INNOVATION ROLE OF ENTREPRENEURS IN POVERTY REDUCTION AMONG MICRO AND SMALL ENTERPRISES IN PLATEAU STATE, NIGERIA

1* Steve Azi Dabo stevedabo@yahoo.com
2** Prof. Elegwa Mukulu emuku@jkuat.ac.ke
3*** Prof. George Orwa gorwa@jkuat.ac.ke

1 Entrepreneurship and Procurement Department, Jomo Kenyatta University of Agriculture and Technology, Kenya
2 College of Human Resource Development, Jomo Kenyatta University of Agriculture and Technology, Kenya
3 Department of Statistics and Actuarial Sciences, Jomo Kenyatta University of Agriculture and Technology, Kenya

Abstract

Micro and small enterprises played key role in most economies of the world. They served as engine room of growth in developed countries of the world. Innovation role of entrepreneurs in poverty reduction among micro and small enterprises have led to increased income among owners of enterprises in both developed and developing nations. Most developed nations of the world achieved growth and development due to successful roles played by micro and small enterprise sector. Nigeria one of the most populous countries in Africa, has over half of its population living on less than one dollar per day. This study aimed at determining innovation role of entrepreneurs in poverty reduction among micro and small enterprises in Plateau State, Nigeria. Descriptive and inferential research designed anchored the study. The study target population comprised of all registered micro and small enterprises (MSEs) in Plateau State, Nigeria. The sample size comprised of 342 respondents. A standard questionnaire with both closed and open ended questions was administered to the MSEs owners. The findings of this study revealed that innovation role of entrepreneurs in MSEs played significant role in poverty reduction in Nigeria. The study concluded that adopting modern innovation in product development and business operation improves performance and reduces poverty among MSE owners. The study recommended among others that micro and small enterprises should be innovative and always seek for creative destruction and come out with new products or services.

Keywords: Economy, Innovation, Micro and Small Enterprises and Poverty Reduction

Introduction

The catalytic role of entrepreneurial owners of micro and small enterprises in innovation had been displayed in many countries of the world. Micro and small enterprises had been acknowledged as pillars of the economy. Aside their contribution in per capita income and output, they serve as sources of employment, thus reducing poverty. Micro and small enterprises (MSEs) have been recognized globally as engine room for growth of economies. The sector actually provides employment to a larger number of a nation’s population. According to United Nations Census Bureau (2002) cited in Agyapong (2010) 57.4 million of America’s 115 million workers were employed with companies with fewer than 500 employees in 2001. 12,328,094 worked at businesses with fewer than 10 employees; 20,602,632 at businesses with fewer than twenty employees;
40,973,082 at businesses with fewer than one hundred employees and 57,383,449 at businesses with fewer than five hundred employees. These figures indicate the relevance of MSEs in all economies of the world. Akpomi (2009) posited that micro and small enterprises contributes 40 per cent, 52 per cent, 55 per cent and 47 per cent to the Gross Domestic Product (GDP) of India, Japan, Sri Lanka and Thailand economies respectively.

According to Osetemehin, Jegede, Akinlabi and Olajide (2012) micro and small enterprises contributes to Gross Domestic Product, export earnings and creates a wider employment opportunity for the population of world economies such as South Korea, Malaysia, Japan, Zambia and India among others. In Nigeria both formal and informal sectors micro and small enterprises employs over 60 per cent of the labour force. Oni and Daniya (2012) posited that to make the sector vibrant, Nigerian government had to formulate different policies and schemes with a view of developing micro and small enterprises considering their roles in achieving self – independence, employment creation, import substitution, effective and different utilization of local raw materials and contribution to economic development. Despite the schemes and policies put in place, micro and small enterprise performance in Nigeria has been dismal. According to Charles (2010) cited in Dabo, Gwom and Dakyap (2015) all these policies formulated turn out to be a colossal waste as nothing was achieved. Contributing, Onwubiko and Okonkwo (2012) cited in Dabo, Dashol and Dakyap (2013) argued that the programmes established by the government failed completely to galvanize national effort toward creation of credible job opportunities and reducing poverty for the millions of unemployed Nigerian youths due to poor implementation, corruption among officials and targets beneficiaries among others.

The economy of Nigeria has worsen in the past years such that the World Bank (2005) reported in Adebayo and Nassar (2004) that Nigeria is one of the poorest countries in the world and has highest rates of youth unemployment in Sub-Saharan Africa. Though a country blessed with enormous natural and human resources but yet remained poor indicating that Nigeria had not given much attention to micro and small enterprises growth. Micro and small enterprises can only succeed if they are innovative. According to Fadaee (2014) innovation is keyed in entrepreneurial process. It is a means by which the entrepreneur creates or increases wealth of resources. Despite the importance role of innovation by entrepreneurial micro and small enterprises which leads to poverty reduction the sector has performed dismally in Nigeria.

**Statement of the Problem**

Micro and small enterprises has played key role in reducing unemployment and poverty in most economies of the world. This role has also been acknowledged by developing economies Nigeria inclusive. Micro and small enterprises serves as engine room of growth and development in developed economies. Despite this laudable role, the sector has not contributed much in Nigeria’s economy. Most studies on micro and small enterprises in Nigeria referred to the sector as ordinary small business to generate income and sustain the family. Most studies focused on impact of small and medium scale enterprises on employment creation, MSEs role in poverty alleviation, MSEs as income enterprises, SMEs as panacea for poverty reduction in Nigeria among others. According to Afolabi (2015) micro and small enterprises has the propensity to drive an economy, but the Nigerian situation is different, in spite of the important role of micro and small enterprise sector in economic growth and development and in reducing poverty, the sector has performed dismal in Nigeria. The sector is seen as belonging to those who could not secure paid jobs or those who found themselves out of employment. This practice has resulted in failure of most MSEs in Nigeria. According to Nigeria Vision 2020 Report (2009) Nigeria’s MSEs under performs in contribution to GDP when compared to other countries, in 2006 MSEs in Nigeria contributed only 10 per cent to GDP while the sector contributed 50 per cent to GDP in US, UK and
Japan respectively. It is against this backdrop that this study sought to bridge the knowledge gap by examining innovation role of entrepreneurs in poverty reduction among micro and small enterprises in Plateau State, Nigeria.

**Objective of the Study**

The objective of this study is to determine innovation role of entrepreneurs in poverty reduction among micro and small enterprises in Plateau State, Nigeria.

**Hypothesis**

Hypothesis 1: Innovation in micro and small enterprises sector do not play a role in poverty reduction in Plateau State, Nigeria.

**Theoretical Framework**

There are a lot of theories that relate to entrepreneurship study, but the point of concerned is how the theory relates to the study. For innovation role of entrepreneurs, the Schumpeterian theory shall be adopted. According to Desai (2009) the theory of entrepreneurship was first advocated by Joseph Schumpeter in 1934. Schumpeter posited that entrepreneurship is a catalyst that disrupts the stationary circular flow of the economy and thereby initiates and sustains the process of development. That it is an innovation to the entrepreneur when he introduces new products, develops new production methods, finds new markets and new sources of raw materials or introduces new organization in an industry. Innovation is seen as the source of the entrepreneurial rewards with profit as a key indicator. Innovation was driven by intuition.

The theory was criticized as being only applicable to large scale businesses and that it disregarded creative imitation that adopts a product to the niche market in a better way than the original innovation. This is evident in many developing countries on products innovated by developed countries (Saleemi, 2009). In a similar submission to Schumpeter, Drucker (2007) avers that innovation is the real hub of entrepreneurship but not confined to large scale enterprises as suggested by Schumpeter, but it may occur in both large and small enterprises or in private or public organizations. Unlike Schumpeter, Drucker viewed entrepreneurship as a practice which has knowledge base, and the foundation of which lies in the concept and theory rather than in intuition.

The entrepreneur seeks for innovation through creative destruction and does not believe in a stationary equilibrium. Unlike the economist, when equilibrium sets in, the entrepreneur distorts such equilibrium with innovation through the introduction of new products. To the entrepreneur the profit comes last. The role of innovation in poverty reduction in micro and small enterprise sector in Nigeria relates to the Schumpeterian theory of entrepreneurship. The theory is applicable to this study because it explains how innovation can be used in the micro and small enterprise sector to create new products for the society. It gives an understanding of entrepreneurship and explains why some countries are doing better than others.

**Empirical Review**

The role of micro and small enterprises in poverty reduction in Nigeria has been studied empirically by scholars. Adebayo and Nassar (2014) conducted a study sample of 383 enterprises within Ibadan metropolis in Nigeria. The result indicated that individuals in micro and small business entrepreneurship earn more than $1.25 dollar (N200:00 naira) per day, this is possible due to creativity role. The study found that the impact of income generated by MSEs could have been more pronounced but for some socio – economic, infrastructural
and management challenges. Similarly, Muritala, Awolaja and Bako (2012) carried a sample survey study of 200 SMEs from five local governments of Ogun State, Nigeria. The result revealed that majority of the SMEs surveyed realizes profits of between N100,000 and N1 million naira per annum. The income accrued from the business has lifted many out of poverty. In another study, Ogbuabor, Malaolu and Elias (2013) carried a study among burnt bricklayers in Benue State, Nigeria, 200 burnt bricklayers were selected, and the result showed that bricklaying business leads to job creation, income generation and poverty reduction among owners. Countries with high rate of small industrial enterprises have succeeded in making income distribution (both regionally and functionally) more equitable.

Methodology

Design of the Study

The study adopted the descriptive survey design as it has maximum reliability and protection of reducing the possibility of personal bias. According to Mugenda and Mugenda (2003) descriptive research design determines and reports the way things are. The population of study will comprised all MSEs in Plateau State, Nigeria registered with Ministry of Commerce and Industry, Jos, Plateau State. The population of study was 3,120 MSEs in Plateau State, Nigeria registered with Ministry of Commerce and Industry, Plateau State. Report of 2015 on MSEs from Plateau State Ministry of Commerce and Industry showed that the MSEs are in the following category: manufacturing 420, trading 1,630 and services/others 1070 (MoC&I, 2015).

Sampling Technique and Sample Size

According to Bryman and Bell (2011) sampling is an element of data collection and is defined by a fragment or section of the population that is selected for the research process. The sample formula for small (hyper – geometric) populations is shown as follows:

\[ n = \frac{NZ^2 p q}{(E^2 (N - 1) + Z^2 p q)} \]

Where:
- \( n \) is the required sample size
- \( N \) is the population size (3,120 MSEs)
- \( Z \) is the level of confidence of the sample size (set at 95% thus \( Z = 1.96 \)).
- \( P \) and \( q \) are the population proportions (each set to 0.5)
- \( E \) sets the accuracy of the sample proportions (set to 0.05)

Hence:

\[ n = \frac{3,120 \times 1.96^2 \times 0.5 \times 0.5}{(0.05^2 (3120 - 1) + 1.96^2 \times 0.5 \times 0.5)} \]

\[ n = 2,996.448 \div 8.7579 \]

\[ n = 342.14 \]

The final sample size will comprised of 342 respondents (MSEs)
The instrument for data collection was a structured questionnaire with both closed and open ended questions which was administered to 342 MSEs sampled for the study.

**Data Presentation**

In the study a total of 342 questionnaires were administered to the selected registered MSEs. A total of 310 questionnaires was duly filled and returned. This constituted 91% response rate. The study further uses percentages, mean and standard deviation to describe the data. Descriptive analysis was done based on the research objective, which is to determine the role of innovation in poverty reduction among micro and small enterprise owners in Plateau State, Nigeria. The findings of descriptive statistics are presented in table 1.

Table 1 Descriptive Result for Innovation and Poverty Reduction

<table>
<thead>
<tr>
<th></th>
<th>SD</th>
<th>D</th>
<th>N</th>
<th>A</th>
<th>SA</th>
<th>Mean</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSE owners can only succeed when they are entrepreneurially</td>
<td>5.5%</td>
<td>8.4%</td>
<td>10.3%</td>
<td>37.4%</td>
<td>38.4%</td>
<td>3.95</td>
<td>1.15</td>
</tr>
<tr>
<td>oriented and seek to add value on the products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creative destruction and innovation is necessary for</td>
<td>3.2%</td>
<td>5.5%</td>
<td>12.6%</td>
<td>39.0%</td>
<td>39.7%</td>
<td>4.06</td>
<td>1.02</td>
</tr>
<tr>
<td>entrepreneurial MSE owners to succeed in Nigeria.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSEs aims at adding value to already existing product and</td>
<td>5.5%</td>
<td>7.1%</td>
<td>11.3%</td>
<td>39.0%</td>
<td>37.1%</td>
<td>3.95</td>
<td>1.12</td>
</tr>
<tr>
<td>always thinking of something new and new markets.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MSE owners usually produce new products and sell to old</td>
<td>6.8%</td>
<td>7.4%</td>
<td>8.7%</td>
<td>41.0%</td>
<td>36.1%</td>
<td>3.92</td>
<td>1.16</td>
</tr>
<tr>
<td>customers in old markets and making large profits.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial MSE owners do not explore new methods of</td>
<td>4.5%</td>
<td>8.4%</td>
<td>10.6%</td>
<td>36.8%</td>
<td>39.7%</td>
<td>3.99</td>
<td>1.12</td>
</tr>
<tr>
<td>production and new ideas, hence they are poor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial MSE owners do not want to implore the use of</td>
<td>5.5%</td>
<td>38.7%</td>
<td>36.8%</td>
<td>7.7%</td>
<td>11.3%</td>
<td>3.94</td>
<td>1.13</td>
</tr>
<tr>
<td>new modern technology and no need for research.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The study sought to establish whether MSE owners can only succeed when they are entrepreneurially oriented and seek to add value on the products. The findings presented in table 1 show that 34.4% of the respondents strongly agreed and agreed with the statement. On the other hand 5.5% and 8.4% of the respondents strongly disagreed and disagreed with the statement. The results further indicated that the statement had a mean of 3.95 which confirmed that majority of the respondents agreed and strongly agreed with the statement. On whether creative destruction and innovation is necessary for entrepreneurial MSE owners to succeed in Nigeria, 39.7%
and 39.0% of the respondents strongly agreed and agreed with the statement. Those who disagreed and strongly disagreed with the statement were 5.5% and 3.2% respectively. The statement had a mean response of 4.06 implying that majority of the respondents agreed and strongly agreed with the statement. The result implied that MSE owners agreed that creative destruction and innovation are necessary ingredients for business to prosper and the remaining responses also followed the same pattern. The findings of this study concur with those of Fadaee (2014) who found that innovation is key component in entrepreneurial process and it is a specific action of entrepreneurship, it is a means by which the entrepreneur creates or increases wealth of resources.

Inferential statistics was also carried out. First was correlation test to test the association between independent and dependent variables. Kothari (2014) posited that the importance of correlation is to determine the extent to which changes in the value of an attribute is associated with changes in another attribute. The test was carried based on the objective of the study. The findings of correlation test are presented in table 2.

Table 2 Correlation Result for Innovation and Poverty Reduction

<table>
<thead>
<tr>
<th></th>
<th>Innovation</th>
<th>Poverty Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearason Correlation</td>
<td>1</td>
<td>0.758</td>
</tr>
<tr>
<td>Innovation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>N</td>
<td>310</td>
<td>310</td>
</tr>
<tr>
<td>Pearason Correlation</td>
<td>0.758</td>
<td>1</td>
</tr>
<tr>
<td>Poverty Reduction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>N</td>
<td>310</td>
<td>310</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.01 level (2-tailed)

The result of correlation analysis indicated that innovation had a strong positive and significant correlation with poverty reduction among micro and small enterprises (r = 0.758, p = 0.000). The findings imply that increase in innovation in MSEs would result in increase in poverty reduction among MSE owners. These findings implied that MSE owners adopted innovations in their operations to boost performance and eradicate poverty. The findings of this study concur with Asikhia (2010) who posited that small businesses have the tendency of increasing individual productive capacity through innovation and create wealth when the products produced are sold.

Regression test was conducted to determine the statistical relationship between two or more variables. ANOVA was also used as a procedure for testing the difference among different groups of data for homogeneity. The study employed regression model to ascertain the relationship between innovation and poverty reduction among micro and small enterprises in Plateau State, Nigeria. The findings are presented in table 3, 4, and 5.
Table 3 Model Summary for Innovation and Poverty Reduction

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R – Square</th>
<th>Adjusted R-Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>0.758</td>
<td>0.575</td>
<td>0.573</td>
<td>0.44911</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Innovation

The result of the model showed that the model had an R – Square of 0.575 which implied that innovation accounted for 55.5% of the variation in poverty reduction among micro and small enterprises in Plateau State, Nigeria.

Table 4 ANOVA Result for Innovation and Poverty Reduction

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Square</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
<td>83.912</td>
<td>1</td>
<td>83.912</td>
<td>416.027</td>
<td>.000</td>
</tr>
<tr>
<td>1</td>
<td>Residual</td>
<td>308</td>
<td>.202</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>146.036</td>
<td>309</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Poverty Reduction
b. Predictors: (constant), Innovation

The result of ANOVA in table 4 indicated that innovation was a significant predictor of poverty reduction among micro and small enterprises in Plateau State, Nigeria. This was indicated by the F- statistic results (F = 416.027, p = 0.000) indicating that the model used to link the independent variable and dependent variable was statistically significant.

Table 5 Coefficients Result for Innovation and Poverty Reduction

<table>
<thead>
<tr>
<th>β</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>1.006</td>
<td>0.147</td>
<td>6.859</td>
<td>0.000</td>
</tr>
<tr>
<td>Innovation</td>
<td>0.743</td>
<td>0.036</td>
<td>0.758</td>
<td>20.397</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Poverty Reduction
The regression coefficient of innovation was at (β = 0.743, p = 0.000 < 0.05) showed a statistically significant relationship between innovation and poverty reduction among micro and small enterprises in Plateau State, Nigeria. The regression coefficient of 0.743 obtained in this case implies that a unit increase in innovation would lead to 0.743 units increase in poverty reduction among micro and small enterprises in Plateau State, Nigeria. This finding implies that MSE owners adopted innovation in their operations to boost performance and eradicate poverty. The study also carried a multivariate regression analysis to test the joint relationship of the variables.

Table 6 Coefficients for Multivariate Regression Analysis

<table>
<thead>
<tr>
<th></th>
<th>β</th>
<th>Std. Error</th>
<th>Beta</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.567</td>
<td>0.117</td>
<td>4.853</td>
<td>0.000</td>
<td></td>
</tr>
<tr>
<td>Innovation</td>
<td>0.149</td>
<td>0.049</td>
<td>0.152</td>
<td>3.013</td>
<td>0.003</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Poverty Reduction

The model Y = β0 + βX1 + X1 + ε

Poverty Reduction = 0.567 + 0.149(Innovation) + ε

Hypothesis Testing

The study used the findings of the multivariate regression in hypothesis testing. Linear regression was conducted at 95% confidence level (α = 0.05).

Ho1: Innovation in micro and small enterprise sector do not play a role in poverty reduction in Plateau State, Nigeria.

The coefficient of innovation was (β = 0.149, p = 0.003, < 0.05) which revealed a statistically significant relationship between innovation in micro and small enterprise sector and poverty reduction in Plateau State, Nigeria. Hence we rejected Ho1 at α = 0.05 and concluded that innovation in micro and small enterprise sector played significant role in poverty reduction in Nigeria. The regression coefficient of 0.149 obtained in this case implies that a unit increase on innovation in micro and small enterprise sector would lead to 0.149 units increase in poverty reduction in Nigeria. The findings of this study concur with that of Fadaee (2014) who found that innovation is key components of the entrepreneurial process. He further stressed that innovation is specific action of entrepreneurship, it is a means by which entrepreneur creates or increases wealth of resources.

Conclusion

The findings of this study revealed that entrepreneurial characteristics of innovation among micro and small enterprises played significant role in poverty reduction in Plateau State, Nigeria. The study therefore concluded that adopting modern innovation in product development and business operation improves performance. With the rapid changing business environment, being innovative in business enhances performance which increases income generation, hence employment creation and poverty reduction. Micro and small enterprises in Plateau
State Nigeria must continue being innovative in coming up with new and cost effective ways of transacting business.

**Recommendations**

Based on the findings of this study, the following recommendations are hereby drawn:

i. Micro and small enterprises in Plateau State Nigeria should be innovative and always seek to come up with new products or services or add value to an existing product.

ii. Micro and small enterprises should adopt the latest technology in marketing their products; they should always seek and explore new markets.

iii. Micro and small enterprise owners should engaged in research and development and go for training and re-training so as to improve their performance in the global world of competition.

**REFERENCES**


