

CLIMATE CHANGE AND THE ADMINISTRATION OF UNIVERSAL BASIC EDUCATION IN ENUGU STATE, NIGERIA

DR. S. A. MAGAJI; DR. J. O. EGBEBI; & Mr YAKUBU CHISOM

Department of Administration and Planning, Faculty of Education, Ahmadu Bello University, Zaria

ABSTRACT

T*his study was carried out to assess climatic change on the administration of the UBE programme in Enugu state, Nigeria. The objectives of the study were to ascertain the effect of erratic rainfall in the administration of UBE programme in Enugu state and to determine the effect of drought in the administration of UBE programme in Enugu state. Research questions and hypothesis were in line with the objectives. The research approach adopted is descriptive survey research design. Population of the study is 3,652 comprised 2, 728 classroom teachers, 154 principals and 770 ESUBEB. Krejcie and Morgan was used to determine the sample size of 351 respondents' which comprises of 262 teachers, 15 principals, and 74 ESUBEB officials, the sampled schools were purposively selected from junior secondary schools in Enugu state. 40- Item*

Introduction:

Climatic change is a global phenomenon that transcends national boundaries, posing threat to mankind and nature. Climate change is a change in the composition of the atmosphere that is over and above natural variations attributed directly or indirectly to anthropogenic or human activities. Climate change refers to an increase or decrease in average global temperatures. Natural events and human activities are believed to be contributing to an increase or decrease in average global temperature.. It may simply be referred to any

questionnaires were administered to the 351 respondents. Cronbach alpha technique was used for its analysis in the determination of the internal consistency of the instrument, the Split Half method was observed; the overall reliability value of 0.944 was obtained. The major findings prove that climatic factors such as erratic rainfall and drought militate against the administration of the UBE programme in Enugu state, the fact that Erratic rainfall and drought affects the lives of both plants and animals leading to poor health of administrators of UBE programme and affects the infrastructural facilities and equipment in school. Based on the findings, the researcher recommended that the government and other agencies should make provisions and assist those with poor health. They should also organize public campaign against throwing refuse materials indiscriminately which block water-ways, seminars, workshops and conferences to create awareness in the minds of the people about this global issue and as well device means to help teachers, principals, parents, school children on how to adapt to the situation.

Keywords: *Climate, Climate Change, Administration, erratic rainfall, drought*

Change in climate overtime whether due to natural variability or as a result of human activity (Odjugo 2010). Climate change is one of the major challenges of our time that adds considerable stress to our societies and to the environment.

Climatic change occurs in form of acid rain, tile threat to ozone layer from chlorofluorocarbons and global weather effects such as erratic rainfall, over flooding, rise in sea level, global warming, erosion, desertification, drought, pest, diseases and land degradation. Many studies such as the one conducted by intergovernmental panel on climate change IPCC (2017), predicts a continuous rise in the frequency of these disasters across the globe. This agrees with Ozor (2009), who opines that climate change refers to change over time whether due to natural variability or as a result of human activity and is widely recognized as the most serious environmental

threat facing our planet today. Nigeria like other nations of the world which are at the receiving end of the effect of global climate change is counting its losses from the impacts of the climatic change disasters. This menace affects the access to quality education in Nigeria particularly in Enugu state where erratic rainfall and drought have become serious factors militating against the administration of the Universal Basic Education programme. Hornby (2010), stated that erratic rainfall patterns can mean both an increase and decrease of precipitation amounts. Decreased rainfall and drought can cause low yields and crop failure, depletion of surface and groundwater irrigation supplies, depletion of domestic water supplies, and an increase in wildfire potential. Drought is a slow motion disaster, as water resource depletion is not a singular event; it builds as rains fail, heat increases, and supplies are exhausted. With the combination of irregular extreme heat spikes, varied season length, and erratic rainfall patterns, educational planners and administrators who have historically relied on predictable curriculum calendar schedules can find themselves in unfamiliar new conditions that are hard to predict and plan for, these invariably affect the administration of universal basic education programmes in Nigeria.

Administration which is an integral part of an organization is a process by which human and non-human resources are co-ordinated to accomplish a given set of objectives. Akubue (2011) sees Administration as the process of systematically arranging and co-coordinating the human and material resources available to any organization for the main purpose of achieving stipulated goals of that organization. However, administration of the Universal basic Education programme is the process of co-ordinating the human and material efforts towards the provision of free universal basic education for every child of school going age. It is established and maintained to ensure an uninterrupted access to 9-year formal education programme which is free and compulsory basic education for every child under six years of primary school and three years of junior secondary education which also includes adult and non-formal education programme. However, its vision and mission have been obstructed by climatic change

disaster such as over-flooding and erosion which affect the UBE programme. Universal Basic Education Programme which was launched by Olusegun Obasanjo Administration in May 1999 to improve on the limitation of the Universal Primary Education (UPE) of 1970's is an education reform programme aimed at providing education to all Nigerians of school going age. Babalola, (2016) observed that in an attempt to effectively realize the objectives of the universal basic educational programmes the government outlined the implementation guidelines to facilitate the successful achievement of the stated objective.

Besides, the efforts of Nigerian government in enhancing education for all cannot be over-emphasized although it has been corrupted with a lot of problems of climatic change disasters such as floods, erosion, droughts and rise in sea level among others. Again, management problems such as poor planning, organizing and poor implementation of the scheme couple with poor provision of adaptive strategies to climate change disasters have made it operationally difficult in achieving the objectives of the Universal Basic Education (UBE) Programme in Nigeria. Hence, the present study seeks to assess climatic change in the administration of the Universal Basic Education (UBE) Programme in Enugu State.

Statement of the Problem

Administration of the Universal Basic Education Programme has been troubled with numerous challenges most of which is the climatic change disasters across the globe. This has become a hinder in the wheel of achieving the nation's educational objectives. These disasters which were very rare in Nigeria in the past have today become serious factors militating against the administration of the universal basic education programme in some states in Nigeria particularly in Enugu State. In 2020 the Enugu State Disaster Relief Coordinating Committee (ESDRCC), stated that the people of the state have truly suffered severe losses of facilitates in educational sector. In the state for example, many people in some local governments, communities, towns and villages have been dislodged and schools destroyed due to the incidence of erratic rainfall and drought.

These circumstances among others have made it practically difficult and problematic for proper administration of the UBE programme in the affected areas of Enugu state. In light of this, the researcher intends to assess climatic change on the administration of the Universal Basic Education (UBE) Programme in Enugu State.

Objectives of the Study

The general objective of the study was to assess climatic change on the administration of the Universal Basic Education (UBE) programme Enugu State. Specifically, the study seeks to:

1. Determine the effects of Erratic Rainfall on the Administration of the Universal Basic Education programme in Enugu state.
2. Determine the effects of Drought on the Administration of the Universal Basic Education (UBE) Programme in Enugu State.

Research Questions

The following research questions were formulated to guide this study:

1. How does erratic rainfall affect the administration of the Universal Basic Education programme in Enugu State?
2. What are the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State?

Hypotheses:

The following null hypotheses were formulated to guide the study.

H01: There is no significant difference on the opinion of teachers, principals and members of Enugu State universal basic education board (ESUBEB) on the effects of erratic rainfall on the administration of the Universal Basic Education programme in Enugu State.

H02: There is no significant difference on the opinion of respondents on the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State

Scope of the study

The study Assessment of Climate Change in the Administration of Universal Basic Education Programmes in Enugu State was scoped at Enugu state and the study was limited to junior public secondary schools in Enugu State. It is also limited to six educational zones in Enugu state was studied.

Methodology

This research work adopted descriptive survey design. According to Ali, (2006) descriptive survey is a type of study which aims at collecting data and describing in a systematic manner, the characteristic features and facts about a given population.

The population of the study was 3,652 which comprised 2, 728 classroom teachers, 154 principals (Enugu State Post-Primary School Education Board, 2020) and 770 members of State Universal Basic Education Board, Enugu (ESUBEB) (UBEC, 2020). The study was carried out in public junior secondary schools in Enugu State. There are 154 public secondary schools owned by Enugu state Government across 17 Local Government Areas of the state under 6 educational zones, the zones are Agbani, Awgu, Enugu, Nsukka, Obollo-Afor and Udi. The sample size of the study was determined by adopting the procedure suggested by Krejcie and Morgan (1970). To this effect, 262 teachers, 15 principals, and 74 ESUBEB officials was drawn from junior secondary schools and Enugu State Universal Basic Education Board. A total of 351 participants were sampled from the bodies under study. The researcher adopted 95 percent confidence level and margin error of 5 percent. The researcher adopted purposive sampling in determining 35 sample schools; three schools were drawn from each education zone out of the six education zones in Enugu state.

Results

Research Question Three: How does erratic rainfall affect the administration of the Universal Basic Education programme in Enugu State?

This section covers item statements 1 to 10 in the questionnaire

Table 1: Opinion of respondents on how Erratic Rainfall affects the Administration of the Universal Basic Education programme in Enugu state

s/no	Items	SA	A	D	SD	Mean
1	Erratic rainfall prevents access to school for monitoring or supervision	146	122	46	37	3.08
2	Erratic rainfall damages school premises	136	76	99	40	2.88
3	Out of season rainfall affect school curriculum calendar schedules	78	64	132	77	2.41
4	Erratic rainfall causes damage to school structures	116	151	62	22	3.03
5	Erratic rainfall prevent students access to schools	74	101	119	57	2.55
6	Erratic rainfall prevents the realization of the UBE objectives as a result of its effects on school structures	183	86	61	21	3.23
7	Erratic rainfall affects the infrastructural facilities and equipment in schools	205	43	61	42	3.17
8	Erratic rainfall affects the lives of both plants and animals leading to poor health of administrators of UBE programme	178	95	71	7	3.26
9	Erratic rainfall confusion in UBE administration process	145	122	47	37	3.07
10	Erratic rainfall disrupt networks thereby causing bridge of communication among UBE staff	136	76	99	40	2.88
	<i>Cumulative mean</i>					2.95

Results of the descriptive statistics on the above table shows that there is high negative effect of erratic rainfall on the administration of the Universal Basic Education programme in Enugu state .This is because the cumulative mean of 2.95 is greater than the cumulative mean of 2.500. Specifically, Erratic rainfall affects the lives of both plants and animals leading to poor health of administrators of UBE programme, as this item obtained the highest mean value of 3.26 as further details reveal that while 178 of the respondents strongly agreed with this item, another 95 of the respondents agreed with this item, as against 71 of the respondents disagreed with this item and the rest 7 of the respondents strongly disagreed with this item. Also, the same vein, Erratic rainfall prevents the realization of the UBE objectives as a result of its effects on school structures since this item held the second highest mean value of 3.23 as further details show that 183 of the respondents strongly agreed with this item, 86 of the respondents agreed with this item, 61 of the respondents disagrees with this item, and the rest 21 of the respondents strongly disagrees with this item. Also Erratic rainfall affects the infrastructural facilities and equipment in schools, this item has the third highest mean value of 3.17; as 205 of the respondents strongly agreed, 43 of the respondents agreed, 61 of the respondents disagreed and the remaining 42 of the respondents strongly disagreed, with the item . In summary, there is high negative effect of erratic rainfall on the administration of the Universal Basic Education programme in Enugu state, especially as the fact that Erratic rainfall affects the lives of both plants and animals leading to poor health of administrators of UBE programme and Erratic rainfall affects the infrastructural facilities and equipment in schools,.

Research Question four: What are the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State?

This section covers item statements 11 to 20 in the questionnaire

Table 2: Opinion of respondents on how drought affects the administration of the Universal Basic Education programme in Enugu state

s/no	Items	SA	A	D	SD	MEAN
11	Prolonged drought may spell doom to most school resources	78	64	132	77	2.41
12	Drought increases pressure on land resources	116	151	62	22	3.03
13	Drought causes pest and diseases which leads to poor health of administrators	74	101	119	57	2.55
14	Drought causes Food crisis leading to malnourishment of staff and students of UBE programme	183	86	61	21	3.23
15	Drought causes poverty due to loss of crops and animals leading to inadequate funding of UBE programme	205	43	61	42	3.17
16	Drought prevents the realization of the UBE objectives as a result of its effects on students health	178	95	71	7	3.26
17	Drought causes mental stress on school administrators	145	122	47	37	3.07
18	Poor economic conditions at home as a result of drought causes students dropout	136	76	99	40	2.88
19	Drought affects school calendar	78	64	132	77	2.41
20	Drought damages school premises by making it too dusty	72	67	131	81	2.37
	Cumulative mean					2.84

Results of the descriptive statistics on the above table shows that there is serious negative effect of drought on the administration of the Universal

Basic Education programme in Enugu state, reason being that the cumulative/general mean of 2.84 is greater than the cumulative mean of 2.500. Specifically, Drought prevents the realization of the UBE objectives as a result of its effects on students health, as this item attracted the highest mean value of 3.26 which further details reveal that 178 of the respondents strongly agreed with this item, while 95 of the respondents agreed with this item, as against 71 of the respondents disagreed with this item and the rest 7 of the respondents strongly disagreed with this item. In the same vein, Drought causes Food crisis leading to malnourishment of staff and students of UBE programme since this item held the second highest mean value of 3.23, which further details show that 183 of the respondents strongly agreed with this item, while 86 of the respondents agreed with this item, as against 61 of the respondents disagrees with this item, and the rest 21 of the respondents strongly disagrees with this item. Also Drought causes poverty due to loss of crops and animals leading to inadequate funding of UBE programme, this item has the third highest mean value of 3.17; with details showing that while 205 of the respondents strongly agreed, with 43 of the respondents agreed, as against as against 61 of the respondents disagreed and the remaining 42 of the respondents strongly disagreed, with the item. In summary, there is high negative effect of drought on the administration of the Universal Basic Education programme in Enugu state, especially because of the fact that Drought prevents the realization of the UBE objectives as a result of its effects on students health and Drought causes poverty due to loss of crops and animals leading to inadequate funding of UBE programme,

Hypotheses Testing

This section presents details of hypothesis testing based on the produced objective of the study. The null hypotheses were tested using ANOVA statistics at 0.05 level of significance. The decision rule for the hypotheses was that any calculated value which was less than the critical value was considered not significant while any value that was greater than the critical value was considered significant

H01: There is no significant difference between the opinion of teachers, principals and members of Enugu State universal basic education board (ESUBEB) on the effects of erratic rainfall on the administration of the Universal Basic Education programme in Enugu State.

Table 3: Analysis of Variance (ANOVA) statistics on different between the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on the effects of erratic rainfall on the administration of the Universal Basic Education programme in Enugu State.

	Sum of Squares	Df	Mean Square	F computed	F critical	Sig.
Between Groups	39.079	2	19.540	1.397	2.60	.249
Within Groups	4868.152	348	13.989			
Total	4907.231	350				

$p > 0.05$, $F_{\text{computed}} < F_{\text{critical}}$ at df 2, 34

Results of the Analysis of Variance (ANOVA) statistics above showed that there is no significant difference on the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on the effects of erratic rainfall on the administration of the Universal Basic Education programme in Enugu State. This is because the calculated p value of 0.249 is above the 0.05 alpha level of significance and the computed F value of 1.397 is lower than the F critical value of 2.60 at df 2, 348. Their computed mean opinions are 29.725, 29.4000 and 28.905 of teachers, principals and members of Enugu state universal basic education board (ESUBEB) respectively. This shows that each of the three groups of respondents have similar level of opinion concerning the effects of erratic rainfall on the administration of the Universal Basic Education programme in Enugu State. Therefore the null hypothesis which state that There is no significant different between the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on the

effects erratic rainfall on the administration of the Universal Basic Education programme in Enugu State, is hereby accepted and retained.

H04: There is no significant difference between the opinion of teachers, principals and members of Enugu State universal basic education board (ESUBEB) on the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State.

Table 4: Analysis of Variance (ANOVA) statistics on different between the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State.

	Sum of Squares	Df	Mean Square	F computed	F critical	Sig.
Between Groups	29.082	2	14.541	1.385	2.60	.252
Within Groups	3654.769	348	10.502			
Total	3683.852	350				
<i>p > 0.05, F computed < F critical at df 2, 348</i>						

Results of the Analysis of Variance (ANOVA) statistics above showed that there is no significant difference on the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State. This is because the calculated p value of 0.252 is above the 0.05 alpha level of significance and the computed F value of 1.385 is lower than the F critical value of 2.60 at df 2, 348. Their computed mean opinions are 28.481, 29.000 and 27.851 of teachers, principals and members of Enugu state universal basic education board (ESUBEB) respectively. This shows that each of the three groups of respondents have similar level of opinion concerning the effects of drought

on the administration of the Universal Basic Education (UBE) Programme in Enugu State. Therefore the null hypothesis which state that There is no significant different between the opinion of teachers, principals and members of Enugu state universal basic education board (ESUBEB) on the effects of drought on the administration of the Universal Basic Education (UBE) Programme in Enugu State., is hereby accepted and retained.

Discussion of the Findings

Based on the findings from both the teachers, principals and members of ASUBEB on items of research questions and hypotheses formulated for this study, the summary of the findings is hereby presented as follows:

The first finding showed that there is high negative effect of erratic rainfall on the administration of the Universal Basic Education programme in Enugu state, especially as the fact that Erratic rainfall affects the lives of both plants and animals leading to poor health of administrators of UBE programme and Erratic rainfall affects the infrastructural facilities and equipment in schools. This agree with Tahir, (2011) which opined that quality assurance which comes from efficient management, monitoring, evaluating and reviewing of a programme is yet to be achieved in those areas affected by erratic rainfall. This has led to the extent of obstructing the school curriculum as well as the school calendar as some schools were closed down, children displaced out of school and sometimes render them homeless and hopeless. Besides, Sjoberg, (2012) related that this situation of erratic rainfall has reduced the quality of education in Nigeria and has also made the UBE programme not to achieve the desired objectives at quality standards. This poses a challenge to the stakeholders, education managers and the government according to him.

The second finding showed that there is high negative effect of drought on the administration of the Universal Basic Education programme in Enugu state, especially because Drought prevents the realization of the UBE objectives as a result of its effects on students health and it causes poverty due to loss of crops and animals leading to inadequate funding of UBE programme. This is in line with Ibiam, (2013) which opined that if there is

no establishment of adaptive strategies by the government, listening to information about the phenomena and organizing seminars, workshops and conferences by some agencies and the governments on way to cop and prevent drought, that UBE objectives cannot be achieved. Similarly Okebukola (2017) stated that although epidemics and diseases have continued to strike both human and animal population, drought has perhaps been a greater scourge especially in the realization of a universal basic education in Nigeria.

Conclusion

- 1 It was revealed that there is high negative effect of erratic rainfall on the administration of the Universal Basic Education programme in Enugu state, Nigeria.
- 2 It could be concluded from the findings that there is high negative effect of drought on the administration of the Universal Basic Education programme in Enugu state, Nigeria.

Recommendations

In the light of the findings, the researcher makes the following recommendations thus

1. The government should involve the education managers in the campaign for creation of awareness in climatic change through seminars, workshops and conferences. This can be achieved through the recruitment of weather forecasters, provision of adequate logistics and funds so as to increase extensive coverage.
2. The Non governmental agencies should form pressure groups to challenge various governments on the issue of enforcement of environmental laws especially to arrest those who set bushes on fire or engage on deforestation
3. The government should enforce the effective use of the available gadgets for communication about the climatic change disaster in order to reach the grass-root levels as a public campaign for awareness.

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