

ENVIRONMENT, TECHNOLOGY AND INFRASTRUCTURAL DEVELOPMENT IN NIGERIA.

BY

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PGD/GED/99/200/080

**“A research project submitted to the Department of geography,
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in Environmental Management.**

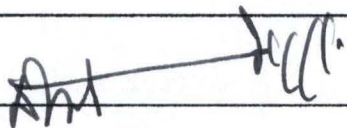
March, 2001.

CERTIFICATION

This is to certify that the research work for this research project and subsequent preparation of this research report by **YAKUBU DEJI ABDULLAHI** were carried out under my supervision.

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CERTIFICATION

This is to certify that this research project has been examined and approved for the award of POST GRADUATE DIPLOMA IN ENVIRONMENTAL MANAGEMENT of the Federal University of Technology, Minna.

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Signature: _____

Date: _____

DEDICATION

To all my brothers and sisters and my one and only OYEBOLA.

To God be the glory.

ACKNOWLEDGEMENT

I thank the Almighty God for granting me existence and good health from the time I was born to date.

For each and everyone of us, there is a time to be born, and a time to die, in between is the privilege to live, to the glory of our creator, to the glory of humanity, and to the glory of our nation.

A big thanks goes to my brother Engr. Alabi, J.B a Lecturer of the Department of Agric Engineering, The Polytechnic, Birnin Kebbi, Kebbi State. My Sister Rahina Larai Abdullahi (Bunmi) a teacher in G.G.S.S Tungan Magajiya, Rijau LG. Area of Niger State and finally to my late parents Mr. and Mrs. Alabi.A..

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ABSTRACT

The subject 'Environment, Technology and Infrastructural Development in Nigeria is a research project with the objectives of examining the relationship between the environment and technology and identifying infrastructure development as one means of making the environment clean and safe.

The research work was carried out by the use of a clear self structured questionnaires sent out by mail and personal delivery. The analysis of the data collected was carried out by the use of mean rating analysis and the percentage analysis method. They were combined in a single table format.

From the data collected, it is clear that environmental degradation in Nigeria is mainly as a result of activities of the people. They are mostly traced to technological occurrence. In addition, degradation results from negligence on the part of environmental management practitioners and also because they experience in management aspect and incompetence.

It has also been revealed that government, industry, and the public are the ones that should in their own best make sure that the environment is managed properly with more consciousness.

The research also recommends that the Government (Federal and States) should create a separate ministry for Environment and Natural resources. Also for the government to enforce environmental standards and guidelines for critical activities and those involve should organize seminars, workshops etc. Just to make the public aware of the condition of the environment and how to solve the problems.

CHAPTER ONE

1.0 INTRODUCTION

The basic resource for man, which is becoming scarce, is a clean and healthy environment. This planet's environment is in great danger. The rate of environmental deterioration is accelerating with the rate of industrial revolution or expansion land will collimate in all ecological disaster of an unimaginable proportion if urgent remedial measures are not taken to protect the environment.

Billions of tonnes of pollution injected into the atmosphere are the cover of global warming, acid rain and other effects of climate change while, at depletion of the ozone layer results in the ultraviolet radiation reaching the earth. It increases the risk of skin cancer, eye damage and suppresses the human immune system. Owing to the green house effect, the sea levels is expected to rise and threatening the low laying coaster towns, villages and cities, viz., Lagos, Port-Harcourt, Warri, Calabar, Sepele etc.

While a lack of technological foresight has in part contributed to the destruction of the eco-system, it is the technology itself that can help to save the endangered planet. It is necessary to identify the various designs and control parameters and the environmental improvement efforts, which will help in providing a safe and healthy environment.

1.1 JUSTIFICATION OF STUDY

Looking at the environment today, it is unfortunate that owing to human activities mostly that have took place and are still in progress the environment is not clean and healthy.

Pollution injected into the atmosphere is one of the greatest dangers to the environment, which as a result of lack of technological foresight the Eco-system is under going destruction including the infrastructural facilities put in place and that one is lacking. It is on this issue that the decision to make a research on the topic “Environment, Technology and Infrastructural Development in Nigeria” arose.

1.2 STATEMENT OF PROBLEM

This research is to critically assess environmental dangers of cities, towns and countryside in relation to allocation of land for activities and the use of funds to adapt to new technological advances.

1.3 OBJECTIVE OF STUDY

- To examine the relationship between the environment and technology.
- To identify infrastructural development as one means of making the environment clean and safety.

1.4 SIGNIFICANCE OF STUDY

This research will identify some environmental problems which are mainly caused by application of technology, such like that of Wachiko farm in Niger State which has been left fallow for a long period of years and will still need more years to come back to be a productive land. First of all, tractors are been used to cultivate the land thereby making the fertility of the land expose to the surface and cannot assist well in the germination of plants and their production. There are so many farmlands like that and thereby making the areas for production to be limited in a short form. Also

many areas where trees are available which are cleared for farming now left fallow makes it deforested, also turning this land areas to be desert of some kind.

Also, noise pollution in another form, has been a problem of the environment. Some years back during the construction process of Minna drainage system, rocks were blasted and the noise emanated from it did scared the animals in the bush away. These include the different species of animals and birds that settled around the Saiko hill, most especially monkeys. The blasting also caused vibration, which affected the strength properties of the soil. In fact, in the process of going to get stones for construction purposes, a very wide area of trees are cleared and that makes deforestation which now only grasses grow there.

The discharge of effluent into rivers has caused a lot of injuries to people and infact done so many destruction of aquatic life. This kind of environmental problems can easily be traced to Kaduna, mostly the discharge of effluent from Kaduna textiles. The effluent goes straight to the Kaduna river. Also in Kaduna around television garage road to Kakuri junction it has been a fact that the atmosphere is always polluted by some kind of pollutant coming out of the various companies located within the area.

This research therefore is with the view of finding lasting solution against future occurrence of the problems of the environment and is also done to bring to standard research document for the benefit of the generality of readers and also as a basis for further studies by future researchers alike.

1.4 SCOPE AND LIMITATION OF STUDY

Owing to the time and finance available to carryout the study, it would be economical to limit the scope to Niger and Kaduna states of Nigeria with assurance that result of findings from the states world adequately represent Nigeria at large.

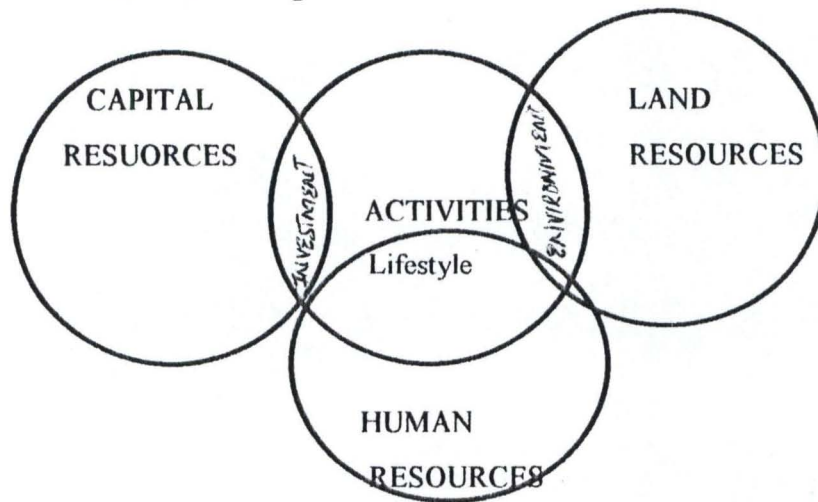
1.6 METHOD OF STUDY

The following methods of study would be undertaken to achieve the objective of this study;

- Consultation of journals, seminar papers and personal involvement
- By sending out well-structured questionnaires to well established and organised organisation in relation to environmental management.
- By careful analysis of the result obtained from the use of questionnaires.

into structures and equipment. By such processes changes in human activities are generated and sustained.

These relationships between resources and activities defined three classes of changes. As illustrated in fig.1



The relationship between human resources and activities creates the differing combination of opportunity, which is available to different groups in the community, community called differences in lifestyle. The relationship between capital and activities creates the pattern and process of investment by which capital is allocated to different activities leads to changes in land use and development which together mould the physical environment of these the latter is clearly of greatest significance for the purpose of this study.

2.1 ENVIRONMENT

It is largely through the allocation of land to activities and the use of capital to adapt that land by constructional works that the environment of cities, town and countryside is changed.

The physical environment has a number of aspects. It provides fairly unique locations in space for particular human activities. Activities system extends through space and spatial interaction between activity locations is therefore an important dimension of activity system. In this term between place activities and within place activities can be distinguished. The former are communication activities by which volumes of information, money, materials, persons are transferred from one location to another; transport, telecommunication, waste discharges are activities of this kind.

The later, within space activities are located at points in space at which goods are produced or consumed: manufacturing, recreation, residence are activities of this kind. The two kinds of activities and their locations are of course related and mutually supportive.

Each can not be sustained without the other; for the activities of production and consumption need continuous supply and removal of materials and goods. In the same vein communications are generated by production and consumption.

These systems of located activity function within spaces adapted to provide accommodation. These include dwellings, roads, railways, factories, parks, seashores, pipelines, forests, air fields, quarries and so on representing a variety of ways in which physical spaces have been adapted to better accommodate the pursuit of activities.

2.1.1 THE ENVIRONMENTAL CATASTROPHIES

Than and his environment is ageless, but the environment which might affect the mankind have never been realized so clearly. Man must realize that

he is not just the master of the nature, which he has subdued but that he is both it's creature and it's trustee. In protecting his environment, man protects himself.

There is a growing concern that the world economic system will collapse even before the year 2100 (Ramamurthy, 1992). According to the study, industrial output will increase so rapidly that the supplies of raw materials and fossil fuel energy resources will soon be exhausted and, with environmental pollution increasing in leaps and bounds, the effect will be disastrous. The exhaust gases of combustion process of all kinds accumulate in the air of our cities and their surroundings. The combustion of coal, oil and exhausts from moving vehicles gives off poisons which amount to several hundred million tonnes yearly. The general contamination of the air contributes to the following illness either as a cause or as an aggravating factor; acute and chronic infection of the respiratory organs; lung cancer, constriction of the blood vessels.

The water requirements in the various cities, towns and villages are steadily increasing whereas the supplies of suitable water available tend to diminish. Water is also the universal solvent and thus the ultimate sink for most of the toxic chemical that are released from the industries. The polluted water is unfit for use.

Life is also threatened by the chemical pollution there are an estimated 100,000 commercial chemicals in the world and the number grows by 1000 to 2000 per year. Most of these chemicals have not been tested in any depth for their effect on the living environment.

Biologists know 1.7 million forms of life including plants, insects, fish, reptiles, animals and birds, and estimates that there are 10-30 million more. But the rapid loss of wilder lives eliminates an estimated 1000 species annually. It is the greatest extinction of life since the dinosaurs vanished.

Increasing technological and industrial development has resulted in the extensive use of computers for every operation and process including typing. Recent studies confirm that long exposure to the radiation of the computer screen result in cancer permanent eye damage and brain disease. In addition, blind application of computer aided diagrams without the concept of the physical behaviour of the structure and other environmental problems lead to project failures or computer aided catastrophes.

Environmental degradation affects all nation of the world and respects no boundaries Best, Robin suggested that whether we like it or not the world is at a turning point. The environment cannot be allowed to deteriorate further. We need to look for global solutions to save the endangered planet in addition to local and national solution. Adefolalu (2000) says our geo-environmental has been abused resulting in what is generally termed 'CLIMATE CHANGES'. He says consequently we are all witnesses to changed and sometimes ineffective planning seasons, erratic but destructive storms, hot days and hot nights, more wind, more rains yet drought desiccating heart polluted cities even those without industries, poor life support facilities (water, electricity, communications etc). No water the echoes of the 'Difficult land' are relevant.

2.1.2 URBAN GROWTH

Increasing human demand are damaging the natural resource base-land, water and air upon which all the development ultimately depends. A clear survey by Omoniyi (Omoniyi, 1999) suggested that Nigeria population is

expected to rise up to 150 million by the end of the century while world population is also expected to rise up to 6 billion within the same period. The tropical forests are shrinking by million hectares a year. New deserts are appearing at the rate of 6 million hectares a year. In many areas the ground water is being used faster than it is being replenished and sanitation and water logging affect considerable vast area of Nigeria irrigable cropland.

Environmental stress is the cause of uneven population distribution, particularly the rapid urban growth. By the end of the century, half the world will be living in the urban areas. An unknown quantity of toxic and hazardous waste is being transported across the notional borders. Transported across the national borders. Transporting the waste itself is hazardous, and too often the disposal sites are unregulated and usage.

The marine environment in the sea has become more apparent. Hydrocarbon caused by the oil spill, tank ballast washings and disposal of sewage and other hazardous waste in the sea are the major threat to the marine environment. As population increases it bring stress to our terrestrial environment in which we will have to look at the marine environment for some of the resources that we have traditionally depended on the land to provide.

Omoniyi (1999) suggested that we must be careful that we do not end up in the same mess by polluting the marine environment as we have done with the terrestrial. The effects of resources use, environmental damage and population growth are not confined within the national borders. In order to establish a sustainable relationship between the growing human needs and

available resources, action will be need on all level, from international to the individual.

2.1.3 URBAN INFRASTRUCTURAL DEVELOPMENT

An unknown rise in the population of a town or city exert a tremendous pressure on the existing or available infrastructures and indeed brings about a renewed and constant demand and need for new and additional ones. Population pressure in the existing infrastructure shopping, education and social services (such as electricity, water, good roads), banking facilities, postal and telecommunication services, recreational such as relaxation centers, sporting arenas and a host of others bring about the question of developing or redeveloping these facilities. This ultimately would make radical changes to the environment.

In the past, large area of housing have been built in this way around existing towns and often little provision was make for the local needs of the urban dwellers.

Shopping, educational and social facilities had to be fitted in afterwards where space could be found. Today the need for more comprehensive planning is accepted and provision is made for what have come to be known as the neighborhood facilities, intended to cater for today needs.

In recent past, the growth of towns has proceeded at such a rate that in many places particularly Ibadan and Lagos, they have coalesced into each other to form conurbation which stretch for several kilometers in all directions. Given the present standards of amenity for urban development,

the point is soon reached where additional population can only be housed if there is correspondent development of urban infrastructures.

The development of urban infrastructure is a function of available funds which is always inadequate. While final judgement should depend on the total consequences of the development on the community, realization of the infrastructure development depends on the balance of cost and revenue being satisfactory to the developer (private and public).

2.1.4 EFFECT OF URBAN INFRASTRUCTURAL DEVELOPMENT

The costs to the private developer consist of these for land and its development, roads and sewers and any charges levied by the public utility authorities, the costs of buildings, ancillary site works and landscaping.

If the developer retains the property as an investment the cost of maintaining and servicing such infrastructure may also need to be considered.

The public developer is in a similar situation as the private developer. The cost benefit analysis must be considered since the motive is service to the community. The Government is likely to be involved in the payment of direct subsidies and grants for the development.

The users of the developments will be affected in various ways. People living in the area will pay rents/rates for their uses and by the nature of the facilities provided for shopping, education and entertainment which may result in higher or lower cost for transport to facilities outside the district. People and businesses from outside the area will be affected by changes in the level of convenience for shopping and other activities provided by the

new development, and by possible improvements in the flow of traffic through the area.

2.1.5 FINANCING URBAN INFRASTRUCTURES.

The bulk of the funds for the development of urban infrastructures rest squarely on the Government. Federal, state and local Government are majority responsible for the development of infrastructures. Private sector is however playing a marginal role in the provision of some of the infrastructure through organized groups. The reluctance and hesitancy of private developer providing money for the development of the infrastructure is not unconnected with economic factor profit which is almost nil in the provision of such infrastructures most of which are social in nature. The provision of electricity, water, sewage disposal, sewer and entertainment or relaxation centers are provided by government as part of its social responsibility to the people. Private developer belief that it is not profitable for the sector to develop infrastructures. Once you dabble into it, there will always be substantial and ever increasing expenditure on services such as roads and so on and the trouble is that the standards are constantly increasing.

Government cannot finance urban infrastructures alone. There must be private participation, and there must be private capital. Though, this is not easy in the participation, and there must be private capital. Though, this is not easy in the parlous state of scarcity of capital. We have to consider what our priorities will be. The underlying fact is that much public and private expenditure is needed. Local authorities, particularly in the large cities like Lagos and Ibadan, already have to raise considerable funds to finance their

capital out goings quite apart from urban re-development. Their capacity to borrow any more is limited; indeed it will be difficult to borrow all that they require for all their services because of the rather difficult present precarious situation. There is certainly excess pressure on the meager resources at the disposal of the government.

Financial institutions which are the custodians of people's savings and are therefore motivated by the profit element, which is perhaps a solid motive, are scared from infrastructural development. This based on the fact that cost which disregard profit can lead to disastrous consequences.

However, institutional finance will play its part in urban infrastructural development not through direct participation, but by providing the money to the various development agencies, which carry out the physical task of infrastructural development. In short, institutional finance will be the sources from which a developer raises money for carrying out infrastructure projects.

2.1.6 ENVIRONMENTAL CONTROL MEASURES IN URBAN AREAS.

To allow for meaningful enjoyment and use of urban infrastructure and prevent health hazard there is need to take urgent measures to control environmental hazards.

The pressures on industry for environmental control will ultimately be borne by the whole nation in the form of higher prices or contraction in employment. For the implementation of environmental policies, therefore a comprehensive co-ordination of various national policies such as industrial policy, energy policy and labour policy is important. It is widely recognized that control measures for urban pollution have become necessary in addition

parameters to determine the degree to which the environmental protection is achieved. The source of monitoring determines the nature and quantity of contaminants or pollutants prior to their distribution in the environment. The ambient monitoring determines the nature, quantity and distribution of pollutant in the natural environment after discharged from the facility. Effects monitoring identifies the environmental changes or disasters caused by the pollutants. All of these aim at reducing and arresting environmental pollution to pave way for the development of infrastructures in a conducive atmosphere in order to grate in safe environment.

2.1.7 ENVIRONMENTAL INFRASTRUCTURAL EDUCATION AND TRAINING

Education and training are key factors for a healthy environment. A healthy environment is a passport to liberty and meaningful life enjoyment and relaxation. The increasing awareness of the environmental problems led to the establishment of Federal Environmental Protection Agency (FEPA) and SEPA in Nigeria. Baba (2000) suggested that the only concern of the future educational programs must be to create an awareness of the importance of the environmental and urban infrastructural component of sustainable development. The training programs are to define the incorporation of the environmental dimension into the professional performance or to transmit new theories, methods and instruments to aid the development and use of urban infrastructures. Given the socioeconomic and sociopolitical conditions of the occupational and leisure context, it is obvious that any environmental education and training should include political, economic and social subdivision of structures as an integral part of the pure scientific, methodological and theoretical contents of the programs and courses.

CHAPTER THREE

3.0 DATA COLLECTION AND ANALYSIS.

This chapter describes the method involved in order to collect the necessary information on the subject and gather the appropriate data for answering the research questions.

3.1 INSTRUMENT FOR DATA COLLECTION

One major instrument used for this study is the questionnaires to extract information from the various practicing professionals of different department. The questionnaire comprises of questions for or against in the form of yes or no and true of false.

3.2 PARTICIPATING PROFESSIONAL

Several professionals had participated in contributing their own views based on their experience. These professionals are; Environmental managers, Building Technologists, Estate Surveyors, Land surveyors, general urban and rural development managers.

3.3 PROCEDURE FOR DATA COLLECTION

A letter attached to the questionnaires is distributed to the various professionals which introduces the researcher fully and stating his intention. The researcher personally distributed some of the questionnaires, some through other people and some which is very few by posting.

3.4 DATA ANALYSIS

For the purpose of this study, Fifty (50) questionnaires were distributed within Niger and Kaduna States to different professionals, but only Twnty Nine (29) were returned which constitute (58%) of the total distributed.

Mean rating analysis is used to determine the direction of the respondents' opinion on statements. Furthermore percentage analysis were used to analyze the researchers answer to determine the relationship between environment and technology.

The table below analyses the response of the total questionnaires.

Table 3.1

Response	Frequency	Percentage (%)
Questionnaire returned	29	58
Not returned	21	42
Total	50	100 %

Data collected are put together in a tabular form and comments are made to fully represent the responses.

Table 3.2

Changes in the environment of cities, towns and countryside are through the allocation of land for activities and the use of fund to develop that land.

Responses	Frequency	Percentage %
Agreed	25	86.2
Disagreed	-	-
No opinion	4	13.8
Total	29	100 %

Table 3.3

Technological application in an environment is a major means for development.

Responses	Frequency	Percentage
Agreed	29	100
Disagreed	-	-
No opinion	-	-
Total	29	100%

Table 3.4

It is the application of technology, which causes problem to the environment that will also be used to correct the problems.

Responses	Frequency	Percentage
True	29	100
False	-	-
Total	29	100%

Table 3.5

The relationship between the environment and technology as at today is nothing good to write home about, because a lot of environmental degradation is happening.

Responses	Frequency	Percentage
True	29	100
False	-	-
Total	29	100%

Table 3.6

The level at which human activities has affected the Nigerian environment.

Responses	Frequency	Percentage
Very high	5	17.24
High	18	62.07
Low	6	20.69
Total	29	100%

Table 3.7

The rate at which deforestation is going in Nigeria is becoming alarming; it has exposed a large area to desertification

Responses	Frequency	Percentage
True	25	86.2
False	4	13.8
Total	29	100%

Table 3.8

Impact of dams in Nigeria today

Responses	Frequency	Percentage
100% positive	-	
70% positive	6	21.42
40% positive	15	57.14
100% negative	3	7.14
40% negative	5	14.3
Total	29	100%

Table 3.11

Availability of infrastructures for the population in Nigeria.

Responses	Frequency	Percentage
Too many	-	-
Adequate	-	-
Not adequate	29	100
Not available	-	-
Total	29	100%

Table 3.12

Areas in Nigeria where erosion impacts are most serious.

Responses	Frequency	Percentage
North only	-	-
South East only	-	-
South West only	-	-
South -South only	-	-
All over Nigeria	29	100
Total	29	100%

Table 3.13

The specific part of Nigeria that suffer erosion most as a result of running water.

Responses	Frequency	Percentage
North only	-	-
South East only	26	89.65
South West only	3	10.35
South -South only	-	-
Total	29	100%

Table 3.14

Type of pollution found in Niger State

Responses	Frequency	Percentage
Air pollution	-	-
Water pollution	-	-
Noise	-	-
All of the above	29	100
None of the above	-	-
Total	29	100%

Table 3.17

The level of awareness of environmental problems in Nigeria.

Responses	Frequency	Percentage (%)
Very high	-	-
High	-	-
Low	14	48.28
Poor	15	51.72
Total	29	100%

Table 3.18

Factors likely to reduce the level of performance of the professionals of environmental management.

Responses	Frequency	Percentage (%)
Unavailability of fund	5	17.24
Unavailability of equipment and materials		
Lack of technical expertise and inexperience	6	20.69
All of the above	18	62.07
None of the above	-	
Total	29	100%

CHAPTER FOUR

SUMMARY, CONCLUSION AND RECOMMENDATION

This chapter will form part of this research that describes briefly or summarizes the findings in chapter three, the conclusion and most importantly recommendation based on the problems from the findings. In short, it serve as a report drafting of the problems and prospects of data collected based on the research topic: Environment, Technology and Infrastructural Development in Nigeria.

4.1 Summary of Findings.

From the analysis of the data collected in chapter three, it has been discovered that;

- (1) A lot of changes occur in the environment, which are mostly through the allocation of land of activities.
- (2) For development to take place, technology must be applied to the activities required and when technological application causes problems, then it is also technological application in a corrective form that will or must be used to erase the problems.
- (3) The environment cannot d without technology.
- (4) The Nigerian environment has been facing environmental degradation owing to neglect and human activities technologically.
- (5) The Nigerian environmental problems are
 - (i) Desertification
 - (ii) Deforestation
 - (iii) Erosion
 - (iv) Flooding

2. Finally, there is the need to properly finance the different organs of Government to assist them organize localized workshops, seminars and meetings on environmental changes e.g. climate change. Agencies such as NEPA, NNPC, NALDA etc.

FOOT NOTE

FEPA: Federal Environmental Protection Agency

SEPA: State Environmental Protection Agency National Library Minna
Niger State.

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**DEPARTMENT OF GEOGRAPHY SCHOOL OF POST GRADUATE
STUDIES FEDERAL UNIVERSITY OF TECHNOLOGY
MINNA, NIGER STATE.**

Dear Sir/Madam,

**RESPONSES TO QUESTIONNAIRE FOR PGD RESEARCH PROJECT.
TITLE: "ENVIRONMENT, TECHNOLOGY AND INFRASTRUCTURAL
DEVELOPMENT IN NIGERIA"**

The above topic is for a proposed research project in the PGD ENVIRONMENTAL MANAGEMENT programme of the Department of Geography, F.U.T. Minna. Currently the work is at the data collection stage.

The data required are your responses to the questions in the attached questionnaire.

You are therefore, requested to please respond to the questions as freely, objectively and comprehensively as possible, bearing in mind, the assurance that your responses will be treated in strict confidence and will be used solely for the purpose of this academic exercise - research write up.

Your co-operation in this regard will be immense contribution to the advancement of the frontiers of knowledge and will be highly appreciated.

Yours sincerely,

Y.D. ABDULLAHI

PGD/GEO/99/2000/080

QUESTIONNAIRE
ENVIRONMENT, TECHNOLOGY AND INFRASTRUCTURAL
DEVELOPMENT IN NIGERIA

The questions below are followed with series of answers and you are required to tick only one answer.

1. *Do you agree that changes in the environment of cities, towns and countryside occur as a result of allocation of land for activities and the use of funds develop that land?*

- (i) *Agree*
- (ii) *Disagree*
- (iii) *No opinion*

2. *Do you agree that technological application in an environment is one major means for development?*

- (i) *Agree*
- (ii) *Disagree*
- (iii) *No opinion*

3. *Is it true or false that environmental problems as a result of technological application can be corrected by another application of technology?*

- (i) *True*
- (ii) *False*

4. *How do you react or respond to the statement that the relationship between the environment and technology as at today is nothing to write home about'. Is it;*

5.

(i) True

(ii) False

5. *How much have human activities degraded the Nigerian environment?*

(i) Very much

(ii) Much

(iii) Slightly

(iv) Very slightly

6. *Is it true or false that the rate at which deforestation occurs in Nigeria is alarming and that it has exposed a large area to desertification*

(i) True

(ii) False

7. *Which of the following describes the impact of dams in Nigeria today?*

(i) 100% positive

(ii) 70% positive

(iii) 40% positive

(iv) 100% Negative

(v) 40% Negative

8. *How efficient is the National Electric Power Authority (NEPA) in Nigeria?*

(i) Very good

(ii) good

- (iii) Fair
- (iv) Poor

9. How good would you describe the roads in Nigeria as at the year 2000 and 2001?

- (i) 100% Good
- (ii) 80% Good
- (iii) 60% Good
- (iv) 40% Good
- (v) 20% Good

10. Considering the adverse population, which of the following best describe the availability of infrastructure in Nigeria?

- (i) Enough
- (ii) Too much
- (iii) Not one available
- (iv) Not enough

11. What part of Nigeria do erosion occur?

- (i) North
- (ii) South
- (iii) West
- (iv) East

12. What specific part of Nigeria suffers the problem of erosion most?

- (i) South West
- (ii) North
- (iii) South East
- (iv) South South

13. Which of the following types of pollution affect the Nigerian environment?

- (i) Air pollution
- (ii) Water pollution
- (iii) Noise pollution
- (iv) All of the above
- (v) None of the above

14. Which of the following is best responsible for the development of the environment in respect to, good health, safety and sustainable development?

- (i) Project Manager
- (ii) Construction Manger
- (iii) Environmental Manager
- (iv) Estate Surveyor
- (v) Geographer
- (vi) Geologist
- (vii) Others

15. Which of the following best describes the performance of the environmental managers in Nigeria?

- (i) Very Good
- (ii) Good
- (iii) Fair
- (iv) Poor

16. Which of the following best describes the level of awareness of environmental problems in Nigeria?

- (i) Very High
- (ii) High
- (iii) low
- (iv) very low

17. What are the factors likely to reduce the level of performance of the professionals in Environmental field?

- (i) Lack of funds
- (ii) Lack of equipment and materials
- (iii) Incompetence and inexperience
- (iv) All of the above
- (v) None of the above