# Utilization of indigenous knowledge and quality of life of rural people in Idemili South Local Government Area of Anambra State, Nigeria

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# **Abstract**

Quality of life (QoL) is viewed as a good life and cultural conditions which include happiness and fulfillment of needs. The rural people seemingly under-use indigenous knowledge (IK) in terms of health, cultural values, and communication which has a negative impact on their QOL. This study investigated how utilization of IK determined the OoL of rural people in Idemili South local government of Anambra State. A survey research design was adopted for this study. The population consisted of 384 respondents from Idemili South LGA of Anambra State, Nigeria. A structured questionnaire titled utilization of IK and QoL of rural people in Idemili South LGA of Anambra State was used for data collection. A multi-stage sampling technique was used for this study. The findings revealed that uses of IK include: processing and preserving cassava, yam, cocoyam, and plantain. Challenges against the utilization of IK were: influence of modernization and western knowledge on younger generation, lack of interest in IK and rural-urban migration in search of greener pastures. Utilization of IK had significant positive influence on the quality of life of the rural people. The QoL of rural people depends on their effective utilization of IK. The study recommended that librarians should champion the documentation and preservation of various components of IK systems. Also, Ministry of Education should incorporate IK into the educational curriculum in order to promote the usefulness and its influence on the quality of life.

**Keywords**: Utilization of Indigenous Knowledge (IK); Idemili South Local Government; quality of life (QoL); rural people.

#### Introduction

Quality of life is the degree to which the experience of an individual's life satisfies that individual's wants and needs. It therefore reflects how and what people believe to constitute a good life and human satisfaction. The satisfaction derived from various life domains directly contributes to individual quality of life. The quality of life of a person is what he/she perceives it to be. For example, it consists of higher pay, longer holidays, satisfaction in working lives, time to pursue enjoyable and satisfying leisure, emotional fulfillment in relationships, and having a long healthy and happy life (Zaid & Poopola, 2010).

According to European Commission (2015), quality of life can be measured by a lot of indicators such as material living conditions, productive or main activity, income, personal and family life, leisure and social interactions, economic and physical safety. In addition, quality of life can be determined with the general characteristics of the community based on governance and basic rights, natural and living environment and overall experience of life. According to Zaid and Poopola (2010), the domains that are selected as indicators of quality of life are: educational level; health; income; and occupation.

Quality of life of rural people is connected to the utilization of indigenous knowledge (IK). The rural people have a relatively rich body of IK and related technologies with which they have been using for solving problems of food production, herbal remedies and other natural medicinal formations for health promotion. Despite the uniqueness of IK and technologies, the rural people seemingly under-use IK (Abanyam, 2012). In the traditional African context, girls avoided premarital sexual experience for fear of social punishments usually meted out to girls who lost their virginity before marriage. The situation today shows a contrast to this African cultural value. Studies repeatedly show that watching violent entertainment increases aggression in those who view it. Although modernization seems to present 'improved' life and ways of doing things, it is still important to note that IK is part and parcel of the traditional information systems on which information exchange and social interactions between and among people in a community rotate (Nnadozie, 2013).

Indigenous knowledge (IK) is based on social, physical and spiritual understandings which have informed the people's survival and contributed to their sense of being in the world. Africa has a rich body of indigenous knowledge which for many decades has been handed down orally from generation to generation (Grey, 2014). Such IK has traditionally played a vital role in the area of agriculture, animal and human health, natural resource management, education and other economic and social activities. IK has become an accepted term which includes the expressions, practices, beliefs, understandings, insights, and experiences of indigenous groups generated over centuries of profound interactions with a particular territory. According to Inter-Agency Support Group (IASG, 2014), IK is the innovations and practices of rural people around the world. Rural people according to Magni (2016) are those who have a historical continuity with pre-invasion and pre-colonial societies that developed on their territories. They consider themselves distinct from other sectors of the societies now prevailing in those territories or parts of them.

According to Nnadozie (2013) the pragmatic nature and utilitarian of IK causes everyday demand of life which is influenced also by non-indigenous elements such as indigenous response to innovation. For instance, farmers in rural communities rely on their native intelligence to determine the suitability of land for particular crops. It has been observed that in Idemili South Local Government area of Anambra State, the rural people have reduced the extent by which indigenous knowledge is being used. This may be as a result of modernization or western culture on younger generation which has serious effects on indigenous health and quality of life of rural communities. This is particularly important for addressing the issue of indigenous knowledge utilization to improve the quality of life of rural people. This research therefore investigated how the utilization of indigenous knowledge determined the quality of life of rural people in Idemili South Local Government area of Anambra State.

# **Objectives of the study**

The main objective of this research was to investigate how utilization of IK improves the quality of life of rural people in Idemili South Local Government area of Anambra State. The specific objectives are to:

- 1) Examine the uses of IK in Idemili South Local Government of Anambra State;
- 2) Determine the influence of IK Utilization and the quality of life of rural people in Idemili South Local Government of Anambra State;
- 3) Identify the challenges against the utilization of IK in Idenili South Local Government of Anambra State.

#### **Research questions**

The study provided answers to the following research questions.

- 1) What are the uses of IK in Idemili South Local Government of Anambra State?
- 2) What are the challenges against utilization of IK in Idemili South Local Government of Anambra State?

# Research hypothesis

The following hypothesis was tested at 0.5 level of significant.

**Ho1**: Use of IK does not significantly influence the quality of life of rural people in Idemili South Local Government.

#### **Review of related literature**

The concept of quality of life is the essence of life and its interaction with the social order and physical environment. Milivojevic, Kokic-Arsic,, Milovanovic, Savovic, and Tonic (2012) see the quality of life as quality of performance which is becoming more important than quantity adding that, old and young, men and women want to live healthy life with a peaceful and spiritually fulfilling life. All they want is highly ethical society in which they can trust, and that is not based on exploitation but on helping each other, which gives a real base to realize their hopes and dreams. This, in other words implies that, people want to be happy throughout their life. According to Bagheri-Nesami, Rafii, and Oskouie (2010), quality of life is a criterion for determining the power or force that makes a person tolerate challenging situations successfully in life.

Quality of life as a general term is meant to represent either how well human needs are met or the extent to which individuals or groups perceive satisfaction or dissatisfaction in various life domains. Understanding quality of life therefore has potential implications because improving quality of life is very essential to individuals' lifestyle and goals. This is because, quality of life reflects the extent to which human needs are met in terms of levels of happiness, pleasure, and fulfillment (Bruaer, & Dymitrow, 2014). The experience of rural people in having a good quality of life reflects a complex set of attitudes and expectations of life in relation to individual attitudes.

However, some major indicators of quality of rural life of rural people as identified by Zaid and Popoola (2010) are: educational level, occupation, income and health. On the other hand, Mabawonku (2005) posits that, IK is the basis for local level decision making in agriculture, healthcare, food preparation, music, arts, crafts, natural resources management and a host of other activities in the communities.

Ilo (n.d) identified some of the indigenous medical practices prevalent in the Nigerian society such as: heat therapy for treatment of fever; bone setting through indigenous orthopedic practices; use of 'Obialu-Ofuu' leaves for malaria treatment; and chewing of bitter leaf to quell stomach problems. Lwoga, Ngulube and Stlwol (2010) maintain that, knowledge of local herbs is normally transmitted in indigenous communities from grandparents to children, especially those who show interest in such a practice. Quality of life, on the other hand is a positive outcome that is meaningful for people and for the society, because it reveals how people perceive their lives and how well they live. (Brauer & Dymitrow, 2014).

#### Methodology

A survey research design was adopted for this study. The population consists of indigenes of the target communities in Idemili South Local Government of Anambra State made up of seven (7) communities with a total population of 237,900. The population includes the elderly and youths whose ages range from twenty to sixty-five years (20-65years). The sample size of the population was 384. A multi-stage sampling technique was used to select appropriate sample size for this study. A structured questionnaire titled "Utilization of IK and QoL of rural people in Idemili South LGA of Anambra State" was used as instrument to collect data from the respondents. The questionnaire has three sections A-C. The questions were tested for validity and reliability using the Cronbach's alpha test. The questionnaire was distributed and collected by the researcher. The questionnaire was analyzed using descriptive analysis such as frequency count, percentage distribution, mean and standard deviation.

# Result and discussion of findings

Research Question One: What are the uses of indigenous knowledge in Idemili South Local Government of Anambra State?

Table 1: Uses of indigenous knowledge

S/N	Utilization of indigenous knowledge	SA (%)	A (%)	D (%)	SD (%)	Mean	STD
	Agriculture						
1.	I can process and preserve yam. Cocoyam, and plantain in dry form and/ or grind them into flour for traditional dishes.	148 (51.6%)	58 (20.2%)	39 (13.6%)	42 (14.6%)	3.0	1.111
2.	I plant lemon grass to control or expel termites	122 (42.5)	96 (33.4)	33 (11.5)	36 (12.6)	3.0	1.021
3.	I keep maize in the kitchen to dry moisture content low enough to keep them safe against weevils	107 (37.3)	92 (32.1)	43 (15.0)	45 (15.7)	2.9	1.070
4.	I use wood ash solution on cut surface of yam sets to avoid decay/rotten and expel termites	104 (36.2)	103 (35.9)	24 (8.4)	56 (19.6)	2.8	1.104
5.	I use dogonyaro leaves(neem) to control termites on cassava	114 (39.7)	66 (22.6)	53 (18.5)	55 (19.2)	2.8	1.151
6.	I rub bitter leave juice on the surface of affected tubers as soon as infestation of termite is noticed	104 (36.2)	77 (26.8)	48 (16.7)	58 (20.2)	2.7	1.140
7.	Weighted Mean					2.9	
8.							
0	Traditional medicine	100	15	26	1.0	2.4	012
9.	Indigenous surgeons combine surgery and herbs to deliver pregnant women of their babies	190 (66.2)	45 (15.7)	36 (12.5)	16 (5.6)	3.4	.912
10.	Making incision on the swollen part of the body in a bid to get rid of bad water or blood after which herbs are applied on the body.	182 (63.4)	51 (17.8)	21 (7.3)	33 (11.5)	3.3	1.030
11.	I use 'obialu-ofuu' (scent leaf) and chewing of 'onugbu (bitter leaf) to quell stomach problems	152 (53.0)	74 (25.8)	19 (6.6)	42 (14.3)	3.1	1.075
12.	I use plants, herbs, roots, or their combination for treatment of ailments.	122 (42.5)	100 (34.8)	23 (13.6)	42 (14.6)	3.0	1.045
13.	I make use of traditional medicine for treatment of fever and bone setting through indigenous orthopedic practices	126 (43.9)	78 (27.2)	42 (14.6)	41 (14.3)	3.0	1.077
14.	I use ginger as a spice in cooking food to prevent vomiting, dizziness and ulcerative colitis.	114 (39.7)	80 (27.9)	56 (19.5)	37 (12.9)	2.9	1.053
	Weighted Mean					3.1	

**Key:** Strongly Agree (SA = 4); Agree (A = 3); Disagree (D = 2); Strongly Agree (SD = 1).

Table 1 shows some of the uses of IK in the rural communities. The percentage of respondents and their responses were presented in the same box for ease of reference. That is, the respondents who strongly agreed (SA) and agreed (A) in the items were added for accuracy. On the utilization of IK, results show that processing and preserving yam, cocoyam, and

plantain in dry form and/or grind them into flour for traditional dishes (206, 71.8%;  $\bar{x} = 3.09$ ) and planting of lemon grass to control or expel termites (218, 75.9%;  $\bar{x} = 3.06$ ) were used in agriculture. The result implies that the rural people use IK for processing and preserving yam, cocoyam and plantain in dry form and/or grind them into flour for traditional dishes as well as planting of lemon grass to control or expel termites. It was also revealed that rural people use 'obialu-ofuu' (scent leaf) and chewing of 'onugbu' (bitter leaf) to quell stomach problems (226, 78.8%;  $\bar{x} = 3.17$ ). This result implies that rural people use IK in traditional medicine practice in the communities.

# Research Question 2: What are the challenges against utilization of indigenous knowledge in Idemili South Local Government of Anambra State?

Table 2: Challenges against utilization of indigenous knowledge

S/N	Problems	SA	A	D	SD	Mean	STD
		(%)	(%)	(%)	(%)		
1.	Modernization and western knowledge	193	47	38	9	3.4	.840
	positively influence the younger generation	(67.2)	(16.4)	(13.2)	(3.1)		
2.	Young generation lack interest on	190	51	37	9	3.4	.835
	indigenous knowledge	(66.2)	(17.8)	(12.9)	(3.1)		
3.	Migration to urban areas for greener pasture	192	47	37	11	3.4	.860
		(66.9)	(16.4)	(12.9)	(3.8)		
4.	Custodians of indigenous knowledge are	191	47	37	12	3.4	.871
	mostly illiterates	(66.6)	(16.4)	(12.9)	(4.3)		
5.	Indigenous knowledge is mostly held by the	185	50	43	9	3.4	.858
	elders and traditional rulers in the	(64.5)	(17.4)	(15.0)	(3.1)		
	community						
6.	Indigenous knowledge is restricted to only	186	47	41	13	3.4	.896
	family members	(64.8)	(16.4)	(14.3)	(4.5)		
7.	There are satanic and diabolic practices in	163	40	75	9	3.2	.948
	indigenous knowledge	(56.8)	(13.9)	(26.1)	(3.1)		
8.	Lack of confidence in indigenous	163	40	75	9	3.2	.948
	knowledge	(56.8)	(13.9)	(26.1)	(3.1)		

**Key:** Strongly Agree (SA = 4); Agree (A = 3); Disagree (D = 2); Strongly Agree (SD = 1).

Table 2 presents results on the challenges against utilization of indigenous knowledge by the respondents. The percentage of respondents and their responses were presented in the same box for ease of reference. The result shows that influence of modernization and western knowledge on younger generation (240, 83.6%;  $\bar{x}=3.48$ ), lack of interest in indigenous knowledge by younger generation (241, 84.0%;  $\bar{x}=3.47$ ), rural-urban migration in search of greener pastures (239, 83.3%;  $\bar{x}=3.46$ ), poor and low level of education on the part of custodians of indigenous knowledge (238, 82.0%;  $\bar{x}=3.45$ ). This result shows that lack of interest in indigenous knowledge by the younger generation were more in number based on the responses of the respondents as challenges against utilization of indigenous knowledge in communities surveyed.

# Analysis of research hypotheses

In order to achieve the objectives of this study, one hypothesis was tested.

Hol: Use of indigenous knowledge does not significantly influence the quality of life of rural people in Idemili South Local Government.

.R	R Square	quare Adjusted R Squar		e Std. Error of the Estimat			
0.558	0.311		0.309		7.446		
Variable	Sum of Squares	df	Mean Square	F	P	Remark	
Regression	7131.76	1	7131.76	129.62	0.000	Cianificant	
Residual	15802.23	285	55.44	128.62		Significant	
Total	22933.99	286					

Table 3: Influence of utilization of indigenous on the quality of life of rural people

Table 3 presents result of test of hypothesis focusing on the influence of utilization of indigenous knowledge on the quality of life of rural people in Idemili South local government of Anambra State, Nigeria. The result revealed that utilization of indigenous knowledge has significant influence on the quality of life of rural people in Idemili South local government of Anambra State. The result also shows a coefficient of multiple correlations (R) of 0.558 and a multiple R square of 0.311 and Adjusted  $R^2$  of 0.309. This implies that 30.9% (Adj  $R^2 = 0.309$ ) of the total variance in the quality of life of the rural people (dependent variable) is accounted for by the utilization of indigenous knowledge (independent variable). The significance of the influence was tested at p<0.05 using the Fratio at the degree of freedom (df = 1/285). The table also showed that the Analysis of Variance (ANOVA) for the regression yielded an F- ratio of 128.62.

# Discussion of the findings

Utilization of IK in Idemili South local government, Anambra State, Nigeria was considered under major sectors such as agriculture, traditional medicine, music, and environmental conservation. Findings on the utilization of IK in agriculture by rural people in communities revealed major areas of IK utilization to include: processing and preserving yam; cocoyam; and plantain in dry form and/or ground-flour for traditional dishes as well as planting of lemon grass to control or expel termites. These findings were in slight contrast with Bamigboye and Kuponiyi's (2010) findings which established utilization of IK in rural areas in Ekiti State, South West of Nigeria, in the areas of land preparation and management. Therefore, it could be deduced that there were diverse ways of utilization of IK in agriculture in rural communities in Nigeria.

Another area of utilization of IK investigated by the researcher was in traditional medicine practice in the communities and findings revealed combination of surgery and herbs to deliver pregnant women of babies by traditional surgeons, making incision on the swollen part of the body in a bid to get rid of bad water or blood after which herbs were applied on the affected part. Also, a high percentage of utilization of IK in traditional medicine was also established. Findings from this study was in line with the findings of the study of Ajuwon, Brieger, Oladapo and Adeniyi's (1995) which reported the act of indigenous surgery in the western part of Nigeria where the 'Oloolas' (traditional surgeons) specialize in circumcision and making traditional facial marks.

The study further established the sustainability of natural resources and monitoring of climate and other natural systems as the major areas in which rural people utilized IK for environmental conservation. These findings were partially in support of results from Mercer, Dominey-Howes, Kelman and Iloyd's (2007) which established land use planning, building methods, food resilience, social resilience and environmental resilience. On the challenges against utilization of IK by rural people in the communities, the study established influence of modernization and western knowledge on younger generation, lack of interest in IK by younger generation and rural-urban migration in search of greener pastures.

The result on the influence of utilization of IK on quality of life of rural people in Idemili LGA, Anambra State revealed that utilization of IK has significant positive influence on the quality of life of the rural people. It could be deduced that, for every level increase in indigenous knowledge utilization by the rural people in Idemili LGA, Anambra State, a 30.9% improvement in the quality of life of the rural people would be achieved. These findings corroborated findings from Anyira and Nwabueze's (2010) which established that indigenous knowledge helps Niger Delta rural communities to produce food, acquire education and vocational skills, and conserve their natural environment.

#### **Conclusion**

Utilization of IK is essential in promoting nature and a positive outcome that is meaningful for people and society because it reveals how people perceive their lives and how well they live. The quality of life of rural people depends on their effective utilization of IK of the community. Furthermore, IK provides template for better understanding and appreciation of a people's culture, norms and knowledge system which have influence on the quality of their life. The rural people also claimed that they were healthy enough to go about their daily activities with neighbours with whom they shared love and affection.

#### **Recommendations**

Based on the findings of this study, it is evident that utilization of indigenous knowledge has a positive significance on the quality of life of rural people in Idemili South Local Government. Therefore, the following recommendations are made.

- 1. Librarians should champion the documentation and permanent preservation of various components of the indigenous knowledge systems. This would in no doubt engender cultural renaissance, understanding and attendant educo-research tourism.
- 2. The Federal Ministry of Information and Culture should intensify efforts to take library services to rural communities as this would revive interest in the indigenous or local language system of various communities.
- 3. Librarians, through library automation, internet, radio, television, billboards, films, audio cassettes, among others should adopt dissemination of IK. This would not only facilitate easy documentation and communication of this specialized body of information to a large mass of people but would serve as a means of attracting the interest of the younger generation to the importance and usefulness of IK.
- 4. The Ministry of Education should incorporate IK into the educational curriculum in order to promote the usefulness and its influence on the quality of life.

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