

## Financing Disaster Management Methods in Federal Universities of North Central Nigeria in Era of COVID-19 Pandemic

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### Abstract

This study examined the relationship between funding and disaster management methods of the Federal Universities in North Central in era of COVID-19 Pandemic in Nigeria. A descriptive survey research design was adopted for the study. The population of the respondents are Bursar, Registrars, directors of works, physical facilities, chief security officers, portals, medical sciences, deans of facilities, students' affairs and deputy vice chancellor administration which totaled 560 respondents, out of which 300 respondents were selected using stratified random sampling technique. Four research questions were raised and two hypotheses were formulated to guide the study. The instruments for the study were self-designed instrument tagged Disaster Management Methods Questionnaire (DMMQ) and Disaster Management Funding Checklist (DMFC). The instrument was validated by the experts in education and disaster management. Reliability index was 0.77 which was determined by using split-half reliability method. The research questions were answered using Mean Score and Standard deviation at +2.5 benchmarks. while the hypotheses were tested using Pearson product moment correlation statistics. The findings however revealed that the available financial budget is low to cater for both the capital and recurrent expenditure patterns in Federal universities in era of COVID -19 Pandemic in Nigeria. However, the methods of disaster management suffered a lot but it was efficiently managed by the institutional management. It is however recommended that the disaster management of the Nigerian Universities should be given an adequate priority when preparing the yearly budgetary allocation of the universities in era of COVID-19 Pandemic in Nigeria.

**Keywords:** *COVID-19 Pandemic, Disaster Management Methods, Federal Universities, Funding and North central Nigeria.*

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### **Background to the Study**

Over the years in Nigeria, the society had been exposed to series of calamities which had constituted threats to the life and properties of the citizens. However, these calamities are caused as a result of environmental factors, climate change, human factors and unseriousness of the three tiers of government to prioritize the existing calamity in the society, which can also be called disaster.

Disaster, according to UNDRR (2015) can be defined as a natural and sudden event which destroy the environment or the residential abode of the citizen which made the life unbearable for the citizens. Examples of the natural disaster include building collapse, flood, time-bomb explosion, wind, falls, different types of accidents, protest, violence, menace of hoodlums, fire outbreaks, kidnapping, poverty, hunger, abduction etc. All these constitute threats to the life and properties of the citizens (Fakatava and Lassa (2020). It should be noted that in Nigerian Universities, the lives and properties are put at the risks of different disasters such as flooding, fire outbreak, epidemic excessive climate change, building collapse, students unrest and protest which lead to the destruction of the needed instructional activities.(Evasco (2020) It is therefore important to note that the institutional management need to liaise with the National Emergency Management Agency (NEMA) that was established by the Federal Republic of Nigeria in a bid to fight against the unforeseen occurrence of the natural and social disasters in the Nigerian institutions .It should also be noted that, adequate funds are required to be at the disposal of the Institutions, especially with the outbreak of COVID-19 Pandemic in Nigeria.

According to Ogundele (2017) for effective institution administration, adequate funds should be at the disposal of the institutional administrators. This is because money is required for the capital and recurrent expenditure. The adequate funds have to be sourced and utilized to produce strong capital projects like classroom, library, laboratory, offices, buildings and the human resources like lecturers and other non-academic staff have to be adequately motivated by ways of good salaries and other emoluments. However, Ajayi (2019) noted that there had been flimsy excuses of the government that government alone cannot shoulder the responsibilities of funding university education alone, that , that it has to be complemented for by all and sundry in the society especially at the critical period when the whole world is battling with the COVID-19 pandemics. Babalola (2014) also, noted that adequate funding of education will encourage provision of standard infrastructural facilities at the institutions. The solid facility put in place will prevent disaster occurrences and will eradicate the destruction of life and properties.

Ogundele (2020) also, stated the types of natural disasters that occur in the higher institutions such as fall, building collapse, bush burning, snake bites, kidnapping, flooding, typhoons, climates change, fire disasters, wind destruction armed robbery, banditry disasters, accidents and series of unrest in the campuses. The author even described the COVID-19 Pandemic as a global demonic disaster to the humanity.

However, the basis for the study is to examine the relationship between funding and disaster management methods in Federal Universities in North central Nigeria in era of COVID-19 Pandemic in Nigeria.

### **Statement of the Problem**

Due to the need to provide adequate security for the life and properties in Nigeria higher education, it is important to provide effective disaster management methods in Nigerian Universities. However, effective natural disaster management methods cannot be put in place without adequate finance at the disposal of the higher Education administrators which make the fight against any form of disaster easy in Nigeria. The problem that the study intends to examine are: The sources of funding, the expenditure patterns, the problems militating against effective financing of disaster management methods and the influence on the types of disaster management methods in North Central Nigeria in era of COVID-19 Pandemic in Nigeria. However, the study will also, identify the causes of disaster and the disaster management methods.

### **Aims and Objectives of the Study**

The study aimed at investigating the relationship between funding and disaster management methods in Federal Universities in North Central Nigeria.

Specially the objectives of the study are to:

1. Find out the available types of natural disasters in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.
2. Identify disaster Management methods adopted in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.
3. Investigate the sources of funding for managing disasters in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic. .
4. Find out the expenditure patterns of the funds in Federal Universities in North Central Nigeria
5. Examine the militating factors against effective funding of Universities towards effective disaster management in North central Nigeria.

### **Research Questions**

The following research questions were raised for the study.

1. What are the types of disaster management methods adopted in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?
2. What are the basic sources of funding for disaster management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?
3. What are the expenditure patterns for the funds sourced for disasters management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?
4. What is the problems militating against financing of disaster management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?

### **Hypotheses**

The following hypotheses were formulated for the study.

1. There is no significant relationship between funding and disaster management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

2. There is no significant relationship between expenditure patterns and disaster management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

**Methodology**

The design for the study was a descriptive research survey design. The study was carried out in ex post-factor designed. The population for the study was 560 and the sample was 300 respondents. Stratified random sample was used for the selection. Four research questions and two hypotheses were generated for the study. The instrument was Disaster Management Methods Questionnaire (DMMQ) and Disaster Management Funding Checklist (DMFC). The instrument was validated by the experts. The research questions raised were answered using Mean score and Standard deviation at +2.50 benchmark and the hypotheses were tested using person product moment correlations statistic 0.05 significance level.

Find below the result:

**RQ1:** What are the disaster management methods being put in place in the Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?

**Table 1:** Disaster management methods put in place in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic

S/N	Statements	Mean score	Sd	Decision
1	The universities provide channels for the runoff water`	25.66	3.41	Agreed
2	There is fire service building in the universities	21.37	2.67	Agreed
3	Adequate funds are provided to provide solid foundations for the buildings	11.69	3.14	Agreed
4	The universities are adequately fenced to prevent intruders	14.39	2.77	Agreed
5	Disaster management was integrated into the school curriculum	18.64	3.11	Agreed
6	Planning of cover grasses and tress in the campuses.	12.17	2.66	Agreed
7	Clearing of environment to avoid the outbreak of fire	16.32	2.66	Agreed
8	Effective supervision of the hostels and the classrooms	18.24	2.52	Agreed
9	Adopting administrative inclusive methods in the institutions	21.62	2.67	Agreed
10	Recruitment of many security officers into the campuses	22.70	2.72	Agreed
11	There is installation of the CCTV all around the university campuses	22.11	2.99	Agreed
12	High commitment to the ecological challenges in the universities	12.47	3.11	Agreed

Table 1 shows the various disaster management methods put in place in federal universities in North Central Nigeria in era of COVID-19 Pandemic. However the follow disaster management methods put in place in the Federal Universities in the North central Nigeria are channelization, establishment of fire service buildings, funding for adequate and solid foundations of every buildings, fencing, integration of disaster management into the university education curriculum; regular clearing of the school environment, preparation of

Lawns and landscaping for more attraction, installation of management information gadgets, the use of inclusive leadership and adequate provision of security officers in the campus for supervision and disaster monitoring all these aid effective disaster management in all the Federal Universities in North Central Nigeria. The result is in line with the finding of Marasign and Ceniza (2020) which noted that the Nigerian government adopted the above as the best practices for disaster management. Also, senarath (2019). The society need to adopt coping strategies by ways of providing adequate funds needed for effective disaster management methods in the Federal universities in north central Nigeria

**RQ2:** What are the basic sources of funds for disaster management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?

**Table 2:** Basic sources of funds for disaster management in the Federal Universities in the Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

S/N	Sources	X	SD	Decision
1	Internally generated funds are devoted to natural disaster	21.42	2.41	Disagreed
2	External financial assistance come to the aid of disaster	20.21	2.21	Disagreed
3	Tetfunds also intervene in the management	18.77	2.11	Disagreed
4	Donations from the community is high	22.14	2.12	Disagreed
5	Community-school relations are used to manage the disaster of Federal Universities	18.40	2.72	Agreed

Table 2 stated the basic sources of funds for the disaster management in the Federal Universities in North Central Nigeria. The sources identified in the research study were internally generated funds, external financial aids, Tetfunds disaster recovery interventions, public-private partnership intervention, donations and funds are sourced through the community school relations. The combinations of the sources are used to provide effective disaster management in Federal Universities in North central Nigeria. The result in however, supported by Lassa (2018) which observed that the government organization and the community need to complement the governmental efforts in financing the issue of disaster management in order to reduce the risks of disasters in the schools. However, the study noted that the financing of disaster management everyone responsibility.

**RQ3:** What are the expenditure patterns of the funds sourced for disaster management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

**Table 3:** Expenditure Patterns of the funds sourced for disaster management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic

S/No	Expenditure	X	Sd	Decision
1	Huge amount of money is expended for hiring equipment	14.24	3.32	Agreed
2	The amount was used for security gadgets maintenance	12.67	2.72	Agreed
3	Funds are used to pay the security officers.	14.78	3.23	Agreed
4	The funds are used for the research conducts for the disaster management in the institutions	18.33	2.57	Agreed
5	The funds generated are used to prevent fire outbreak, erosional forces and excessive climate change in the schools	14.71	2.55	Agreed

The expenditure pattern of the funds generated are mainly for the capital, recurrent and miscellaneous related to the disaster management method expenses. The table shows that the respondents agreed that the available funds are expended on the purchase of technological equipment, construction, hiring of the security for effective supervision and he use of the use of the technology. However, the funds in the Federal Universities are used to pay the security officer. The result confirmed with the finding of AZI (2020) identified the expenditure patterns that occurred in managing COVID-19 Pandemic disaster as capital and recurrent expenses. The author noted that the expenditure needs to be prudence and transparent in their spending especially when spending money on the management of the existing disasters in Federal universities in north central Nigeria.

**Research Question 4:** What is the problems militating against financing of disaster management in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic?

**Table 4:** Problems imitating against financing of disaster management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

S/N	Statements	X	Sd	Decision
1	High rate of inflationary trend affects expenditure patterns.	18.72	2.78	Agreed
2	Inadequate technologies to handle the technological equipment	17.27	2.55	Agreed
3	There excessiveness of the climate change	18.11	2.57	Agreed
4	Global economic recession affects the cost of the disaster control materials	18.72	2.71	Agreed
5	Long period of academic strike due to covid-19 Pandemic lockdown	28.72	2.55	Agreed
6	Politics in the management of Federal Universities in Nigeria	18.78	2.77	Agreed

Table 4 also shows that major problems that are militating against financing of disaster management methods in the Federal Universities in North Central Nigeria. However, the

respondents agreed that the problems of inflationary trends, there is inadequate number of technologists that can handle technological equipment, excessiveness of climate change lead to the high rate of the destruction caused by the natural disasters, the global economic recession lead to the high cost of the disaster management methods equipment and personals, the politics in the management of institutions do affect the extents of the priorities accorded the disaster management at the institution. However, the result is in line with the study of Ogundele and Aiyaleso (2020) identified the major problems militating against the financing of online education in era of COVID-19 Pandemic disaster as inflationary trends, economic recession and governmental policies made the financing is difficult in Nigeria.

### Hypotheses Testing

The following hypotheses were tested at 0.05 significance level

**H<sub>0</sub><sub>1</sub>:** There is no significant relationship between funding and disasters management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic.

**Table 5:** Funding and disaster management methods in Federal Universities in North Central Nigeria in era of COVID-19 Pandemic

Variables	No	X	Sd	Df	Calculated R-value	Critical R-value	Decision
Funding	300	16.48	3.32				H <sub>0</sub> <sub>1</sub>
				299	.68	.198	Rejected
Disaster management methods	300	18.44	2.78				

Table 5 indicates that the calculated R-value of 0.68 is greater than the critical R-value of .198 at the degree of freedom of 299 and tested at 0.05 significance level. However, the null hypothesis which stated that there is no significant relationship between the funding and disaster management methods is therefore rejected. It however schools that high significant relationship existed between funding and the disaster management methods in the Federal Universities in the North Central of Nigeria. The result is therefore supported the findings of Centre for Disaster Risk Reduction (2018) which called for the adequate financial provision for managing and reducing the disaster risks especially in Nigerian Universities. The author however noted that the funds will go in a long way in enhancing effective disaster management in Nigeria. However, in Federal Universities in North central Nigeria, the disaster management methods are well funded which helped in the disaster risk reductions methods especially in the federal universities in Nigeria.

**Table 6:** Expenditure patterns and disaster management methods in Federal Universities in North central Nigeria

Variables	No	X	Sd	Df	Calculated R-value	Critical R-value	Decision
Expenditure	300	21.62	2.41				H <sub>0</sub>
				299	.61	.198	Rejected
Disaster management methods	300	18.44	2.98				

Table 6 shows that the calculated R-value of .61 is greater than the critical R-value of 0.198 at the degree of freedom of 299 and tested at 0.05 significance level hence the null hypothesis which stated that there is no significant relationship between the expenditure patterns and disaster management methods in Federal Universities in North central Nigeria is however rejected. It means that the expenditure patterns of the universities have a great influence on the disaster management methods in the Federal Institutions. However, the result is however in line with the findings of Ajayi (2008) that noted that the expenses on capital, recurrent and miscellaneous patterns are necessary for enhancing effective goals achievement of the educational goals. However, the Federal Universities in North Central Nigeria Judiciously expended the available funds which help to reduce the risks of disasters in the various institutions. Bello (2013) also said the public-private partnership models are effectively used which helped universities in managing the natural disasters in the federal universities especially in the North central Nigeria.

### Conclusion

The paper made a investigations into the strategies for financing the disaster management methods, the researcher made a critical review of the findings it was however concluded that the Federal University management council members and the stakeholders in the Universities administration had collaborated in the funding of the disaster management methods which help in reducing disaster risks in the Federal Universities. The result however indicated that high significant relationship existed between funding, expenditure patterns and disaster management methods especially in federal universities in North central Nigeria.

### Recommendations

Based on the data analyses and the result of the findings the following recommendations were made:

- 1. Public involvement in Financing disaster management methods:** Financing of disaster management methods in federal universities is the responsibility of the immediate environment, the stakeholders in the universities and all well-meaning Nigeria that have good will on educational development Natural disaster management methods and enhancing the security of the staff and students at the Universities especially in North Central Nigeria.
- 2. Establishment of Disaster management Agency:** They should be Natural Disaster Management agencies (NDMA) in the universities that will serve as an advisory body for effective financial management devoted for disaster management methods and reducing the disaster risks at the various universities in Nigeria.



3. **Disaster management integration into the curriculum:** Disaster management should be integrated into the university curriculum. The effort will expose the causes and the management methods. The knowledge will help in identifying the source of financing the methods in the interest of reducing the risks of the various types of disaster in the Federal Universities in North Central Nigeria.
4. **The fight against corrupt practices be intensified:** Federal and State government should properly fight against the corrupt practices that can cause the embezzlement of the allocated funds for disaster management methods in the universities in Nigeria.
5. **Staff capacity building need to be encouraged:** The capacity of the stakeholders in the administration of the universities be adequately built through conferences, workshop In services, professional training and teaching on the sources and types of disaster the disaster management methods towards enhancing disaster risks reductions in the Federal universities in North central Nigeria.

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