table>

Figure 3.1: Development continuum

From Figure 2.1, when the government decides for subsidy regime on the LHS, low capital formation, distortion in macroeconomic policies, rent seeking and corruption would increase. Smuggling activities to neighbouring countries and the few rich people would be the beneficiaries without tax to government. This is extreme capitalism or
bourgeoisie, whereas these were not envisaged by the masses, and according to Atojoko (2009:5), the actual amount of subsidy had always been shrouded in secrecy, while the economic sense of it remains controversial.

Figure 3.2: Before the construction of additional refineries

However, when the government decides to make the right decision by tilting to the RHS, it tantamounts to deregulation, market-oriented pricing systems, increases domestic productivity, increase tax revenue, rules and legal frameworks would be developed to protect the operators. If the government sticks to the RHS, then before 2020, the economic benefits of subsidy removal may be fully consummated with benefits flowing to the masses, who presently have to endure little pain
otherwise known as sacrifice, as an alternative foregone to reap the future benefits. But, if the government decision tilts to the LHS, then, the country, according to experts, would face the risk of total collapse, as the continual borrowing to fund consumption (subsidy) may not be sustainable.

Figure 3.2 shows the phenomena in the market conditions, which resolves price hike. Before the arrival of the new refineries which would be expected to boost domestic supply, we assumed that the pump price (Po), was equilibrium (Eo) price at the point where Do cuts So with quantity (Qo) demanded. Upon the announcement of the subsidy removal, retailers, members of independent marketers (IPM) decided to withhold supply, which shifted from So to S1, creating artificial scarcity and panic. This caused price to rise to a temporary
price (TP), with a temporary equilibrium (TE) causing the buyers to purchase less quantity, at temporary quantity (TQ). The consumers now adjust their fuel demand profile down-ward. Consequently, a new demand curve (D1) emerges which cuts the supply curve (S1) at a new equilibrium point (E1). It is, therefore, remarkable of note that the price (P1) is slightly above initial pump price (Po) but obviously below the temporary price (TP) which was too high when the subsidy removal impact was new. The beauty of a market economy is that given a particular time frame, prices will by and large adjust downward.

The situation here is quite different from Figure 3.2, which was driven by the consumers behavior to downsize their demand for fuel. In the situation shown in Figure 3.3, any attempt by the IPM to hoard fuel would fail because supply having increased with the commissioning of new refineries and the former four revamped and fully operational. Interpreting the diagram on Figure 3.3: **Full Capacity Utilization of Existing Four Refineries plus the New-Built Additional Refineries.** Initially at price Po, the supply curve (S0) cuts the regular demand curve for fuel (D0) at equilibrium point (E0), and quantity demanded was Q0. When IPM seek to withhold fuel supply in order to induce artificial scarcity, the supply would shift inward from S0 to S1 creating an equilibrium at TE and a new price at TP, the supply will automatically shift from S1 to S2, as the NNPC designated retail-outlets commence sales, following the release of fuel from the local refineries (old and new), thus cutting the regular demand curve (D0) at price (P1) which is even below the initial equilibrium price (Po). At the new pump price level (P1), the new equilibrium point (E1) and the new quantity demanded (Q1) would be a replica of the fuel market when the refineries were fully operational as planned by the incumbent government. This means that when the four refineries are fully operating, in addition to the newly constructed ones, the market forces would drive the pump price down from the present N97 per litre, to even below N65 per litre. This is the true market prospect anticipated in the deregulation process, ceteris paribus.
Management and accounting control deficiencies in Nigerian civil service

Nigeria, no doubt, is one of the most endowed nations the world over. She is rich in natural, mineral and human resources. Paradoxically, her citizenry were crowded out of her riches and ranks high in the poverty profile among the comity of nations. The problem is, however, with how her resources are managed. Onodugo (2000: 194) described it as lack of integrity among most Nigerian government bureaucrats, adding that, “integrity is the inner conviction which helps to deter one from doing what is wrong or gaining an undue advantage over things that belong to all. Most people in Nigerian management crew regard everything but integrity”. It is alarming that corruption and looting are norms rather than exceptional behavioural characteristics. The society accords recognition and respect to affluence and not integrity. Successive leader replicates error or mistakes or control loopholes that engender corruption and looting of public treasury in breach of trust.

Owolabi (2007: 11) captured the mindset on corruption of government officials when he stated that, “Economically, misallocation of resources is worsened by corruption, and government officials will not press for change in the regulations from which they enrich themselves”. This may have been the case with the subsidy scam, where successive Nigeria presidents (mainly military dictators) perpetuated the fraud. Olatunde (2007: 20) sounded a warning that, “if urgent measures are not taken, concerted in some cases, to curtail its almost intractable dimension, corruption would frustrate the efforts of governments, with telling effects on the political and socio-economic well-being of the societies”.

The phenomena antecedental to the public street protest was a subsidy fraud. There were obvious neglects which attended the initial signals of the subsidy saga by the past leaders. Atojoko (2009), tried to capture it as follows: “The general feeling is that subsidy, rather than benefit the army of poor ordinary Nigerians, has over the years been a conduit for siphoning public funds by a cabal comprising
government officials and their cronies in the downstream sector of the petroleum industry.” Continuing, Atojoko (2007: 5) maintained that “the actual amount of subsidy had always been shrouded in secrecy, while the economic sense of it remains controversial.”

Based on the wide spread corruption, conducting government business degenerated so much by the year 2000. No serious attention was paid to Public Service Rule Financial Regulations and Ethics and Norms because of selfish reasons. In the 2000, however, Federal Government commissioned the World Bank to collaborate with some private sector specialists to study Financial Systems and General Procurement – related activities in the country. The essence of which is to assist Nigerian government “with a process of enthroning efficiency, accountability, integrity and transparency in government procurement and Financial Management Systems” (Ekpenkho, 2003: 18). Some lacunas in the Nigerian Financial and Procurement Accounting procedures are:

1. Lack of modern law on public procurement and permanent oversight and monitor purchasing entities.
2. That the Finance (Control and Management ) Act 1958, together with Financial Regulations which set basic rules for managing public expenditure have gaps, deficiencies, and faulty implementation of existing regulations on procurement (eg lack of permanent arrangement for control and surveillance), which create opportunities or loopholes for bribery and corruption.
3. That procurement is often carried out by staff substantially lacking in training.

Moreover, Okwesili (2004) pointed out that the absence of economic cost/benefit analysis of the government projects was appalling. A government that seeks to pursue reforms for human development, must entrench adequate checks and balances in the disbursement procedures, and systems, if the reforms must be sustained. According to Oguonu
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(2011: 28), “It is necessary that legislators should play a leading role in enthroning openness, accountability, probity and transparency.”

The ineptitude observable in the Nigerian management of public wealth is an aberration of international order, that ridicules Nigerian elites in the comity of nations. Avuru (2009: 11) argued that for over 15 years the NNPC has demonstrated beyond all reasonable doubt that it is incapable of consistently and efficiently operating these refineries to guarantee uninterrupted supply of petroleum products. The distribution of products remains a problem. Testifying to the weaknesses of the grandiose oil giant (NNPC), Muyiwa (2009:5) stated that NNPC, over the years, has been everything but efficient and transparent and that it has been adjudged to be the third most corrupt agency in Nigeria after Nigeria Police Force (NPF) and Power Holding Company of Nigeria (PHCN). Antecedental phenomena showed that the subsidy which was portrayed as a benefit to the masses was a monumental fraud. The subsidy fraud according to Agbakoba (2012), Oguonu (2011), Okwesili (2011) and Atojoko (2009) was fraudulent and emanated from the weak legal and financial frameworks which failed to checkmate, indict and prosecute culprits.

Amidst distractive mischief of the Islamic Sect (Boko Haram), amicable way of peaceful resolution of the subsidy palaver may be the alternative dispute resolution (ADR) option rather than calling out names behind the authorization of payments of the fraudulent subsidy. Consequently, truth and reconciliation may be implied in the way to resolving the hot burning issue, as the Nigerian masses (inclusive of NLC, TUC and CSOs among others) are eagerly waiting to hear not only the names of the bad eggs in the leadership of this nation who perpetuated the subsidy fraud, but also their prosecution.

Truth and reconciliation implied
The approach to resolving the subsidy saga resonates with Public Relations (PR) ethics of conflict and crises resolution. However, the Nigerian public must be properly educated about the hard facts that guided government’s decision to douse the issue, even though
unprovoked attacks have continued in the northern parts of the country; crises and conflicts are bound to occur in any organization or government. Unfortunately, they attract negative publicity and tension. Managing such volatile situations creatively and effectively without allowing them to disrupt normal operations, especially in the face of many reform programmes in the pipeline agenda of the government, is a major task of PR.

Emeka (2011) states that “Conflicts bring out the creativity in man as he thinks out ideas that will help him challenge the opponent and defend himself. Conflicts bring change because the people involved never remain the same after”. However, Nkwocha (2004: 97) submits that poor crisis and issues management affect public perception, credibility, image an reputation of a corporate organization or government adversely. The facts surrounding the subsidy saga are very dicey and appear sacrosanct. It requires care and tactics to douse. The basis of the idea of strategic forgiveness is the fact that the magnanimity a leader demonstrates must be highly principled. In the developed countries, security system has gone digital. Fundamental to this digital system in security and conflict issues is the place of the brain or intelligentsia. The emphasis is how to win war without fighting. This was borne out of the realization that conflict is a negative phenomenon.

According to Odigbo (2007: 201), “The major problem is the people to whom the masses entrusted power, hence their fate, lives and future into their hands – the political class. Monumental rigging of elections has been enthroned as a national culture, much to the smear of the nation’s image abroad”. The Nigerian polity was for long characterized by politically-motivated assassinations, murders or bloody death of one kind or the other. Added to these is the terrorism by Boko Haram (an Islamic Sect). These are the ills of past military administration, which may have groomed or bred militants for scoring one political goal or the other to truncate development reforms.

The issue of subsidy removal came up as a pragmatic economic development decision that ought to be applauded, except for the
temporary hardships which was exacerbated by the extreme capitalist cultures of some Nigerian traders in the drive for profiteering. The culprits behind the subsidy saga may have been the predecessors of the present administration. Agbakoba (2012), in Agande and Ovaukporie (2012:14), attributed the deteriorating state of the economy to failure of successive governments to implement various laws made to govern the system. This brings to the lime-light the delays of the Upper and Lower Houses in the passage of bills.

Subsidy has been found to be a misnomer, but the lacuna in checks and balances in the payments and accounting procedures encouraged over-invoicing in the quantity of vessels with imported fuel. Sanusi (2011) was clear when he stated that the number of ship loads of ocean bound imports were very often inflated and charged to the States and Federal Government as subsidy. The subsidy palaver which attracted much publicity transpired to be a ruse for embezzlement of Federal, States and Local Authorities funds using the NNPC and its associates as a pliable conduit. So much money was siphoned by past heads of state has adversely affected the building and development of both hard and soft infrastructural facilities, absence of which has hampered the growth and development of domestic economy.

Apart from the absence of essential hard-infrastructures such as roads, electricity generating transformers/turbines, etc soft-infrastructures such as passage of bills, effective laws and other frameworks that foster implementation and sustainability, were, however, not adequately installed in Nigerian situation. Nigeria has been jointly and severally criticized for not being able to harness human and material resources for the ultimate well-being of her citizens (Waku, 2007:187). PR, as a communication-centered activity, is based on open discussion, truthful information and respect for the right of the individual to full information which is the basis for free discussion and decision making. However, the level of development of minds of the people varies widely and free discussion may not engender or elicit all the truth that may lead to reconciliation. Another
factor is the character of the personalities involved. For example, Heads of State (whether past or present) have immunities that appear to insulate them from indictment.

**Methodology**

The cross-sectional, descriptive research approach was adopted. In addition to secondary information, primary data were generated by use of questionnaire, which contained two sections - the demographic section the technical section with ten structured or closed-ended questions consisting of a 15-item test instrument. The respondents were grouped into four, and the distribution pattern ensured that each category received a fair share of the questionnaire in a simple random sampling technique. The four categories selected, who cut across petrol users, were Bus/Taxi Drivers (33%), Okada/Keke Napep (17%), Civil Servants (33%), and others (17%). The spatial distributions in Enugu metropolis covered Obiagu, Old Park, and Abakpa. Five hypotheses were tested, using the chi-square statistical model.

**Results**

Sixty-seven per cent (67%) of the respondents were males, while (33%) were females. The age distribution was 7%, 33%, 10%, and 17% for 10-20, 21-30, 31-40, 41-50 and 51-60 years respectively. The highest academic qualifications of respondents were FSLC (23%), Trade Test (33%), WAEC (33%) and Bachelor degrees (11%). Their income was between ₦15,000-₦30,000 per month.

**Test of hypotheses**

Five hypotheses were empirically tested in this study using the chi-square statistical model and the result were analyzed as below:

\( H_1 \): Subsidy is a democratic dividend or benefit to Nigerian masses.

**Table 3.2: Subsidy as a democratic dividend to Nigerians**

64
PMS subsidy removal in Nigeria: Issues and challenges

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondent category</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>Bus/Taxi drivers</td>
<td>7</td>
</tr>
<tr>
<td>2</td>
<td>Okada/Keke Napepe</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Civil Servant</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
<td>5</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>Percentages</td>
<td></td>
<td>73%</td>
</tr>
</tbody>
</table>

*Source:* 2012 Field Survey

Where $X^2 = \frac{(fo-fe)^2}{fe}$, $X^2 = 3.27$, $P = 0.001$, $df = 3$, $XU^2 = 7.81$

The chi-square table of critical value ($XU^2$) is greater than the calculated chi-square. Thus, $H_1$ was rejected. This means that subsidy, indeed, is not a democratic dividend or benefit to the masses.

**H$_2$: Subsidy removal should be reversed**

### Table 3.3: Reversal of subsidy removal

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondent category</th>
<th>Response Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td>1</td>
<td>Bus/Taxi drivers</td>
<td>8</td>
</tr>
<tr>
<td>2</td>
<td>Okada/Keke Napepe</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Civil Servant</td>
<td>8</td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
<td>5</td>
</tr>
</tbody>
</table>
Where $X^2 = \frac{(fo-fe)^2}{fe} = 8.07$, $P = 0.001$, $df = 3$, $XU^2 = 5.99$

Since the calculated chi-squared ($X^2$) is greater than the chi-square value in the table, $H_2$ was accepted. This suggested that the generality of opinion of Nigerians, whose level of understanding of the technical implications of subsidy was conjectured, sided with the reversal of subsidy removal policy.

**H3:** Government should repair existing refineries and build new additional ones to increase local supply

**Table 3.4:** Building more local refineries would reduce pump price drastically

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondent category</th>
<th>Response Rate</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1</td>
<td>Bus/Taxi drivers</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>Okada/Keke Napepe</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>3</td>
<td>Civil Servant</td>
<td>10</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
<td>5</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td>Percentages</td>
<td></td>
<td>100%</td>
<td>-</td>
</tr>
</tbody>
</table>

*Source:* Field Survey 2012

Where $X^2 = \frac{(fo-fe)^2}{fe} = 15.0$, $P = 0.001$, $df = 3$, $XU^2 = 11.34$

The calculated value of chi-square ($X^2$) is greater than the critical table value ($XU^2$). Therefore, $H_3$ was accepted. Thus, the Government should repair the existing refineries and build additional ones to increase domestic supply. This is illustrated in Figure 3.3 for new refineries and repair of the old ones scenario. The effect would be
**PMS subsidy removal in Nigeria: Issues and challenges**

increased supply which would push the pump price further downward below the current ₦97.00 per liter.

**H4:** The timing of the subsidy removal was wrong

**Table 3.5:** Timing of the subsidy removal

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondent category</th>
<th>Response Rate</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bus/Taxi drivers</td>
<td>9</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Okada/Keke Napepe</td>
<td>4</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Civil Servant</td>
<td>6</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>22</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Percentages</td>
<td></td>
<td>22%</td>
<td>27%</td>
<td></td>
</tr>
</tbody>
</table>

*Source:* Field Survey 2012

Given that \( X^2 = \frac{(f_o-f_e)^2}{f_e} = 3.27, P = 0.001, df = 3, XU^2 = 7.81 \)

\( H_4 \) was rejected. This implies there would be no suitable time for the subsidy removal in order not to attract protest.

**H5:** Government did not make appropriate consultations on the subsidy issue before its removal

**Table 3.6:** Government inappropriate consultation on subsidy issue before its removal

<table>
<thead>
<tr>
<th>S/N</th>
<th>Respondent category</th>
<th>Response Rate</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Bus/Taxi drivers</td>
<td>10</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Okada/Keke Napepe</td>
<td>5</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Civil Servant</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Others</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
Given that $X^2 = (fo-fe)^2/fe = 4.27$, $P = 0.001$, $df = 3$, $XU^2 = 16.27$

The calculated $X^2$ is less than table value of $XU^2$, $H_5$ was rejected. Thus, the government adequately consulted with the key stakeholders of the nation.

### Discussion of findings

Result showed that Nigerians did not see the subsidy on the pump price of PMS as democracy dividend or benefit to the masses. This concurs with the literature views that subsidy is a fiscal policy instrument used to stimulate production and investment within a domestic economy (Todaro and Smith, 2001). Therefore, seeing the subsidy as right of the masses was not responsible for anti-subsidy removal upheavals. Rather, mistrust for government was. One of the greatest factors that fostered distrust in government and their development policies is the tendency to replicate predecessors’ mistakes and errors. The public perception of subsidy was also conjectured by a number of factors, which included knowledge gap, political interest groups, pecuniary interest of the sponsored few. Knowledge gap shows in the majority of Nigerian being illiterate, while graduates were often disconnected from what they learned. Political interest groups combined with NLC and TUC to further the vendetta interests of the politicians defeated in recent polls. Pecuniary interest of the sponsored few manifested in some protesters under the guise of labour which concealed their heinous motives of working for the subsidy cabals, who had hired them.

Nigerians sided with the reversal of subsidy removal policy. Little wonder, the pump price value was subsequently reduced by the government to ₦97 from ₦138 per liter. This halted the protest and labour strike.
Nigerians want the Government to repair the existing refineries and build additional ones to increase domestic supply, as a prelude to removal of subsidy. This showed support for subsidy removal, after adequate mitigating measures have been put in place. Little wonder, the reduction from =N=138 to =N=97 per litre was accepted by Nigerians, 49% up from the former =N=65.

No time would have been suitable for the subsidy removal in order to avert protest. This can be attributed to the masses being grossly misinformed by detractors on the issue of subsidy. However, experts who were sympathetic with the government’s decision, were of the view that the refineries and other connected infrastructures should have been in place before the subsidy removal to pre-empt the fuel speculators. On their side, the government considered the funding of these capital intensive investments and sought to remove subsidy to attract investors.

Results showed that the federal government adequately consulted with the key stakeholders of the nation before removal of the subsidy. The state governors, the federal executives, the civil society groups, the labour unions and the national assemblies were fully consulted. The level of consultations achieved succeeded in minimizing, but not averting, the protests. What many saw in the protesters was hunger and frustration of unemployment and under-employment, while others may have been on a vendetta mission. No time would have been suitable for the subsidy removal in order to avert protest, contrary to accusation of wrong timing.

**Conclusion and recommendations**

Diverse interest groups polarized and politicized the removal of subsidy of the pump price of PMS, leading to heating of the system and its partial success so far, after mitigating measures for transportation were put in place. This study succeeded in feeling the pulse of a cross-section of PMS users on the removal of the subsidy. Surprisingly, it found out that the federal government adequately consulted with the key stakeholders of the nation before removing the
subsidy, contrary to the claims of many stakeholders. Nigerians want the Government to repair the existing refineries and build additional ones to increase domestic supply of PMS, contrary to speculations that they did not want the subsidy removal. However, they sided with reversal of the subsidy removal policy, in order to give room for adequate preparations. And, Nigerians do not see fuel subsidy as a democracy dividend, contrary to misinformation from the carbals.

The following recommendations are proffered:

1. Increase the supply side of fuel in the NNPC designated filling stations.
2. Reverse the wrong classification of over-invoiced bills which were mis-named subsidy and pursue recovery of the fraudulent payments.
3. Design a publicity campaign to cure the misguided psyche of the electorates who may have adhered to the belief that subsidy is a kind of benefit or favour from government.
4. Restructure our educational curriculum content to impart elementary knowledge on Oil and Gas Studies.
5. Reverse the public perception of government development policies by publicizing some of the implemented campaign promises with less rhetoric.
6. Institute adequate management and accounting control with checks and balances to ensure proper verification of procurement vouchers and procedural compliances.

References

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PMS subsidy removal in Nigeria: Issues and challenges


TOWARDS ACHIEVING MILLENIUM DEVELOPMENT GOALS IN NIGERIA: DEVELOPMENT OF E-LEARNING ACQUISITION ASSESSMENT INSTRUMENT

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Department of Science Education, University of Nigeria, Nsukka

Abstract
This paper focused on the development and validation of an instrument for assessing the extent of e-learning acquisition by learners in tertiary institutions in Nigeria. The documentary research design was employed. Area of the study was the University of Nigeria, Nsukka. The entire population of academic staff was used in the study. Items of the instrument were framed based on a criterion-referenced bases, using the key platforms involved in e-learning.

Introduction
Information communications technology (ICT) has turned the whole world into a small village. It has also opened up a world of incredible possibilities in many sectors, especially in education. Today, Nigerian universities, and many other sectors of the nation’s economy are facing many challenges that are indeed significant. Some of these challenges include the rapidly growing population, low and uneven education participation, poor quality of education, increasing demand for higher education, quest for technological, economical and academic developments, to mention but a few.
The issues in e-learning have been found to be veritable tools for addressing these significant national challenges. When coupled with the increasing adoption of e-learning in developed and developing countries of the world, the tools for e-learning have become very imperative and indispensable for meaningful technological, educational and economical breakthrough of any nation. These are the goals of the Millennium Development Goals (MDGs), which Nigeria also asserted to their actualization.

The development of benchmarking activities that will help in the beginning of the processes of identifying some key factors that will lead to successful e-learning programmes and objectives in colleges and universities in the country have become very necessary for this country, especially at tertiary levels where e-learning programmes recharges are currently in vogue. The design of an assessment instrument bringing to limelight the much expected success or failure of the e-learning enterprise has become important for monitoring and evaluation of such programmes. This study, therefore, presents an objective type of instrument for assessing the extent of learners’ acquisition of information communications technology e-learning programme package that can be used in colleges and universities in the country.

Statement of the problem
E-learning has been recognized globally as an indispensable tool for facilitating teaching and learning both in colleges of education and universities in Nigeria. The open university system, which has become functional in the country, became successful principally on e-learning principles and practices. The strong desire by universities in this country, especially the University of Nigeria, Nsukka, is to use e-learning platforms in all her academic and administrative operations. This has made it very imperative for an e-learning based objective type ICT-facilitated, the test instrument to be involved for use in e-learning acquisition programme evaluation and maintenance.
Purpose of the study
The main purpose of this study was to develop and factorially develop an objective test type ICT-facilitated e-learning instrument for use in assessing the extent of acquisition of e-learning programme package. Specific objectives of the study were:

1. To develop an objective type of ICT-facilitated e-learning test instrument for easy acquisition of basic ICT education.
2. To factorially validate the developed instrument for effectiveness

Research questions
The questions that guided the study were:

1. What are the items of objective test of the ICT e-learning questionnaire instrument develop (ICT-EQQI)?
2. What are the indicators that the instrument is factorially valid and reliable?
3. What are the tools for effective lesson delivery?
4. What are the benefits of e-learning to the learner?
5. What are the disadvantages of the e-learning to education/learner?

Significance of the study
The students/learners engaged in acquiring the ICT-facilitated e-learning programme package will benefit from the developed instrument, which will serve as a ready tool for assessing and evaluating them. The instrument will also be of benefit to institutions in Nigeria that are fast adopting the ICT-facilitated e-learning programme package in the teaching and learning enterprise. Assessors in developing countries will also benefit from the study, which provides them an easy assessment tool for e-learning programme package now in vogue.
Scope of the study
The study was limited to the assessment of the e-learning readiness of colleges of education and universities on the areas of administrative, academic (teaching and learning) and technological readiness of faculties and departments of tertiary institutions as well as the readiness of individuals. The study is limited to the acquisition of basic knowledge in the cognitive and psychomotor levels of the ICT-facilitated e-learning programme package.

Assumptions made in the study
It is assumed that the ICT facilitated e-learning programme packages for the beginner ICT compliant person can be applied to all levels of the tertiary education in Nigeria.

Limitations of the study
The study is limited to the extent that the items of the instrument were adapted from Geo Sink International (2009) instruments used in assessing ICT e-learning readiness for the beginner ICT compliant person in developed countries.

The items of the ICT-facilitated e-learning objective test for the questionnaire instrument developed in answer to research questions 1, 2 and 3 ICT-EOQI

Cluster A: items on basic knowledge of ICT E-LEARNING
Kindly answer the following questions using (✓) to indicate your chosen response from the options A-D.

1. What is the full meaning of ICT
   A. information communications technology
   B. information committee technique
   C. information continuing technique
   D. instructional committee technology

2. The term e-learning means
Ezeugwu: *E-learning acquisition assessment instrument*

A. Electronic learning B. Educational orientation learning
C. Electricity learning D. Even-distributed learning

3. All, except one of these can also be used to describe e-learning
   A. Computer based training B. Web based learning
   C. On-line based learning D. Every day learning

4. ICT e-learning can be delivered via these, except
   A. intranets B. Audio and video tape
   C. CD-ROM D. Radio and TV

Please, mark (×) any of the following options: STRONGLY AGREE (SA), AGREE (A), and DISAGREE (D) STRONGLY DISAGREE (SD), which mostly corresponds to your chosen response to the following items.

5. ICT e-learning covers a wide range of activities from supported learning to blended or face-to-face learning-to-learning that occurs 100% on-line (SA, A, D, SD).

6. On-line distance education is well matched with ICT e-learning and flexible learning and also used for the in-class teaching and learning (SA, A, D, SD).

7. On-line distance education is also well matched with in-class teaching; blended learning; outreach programmes and micro teaching exercises (SA, A, D, SD).

8. An e-learning course is a course in which learning is facilitated and supported using ICT (SA, A, D, SD).

9. ICT e-learning course is rarely attended face-to-face (SA, A, D, SD).

10. In ICT e-learning, most teacher-learner or learner-to-learner interactions are done via computer networks (SA, A, D, SD).

11. ICT e-learning motivates and supports students to take responsibilities for their own learning (SA, A, D, SD).

12. Through ICT e-learning assessment and mailing, work loads are reduced through the use of computer-assisted assessment (CAA) and computer-mediated communication (CMC) only (SA, A, D, SD).
13. ICT e-learning does not encourage collaborative learning (SA, A, D, SD).
14. ITC e-learning enhances quick amendment and updating of materials (SA, A, D, SD).
15. ICT e-learning leads students to feel isolated or make them miss some social interactions (SA, A, D, SD).
16. ICT e-learning guarantees that all courses can be learnt on-line (SA, A, D, SD).
17. ICT e-learning requires that the instructions must always be available on demand (SA, A, D, SD).

Cluster B: Items on lesson delivery via ICT e-learning

Item 1 answers to the research questions 1, 2 and 3 content

Kindly answer questions 18-27 by marking (√) against any of options A-D that marhes your chosen response.

18. E-learning can be delivered using any two of the following ICT platforms except
   A. CD-ROMS  C. Internet  C. Intranet  D. White Board  
   A (A, D), B (B, C), C (C, D), D (A, B, C, D).
19. The following are e-learning management systems
   A. White Board  B. Story Board  C. Moodle  D. Webc/jE. Sahia, Kawl  
   (SA, A, D, SD).
20. UNN-e-learning system is built on a course management system (CMS) called:
   A. Moodle  B. Yahoo  C. Google  D. CD-ROM
   (A only), (A/B only), (A and D only).
21. The full meaning of Moodle is
   A. Modular Object Oriented Dynamic  
   B. Modular, Object Ordered Dynamic  
   C. Modular Oriented Dynamic for Learning  
   D. Modular Oriented Data Learning Electrically
   (A ONLY), (B ONLY), (C ONLY), (D ONLY).
22. An activity package in e-learning where people (i.e. The teacher and students) can meet at the same time and send text messages is
Ezeugwu: E-learning acquisition assessment instrument

called -------
A. Chat Room       B. Home       C. Web Sight
D. Window

23. A single poll used by teachers in e-learning for getting feedback from students is called ------
A. Intranet       B. Internet      C. Choice      D. Windows

23. The command that helps in saving document in e-learning is:
A. Control       B. Delete        C. And        D. Home

24. A web based instrument with a wide variety of questions types such as multiple choice, true/false short answers and matching used in e-learning is called -------
A. Quiz       B. Home       C. Internet      D. Intranet

25. A collaboratively edited webpage is called -----------
A. Wiki       B. Web     C. Network     D. Diaphragm

26. Which of these is not one of the dimensions of e-learning evaluation?
A. Organizational       B. Environment      C. Pedagogy
D. Technology

27. Lessons are delivered most successfully to learners I e-learning via.
A. Chalk Boards       B. White Boards    C. Slides only
D. White Boards/Slides/Flashes

CLUSTER C: Benefits of e-learning to education

28. To what degree do you agree that the following are major advantages of e-learning to institutions and individuals?
A. reduction of work load       B. making information available on-line
C. Reduction of time frame       D. Reduction of cost
(SA, A, D, SD).

29. Easy amendment and upgrading of materials is observed in e-learning       (AS, A, D, SD).

30. E-learning enhances easy communication with individual and group of students       (SA, A, D, SD).

31. E-learning makes it possible to use a wide range of resources that may have been difficult and very expensive to use       (SA, A, D, SD).
32. E-learning and traditional method of instruction use the same types of evaluation modes (SA, A, D, SD).

33. Data collection using e-learning is the same with traditional method
(Strongly Agree (SA), Agree (A), Disagree (D), Strongly Disagree (SD)).

34. The following are e-learning evaluation models
   A. Management Model   B. Kirk Patrick Model
   C. David’s’ Stufflebeam CIPP Model

35. E-learning makes it possible for learners to study with computers at
   A. Home   B. School   C. Library
   D. Where There Are Internet Services
   (1) A, C (2) A, B (3) B, C (4) D only

36. Options to select learning materials that meet learners’ level of knowledge and interest are in e-learning said to be:
   A. Very Highly Enhanced   B. Just Enhanced
   C. Not Enhanced   D. Not Very Enhances Through e-learning (SA, A, D, SD)

37. Self spaced-learning modules disallows learners to work at their own pace (SA, A, D, SD).

38. Different learning strategies (visual, auditory, tactile, illinesthic) can be addressed through e-learning (SA, A, D, SD).

39. Provision of frequent and timely individual feedback information through e-learning is -------
   A. Highly Assured   B. Assured   C. Not Assured
   D. Not Always Assured Through e-Learning (SA, A, D, SD)

**CLUSTER D: Disadvantages of e-learning**
Which of the following opinions do you agree with regards to e-learning programme?

40. Unmotivated learners or those with poor study habits may
   A. Fall Behind   B. Not Fall Behind   C. Be Motivated
   D. Be Disinterested More
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(SA, A, D, SD)

41. Slow or unreliable internet connections can be
   A. Joyous   B. Very Joyous   C. Accommodated
   D. Very Frustrating.  

42. Intranet is an ICT platform that has very limited area of coverage (SA, A, D, SD).

43. Internet is an ICT platform that has very wide area of coverage (SA, A, D, SD).

44. Power point presentation can be used in the following areas:
   (1). Seminar Presentation; (2). Teaching and learning;
   (3). In project designing.
   A. 1, 2, 3   B. 1, 3   C.3 Only   D. 2 Only

45. To remove an unwanted item in a computer, use the command icon:
   (1). Delete; (2). Backspace; (3). Table eraser
   A. 1, 3 only   B.1, 2 only   C. 2, 3 only   D. 1, 2, 3

46. To produce a table, use the icon: (1).draw table ; (2). Insert table;
   (3). Table eraser;
   A. 1, 3, only   B. 1, 2 only   C. 2, 3 only   D. 1, 2, 3

47. The short cut for highlighting all documents in a page is:
   (1). Control + A; (2). Control + Z; (3). Control and drag cursor
   A. 1, 2, 3   B. 1, 2 only   C. 1, 3 only   D. 1, 3 only

48. To copy a document from the computer we use:
   (1). Control + A; (2). Right click and click copy; (3). Left click;
   (4). Control + F.
   A. 1, 4only   B. 1 only   C. 2, 3 only   D. 1,2only

49. Font size of a document means:
   (1). The gap(s) between adjacent statements;
   (2). The gaps between adjacent;
   (3). The gap(s) between tables in a page.
   A. 1, 2 only   B. 1, 3, only   C. 1 only   D. 2 only

50. The short cut for undo command is:
   (1). Control + Z; (2). Control + C; (3). Control + L
   A. 1 only   B. 1, 2 only   C. 1, 3 only   D. 1, 2, 3
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- 48. D
- 49. D
- 50. A

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TOTAL QUALITY MANAGEMENT: CONCEPT, REALITY AND CHALLENGES

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Abstract
This paper examines the background history and concept of Total Quality Management (TQM), a comparison of TQM with Business Process Reengineering (BPR) and Six Sigma, challenges facing TQM implementation in contemporary organizations, and offers a number of strategies/success characteristics/models for successful TQM implementation thereby enhancing the chances of turning TQM rhetoric/concept into reality in modern organizations. Recommendations include a culture review by management to accommodate TQM introduction/implementation and linking quality initiative objectives with departmental and organizational strategy to decrease the likelihood of failure.

Introduction
Organizations are usually involved in manufacturing of products or provision of services that are offered for sale to potential customers
and clients. There are major issues to be considered in the sale of these products or services, which include price and quality. To Heizer and Render (1993) quality is often the major issue because poor quality can be very expensive for both the producing firm and the customer. It is therefore imperative for every organization’s operation manager to ensure that his or her firm delivers a quality product or service at the right place, at the right time and at the right price.

In view of this, the continuously growing competition in the market place has forced many contemporary Nigerian organizations to start focusing on quality improvements and cost reduction in order to stay competitive. However with the continued growth in competition, managers were forced to pursue corporate strategy that is customer-focused (Oni, 1998). Thus, a systematic and continuous work with quality improvement and quality methods constitutes central activities that should be implemented in an environment often characterized by limited resources available, high workload and by a workforce where few, if any, employees are familiar with quality methods.

Thus, today customer expectations are rising. Customers choose from among the competing firms, which produce or offer the best products and services for their money. This trend towards getting customers satisfied at consistently lower real costs stimulated interest in the TQM concept. TQM is the management concept based on the principles of total customer satisfaction, employee involvement, continuous improvement, and long-term partnerships with suppliers and customers.

The concept of TQM has dominated the management scene for some decades. Many organizations all over the world have tried to use TQM to achieve increased competitiveness and improved financial results. Some organizations have succeeded. For instance, quality award recipients show better financial results than comparable ‘average companies’ (Hendericks and Singhal, 1997). However, many organizations have also failed (Cao, Clarke and Lehaney, 2000). In other words, there have been significant debates regarding the success of TQM in business organizations. These have been between those
supporting it for bringing improvements in performance and those considering it a failure and fad.

In view of this, in a situation where there is a strong strategic intent to promote quality as a strategic advantage through TQM, there is lack of achieving this due to poor communication and policy infrastructure, lack of quality strategies to act as a foundation and continuing misperceptions of TQM by company leaders. Besides the above challenges, there are several other reasons for these mixed results from TQM, and the failures have tarnished the TQM star and have intensified the search for turning the TQM rhetoric into reality. In other words, working around cum overcoming the challenges facing TQM through effective and efficient strategies for TQM implementation and the success characteristics/models associated with it will turn the TQM rhetoric into reality.

Against this background, this paper examines TQM concept, reality and challenges. After this brief introduction, the rest of the paper is structured as follows: background history of TQM, concept of TQM, comparison of TQM with BPR and Six Sigma, challenges of TQM implementation in contemporary organisations, reality and models of TQM implementation, recommendations and conclusion.

TQM: Background history
The origin of the name TQM is disputed (Martinez-Lorente, Dewhurst and Dale, 1998: 378-386). The Quality Movement has a long history. Often its development is described in terms of a four-phase model consisting of quality inspection, quality control, quality assurance and total quality management (Bergman and Klefjo, 2003). Other descriptions of the development of TQM include two schools of thought: the Deterministic School of Thought and the Continuous Improvement School of Thought. The Deterministic School of Thought evolved around a deterministic view of reality with a belief in the existence of one best way. This means that conformance to standards is the best way to meet customer requirements. On the other hand, the Continuous School of Thought is founded on a reality full of
variation, with an awareness of improvement potential in every aspect of work. Continuous improvements are used to reduce the impact of environmental changes and other variations. The Deterministic School has its origins in Taylorism and was developed roughly via Philip Crosby and the international ISO 9000 series of standards. The continuous improvement school has Walter A. Shewart, Armand Feigenbaum and Edwards W. Deming as some of its figure-heads. To Bergman and Klefsjo (2003), the two schools are currently converging.

Thus, the basics of what we today call TQM may be dated to the early 1950s and are often referred to as based on fundamental works from people like Edwards W. Deming, Joseph M. Juran and Kaoru Ishikawa. Learning the basics from Deming and Juran, Japanese companies extended and customized the integrated approach and culture of TQM. Arguably, the economic growth and manufacturing dominance of Japanese industries in the 1980s can be attributed to the successful application of TQM (Basu, 2004: 44-64]. Much of the Japanese success was based on the three fundamental tenets of Juran’s view of quality programmes; upper management leadership of quality, continuous education on quality for all, and an annual plan for quality improvement and cost reduction- foundations that, by the way, still are valid today.

**Concept of TQM**

Different definitions and descriptions of TQM have been presented over the years. Dale (1999) is of the view that TQM is a management approach of an organization, centered on quality, based on the participation of all its members and aiming at long-term success through customer satisfaction, and benefits to all members of the organization and to society. Several definitions with a system emphasis have been suggested. One of these definitions is that from Hellsten and Klefsjo (2000), who defined TQM as “a continuously evolving management system consisting of values, methodologies and tools, the aim of which is to increase external and internal customer satisfaction with a reduced amount of resources”. Based on this
definition, TQM can be characterized by a number of values, illustrating how to act in professions. The values include continuous improvements, fact-based decisions, participation of all the staff, process focus, and lastly, a customer perspective in what is done.

TQM methodologies include quality function deployment, quality circles, employee development, supplier partnership, benchmarking, process management, design of experiment, self assessment, and policy deployment. The tools include relation diagram, factorial design, control charts, Ishikawa diagram, criteria of MBNQA, ISO 9000, process maps, and tree diagram. It should be noted that the listed methodologies and tools are just examples and not a complete list.

Basically, TQM has two ingredients: employee involvement and quality circles. Employee involvement means including the employee in every step of the process - from product design to final packing. Quality control circles is a situation in which a group (between 6 and 12 employees) volunteer to meet regularly to solve work-related problems. The members (all from the same work area) receive training in group planning, problem solving and statistical quality control (Heizer and Render, 1993).

Tobin (1993: 343-363) is of the view that TQM is a totally integrated programme for gaining competitive advantages by continuously improving every facet of organizational culture. TQM is thus, a management concept for quality improvement based on the principles of total customer satisfaction, employee involvement, continuous improvement, and long-term partnerships with suppliers and customers.

However, TQM concept and its definitions are not without controversy. Boaden (1997: 153-171) claimed that attempting to define TQM is like shooting at a moving target: as it became more widely practiced, and other initiatives emerged, the emphasis on different aspects changed. Foley (2004) summarized some of the criticism against TQM and claimed in particular that it does not have a generally accepted definition and has failed to deliver promised results. Due to

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the criticism, consultants and quality promotion institutions are trying to expunge “quality” from their lexicon. TQM now appears under a different guise, often with new ‘catchy’ slogans, but its substance remains the same. Singhal (2006: 4) observed that new paradigms/concepts, such as re-engineering, customer-centered organizations, process-oriented organizations, learning organizations, supply chain management, Six Sigma, among others that have recently surfaced are basically a spin-off of key TQM concepts packaged and labeled differently. For example, Six Sigma was the centerpiece of Motorola’s TQM initiative, but it is now being sold as something unique and different from TQM. Selling these paradigms was easy, given the controversy about TQM.

Comparison of TQM, BPR and Six Sigma

There are few studies that directly compare TQM and BPR. To Carr and Johansson (1995: 5), the origins of BPR can be found in the TQM concept. TQM is process focused and takes a holistic view of workplace activities, whereas BPR concentrates on selected vital processes. TQM is related but different from BPR. BPR builds on TQM. BPR is thus the fundamental rethinking and radical redesign of business processes to achieve dramatic improvements in critical contemporary measures of performance, such as cost, quality, service and speed.

Few studies also directly compare TQM with Six Sigma, and conclusions on the relationship differ significantly. Ricondo and Viles (2005: 323-354) compared Six Sigma and its link to TQM, BPR, Lean and Learning Organization, paying attention to their origins, values, methodologies and tools. Yang (2004:97-111) presented an interesting comparison between TQM and Six Sigma based on twelve dimensions; development, principles, features, operation, focus, practices, techniques, leadership, rewards, training, change and culture, and concluded, among other things, that the core values differ and suggested an integration of TQM and six sigma.
The term ‘Six Sigma’ arose from the relationship between the variation in a process or an operation and the customer requirements associated with that process. The fundamental thesis of Six Sigma is that variation is evil because a high level of variation means customers will not get what they want. Originally Six Sigma was developed as a set of practices designed to improve manufacturing processes and eliminate defects, but its application has been subsequently extended to other types of business processes as well. In Six Sigma, a defect is defined as anything that could lead to customer dissatisfaction. Bill Smith at Motorola in 1986 came up with the idea of inserting hard-nosed statistics into the blurred philosophy of quality. The programme cum concept was inspired by the Japanese work of Ishikawa, but also strongly influenced by Juran’s thoughts. Due to Six Sigma, Motorola managed to reduce their costs and variation in many processes and were an inaugural winner of American Malcolm Baldridge National Quality Award in 1988. Six Sigma is, thus, a process oriented way to reach improvements through reducing variation and measuring the financial output of each given project.

To Snee (2004), there are four aspects of Six Sigma that are not emphasized sufficiently in TQM. First, Six Sigma places a clear focus on bottom-line financial results, i.e. there is a clear focus on achieving measurable and quantifiable financial returns from any Six Sigma project. Thus, no Six Sigma project is approved unless the bottom-line impact has been identified, meaning that there is a clear project-by-project focus. Many projects have reported saving between USD 175,000 and up to USD 1 million. This bottom-line focus is central to strong and passionate management leadership and support. That is, the culture of Six Sigma demanded the engagement of the CEO and profit-and-loss managers. However, it should be noted that, in many cases, only projects referred to as ‘Six Sigma projects’ are investigated from a financial point of view. An investigation of successful Swedish companies revealed that the financial benefit from improvements projects related to TQM were not measured at all (Erickson and Garvare, 2005: 894-912).
Secondly, Six Sigma builds on improvement methods that have been shown to be effective and integrates the human and process elements of improvement. The human element of improvement involves continuous education of staff and subsequent full time commitment from the entire organization to improvement of projects. The third characteristic of six sigma that are not emphasized sufficiently in TQM is that it sequences and links the improvement tools into an overall approach - that is, DMAIC (Define-Measure-Analyze-Improve-Control) sequences and links key tools proven to be effective in improving processes. This means the highly data driven approach of Six Sigma. The fourth point is that Six Sigma creates an infrastructure of Champions, Master Black Belts, Black Belts and Green Belts that lead, deploy and implement the approach. The champions are not belts or analysts in any traditional sense of the word. Champions are responsible for keeping the Six Sigma programme focused within their business area. They select Black Belts, approve projects, set improvement targets and provide the resources needed to conduct the projects. However, from a statistical perspective, most of the ingredients/tools used in TQM as well as in six sigma are fairly old.

To Snee (2004) these tools include Gossett’s t-test developed in 1908, used among other things, to test statistical significance of effects of process improvements, Fisher’s Design of experiments (DOE or DOX) and Analysis of Variance (ANOVA) developed in the 1920s and used to analyze experimental data, Taguchi’s experimental designs used to achieve product and process robustness. Others include the control charts, statistical quality control (SQC) used to control and improve quality, and the Pareto charts. Many other methodologies and tools, statistical and non-statistical, such as Quality Function Deployment (QFD), Failure Modes and Effects Analysis (FMEA), Lean Management, Process Mapping and Project Management, are also employed in Six Sigma and TQM. Thus, Six Sigma has been described as ‘old wine in a new bottle’, since most of the tools
packaged in it have been around for several decades (Thawani, 2004: 655-664).

**Challenges facing TQM implementation in contemporary organizations**

There are numerous challenges facing TQM implementation in organizations. Such challenges include quality strategies to act as foundation and the continuing misperceptions of TQM by company leaders. In a situation where there are strong strategic intent to promote quality as a strategic advantage through TQM, another challenge to achieving this is poor communication and policy infrastructure. This means that continuous communication to everybody in the organization helps enormously in implementing the quality initiative. However, often times this continuous communication is not available due to poor communication and policy infrastructure - and this remains a challenge.

Furthermore, TQM implementation in organizations requires that management give employees a say in the production processes that they are involved. In a culture of continuous improvement, workforce views are invaluable. The challenge is that many businesses have barriers to involvement. For example, middle managers may feel that their authority is being challenged.

Another challenge facing TQM implementation in organizations is lack of change management skills by staff and lack of adaptability to a TQM culture. The key to success is to identify the management culture before attempting to install TQM and to take steps to change towards the management style required for it. Since culture is not the first thing that managers think about, this suggestion has often been missed or ignored with the resultant failure of a TQM strategy. Another way to look at this is that if members of an organization believe that a change to a TQM culture is something to be feared and avoided, then the TQM implementation is often reactive and haphazard.
TQM also focuses the business on the activities of the business that are closest to the customer – example, the production department where the employees face the customer. This can cause resentment amongst departments that previously considered themselves “above” the shop floor. This remains a challenge to a successful TQM implementation in organizations.

Many companies have failed to implement TQM successfully (Brown et al, 1994; Cao et al, 2000; Foley, 2004). Several explanations for this have been offered. Some writers blame the TQM concept itself for being vague (Knights and McCabe, 1997). Others believe that failure is more due to poor planning and implementation than to a vague management concept. Implementation of TQM is a complex process, since all employees starting with top management need to accept a fundamental organizational change (McAdam and Bannister, 2001: 88-107). Thus, as has been stated earlier, awareness of the fact that TQM implementation really means a thorough organizational development and cultural change seldom exist (Reed, Lemak and Mero, 2000: 5-26). Accordingly, the time, resources and work needed during the implementation are underestimated. Furthermore, Lau and Anderson (Lau and Anderson, 1998: 85-98) indicated that blame can often be laid at the feet of ‘Partial Quality Management’- less than full implementation.

The reality of TQM in contemporary organizations
The reality of TQM in organizations involves the strategies for implementing it in organizations and the success characteristics cum models associated with it. By using the TQM implementation strategies and the success characteristics cum models associated with it effectively and efficiently in organizations, TQM rhetoric/concept will turn to reality.

Strategies for implementing TQM
Many strategies exist for the implementation of total quality. They include:
Clear and engaging leadership

Leadership is based on a common thread between those who lead and those who follow into the same moral and emotional commitments. Implementing TQM is a never ending process that must be constantly and genuinely supported by the leadership of the organization. This means that in order to accomplish this effort at the respective levels of an organization structure, the supervisory manager, the departmental/middle manager, the board of directors and/or president/CEO must play a proactive role in ensuring that the followers understand the changes and are motivated to make the transformation to total quality. The move to total quality requires the leader(s) to understand and communicate to everyone before, during, and after the implementation.

To Deming (1986), the successful leader must possess profound knowledge - a clear level of understanding systems, variation, theory and psychology. While some styles of leadership may lend themselves to implementing TQM, it is apparent that leading the transformation requires the proper mix of leadership styles and theories. In other words, there is no single leadership style that will ensure successful implementation of TQM philosophies, but it is critical to the effort that the leader must be willing to use their power to the best interest of all involved.

Develop a plan

It is hard to conceive a contractor ever building a project without a set of plans. So, too, should be the case when dealing with organizational change (TQM implementation): there must be a formalized plan. The concept of planning thus suggests that one must ‘plan the preplan’ with passion. When implementing total quality, the concept of false starts comes to mind and it is important to understand whether or not your plan failed, or did you simply fail to plan.

Provide direct access to customers
Direct access to both internal and external customers allows for timely and accurate responses to customer needs and expectations. No matter the identity of the customer, internally or externally, there must be a direct link from the customer(s) to the value adding process through advisory councils, surveys, employer surveys, among others.

**Embrace technology**
Change is enhanced through technology. In fact, many times technology is the catalyst for change. With respect to a quality movement in organizations, technology is the leading component for new directions being faced today. Such technologies include CD-Rom, internet, and integrated information technologies that give employees and managers access to virtually everything in real time. Technology will thus play the largest role in the movement to implement TQM, because the customer has immediate access to the system via electronic means for both information access and feedback.

**Promote interdependence**
Effective cross-communications and functionality provide for actions to take place simultaneously instead of linearly. Although each portion of the system is responsible for different sub-processes, an integrated approach for technology, information, and problem solving will improve the implementation and continuous monitoring. This also reinforces the importance of understanding internal customers and the dependency of outputs from one another, which serve as the input of the next.

**Involvement promotes acceptance/team effort**
Based on the idea that participation increases ownership, commitment, and loyalty of everyone involved, quality leaders must develop and support a team effort to ensure success.

**Lead by example**
Remember, ‘don’t do as I say, do as I do’ is the maxim in TQM implementation. In order to truly lead the changes to total quality, top level persons must genuinely show their support and dedication to the effort through their own actions. Do not ever expect others to do anything that you are not willing to do. Change affects everyone in the system, so this example will soften the transition.

**Scope of implementation**
Remember, the scope of quality implementation should not exceed the level or influence of those leading the implementation. In addition, limit the scope to those processes that need improvement. Perhaps even those processes that need the most improvement, but do not attempt something that is perceived as impossible. Concentrate on those processes that can be accomplished and share inputs and outputs. By doing so, an environment of shared necessity is created and everyone has a stake in the situation.

**Success characteristics associated with TQM**
There are six success/survival characteristics for reengineered systems, including TQM systems. Once the implementation has begun, watch to see if any of these characteristics are evident within your quality system.

*Customers matter most*
For internal and external customers, whatever matters to them matters to you. Without customers you have no reason of being in business. Always start improvement efforts on what your customers agree as needing improvement.

*Create and keep only what is value-adding*
Once a raw material enters into the system, then each step of the value-adding process must truly enhance the raw material by increasing its value. In simple terms, if the step does not enhance the product, then do not waste the time and effort; improve the step or remove it.
Lead from the top: Work the detail from the bottom
Through effective leadership, establish the goals and objectives and create an environment that supports the individuals in their efforts.

Design the whole: Implement the pieces
Remember the system in its entirety by taking a holistic approach, while laying the foundation for the implementation. Then, each phase of the implementation should deliver results. These results will increase momentum and free up resources that can be used on the next phase, creating a perpetual situation.

Be disciplined and stick to it
Once the plan is established follow through it, maintaining a constancy of purpose and a systematic approach. Persistence, patience, performance measurement and a pursuit of perfection should be the key ingredients to the implementation.

Do not let the consultants do it for you or to you
Just like dieting, if you want advice on healthy habits you should get it. However, no matter how much money you spend on the advice and counseling, it all comes down to the fact that you must do it yourself. No one can do it for you. While consultants are valuable part of the total quality movement, they cannot do it for you.

Models for TQM implementation in contemporary organizations
No two organizations have the same TQM implementation. There is no recipe for organizational success. However, there are a number of great TQM models that organizations can use. These include the Deming Application Prize, the Malcolm Baldrige Criteria for Performance Excellence, the European Foundation for Quality Management, and the ISO quality management standards. Any organization that wants to improve its performance would be well served by selecting one of
these models and conducting a self assessment. The simplest model of TQM is shown in Fig. 5.1.

The simplest model of TQM is shown in Fig. 5.1. The model begins with understanding customer needs. TQM organizations have processes that continuously collect, analyze, and act on customer information. Activities are often extended to understanding competitor’s customers. Developing an intimate understanding of customer needs allows TQM organizations to predict future customer behaviour.

*Fig. 5.1: A Simple TQM Model*
*Source: [www.totalqualitymanagementinc](http://www.totalqualitymanagementinc) (2010)*
TQM organizations integrate customer knowledge with other information and use the planning process to orchestrate action throughout the organization to manage day-to-day activities and achieve future goals. Plans are reviewed at periodic intervals and adjusted as necessary. The planning process is the glue that holds together all TQM activity.

TQM organizations understand that customers will only be satisfied if they consistently receive products and services that meet their needs, are delivered when expected, and are priced for value. TQM organizations use the techniques of process management to develop cost-controlled processes that are stable and capable of meeting customer expectations.

TQM organizations also understand that exceptional performance today may be unacceptable performance in the future, so they use the concept of process improvement to achieve both breakthrough gains and incremental continuous improvement. Process improvement is even applied to the TQM system itself.

The final element of the TQM model is total participation. TQM organizations understand that all work is performed through people. This begins with leadership. In TQM organizations, top management takes personal responsibility for implementing, nurturing and refining all TQM activities. They make sure people are properly trained, capable, and actively participate in achieving organizational success. Management and employees work together to create an empowered environment where people are valued. Thus, all of the TQM model’s elements work together to achieve results.

**Recommendations**

On the basis of the challenges facing TQM in contemporary organizations, the following recommendations are made, in order to enhance the chances turning the TQM rhetoric/concept into reality:
1. Managements of contemporary organizations should endeavour to provide quality strategies to act as a foundation for TQM implementation.

2. Effective and efficient communication and policy infrastructure should be provided by managements towards an unambiguous, unadulterated and continuous communication to everybody in the organization that is affected by TQM introduction/implementation.

3. Managements should strive to give employees a say in the production processes, as a culture of continuous improvement requires invaluable workforce views.

4. Organizations’ management should try to identify and address organizational forces likely to drive or impede a cultural change. They should undertake a culture review to accommodate TQM introduction/implementation.

5. Managements should identify the key objectives of the quality initiative and clearly link them to departmental and organizational strategy, in order to avoid the likelihood of failure.

**Conclusion**

This paper has reviewed TQM concept, reality and challenges with particular reference to contemporary organisations, and has offered a number of strategies, characteristics and models for TQM implementation, which managers may adopt, thereby enhancing the chances of turning TQM rhetoric/concept into reality. Armed with the strategies for TQM implementation in contemporary organisations, the success characteristics cum models associated with it, wise managers can confront the dismal quality of their products, service, processes and personnel work in a practical and courageous manner, and thus, turn TQM rhetoric/concept into reality.
References


Economics, that everyday practical subject and discipline of our lives, has been described as the study of how and why individuals, groups and organizations make decisions about the use and distribution of valuable human and non-human resources. On the other hand, the environment includes all living and nonliving things and their interactions. The environment is the platform for all human activities. Human activities affect the environment and the environment in turn, affects man. Man and his environment are, therefore, dialectally related.

The book, as the title goes, is a coalition between the environment and economics. As the environment is a broad spectrum, the book is the application of economic perspective to environmental management and protection. The book is an introduction to environmental economics, which is one way of approaching the steps that need to be taken to halt and reverse the process of environment degradation caused by man. It is about the way human decisions affect the quality of the environment, how
human values and institutions shape our demands for improvement in the quality of that environment, and most especially, about how to design effective public policies to bring about these improvements.

Environmental economics focuses on all the different facets of the connection between environmental quality and the economic behaviour of individuals, groups and organizations. Having attained a high level of economic growth and material prosperity, the question is: What good is material wealth if it comes at the cost of huge disruptions of the ecosystem by which we are nourished? More fundamental perhaps, is the fact that with contemporary economic, demographic, and technological developments around the world, the associated environmental repercussions are becoming much more widespread and lethal. What once were localized environmental impacts, easily rectified, have now become widespread effects that may very well turn out to be irreversible. Indeed, some of our most worrisome concerns today are about global environmental impacts like ozone layer depletion, global warming and climate change.

It is no wonder then, that the quality of the natural environment has become a major focus of public and global concern. The strength of environmental economics lies in the fact that it is analytical and deals with concepts such as efficiency, trade-offs, costs and benefits. The book is an introduction to the basic principles of environmental economics as they have been developed in the past and as they continue to evolve. The book is divided into 6 (six) sections of 21 chapters with an appendix, name and subject indices (indexes).

Section One is an introduction, beginning with a chapter on the meaning and nuances of environmental economics, followed by one on the basic nexus between the economy and the environment. Section Two is devoted to studying the “tools” of analysis, the principles of demand and cost, and the elements of
economic efficiency both in market and non-market activities. This section also contains a chapter in which these economic principles are applied in a simple model of environmental pollution control.

Section Three is an environmental analysis, focusing on the techniques that have been developed by environmental economists to answer some of the fundamental value questions that underlie environmental decision making, with greater emphasis on the principles of cost-benefit analysis. Section Four, which is on the principles of environmental policy design, begins with a short chapter dealing with the criteria we might use to evaluate policies, then moves on to chapters on the main approaches to environmental quality management.

Section Five and Six contain policy chapters, where current developments in environmental policy with the analytical tools developed earlier, are examined. Section Five is devoted to environmental policy in the United States, covering federal policy on water, air, and toxic materials, with a chapter also on environmental issues at the states and local levels. Finally, Chapter Six, which is the last section, looks at international issues such as environmental policy development in other countries, global environmental issues, including global warming, and the economics of international environmental agreements.

Economics is a pedantic discipline that has developed a sophisticated body of theory and applied knowledge. But, the book is intended, instead, for people who have not necessarily had any economics courses, at least not yet. It was written on the assumption that it is possible to present the major principles of economics in a fairly commonsensical, although rigorous, way and then apply them to questions of environmental quality. The book also contains current materials on global warming (Chapters 1, 6, and 20); emission trading programs, including carbon trading (Chapters 1, 13, and 15); green taxes (Chapter 12); markets for green goods (Chapter 10); environmental problems in China
(Chapter 1); coastal water pollution (Chapter 14); valuing health outcomes (Chapter 7); the value of private information in policy plans (Chapter 9); the economics of pest resistance (Chapter 16); and the use of charges in solid waste (Chapter 17).

Again, there is a tutorial for working with graphs, name and subject indexes for easy referencing, and a collection of relevant web links and sources. To access the website associated with this book, log on to www.mhhe.com/fieldse

The book is a high quality foreign print. It is a delight to see, hold, and read, with an immense academic value-chain intellectual effervescence; applications and implications for development. Indeed, the picturesque imagery and message on the book’s cover is that the environment is in our hands to protect and manage effectively, for private, public and global good with sound and proactive policies because it is a global common. More importantly, man and his environment collapse into each other in a dialectic and symbolic relationship.

The book is recommended for all. Essentially, students of economics, environment, development studies, urban and regional planning, geography, development and environmental consultants and practitioners would find it very handy.

AUTHOR’S GUIDE

Authors are invited to submit manuscripts for review for possible publishing in the Sustainable Human Development Review, SHDR – an international multidisciplinary academic research journal (published quarterly: March, June, September, and December).

Manuscripts, which must be original, theoretical or empirical, and scholarly, are considered on the understanding that they are not submitted to any other publishers. Paper, with 1-inch all-round margin, must not exceed 8 pages 12-font-size Times New Roman single-line spacing in Microsoft Word (Windows ’97-2003), should be sent electronically as attachment to the Managing Editor, WIPRO International Academic Research Journals, through E-mail: info@wiprointernational.org (copy esccha@yahoo.com).

Paper should conform to Harvard style of citation and referencing. Citation in the text is by author’s surname, year of publication and page where necessary, e.g. Moma (2008: 13) for in-sentence citation or (Moma, 2008:13); (Okolo and Adams, 2007); (Musa et al, 2003); (Mica, 1975 a and b), as appropriate, for end-sentence citation. Several citations by the same author should be arranged by date of publication. Full references should be listed alphabetically by author’s surname, followed by initials.

Under the title of the paper should appear the author’s name (surname first), institutional affiliation, rank, e-mail address and mobile phone number, followed by italicized abstract of not more than 100 words. Table or figure should be properly numbered (e.g. Table 1 or Fig. 1) and placed as close as possible to the in-text citation. Map, chart, table and figure should fit into trimmed quote size.
Each submitted article should be accompanied by a review fee of $50 (international scholar), $30 (African scholar) or =N=3,500 (Nigerian scholar) paid into WIPRO International domiciliary USS A/c. No. 1191023897 or Naira A/c. No. 1191034798 of ECOBANK Nigeria Plc., Enugu (Okpara Avenue Branch II). Scanned copy of payment teller should be sent electronically as attachment.

Minor and obvious corrections may be effected by the Editorial Board, but the Ms would be returned to author for major corrections. Authors will be communicated on the status of their articles within four weeks through their supplied e-mail addresses and/or phone numbers. After effecting major corrections, author will return Ms electronically as attachment for publishing in the next edition of SHDR with a pagination fee of $180 (international author), $150 (African author) or =N=12,000 (Nigerian author) plus Web metrics fee of $50 (international author), $30 (African author) or =N=3,000 (Nigerian author) paid as directed above with the scanned copy of payment teller sent as attachment. An article attracts a copy of the journal in which it appeared to the author(s), who will arrange to collect it from the Managing Editor in Enugu or pay the appropriate courier charge. An extra copy sells for =N=1,500 or $20.

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