



# **Our Values On Transition: Analyzing The Nexus Between Environmental Governance And Changing Mobility Of Rural Farmers**

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## **ABSTRACT**

Indigenous capacities on erosion control are impacting on livelihood of rural households in a marginal dimension. This undermines their collective positions in global environmental governance. This situation has necessitated strong intellectual debates on indigenous knowledge use for environmental conservation. The study thus utilized the multi stage sampling of communities with records of erosion menace in three selected southeastern states namely; Abia, Anambra, Imo States were used. A random sampling of 315 respondents was used. Data were collected using the qualitative key informant interviews, focused group discussions and questionnaire tools for the quantitative data. Data elicited were analyzed with aid of the Chi square test. The results showed that there is a relationship in the participation on environmental governance, and its impact on migration and erosion control within the communities. When tested as a hypothesis using Chi-Square test of Independence, it was confirmed that the relationship was significant since the test gave a  $\chi^2_{cal}$  value of 45.761 with significance level of .000 which is less than 0.05 level of significance. The study concludes that our land conservation values have gradually been on transitory scale due to the interplay of poor environmental governance by both local and state authorities which incisively have impacted on the changing mobility of rural manpower capacities. The study recommends that despite fastidious transition, it is pertinent to reassess the weak relationship between the indigenous network and the state environmental authorities in ensuring integrative environmental governance that would interject the changing mobility of rural farmers in the southeastern Nigeria.

**Keywords:** Indigenous Knowledge, Erosion Control, Environmental Governance, Mobility

## **1.0 INTRODUCTION**

Historically, our forefathers consciously and unconsciously planted trees and had dense gardens at their backyards with yam barns in almost all homes for food storage. This practice provided security for food as well as helped conserve the environment from adverse weather attack but a change and or decline in these practices with the inequalities in the levels of adherence to cultural norms that once protected the soil from harm have constituted sequential environmental threats. However, with the rapid urban and livelihood transformations of rural communities into semi urban and urban centres there is a recurrent provocative effect on immediate environment.

Consequently, most households and communities in the region are at the perils of erosion risks and attendant ecological threats. Indigenous knowledge systems (IKS) in emerging economies in general and rural Africa, in particular, have historically been considered one of the most valuable assets rural people own but also the least mobilized for developing rural communities (Mauganidze, 2016).

Based on these interactions, it can be surmised that the indigenous knowledge system in addressing environmental disaster is dialectically essential to livelihood sustenance of the southeastern communities in Nigeria. From a historical perspective, Udo (1971), reported that the problem of gully erosion had

been long recognized by the British colonial government in the 1920s. This supports the claim that the present day gully erosion menace can be assumed to have been created with the politicization of the disaster from historic time as listed by Federal Radio Cooperation of Nigeria, Enugu (FRCN 2008). According to Chief Okoye, Mbuze I of Nanka (see; [www.frcn.radionigeria.net](http://www.frcn.radionigeria.net)); *“The gully erosion in Nanka and Ekwulobia started from the flood waters that flow down from Isuofia some seven kilometres and seventy-five meters higher to the west of Nanka, Oko and Ekwulobia. The people had wanted to tackle the problem but were told to wait for the government. In Agulu, the surface flood incidence was the genesis of the erosion problems which was left unattended to, thus was the gullies created”*.

Studies by Food and Agricultural Organization (FAO) led Global Soil Partnership (2017) reports that 75 billion tonnes (Pg) of soil are eroded every year from arable lands worldwide, which equates to an estimated financial loss of US \$400 billion per year. The latest reference document of Food and Agricultural Organization of the United Nations (2015) on the status of global soil resources stresses that “the majority of the world’s soil resources are fair, poor or very poor condition”. Ikponmwsa, et al (2016) observed that although soil erosion is one of the main themes in environmental studies, an unresolved question is whether its relevance is accorded due place in agriculture and related studies because of its great concern and implications on all human activities; especially the agricultural sector which is the most affected.

Premised on the above a linkage on the how the interactions of our indigenous values on transition have been impacted by the prevailing environmental governance and changing mobility of rural farmers. Thus, as Studies by Brandes et al (2005) argued that environmental governance advocates sustainable development as the supreme consideration for managing all human activities—political, social, and economic. Kunce et al (2007) also contend that local governments would rather make a less strict standard of environmental regulations than consider the long-term benefits and caring for the environment, thereby preferably loosening environmental standards in order to attract more investments and generate more job opportunities and tax revenues. This has led to a rapid decrease of environment quality. Under these particular circumstances, this study examines community participation in current erosion control as an important role in local and national environmental governance.

In relation to food security, studies by FAO (2001) stated that Nigeria is one of the countries with high declining soil fertility. The country was estimated to be losing an average of 24 kg nutrients/ha per year (10 kg N; 4 kg P<sub>2</sub>O<sub>5</sub>, 10 kg K<sub>2</sub>O) in 1990 and 48 kg nutrients/ha per year in 2000, that is, a loss equivalent to 100 kg fertilizers/ha per year. Based on the above, one could surmise that erosion like any other environmental disaster provokes an overriding realization of the victims to migrate either in large scale or in small scale depending on the level of shock, and the availability of social and financial capital to help mitigate the impact.

The southeastern communities of Nigeria, therefore, have been historically challenged by the adverse policy regimes of the Nigerian state which is clearly snail-like in addressing environmental challenges with far-reaching consequences on the fundamental rights of the people especially as it relates to their natural environment. The outcome of this has been negatively impacted land use changes since the post-civil war era, in addition to the ineptitude and negligence of both state and federal government to intervene holistically on the issue of erosion control. Hence, agricultural development and food security in the area became politically driven. Several socio cultural imbalances have erupted to influence household livelihood changes and migration of rural manpower into the cities for menial jobs and other entrepreneurial engagements. It is in light of the above that this study analyzes the nexus between environmental governance and changing mobility of rural farmers with specific interest on how the indigenous value system have been transformed towards developing the local capacities for erosion control.

## **2.0 Empirical Review**

Public participation has been in a dominant position of determining how society manages or protects the environment in many countries Bosso (2003). The general public ought to have the right to live in a healthy environment, and more often than not, they have a better understanding of their surroundings.

They could offer crucial information and suggestions for environmental governance Xiao (2017). Citizen involvement is intended to produce better decisions, and thus generate more efficiency benefits for the rest of society Irvin et al (2004).

Scholars such as Meadowcroft argues that the basis of environmental governance has been regulatory (based around fixing standards, issuing permits, and legal enforcement), and the coming of sustainable development has been linked to more negotiated or co-operative approaches Meadowcroft (2000). This however, reflects the unequal position of the indigenous knowledge system to promote and or influence sustainable environmental governance for sustainable development of most African communities. Environmental governance as defined by scholars refers to the set of regulatory processes, mechanisms, and organizations through which political actors influence environmental actions and outcomes Carmen et al (2017).

### **3.0 Research Question and Hypothesis**

- i. How and to what extent can communities' participation in environmental governance impact on migration and erosion control?

#### **Hypothesis:**

- i. The higher the participation in environmental governance, the lesser the impact on migration on erosion control within the communities.

### **4.0 THEORETICAL APPROACH AND METHODOLOGY**

The study employed the holistic ethnographic (ethnopedological) study design as the philosophical and conceptual issues that drive the research. The study utilized the Focus Group Discussion and the Key Informant Interview. Individuals who fall into the categories of possessing indigenous knowledge capacity on erosion control like farmers associations, heads of households and women based associations etc formed the sample size to examine their contributions and challenges in erosion control in their communities. The study utilized both secondary and primary sources of data. The qualitative data derived from interviews and FGDs were coded and analyzed. Qualitative Content Analysis was used. The justification for the choice of these methods is to understand the relationship between the farming households and environmental control institutions in addressing erosion, food security amidst micro scale migration that has expanded the disparities in livelihoods of rural communities in the southeastern Nigeria.

The study was centred on selected states of Southeast Nigeria which comprises of Abia, Anambra, and Imo states. "The zone is located within latitudes 4° 47' 35"N and 7° 7' 44"N, and longitudes 7° 54' 26"E and 8° 27' 10"E in the tropical rain forest zone of Nigeria, with mean maximum temperature of 27 °C, and total annual rainfall exceeding 2500 mm" (Ezemonye & Emeribe, 2012). "It is mainly agrarian and inhabitants depend more on land resources, due to its dense population averaged to about 1000 people/Km<sup>2</sup>. The study utilized the multi-stage sampling technique to sample three states of the south-eastern Nigeria vulnerable to erosion menace. Secondly, it used the purposive sample to select two Local Government Areas affected by erosion menace in the three South-eastern states of Nigeria culminating into seven (6) Local Government Areas. Thirdly, it randomly selected two communities affected by erosion from each of the local government areas equals (12) communities. Fourthly, a purposive sampling of 6 households from each of the village was done. The sample size of the study was 315 households delineated through multi-stage sampling technique.

The study adopted both secondary and primary sources of data. Secondary data were sourced from library, desk and internet materials involving an extensive engagement with literature. While primary data involved the triangulation of qualitative instruments (FGDs and KIIs). Data were qualitatively and quantitatively analyzed.

### **5.0 RESULTS**

The hypothesis was tested using the Chi-Square test of independence

- i. The higher the participation in environmental governance, the higher the impact on migration and erosion control within the communities.

Indicators to measure the relationship were tabulated and tested below.

Communities' engagement indicators	Highly effective	Moderately effective	Poorly effective	Not effective	Total
Informal labour groups and erosion control	12	28	17	24	81
Values on labour sharing will affect migration and physical erosion control practices	19	15	13	19	66
Reduction in informal monitoring and response system has impacted on poor erosion control intervention on livelihoods by erosion.	26	7	18	9	60
Informal value for local landmarks and changes in settlement and erosion patterns in the communities.	23	28	28	29	108
<b>Total</b>	<b>80</b>	<b>78</b>	<b>76</b>	<b>81</b>	<b>315</b>

**Source: Researcher's Field survey 2019.**

Results from the data above was computed using the Chi square

The higher the participation in environmental governance, the lesser the impact on migration on erosion control within the communities

		Impact of communities' participation in environmental governance			Total
		1	2	3	
erosion control	1	Count	64	22	86
		Expected Count	59.9	42.0	70.1
2	Count	45	15	58	118
		Expected Count	41.1	28.8	48.1
3	Count	82	99	88	269
		Expected Count	93.7	65.8	109.6
4	Count	44	29	43	116
		Expected Count	40.4	28.4	47.3
Total	Count	235	165	275	675
		Expected Count	235.0	165.0	275.0

#### Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	45.761 <sup>a</sup>	6	.000
Likelihood Ratio	46.929	6	.000
Linear-by-Linear Association	2.507	1	.113
N of Valid Cases	675		

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 28.36.

Tables above show the cross tabulation and significance of the relationship between participation in environmental governance, and its impact on migration and erosion control within the communities. When tested as a hypothesis using Chi-Square test of Independence, it was confirmed that the relationship is significant since the test gave a  $\chi^2_{cal}$  value of 45.761 with significance level of .000 which is less than 0.05 level of significance. This shows that there is significant relationship between participation in environmental governance, migration and erosion control within the communities.

Data from the table above showed that several indicators were used to measure communities' engagement on erosion control as shown in table 4.9. Results from the data were computed using the correlation Chi-square to observe the variation across indigenous practices on erosion control. Table above shows the indicators used to qualify the relationship between communities' engagement in and erosion control. Data reveals that the relationship between absence or reduction of informal labour pool for monitoring, response system and increase in mobility and erosion menace,

## 6.0 CONCLUSIONS

In conclusion, it would suffice one to state that our values of land conservation that was once indigenous to us have gradually been on transitory scale due to the interplay of poor environmental governance by both local authorities and the state environmental authorities which incisively have impacted on the changing mobility of rural manpower capacities (farmers) thus a threat to food security. This implies that the future of rural livelihood system are constantly undermined hence the justification for the unequal position of the indigenous system to mitigate on erosion control. In addition, the ineptitude and negligence of both state and federal government to intervene holistically on the issue of erosion control have driven several socio cultural imbalances affecting manpower composition due to changes and migration of rural manpower into the cities for menial jobs and other livelihood engagements therefore expanding their livelihood poverty baselines.

## 7.0 RECOMMENDATIONS

The study recommends that despite our values been on a fastidious transition, it is pertinent to reassess the weak relationship between the indigenous network and the state environmental authorities in ensuring integrative environmental governance would interject the changing mobility of rural farmers away from farming as a main source of livelihood of communities in the southeastern Nigeria. This would help check the impact of erosion on food security and as well address the impeding inequalities of rural households to mitigate on migration of rural manpower.

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