Determinants of Quality of Life in Selected African Countries

Sani Muhammad[#1]&Abubakar Sabo*[2] (PhD)
[#]*Department of Economics, UsmanuDanfodiyo University*
P.M.B. 2346, Sokoto, Nigeria
**Department of Business Administration, UsmanuDanfodiyo University*
P.M.B. 2346, Sokoto, Nigeria,

Abstract

This paper sets out to establish whether the determinants of quality of life identified in the literature on developed countries are valid for developing countries like Africa. The study used a panel sample of twenty three (23) countries for the period of 2008 – 2014 on the basis of availability of data in the region.Thus, fixed effects and random effects model were used to estimate the variables under investigation. The Hausman specification test of 1978 was applied to select the appropriate and better model for the estimation where fixed effects estimation was chosen over random effects estimation. The findings revealed that education, material wellbeing and access to safe drinking water had positive and statistically significant impact on quality of life while mortality rate proxied for health had negative and statistically significant impact on quality of life. However, the leading determinants that highly influenced quality of life are material wellbeing and access to safe drinking water. Consequent upon the major findings, the following recommendations are given; the need for the countries to intensify provision of health care facilities in order to reduce mortality rate; there is also need to boost infrastructural facilities with respect to construction of more schools, provision of more boreholes, more pipe water and other improved water sources; similarly, provision of required facilities and machineries to make best utilization of electricity with a view to improving quality of life.

Keywords:*Quality of life, education, health, access to safe drinking water, Africa*

I. INTRODUCTION

Human development is a major concern of any country be it developed or developing nation.. In fact much has been written since late 1960s, around the world, on the theme quality of life with the majority of the literature related to human development. This is due to the cognizance which has been notified that human development goes beyond economic growth and is a multidimensional phenomenon covering all aspects of well-being (Berenger and Verdier-chouchane, 2007). Therefore, the attention shifted from GDP per capita to quality of life.

However, GDP per capita has been long criticized for measuring only material well-being which alone cannot explain human welfare of a country from broader perspective. The Economist Intelligence Unit (2005), points-out that due to serious challenges in assigning monetary values to various factors and intangibles that comprise a broader measure of socio-economic well-being; in order to overcome the aforementioned challenges, various attempts were made to construct alternative, non-monetary indices of social and economic wellbeing by creating a single statistic with a number of factors that influence quality of life. However, the main problem associated with these measures is selection bias and arbitrariness in the factors that are chosen to assess quality of life (The Economist Intelligence Unit, 2005).

Thus, empirical studies carried out in relation to quality of life and its determinants are numerous. Notable among these studies focused on gross domestic product (GDP) and quality of life (Mohamad and Padmini, 2015; Deb, 2015;Khodabakhshi, 2011; and Morote, 2010); health and quality of life(Zahran, Koban, Moriarty, Zack, Holt, and Donehoo, 2005) and studies conducted on quality of life from specific perspective using questionnaire (Samson-Akpan, Ojong, Ella and Edet, 2013; Bello and Bello, 2013 and Fajamileshin and Odebiyi, 2011).The major gap common amid these studies is that they suffered from non-inclusion of many determinants of quality of life; they addressed quality of life from specific perspective using cross sectional datasets rather than addressing quality of life from broader perspective.

This study therefore seeks to contribute to this growing literature and fill the aforementioned gaps by investigating the determinants of quality of life in selected countries of Africa using panel data analysis for the period of seven years, 2008 to 2014 using fixed effects and random effects models. Therefore, the paper intends to answer questions such

as: To what extent does health, education, material well-being and access to safe drinking water influence quality of life of people in Africa? The paper is organized as follows: following this introduction is section 2 that contains conceptual, theoretical and empirical literature reviews. Section 3 discusses the methods of data collection and analysis. The major findings are presented in Section 4 and section 5 reports the conclusion and recommendations

II. LITERATURE REVIEW

A. *Conceptual and Theoretical Framework*

The concept of quality of life has received the attention of many scholars and researchers who define it in a different way. According to Berenger and Verdier-Chouchane (2007) quality of life has been viewed as a vague multidimensional concept that has to do with all aspects of individual life. In the past, the term quality of life is often referred to as well-being. It is proposed that well-being refers to objective life conditions that apply to a population generally, even though quality of life is appropriately limited to individuals' subjective valuations of their lives. Today, this distinction has been lost. This is due to the fact that both have objective and subjective components. The former is external to an individual and measurable by others while the latter is personal assessments of one's own life or of particular aspects of life using measures of satisfaction, happiness, or other self-assessment scales. Therefore, the terms are often used interchangeably within studies. In some instances, one term is even used to define the other (Theofilou, 2013). However, education can lead to increased earning capacity, which in turn can contribute to quality-of-life issues (Nayak, 2016).

However, Venhoven (1996) also defined quality of life in a country as habitability or livability of a country. Livability of a nation can be defined as the degree to which its provisions and requirements fit with the needs and capacities of its citizens. A nation is not well livable if, for instance, it fails to provide the basic needs of its citizens. It is also unlivable if its structure is too complex to handle for most citizens, or if its morals require the impossible. Therefore, a country can be said attains quality of life of its citizen if and only if the country can meet the basic needs of its citizen as well as sustains their life.

B. *Theoretical Framework*

The theoretical framework underpinning the factors that determine quality of life were broadly categorized into three viz. subjective theories,objective theories, and objective -subjective theories of welfare.

1) *Subjective Theories of Welfare*

Subjective theories holdthatsomething is good if and only if that thing rhymes with the attitudes of that person.Theset theories have not yet reached consensus on specifyingtherelevantpro-attitude, thus the following are identified as its elements:endorsement,enjoyment, happiness, satisfaction,desire, and preference. It had been categorized into preference satisfaction theories,actualpreferencesatisfactiontheory, informedpreferencesatisfaction theories, and testimonial model.

2) *ObjectiveTheory of Welfare*

Objective theories, on the other hand, do not require a connection between a person's pro-attitudes and the goods tha tpromote a person's welfare. These theories suggest normative ideals of what it takes forlifetobegoodfortheperson whose lifeitis. It is against this background that certain goods were found to be contributing catalysts that make a person's life better (Bognar, 2005). More so, objective theories are also known as "objective list" or "substantive goods" theories. Objective theories suggest that something is good (or bad) for a person in virtue of some characteristics of that thing itself, independently of the person's pro-attitude or con-attitudes toward that thing. It is the kind of thing that is not only worthy for human beings to demand but also prosper standard of living of human beings and that rational being take care off (Bognar, 2005).

3) *Subjective - Objective Theories*

It is clearly evident that from the foregoing theories, quality of life is based on either social or economic indicators that reflect the extent to which human needs are met or subjective well-being which is self-reported in terms of happiness, pleasure, fulfillment, life satisfaction, etc. Therefore, this is the best theory of well-being that combines objective and subjective approaches of quality of life (Costanza, *et al*. 2007). Thiscategory comprises theories of welfare that focus on both subjective and objective dimensions of quality of life. It has been categorized into hedonist and human ecological theories.

However, subjective theories focus on self-reported levels of happiness, pleasure, fulfillment, life satisfaction, ~~etc~~. that are difficult to quantify and there is paucity of data on Africa. Therefore, the theoretical framework of this research work was based on the objective theory of welfare. The theory provides the foundations of Physical Quality of Life Index, the Human Development Index and the Index of Social Progress. It emphasizes on the means that enhance well-being of people irrespective of their attitudes towards such means. Therefore, the objective theory was hereby adopted to examine the determinants of quality of life in selected African countries.

C. Review of Empirical Literature

This section presents the extensive review of empirical literature on quality of life both cross countries studies (panel data analyses) and country specific studies (cross sectional and time series analyses).

For instance, Keung *et al.* (2005) studied quality of life in Hong Kong with a view to assess and monitor quality of life as a composite index making use of both objective and subjective measures. Empirical evidences showed that there is improvement in quality of life of Hong Kong because scores of composite index and the three (3) sub-indices on sectorial performance - socio-cultural, economic, and environmental - are higher than those of the previous years. Six (6) out of twenty-one (21) quality of life indicators demonstrated that Hong Kong improved like many economically advanced societies in the world.

In Indian study, Subramanian (2013) investigated the influence of economic growth on physical quality of life over the period of 1990 – 2004. Physical quality of life is proxied by HDI. The study revealed that growth of HDI is at faster rate than economic growth, owing to improvement in adult literacy rate, gross enrolment ratio, and infant mortality and maternal mortality rate and health. Similarly,Khodabakhshi (2011) investigated the relationship between GDP and human development indices in India adopting the Indices of UNDP, using GDPas the dependent variable and other indicators as independent variables including long life, health and education over the period 2005 - 2010. The findings disclosed that education index had greatest impact on Human Development Index following by GDP per capita while life expectancy had lower impact on human development index.

Using panel dataset of eighty one (81) indicators covering up to four (4) time period viz. 1960, 1970, 1980 and 1990 through seemingly unrelated regression (SUR) estimation in levels and fixed effect estimator Esterly (1999) examined the impact of economic growth on quality of life. The variables of choice are education, health, access to safe water ~~etc.~~ The empirical evidences from Seemingly Unrelated Regression (SUR) estimator revealed that GDP per capita has significant positive impact on quality of life for thirty two (32) out of eighty one (81) quality of life indicators; while fixed effect estimator discovers that growth has significant positive impact on the quality of life for six (6) out of sixty nine (69) quality of life indicators. In similar study, Mohamad and Padmini (2015) investigated the relationship between Growth Domestic Products (GDP), Human Development Index (HDI) and poverty rate in Malaysia using Johansen Cointegration model and VECM over the period 1990 - 2012. The variables of choice were GDP and human development index. The results disclosed that, in the long-run, HDI and GDP had a significant negative relationship. While in the short-run, it indicated that HDI and GDP had no significant relationship.

In another study, Deb (2015) examined the gap between Gross Domestic Product and human development index in 140 countries during four periods of time, namely, 1990, 2000, 2010 and 2013 in order to observe whether the rich countries experience different from the poor using scatter plots, Spearman's rank correlation and logit and probit regression. The results revealed there was high positive relationship between per capita GDP and human development at the aggregate level of all countries during the four periods. However, Morote (2010) studied the causality between human development, GDP and employment in Mexico and Peru. The study employed Walt test for Granger causality. The finds pointed out that causality runs from the higher education enrollments and employment to economic growth implying that it was the rapid higher education enrollments and employment that pave the way for changes in economic growth.In similar studies, Zahran, Koban, Moriarty, Zack, Holt, and Donehoo (2005) assessed health and quality of life of U.S. residents in order to promote and monitor the progress in achieving two overall healthy people 2010 goals, viz. first to increase the quality and years of healthy life and second to eliminate health disparities. The empirical results revealed that the mean number of physically unhealthy days, mentally unhealthy days, overall unhealthy days and activity limitation days are higher after 1997 than before.

Using descriptive and inferential statistics, Fajamilehin and Odebiyi (2011) examined quality of life against the background of the health behavior and traditional life style practices of elderly persons in Osun State, Nigeria. The empirical evidences revealed that financial resources at the disposal of elderly have significant influence on health status, marital cohesion and ability to get social support and their behavior patterns. The effect of marital status on health is statistically significant. In another study, Bello and Bello (2013) assessed quality of life of one hundred and sixty (160) HIV/AIDS patients out of six hundred and sixteen (616) same patient in Sobi specialist hospital Ilorin The empirical results of descriptive statistics revealed that the mean age of HIV/AIDS patients was 38 year of which seventy per cent were females, fifty five per cent were literates, less than one-quarter were not married, and one-third were businessman/women. Better quality of life is found to be with those Patients who had longer duration of antiretroviral therapy, marital status, and fewer pills. Also, Samson-Akpan*et al.* (2013) investigated the quality of life of 123 people living

with HIV/AIDS participating in five support groups in Southern Cross River The study found that physical health championed the highest score which is an indication of ease of access of antiretroviral therapy; while the environmental indicator got the lowest scores which is also an indication of poverty. Additional evidences suggested that women have higher quality of life than men in all respects.

The lacuna identified in the literature, to the best of our knowledge, is that, there is no research specifically conducted in Africa on determinants of quality of life except on what determine quality of life of people living with HIV\AIDS as well as elderly persons using cross sectional data as carried out by Samson-Akpan*et al*. (2013); Bello and Bello (2013) and Fajamilehin and Odebiyi (2011). Similarly, numerous studies conducted on specific determinant of quality of life were centered on developed countries, emerging countries or on both developing and developed countries, instead of developing countries alone. Notable among these were Mohamad and Padmini (2015); Deb (2015); Khodabakhshi(2011); and Morote (2010); and Qiaosheng, Maslyuk and Clulow (2012); except Bahadur (2014). Unlike these studies, this study aimed to empirically investigate the impact of health, education, access to safe drinking water, and material well-being on people quality of life in the selected countries of Africa by applying fixed effects and random effects models for the period of seven years, 2008 to 2014.

III. METHODOLOGY

A. *Sources of Data and Description of the Variables*

In **es**timating the determinants of quality of life in the selected countries of Africa, the secondary data was used spanning the period of 2008 to 2014. The data was obtained from World Bank's World Development Indicators and United Nations Development Programme (UNDP).However, the study used purposive sampling technique to select the countries from the region based on availability of data in the region.This study employed human development index as proxy for quality of life
which is consistent with the works of Morote (2010), Deb (2015), Khodabakhshi (2011), Mohamad and Padmini (2015) and so on. Health was proxied by infant mortality rate which is in line withKeung *et al.* (2005).Education was measured as primary school enrolment. Access to safe drinking water is measured as the percentage of the population using an improved drinking water source. Material well-beingis measured by real GDP per capita in U.S. dollar.

B. *Model Specification*

The quality of life and its determinants for this research work are expressed in a linear econometric model as follows:

$HDIX_{it} = \beta_0 + \beta_1 GDPK_{it} + \beta_2 AIMW_{it} + \beta_3 EDUCit + \beta_4 HELTit + \beta_5 ENCOit + U_{it}$ (3.1)

Where:
HDIX = Human Development Index
GDPK = Gross Domestic Product Per Capita
AIMW = Access to Safe Drinking Water
EDUC = Education
HELT = Health
ENCO = Energy Consumption Per Capita
$\beta_0 - \beta_5$ = Coefficients of the independent variables
i = The Cross Section Unit
u_t = Stochastic Disturbance Term
t = Time of Observation

C. *Technique of Data Analysis*

This study employs panel data approach to analyze the determinants of quality of life in Africa. There are basically three types of panel data models, namely, the pooled ordinary least squares (OLS) model, the fixed effects model and the random effects model. The choice of either to use, the fixed effects model or the random effects model, is determined by the outcomes of F-test and Hausman (1978) test.

IV. RESULTS AND DISCUSSIONS

A. *Descriptive Analysis*

In conducting this kind of analysis it is important to explore the data used in the estimation as well as determine the distribution of the variables in order to have an insight on the relationship between the variables. Data for this study is from 23 selected African countries for the period of seven (7) years that is from 2008 to 2014, which gives us a total of one hundred and sixty one (161) observations. Table 4.1 presents the descriptive statistics of the data drawn from the selected African countries.

Table 4.1 Summary Statistics for the Variables used for the Estimation

	HDIX	EDUC	HELT	ENCO	ELCO	GDPK	AIMW
Mean	0.548138	6.100810	3.793695	3.486423	5.990890	8.318314	4.054912
Median	0.526692	4.679326	3.877432	3.648636	5.570494	8.224348	4.049142
Maximum	0.771002	114.8737	4.763028	4.604045	8.496559	9.749508	4.602166
Minimum	0.307455	4.199233	2.533697	1.051685	4.254759	6.330975	3.339322

Std. Dev.	0.112371	12.45348	0.536441	0.935906	1.151018	0.893971	0.372447
Skewness	0.114269	8.431962	-0.636333	-0.705390	0.426432	-0.320266	-0.136161
Kurtosis	2.288479	72.14561	2.882912	2.667951	1.953048	2.260883	1.822849
Observations	3404	3404	3404	3404	3404	3404	3404
Cross sections	23	23	23	23	23	23	23

Source: computed by the researcher using Eviews version 7

Table 4.1 shows the descriptive statistics of all the variables drawn across the selected African countries as obtained from Eviews version 7.0. As it appears, the results revealed that there are three thousand four hundred and four observations for each variable. Quality of life (HDIX) recorded the mean, median and standard deviation observations of 0.548138, 0.526692 and 0.112371, respectively; that of log of education stood as 6.100810, 4.679326 and 12.45348. More so, the mean, median and standard deviation observations of the health, energy consumption, electricity consumption per capita, gross domestic product per capita and that of access to safe drinking water (AIMW) are 3.793695, 3.877432 and 0.536441; 3.486423, 3.648636 and 0.935906; 5.990890, 5.570494 and 1.151018; 8.318314, 8.224348 and 0.893971; and 4.054912, 4.049142 and 0.372447, respectively. The minimum observation in the entire dataset is 0.307455 while the maximum is 0.771002.

The lowest and highest observations of skewness are -0.705390 and 8.431962 for energy consumption and education, respectively; while the lowest and highest observations of Kurtosis are 1.822849 and 72.14561 for access to safe drinking water source and education, respectively. This indicated that the distribution is asymmetrical; therefore, none of the variable is normally distributed for this specific period.

B. Inferential Statistics

This section presents the results of inferential statistics that has been carried out in form of panel data regression analysis of fixed effects model and random effects model employed in estimating the influence of regressors (education, health, gross domestic product per capita and access to improved water sources) on the dependent variable (human development index).

Table 4.1 Regression Results of Fixed Effects and Random Effects Estimations				
Dependent Variable: Quality of Life				
Independent Variables	Coefficient Estimates and t-statistic			
	Fixed Effects Regression		Random Effects Regression	
Education	0.002296	(4.95)***	0.007755	(1.89)*
Health	-0.048149	(-19.14)***	-0.000374	(-0.21)
Energy consumption	0.005286	(5.12)***	-0.002291	(-3.38)***
Electricity consumption	-0.002161	(-1.70)*	5.50E-05	(0.10)
Material Wellbeing	0.041075	(14.80)***	0.003668	(2.09)**
Access to Safe Drinking Water	0.015357	(1.86)*	0.004602	(1.99)**
Constant	0.305564	(6.91)***	-0.054785	(-2.44)**
R – Square	0.99		0.99	
F – Statistics	74811.00***		9925.47***	
Hausman Specification Test				
Test Summary	Chi-Sq. Statistic		Chi-Sq. d.f.	
Cross section random	111.152629***		7	
Significant at 1% (***), 5% (**) & 10% (*)				

Source: author's computation using Eviews version 7.0.

From the fixed effects regression result in Table 4.2, it is evidently presented that education, access to safe drinking water and gross domestic product per capita have positive impact on quality of life proxied by human development index at 1 percent level of significance with the exception of access to safe drinking water which is significant at 10 percent level. While infant mortality rate proxied for health has negative impact on quality of life at 1 and 10 percent levels of significance, respectively. Furthermore, the magnitude of the impact differs by all the coefficients. That is, a 1 percent increase in education, gross domestic product per capita and access to safe drinking water will lead to 0.2296, 0.5286, 4.1075 and 1.5357 percent increase in quality of life, respectively. However, a 1 percent increase in infant mortality rate and electricity consumption will decrease quality of life (HDIX) by 4.8149 and 0.2161 percentage.

Moreover, the study applied Hausman specification test of 1978 to compare fixed effects model and random effects model. This is shown in Table 4.2. The value of Hausman test is 111.152629 which is significant at 1 percent level; implying that fixed effects model is consistent and more appropriate than random effects model. This is because the P – value

is significant leading to rejection of the null hypothesis and the acceptance of alternative hypothesis that fixed effects model is more appropriate and better choice for the analysis than random effects model.

C. Discussion

The study is mainly aimed to empirically investigate the determinants of quality of life in selected African countries and also to establish whether the determinants identified in the literature on developed countries are valid for developing countries like Africa. To achieve the aforementioned objectives, the study applied panel data analysis in the form of fixed effects model and random effects model.

The overall result obtained from the estimation of equation 3.1 and presented in table 4.2 are consistent with economic theory and a priori expectation. It revealed that education proxied for primary school enrolment yields a positive coefficient (0.23) and statistically significant at 1 percent level; implying that increase in education lead to an increase in quality of life. Thus, a one percentage point increase in education leads to 0.23 percentage increase in quality of life. It means that, by implication, education is an important factor that improves quality of life in the selected counties of Africa. Therefore, education determines quality of life in the selected countries of Africa. This is in line with the findings of Berenger and Verdier-Chouchane (2007) for one hundred and seventy (170) countries and Subramanian (2013) for India.

Our results also revealed that infant mortality rate proxied for health had negative and statistically significant impact on quality of life at one percent level of significance which is in line with a priori expectation. The result displayed that a one percentage decrease in infant mortality rate will increase quality of life by 4.81 percent and vice versa. And this puzzling result is not surprising because the implication is that provision of health care facilities reduces infant mortality rate which is a proxy for health, therefore, reduction in infant mortality improves quality of life in the selected counties of Africa, over the period of study. Moreover, the lower the infant mortality rate the higher the quality of life, and vice versa. This result is also consistent with the findings of Keung *et al*. (2005) for Hong Kong, Berenger and Verdier-Chouchane (2007) for one hundred and seventy (170) countries and Subramanian (2013) for India, where infant mortality dampens quality of life.

Moreover, the coefficient (0.041) of gross domestic product per capita proxied for material wellbeing displayed a positive impact on quality of life and significant at one percent level implying that material wellbeing is positively associated with quality of life over the period of study which is in accordance to a priori expectation. This is logical because the higher the level of material wellbeing the higher the quality of life. A major revelation emerging from a careful consideration of this result, in Table 4.2, is that coefficient of health (0.041) has the highest value than any other variable which means that it is the most important and leading determinant of quality of life in the selected countries of Africa that has the highest effect on quality of life. This finding is in harmony with the findings of Khodabakhshi (2011) for India; Deb (2015) for one hundred and forty (140) countries comprising those categorized with low, middle and high human development index; but Mohammed and Padmini (2005) for Malaysia reported significant negative impact on quality of life.

However, the coefficient (0.015) of access to safe drinking water showed a positive relationship with quality of life at 10 percent level of significance which is in line with a priori expectation of the study. It revealed that a one percentage increase in access to safe drinking water bring about 1.54 percentage increase in quality of life. This establishes that material wellbeing is among the most important determinants and second leading determinant of quality of life in the selected counties of Africa. This finding corroborates the findings of Bahadur (2014) for ninety one (91) developing countries who reported a significant positive relationship between access to safe drinking water and quality of life. This demonstrates that access to safe drinking water is also very important determinant of quality of life, over the period of the study, in the selected counties of Africa. This is because accessibility to good drinking water protects people from so many diseases especially contagious that deteriorate health conditions and hence quality of life.

On the whole, our findings revealed an important point worth noting. The coefficients of material wellbeing and access to safe drinking water (0.041 and 0.015, respectively) revealed that they are the most important determinants of quality of life, over the period of the study, in the selected African countries. Therefore, they are the leading determinants of quality of life.

V. CONCLUSIONS

The following conclusions are drawn: It was revealed that education, material wellbeing and access to safe drinking water have positive and statistically significant impact on quality of life with the exception of infant mortality which has negative and statistically significant impact on quality of life in the countries under study. Therefore, the study revealed the relative importance of the determinants of quality of life and the magnitudes of their impact on quality of life. The leading determinant among the

factors that influence quality of life is material wellbeing followed by access to safe drinking water. Thus, it is also evident that provision of health care facilities has a very significant impact on quality of life because it reduces mortality.

VI. RECOMMENDATIONS

Based on the findings of this study which displayed that education, material wellbeing and access to safe drinking water havestatistically positive relationship with quality of life; while infant mortality is negatively related to quality of life in the countries under study; the following recommendations are drawn:

a) Since the findings revealed that education determines quality of life, therefore, African countries should invest in education through constructions of new schools so that more primary schools would be established which will increase the enrollment and there would be high possibility for improving quality of life. This is because education is one of the cardinal pillars that improve quality of life. This can be achieved through consolidating Universal Basic Educations activities in the region so that more schools would be put in place in order to enroll more pupils. Loosely speaking quality of life cannot be improved with only constructions of more schools but also with employment of well experienced teachers in the schools.

b) In addition to that, infant mortality greatly dampens quality of life. Therefore, African countries should boost their health care facilities in both urban and rural hospitals so that the rate of mortality will reduce to some extent. The high rate of mortality in the region can be attributed to several factors including obsolete health care facilities, inadequate access to safe drinking water and poor infrastructures. The study therefore recommends replacing the obsolete facilities in hospitals with modern ones; construction of more boreholes, wells and water reservoir; and extension of the electrification coverage in the region. Without constant supply of electricity the facilities cannot be fully utilized towards improving quality of life.

c) Similarly, the findings shows that gross domestic product per capita proxy for material wellbeing has a positive significant effect on quality of life, therefore, production of goods and services should be encouraged while income inequality should be reduced in order to improve quality of life. This can be done by encouraging private investors to establish more industries through subsidizing raw materials, providing infrastructural facilities and giving tax holiday. It is also recommended that enabling environment (constant supply of electricity, good transportation systems, law and order enforcement, etc.) should be provided to smooth the affairs of businesses and attract more foreign investors to the region so that more output would be realized which in turn improve quality of life.

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APPENDIX

Appendix I: List of Selected African Countries

1	Algeria	9	Egypt	17	Senegal
2	Angola	10	Ghana	18	South Africa
3	Benin	11	Kenya	19	Sudan
4	Botswana	12	Mauritius	20	Tanzania
5	Cote d'Ivoire	13	Morocco	21	Togo
6	Cameroun	14	Mozambique	22	Tunisia
7	Congo (Democratic Republic of Congo)	15	Namibia	23	Zambia
8	Congo	16	Nigeria		