

**ATTITUDE OF PEOPLE TOWARDS CONVERSATION AND THEIR
COMMITMENT TO ENVIRONMENTAL PROTECTION IN AHOADA EAST
LOCAL GOVERNMENT AREA OF RIVERS STATE**

A RESEARCH PROJECT

Written By

GODWIN, EGBE JNR.

Matric. No. IOE/PGDEE/2008/018

Submitted to

DEPARTMENT OF CURRICULUM & TEACHING

INSTITUTE OF EDUCATION

UNIVERSITY OF CALABAR

CALABAR – NIGERIA

**IN PARTIAL FULFILLMENT FOR THE AWARD OF A POST GRADUATE
DIPLOMA IN EDUCATION (P.GD),**

MAY, 2011

CERTIFICATION

This is to certify that this research project was carried out by Godwin, Egbe Jnr. With Matric No. IOE/pgdee/2008/018 of the Department of Curriculum and Teaching, Institute of Education, University of Calabar, under my supervision.

Prof. John Emeh (supervisor)

signature/Date

DEDICATION

I dedicate this research study to my lovely children, Andromeda and Athena, and to the good people of Ehuda Mini, my home.

ACKNOWLEDGEMENT

I acknowledge and express my profound gratitude to the Almighty God for his loving kindness, abundant mercies and his favours to complete this course on schedule.

Am thankful to my project supervisor, prof. John Emeh for his patience, guidance and useful comments that has help this work come out successfully. My special appreciation also goes to Mr. Bassey, who has been such a wonderful friend through the process. I equally appreciate my Dad and Mum, Ven & Madam R. F. Egbe.

I must, most humbly, acknowledge my lovely wife, Ekalunu, for her love and understanding. For my two lovely children Ununuma and Chinem-Unwo, I see a part of me in you girls, keep it up.

My sisters Mosky and Iyums, you 've all been so wonderful. Thank you for the encouragement.

ABSTRACT

The study examines the attitude of people towards conservation and their commitment to environment protection in Ahoada East Local Government Area of Rivers State, Nigeria. Three research questions were raised and a sample size of one hundred and twenty (120) respondents was randomly selected for the study. An instrument, a questionnaire was developed and sampled to the respondents. The instrument contained two parts; part (A) dealing with the background information about the respondent while part (B) contained questions about the research phenomena. Research items stated in section B were done with the use of the simple “Yes” and “No” pattern. At the end of the exercise the entire questionnaire were correctly filled and returned. The response from the questionnaire was tested using simple percentage statistical tool. From the result of analysis obtained, three basic findings were obtained and these were that people’s attitude has a significant influence towards conservation and their commitment towards protection of the environment, environmental education also influences people’s participation in the decision making on environmental conservation and protection. From these findings, relevant recommendations were made from the study, one of which was the need to sensitize the people towards the need for environmental conservation and protection.

TABLE OF CONTENTS

CHAPTER ONE: INTRODUCTION & BACKGROUND

1.1	Introduction - - - - -	1
1.2	Theoretical framework: - - - - -	4
1.3	Statement of the problem- - - - -	7
1.4	Objectives of the study - - - - -	9
1.5	Research questions- - - - -	9
1.6	Significance of the study- - - - -	10
1.7	The scope of study- - - - -	11
1.8	Limitations of the study- - - - -	12
1.9	Definition of Terms - - - - -	12

CHAPTER TWO: REVIEW OF RELATED LITERATURE

2.0	Literature Review-	- - - - -	13
2.1	Recent trends in environmental mismanagement -	13	
2.1.2	Policy issues in environmental protection and conservation		
	In Nigeria-	- - - - - - - - - - -	18

2.1.2 People's attitude and participation in environmental conservation and its effect on environmental protection -	24	
2.1.3 Strategies to improve measures towards Environmental conservation	- - - - -	28
2.2 Summary of literature review	- - - - -	37

CHAPTER THREE: Research Design and Methodology

3.1 Research Design	- - - - -	39
3.2 Area & population of study	- - - - -	40
3.3 sampling procedure	- - - - -	41
3.4 Instrumentation-	- - - - -	41
3.5 Data collection Technique	- - - - -	44
3.6 Method of data analysis	- - - - -	44

CHAPTER FOUR: PRESENTATION OF DATA & DISCUSSION OF FINDINGS

4.1 Presentation of data	- - - - -	45
4.2 Discussion of findings	- - - - -	51

CHAPTER FIVE: Discussion, Conclusion, & Recommendations

5.1 Discussion of Research Findings	
5.2 Conclusion	
5.3 Recommendations	

References

Research questionnaire

Appendices

CHAPTER ONE

1.1 Introduction

Experience has shown in recent years that improvement in caring for the environment is essential and overdue in a range of institutions. The environment is indeed at risk due to a number of interdependent issues, which include soil degradation, water contamination, deforestation, soil erosion, biodiversity losses, air pollution and water hyacinth menace. Aggregating all the sources of environmental degradation, the ultimate long term issue has been estimated to be as high as US \$5 billion per annum (World Bank 2000).

As a result, sustainable development practices and policies have become integral parts of the planning of the Federal Government of Nigeria, while redressing the backlog of environmental problems remain a central concern of both the people and the different levels of government. The premise of the nation's effort was enumerated by the Earth summit in 1992: " without improving environment management, development will be undermined and without accelerated development the environment will continue to degrade" (Spyke, 1999)

Nigeria's Agenda 21 programme thus seek to integrate environment into development planning at all levels of government and the private sector; commence a transition to sustainable development; address sectoral priorities, plans, policies and strategies for the major sectors of the economy; and simultaneously foster regional and global partnership.

Usuah (2007) maintained that conservation efforts are usually directed towards the protection of ecologically important or vulnerable species or habitats or features of geological interest. The concept of 'importance' or 'vulnerability' may reflect the fact that a species, habitat, or geographic features is endangered, under ecological stress, unique, or simply valuable in itself. Over recent decades, conservation of flora and fauna has seen a general movement from protection of endangered species to the protection of the habitats on which they depend. Proponents of both anthropocentric and non anthropocentric outlooks could recognize a principle of conservation; the former because of direct consequences for human interests or indirectly because of human respect and enjoyment of special habitats; the latter because either habitats or the individual organisms have value in themselves. Disagreements might arise from perceptions of the relative worthy of wild compared with domesticated animals, man-made or natural environments, and individual members of habitats or the habitats themselves. The fundamental conflict for all such outlooks, however, is the degree to which the conservation principle might override human interests.

Here then lies the concern over individual's attitude in their commitment towards environmental conservation and protection. Individual involvement in protecting the environment is generally supported for its potential to provide low-cost sources of information to government agencies, increased acceptance of and confidence in government decisions, empowered community members on issues that affect them and advancement of democratic ideals (fiorino, 1990, 2000; Heinman, 1997; Shepard and Bowles, 1997; Spyke, 1999; Chess, 2000). Moreover , involvement by local residents can result in the collective transition from victims to agents of change (O' Rourke and Macey, 2003).

There is therefore need to achieve a balance and positively influence the attitude of the individuals, through environmental education, involvement in decision-making process, among strategies to have them participate in conservative activities within their environment. The effect of people's attitude and commitment in environmental conservation and protection in Ahoada East Local government area is the central focus of this research work.

1.2 Theoretical framework

Conservation efforts are usually directed towards the protection of ecologically important or vulnerable species or habitats or features of geological interest. The concept of 'importance' or 'vulnerability' may reflect the fact that a species, habitat, or geographic feature is endangered, under ecological stress, unique, or simply valuable in itself (Taylor 2000). Sustainable development advocated by Brundtland Commission as meeting the needs of the present without comprising the ability of the future generation to meet their own needs. Cunningham and Saigo (1997) put it thus; it is the progress in human well-being that can be extended or prolonged over many generations rather than few years. The main idea about sustainable development is that those presently enjoying the benefits of economic development in all ramifications should not jeopardize the chances of future generation by excessively depleting the earths and in the future.

Historically, natural resources base has been instrumental, in addition to human resources, for development purposes. The issue is critical especially where large populations and government revenue depend on agriculture and exploitation of resources. Local resources management, because of its holistic view of humankind within the biosphere and the awareness of human dependence on scarce natural resources, is in position to reduce resource depletion, improve the environment, improve food self-sufficiency and hence improve the development of the societies. The economic implications of resource degradation include reduced wood fuel supply, increased time lost in wood fuel collection, increased prices of marketed biomass fuels, similar impact on the water supply, and reduced nutritional intake via reduced cooking activities. The impact indirectly extends to national and regional economics through reduced agricultural yield, increased

rural-urban migration, and depletion of natural resources assets which are the basis of both indigenous export industries (Pearce, 1988)

Factors giving rise to resources deterioration are complex. There are direct and indirect causes. Direct causes include land clearance for agriculture and other economic purposes, wood fuel harvesting in a non-sustainable fashion, overstocking of and overgrazing by animals due to improved animal care, an inappropriate farming practices, i.e. fallow period shortened and loss of shelterbelt due to changes in social and economic conditions, population growth with its complex ramifications for urbanizations thereby generating high demand for urban fuel (and charcoal) and food which must come from rural and semi-rural areas. The most significant cause is the common ownership of land. Common property ownership leads to a situation in which each user tends to maximize his/her own self interest, ignoring the effects of his/her actions on other users and the users cost of consumption. The common property argument is linked with the failure of the market to develop properly.

Sustaining the environment has also been affected by other human activities, such as bush fallow, inappropriate technologies, overpopulation, overgrazing, deforestation without adequate reforestation and profligate exploitation of mineral resources, are often not in tune with proper environmental management practices. The obvious result of these activities is the increasing inability of the environment to provide the necessary sustenance to agricultural and rural development programs because of erosion, desertification and pollution. To obviate the adverse effects of the misuse and possible mismanagement of the environment, thereby attain sustainable development, certain recommendations are needful. These include, *inter alia*, increased training and research, as well as the periodic

surveys and inventories of environmental conditions in geographical locations most prone to environmental hazards.

1.3 Statement of problem

Nigeria is confronted by major environmental problems among which are: deforestation, drought and desertification, soil and coastal erosion, water pollution, oil pollution, water hyacinth, loss of biodiversity, flooding, urban decay and industrial pollution. Studies have indicated that the country would suffer large ecological and economic losses if these priority environmental problems continue unchecked. The governments however, have not been silent over this trend. Laws on environmental protection and conservation have been enacted, but this has not seemed to improve the condition. Arguments are that, there is a significant correlation level of influence on people's attitude and the effective implementation of these laws (Sule, 2000, Charles, 2004).

People's attitude which is seen as their perspectives towards Conservation has not been fully developed. Rather than protect environmental species, rural dwellers take to cutting down trees meant for conservation for domestic activities like fire making. Charles (2004) stated that, rather than replace after cutting down trees, they do not and this has adverse effect on conservation. While there is blame on their attitude, ignorance has been cited as a possible reason for such attitudes. This therefore lays the importance of environmental education, to help educate the people either formally or informally on the need to conserve the environment.

More so, recent studies (Emineh, 2003; Esaia, 2003, Antai, 2007) shows that conservation measures fail because cognizance is not made

on individual's participation in the policy making process. This explains why most decisions of the government fail at implementation, especially at the rural sector. Rather than compliment the government efforts, they destroy the forests and environment alike. They scholars further observed that, were individuals are given considerations, with regards to their participation in the decision making process, they will rather compliment the efforts. There is other growing evidence that mandatory citizen participation in the planning and implementation of policy measures at environmental protection and conservation is needful in protection the environment.

There is as such a growing need to integrate individuals in designing conservation policies, increase access to environmental education and protection. The effect of the people's attitude and commitment in environmental conservation and protection in Ahaoda East Local government area will forms the concern of this study.

1.4 Objectives of the study

The study is aim at achieving the following objectives,

1. Examine the effect of people's attitude towards conservation and their commitment towards protection.
2. Investigate how environment education can influence people's attitude towards conservation and their commitment towards protection.

3. Examine how individual's participation in decision making can influence and further improve people's attitude towards environmental conservation and protection.

1.5 Research Questions

The study will be guided by specific research questions to guide the empirical investigation. These are,

1. What factors influence people's attitude towards conservation and their commitment towards protection?
2. What ways has environmental education influence people's attitude and commitment towards environmental conservation and protection in Ahoada East Local Government Area?
3. What is the influence of people's participation in the decision making on environmental conservation and protection in Ahoada East Local Government Area?
4. What better measures can be used to encourage people's attitude in environmental conservation and protection in Nigeria?

1.6 Significance of the study

Investigations and findings generated from this study will help the government identify factors influencing people's attitude towards protection and environmental conservation. Finds from the study will further help the government identify, define and apply the most

suitable measures of addressing the problems influencing the ongoing need for environmental conservation. It will further assist them to develop workable measures in improving measures at protecting the environment.

Also, the study will discuss the importance of environmental education in the achieve people's commitment towards protection and conservation. This importance will help curriculum planners to improve the present educational curriculum, introducing courses that deal with conservation and protection of the environment.

Equally, the study will highlight the need to encourage people's participation in the decision making process. This will help administrators to consider the need for participatory planning, thus providing a forum for individual contribution, especially on issues that deal with enhancing protection and conservation of the environment.

Further researchers will find the research findings useful formulating research questions and hypothesis to guide their study. Literature generated in the study, will also help them develop appropriate framework and theoretical framework for their study.

1.7 The Scope of the study

This study examines attitude of people towards conservation and their commitment to environmental protection, with specific emphasis on Ahoada East Local Government Area.

1.8 Limitations of the study

Among several factors, the study is limited by inadequate literature, as there has not been research interest in this subject area. Other limitations included poor access to the study area, finance, and

the illiterate population of the area, which also forms the sample population for the study.

1.9 Definition of Terms

i. Environment

The circumstances or conditions that surround an organism or group or organisms as well as the complex of social or cultural conditions that affect an individual or community.

ii. Conservation

This a conscious effort directed towards the protection of the environment from damage.

iii. Attitude

Attitude is the collective behavior, or value of a people towards something. It is a will or the way one thinks about something, in this case preserving the environment.

CHAPTER TWO

LITERATURE REVIEW

An issue, which has been the object of controversy, is the source of environmental degradation within the less developed nations themselves. Some scholars see these problems as stemming mainly from forces outside these countries, especially the exploitation of their resources by multinational companies for the purpose of supplying the high-consumption life-style of the industrialized nations (Charles, 2004; Sule, 2005). Others point to conditions within the less developed nations, particularly their rapidly growing populations, as the primary contributors to their environmental problems (Toye, 2005; Sandra, 2007). This literature review will examine the perception of the people's attitude and commitment in environmental conservation and protection.

2.1 Recent trends in Environmental Mismanagement

While it is obviously important for the entire world to achieve environmental conservation, the concept of sustainable environmental conservation and protection has often been focused specifically on the developing countries. The special problems faced by poor countries in terms of protecting their nation's environmental quality while pursuing economic growth is, in fact, the aspect of sustainable development that has received the most attention (Warren, 1999). A major policy issue surrounding discussions about achieving environmental conservation within the less-developed nations has been the importance of assistance from the richer nations, and this was a major source of

controversy at Rio (Dilo, 2002). This important has been heightened as the environment is significant in boosting agricultural sector.

Pauline (2002) maintained that, in spite the role of the economy, adequate attention is not often given to the proper use of the environment in order to realize maximum benefits. This view stems from the contention that several activities inimical to the efficient use and exploitation of the environment are often embarked upon.

Firstly, Warren (1999) noted that inappropriate farming systems and technologies leave the soil worse off. The traditional fallow system is currently proving inadequate for food and industrial raw materials production as a result of overpopulation. With over-population, the traditional fallow period required for the regeneration of the indestructible properties of the soil is shortened because pressure on land.

Similarly, Dile (2002) further maintained that increase demand for livestock product has inevitably resulted in overgrazing. Secondly, the desire to obtain mineral resources in the shortest possible time in order to realize adequate financial resources such as petroleum, tin and gold.

Thirdly, Toye (2003) added that certain government policies have also adversely affected the Nigerian rural environment. In particular, the absence of a policy compelling exploring and extracting industries to reinvest and repair the soil appears to be advanced for other mineral mining activities.

Wilburge (2004) recalled that, the absence of adequate policies has adverse consequences on the environment and the performance of the agricultural and rural sectors. As stated earlier, resources are location-and quality –specific. One area where misuse of the environment is obvious is in the reduction of the quality of the land

resources. A shortened fallow period leads to both overgrazing and overcropping resulting in erosion, degradation and impaired quality. In extreme cases, where deforestation is unaccompanied by reforestation, desertification and a reduced quality of useable land result. Also, the Sahara Desert alone has, during the past fifty years, invaded one million square kilometers of land along its southern fringes. Unfortunately, it is still rolling southward at the rate of six kilometers of land along its southern fringes. Unfortunately, it is still rolling southward at the rate six kilometers per year (Courier, 2004). Given impaired or reduced soil quality and reduced productive land, agricultural production and productivity in particular are endangered. This invariably impairs the ability of farmers to realized their socio-economic objectives.

Toye (2004) noted that, mismanagement of the environment during the process of mining often leads to air, soil and pollution. Cases of soil and water pollution by overflowing crude petroleum products are common knowledge in the oil producing areas. Such pollution adversely affects the ecosystems and microflora leading to reduced crop, fish, livestock and wildlife production. With polluted air, water and soil, and hence food crop, fodder, fish and wildlife, human beings in general and rural people in particular are prone to ill health. Since health problems and productivity are incompatible, one cannot but expect impaired agricultural and industrial levels of production and productivity. Lastly, in an effort to improve the physical and chemical qualities of the environment, scarce financial, human and physical resources need to be invested. For most developing nations, Agbu (2003) says, the required resources cannot be easily met, not only because such resources are scarce but also because there is acute competition for such resources from several competing needs. For the amelioration of the badly managed environment is often prohibitive in

relation to the benefits derived from the excessive exploitation of the environment in the first instance.

In essence, Sule (2005) stated that mismanagement of the environment leads to a fall in production and productivity, a fall in the income generating capacity of the people and the nation, impaired ability of the economy to generate increased employment, inadequate industrial materials and lowered ability for investment in the economy. All these translate into lack growth. In a study on the economic effects of soil erosion in Nigeria by Titilola (2004), it was established that the major factors thought to be responsible for erosion on Nigerian farms include ecosystem disequilibrium, rising population pressure on land and fragile and permeable soil. Soil erosion is however aggravated by such factors as the farming system, soil management practices and poverty. The impact of resources management, illustrated by erosion in Efon-Alaye in Nigeria, on farm size, farm output and value of output are deemed serious for the community and implication for the Nigerian agricultural societies. Erosion has (a) reduced the areas farmed to about one third of the original size (b) reduced physical output to about two third and (c) reduced the monetary value as well.

The implication of Agaki (2004) study for agricultural resources management in Nigeria is that farmers and other rural resources users are most important actors in the prevention and management of erosion. These resources users dominate the agricultural resource in term of number of producers and proportion of output produced. Given the economic situation, under which they operate, they place more emphasis on short time planning, essentially minimizing risk and minimizing income. They can therefore, be motivated in soil conservation effort and erosion control when they see erosion to be threat to their livelihood. The measures that will adequately encourage

resource management must satisfy the following conditions: a) it must be profitable in the short-run b) it must include some aspects of existing farming system practices and c) it must not require farmers to donate their most limiting resources.

2.1.2 Policy Issues in Environmental Protection and Conservation in Nigeria

Toye (2005) maintained that contemporary Africa is facing many environmental problems. Human activities cause environmental hazards, which have negative impact on human beings and other beings of the universe. The negative interactions of the human being with his environment affects negatively. This causes soil erosion, deforestation, pollution and desertification. Individualistic and utilitarian attitudes towards nature have led people to plunder the environment recklessly. People are after economic profit through natural resources rather than being responsible taking care of the resources. Land grabbing for economic use causes problems. The land grabbed is used recklessly in the way the owner desires (Courier, 2004).

According to the National Policy on Environment (1999), Nigeria's ecosystem is richly endowed with abundant and diverse resources. This vast land-an area of 923,7773 sq kilometers, stretching from the Niger Delta to the Northern fringes – grapples with a litany of environmental problems across its length and breath (UN,2003). Among the well known are desertification and drought, coastal and gully erosion, as well as pollution ans other environmental problems peculiar to the

Niger Delta region. To tackle these environmental problems required a political will to put in place a national framework that will give priority to the environment. The discovery of a major toxic waste dump at Koko, a small port town in the then Bendel State in 1987 led to the establishment of the Federal Environmental Protection Agency (FEPA) a year later (UN, 2003).

Toye (2005) recalled that in 1992, the Agency's mandate was expanded by law to cover conservation of natural resources and biological diversity. These represented the efforts made by successive administrations to ameliorate environmental problems of the country. The Obasanjo administration, instituted on 29 May 1999, gave a new fillip to the environmental battle by according it priority in its development programmes. Accordingly, it created, for the first time in the history of the country, a Ministry of Environment in June 1999, barely a month after taking office. Naturally, the Federal Environmental Protection Agency (FEPA) was absorbed and its functions taken over by the new Ministry.

As a policy thrust, the primary mandate of the Ministry is to protect and improve water, air, land, forest and wildlife of Nigeria as mandated by section 20 of the National Constitution. The administration's policy thrust is summarized in the Environmental Renewal and Development Initiative (ERDI). The objective of ERDI is to take full inventory of all natural resources, assess the level of environmental damage and design and implement restoration and rejuvenation measures; and to evolve and implement additional measures to halt further degradation of the environment.

According to Sule (2005), the Ministry is also to ensure the sustainable utilization of the environment and its resources by evolving tools for poverty alleviation, ensuring food security, foreign policy and international development and good governance. For effective implementation of its mandate a number of priority programmes were set to address municipal waste management and sanitation, industrial pollution control including oil and gas, afforestation and conservation of bio-diversity and wildlife. Priority is being given to combating desertification and the mitigating effects of drought, managing mining sites and restoring derelict lands. Particular attention is also paid to the environmental problems of Niger Delta, the desert prone zones well as the coastal and gully erosion areas.

To have a coordinated and holistic approach to environmental protection, Adebola (2005:34) mentioned that, the following Departments from other Ministries were transferred to the new Federal Ministry of Environment:

- i. Forestry Department (including Wildlife, Forestry Monitoring Evaluation and Coordinating Unit – FORMECU) of the Federal Ministry of Agriculture.
- ii. Forestry Research Institute of Nigeria, from Federal Ministry of Agriculture.
- iii. Environmental Health and Sanitation Unit of the Federal Ministry of Health.

- iv. Oil and Gas Pollution Control Unit of the Department of Petroleum Resources of the Federal Ministry of Petroleum Resources.
- v. Coastal Erosion Unit, Environmental Assessment Division and Sanitation Unit of the Federal Ministry of Works and Housing.
- vi. Soil Erosion and Flood Control Department of the Federal Ministry of Water Resources.

In addition, two more departments were created to serve common Services Departments:

- i. Department of Administration and Finance, and
- ii. Department of Planning, Research & Statistics (Adebola, 2005).

In the same spirit, some of the States have now created full-fledged Environment Ministries to replace their existing Environmental Protection Agencies. The Federal Ministry organizes the regular meeting of the National Council on Environment, which is attended by the Chief Executives of all State Environmental Ministries/Agencies. The meeting provides the forum for policy direction and dialogue on topical environmental issues. To date, two of such meetings have been held since the inception of the Federal Ministry of Environment in 1999. The following instruments of intervention are currently in place to tackle the problems of environmental degradation in Nigeria:

- (i) The revised National Policy on Environment, 1999. The policy was first released in 1989.

- (ii) The National Agenda 21 (published in 1999), which touches on the various cross-sectional areas of environmental concern and maps out strategies on how to address them.
- (iii) These instruments complement what had existed in the form of guidelines and standards for environmental pollution control in Nigeria and other regulations that deal with effluents, industrial pollution, waste management, and environmental impact assessment. There are also plans and programmes on wood conservation, resource conservation, water disposal, water quality, environmental audit, environmental friendly products and eco-labeling (Pp.11-13).

For capacity building and institutional strengthening, the Ministry seeks to build capacity through a number of initiatives including public awareness, training, institutional strengthening and infrastructure development as well as through the establishment of non-governmental organizations concerned with the environment. In recognition of the importance of co-operation with other nations of the world for the effective protection of the global environment, the government has over the years, ensured collaboration with the international community in the area of the environment. Such collaborative efforts have resulted in positive contributions to the development of appropriate policies, legislation, action plans and programmes at regional and international levels. A number of international environmental conventions have been signed and/or ratified as a result (Sule, 2005).

2.1.2 People's Attitude and Participation in Environmental Conservation and its Effect on Environmental Protection

Central to the theme of this research, is the exploration of individual attitude as a prime factor or sustaining conservation measures. Developing in the individual's the right and positive attitude towards environmental conservation can be achieved through environmental education. Adnonn (2007) stated that this essence calls for curriculum review. Arising from its importance, educational studies on environmental protection and conservation should not be related to a particular department but that should be considered as a general study as everyone has a contributory role, either consciously or unconsciously in protecting the environment.

For the vulnerable, educationally disadvantaged grouped in rural communities who may not have the privileged of being taught in school on the needs and measures of environmental conservation, Sandra (2006) stated the need for extension educational services. She noted that, it is even these rural vulnerable groups that are engaged in the destruction of the environment. They cut down trees and use as fire woods and for other domestic activities. There is therefore need for a total ideological transformation before the objective of conservation and environmental protection can be better attained.

Individual participation in decision making process, otherwise denoted as citizen's participation is central in the achievement of environmental conservation Gary (2004) maintained that decisions involving the use of Institutional Controls (IC) should include a individual/community's right to participate at level of the process of planning and implementation. In this context of short-term and long-term "principle threat wastes", IC should not be promoted as a way around treatment but rather an adjunct to treatment. The process of planning and implementation IC should accommodate site-specific vs.

facility-wide differences, as well as on-site variations. All too often, IC is concluded by modeling rather than monitoring on-site. There are many examples that demonstrate the ineffective use of IC because of the lack of community-based information that escaped the controls. In several of these cases what was not monitored proved to be the most damaging in the long-term. There is also growing evidence that encouraging individual's participation in conservation and environmental protection in the most effective means sustaining government efforts (2005).

Most people would not dispute that, in a democracy, citizens have a right to participate in the decision which affect them. However there are wide-ranging views on what form that participation should take. A managerial perspective entrusts elected representatives and their appointed administrators with identifying and pursuing the common good (Laird, 1993). While knowledge of public preferences is vital to a managerial approach, the direct involvement of the public in decision-making is seen as a threat to the common good because it opens the door to self-interested strategic behavior. A pluralist perspective views government, not as a manager of the public will, but as an arbitrator among various organized interest groups (Williams and Matheny, 1995). The popular perspective calls for the direct participation of citizens, rather than their representatives, in making policy.

Popular democratic theory stresses the importance of direct participation in instilling democratic values in citizens and strengthening the body politic.

Each perspective favors a different form of participation. The managerial perspective may favor a survey while the pluralist perspective favors stakeholder mediation, and the popular perspective to achieve a balance of increased participation, greater expertise, and

efficiency in the decision-making process. Moreover, because most environmental decisions are concerned with establishment rights and responsibilities over the use of common natural resources (such as water, land, air and biodiversity) environmental laws must require substantial rights of public participation to provide checks and balances on administrative government and to improve the quality of decisions. Public participation can also enable advocacy on behalf of interests not normally represented (Spyk, 1999).

Through an extensive review of various individual/public participation programs in the environmental decisions, Beierle (1999) disclosed the following measures necessary to improve individual's attitude in conservation and protection. These are,

- a. Educating the public
- b. Incorporating public values, assumptions and preferences into decision-making
- c. Increasing the substantive quality of decisions
- d. Fostering trust in institutions
- e. Reducing conflict; and
- f. Achieving cost-effectiveness (Pp. 111-113)

The underlining assumption therefore is that, no better conservative measure can be undertaken unless there is a conscious and careful attitudinal change among rural dwellers on the prime need for environmental conservation and protection. Individual's participation in protecting the environment is generally supported for its potential to provide low cost sources of information to government agencies, increased acceptance of and confidence in government decisions, empowered community members on issues that affect them and advancement of democratic ideals.

2.1.3 Strategies to improve measures towards Environmental Conservation

Antai & Anam (2006) disclosed the under listed strategies to help improve the strategies of environmental conservation. These advocacies spans beyond confide of Nigeria, to other developing economy faced with similar challenge.

i. Environmental Sustainability

Antai & Anam (2006) noted that, first; Government of developing countries must be committed to ensure effective, efficient and transparent public sector and public administration; committed to sound economic policies and management; sustain democratic governance that allows broad based participatory decision making and management, improve local implementation capacity for all actors to empower them to play an effective role in sustainable urbanization; Develop efficient and effective governance systems in African cities and other human settlements; strengthen national and local institutional capacities in the areas of sustainable urbanization; Promote city-to-city cooperation to encourage exchange of best practices of sustainable urban development at all levels; and mobilize external resources and more coordinated and concerted support for sustainable development. The international community, on its part will need to support these initiatives by ensuring that they are adequately financed, technology is transferred, institutions strengthened and capacities built (Leman,2005).

ii. Ensuring Equitable & complimentary Economic System

Ensuring equitable economic, social, cultural and technological development without polluting ecosystems and depleting natural resources are other complimentary strategies. The proper management of natural resources without paying equal attention to the strengthening of human, capital and information resources will not lead to sustainable development, sustainable development cannot occur without carefully taking into account its human settlements. Urban sustainability meets the needs of the present without compromising that of future urban generations (Leman and Cox, 1991).

iii. Developing an Ecological Perspective

Register (2000) emphasizes on ecological perspective in developing the concept of eco-city. Weikel (2001) supports an ecological perspective for major changes in urban areas. "it is now clear that whether we will survive for very much longer as a species hinges on our capacity to engineer a durable transition to sustainable urban life". The goal of sustainability in a city is to reduce the use of natural resources and production of wastes along with the improvement of its livability, which will cause the city to fit within the capacities of the local, regional and global ecosystems. The main challenge for the public sector in the in the area of urban growth and development is to ensure sustainability of urban development and manage urban growth to meet the needs of a growing population, which is taking place in an orderly and sustainable fashion.

iv. Growth Management through a Multi-Layered and Flexible Approach

According to Adebola (2005), growth management requires a multi-layered and flexible approach, collaboration and cooperation, significant commitment in both time and investment, and employs an arsenal of tools. The set of strategies include all the urban form relationships, which make the open spaces and natural systems, healthy downtown, balanced movement systems successful. The five critical components of a growth management strategy include;

1. A clear vision and commensurate commitments to effective growth management by all parties
2. A greater level of collaboration and a clear definition of the roles of key stakeholders
3. Innovation in policy frameworks and financial commitments to support growth management
4. The introduction of better tools
5. An enhanced awareness in the broader community (Adebola 2005, Pp.12)

The United Nations Global Environmental Report (2004: 18) disclosed that, rational use of natural resources is the only means to maintain and improve human conditions. However, in the use of natural resources, one needs to appreciate the impact of one action on the resources use and management emanates from an unprecedented rate of population growth, rising income and per capital demand. These have, in recent years, been magnified by scientific and technological advances, which create new demands. In order to meet these new demands, Nigerian agriculture has been compelled to put additional pressure on the production system. Such pressures often exceed the capacities of the system to bear. What has therefore been advocated worldwide is the concept of integrated resources management (Leman, 2005). This means that in altering one element in the system for the

purpose of deriving advantages, one should understand the impact of that alteration upon the remaining components of the system (Adebola, 2005). Also, one should carefully calculate what should be done to make the system, as a whole, as productive as possible or to prevent the benefit that the modification makes possible from collapsing crucial natural links have been interfered with or terminated.

Fiorino (2000:45) disclosed that, the achievement of this objective requires concerted efforts and reorientation embodied in appropriate policies and programs. Some policies and programs are:

1. The information of agricultural development plans and policies, which take into cognizance the peculiarities of Nigeria farmers and environment so that all participants can make appropriate and commensurate contributions in maintaining environmental quality. Agriculture is an activity of general public interest, not only because it supplies food and raw materials but because it helps to conserve natural resources and the environment, provides employment opportunities, recycle wasted and serves to maintain and enhance the quality and attractiveness of rural areas (Pauline, 2002:12).

Therefore, at the planning stage, Antai & Anam (2007) noted that an environmental impact assessment of development plans must be made in order to prevent harmful environmental effects in such areas as irrigation of farmland, dam construction and large-scale agricultural development programs. The environment must be regarded as a given system in which agricultural development take place and to which it must adapt. Until recently, the environmental

implications of agricultural system were not of importance in the Nigeria agriculture.

2. Toye (2005) suggested that surveys of agricultural areas susceptible to environmental hazards should be periodically undertaken. Such surveys should include the collection and review of available surveys and inventories in order to identify specific sources of hazards. The review should also include loss of soil productivity, depletion of grazing lands, rate of deforestation and the magnitude of the decimation of livestock by pest and diseases. Also of importance in the review are the inter-relationships between ecological conditions, types and intensities of land use and management practices.
3. By doing this Alute (2005) maintained, urgent action on conservation and protection will be logically and systematically devised. In order to enhance the utility of such survey along with the records so obtained, existing agricultural institutions should provide the necessary monitoring service. The case in point is illustrated by agricultural and resources management systems of the eastern part of Nigeria. Previous environmental profile knowledge of the area could avert further disaster.
4. A heightened interest in farming systems in Nigeria makes necessary to initiate research in selected ecosystems in relation to the functioning and productivity of agricultural systems, the environmental effects of certain specific agricultural practices and inputs and the effects of pest control measures on the environment diversification (Godwin, 2006). Researchers

should incorporate environmental considerations in their activities. The findings emanating from such activities will be of assistance in the design and experimentation of ecologically stable systems of land use and agricultural practices (Adele, 2006).

5. Ukpe (2006) suggested that exchange of information and experiences in agriculture should be based on similar ecological conditions especially with respect to climate and soil. The present agro-ecological zonal arrangement of the National Farming Systems Research is ideal and should be utilized in exchanging information and experiences. Within this set-up, relevant and useful information will be made available to planners, farmers and extension agents on issues such as (a)soil characteristics, capabilities and limitations for different uses; (b)agricultural practices suited to increased production and minimum environmental damage.
6. Fiorino (2000:45) further added that, more training should be undertaken especially of resource users in Nigeria in which emphasis will be placed on the understanding of the vital role of agriculture to man's welfare and the importance of maintaining environmental quality in order to achieve this aim. Previous approaches to resources exploitation have all along been viewed only in economic terms. It is, however, not too early, in order to avoid the problems inherent in such approaches, to realize that man's welfare can be advanced with proper and rational use and management of resources. In the training effort, George (2005) disclosed that environmental

problems likely to arise as a result of specific management practices, especially those relating to soil and pest control, must be emphasized. In addition, in order to prevent deforestation, knowledge of the limits of the carrying capacities of the rural resources under specific farming and grazing conditions must be highlighted.

7. Sule (2004) concluded that, since local diversities exist in soil and climate, the availability of land use capabilities maps should serve as a basis for zoning and land use legislation. Measures will thus be instituted to prevent misuse of cropland, misuse of agricultural inputs and careless disposal of agricultural wastes. In this regard, he further added that Government should consider granting incentives and assistance to agriculture related sub-sectors. Such measures will induce recipients to undertake necessary actions to prevent or correct environmental degradation caused by their activities (George, 2005).

2.2 summary of literature review

The literature examined recent trends in environmental mismanagement, policy issues in environmental protection and conservation in Nigeria, the place of people's attitude and participation in conservation process, and the various measures in ensuring the sustainability of the action on environmental conservation and protection will require a conscious and careful attitudinal change among rural dwellers. This will be done by encouraging individual's participation, both in the policy process and at implementation.

Also, Sule (2005) further added that measures at sustainable environmental conservative measures include the 'right' to (economic) development; the integration of economic development and environmental protection; the sustainable use of national resources; and inter-generational equity. These elements are often linked to the idea of attempting to balance the needs arising from economic growth, social justice and the maintenance of biodiversity.

CHAPTER THREE

RESEARCH METHODOLOGY

This chapter presents the research methodology employed by the researcher in conducting this study. This research instrument used and method of data collection and the analytical methodology is equally noted.

3.1 Research Design

This is the structure or plan on how the research intends to gather relevant fact and the nature of analysis he aims at identifying the variable and the relationship with each other. It is basically perceived as the procedure to be used by the researcher to execute his plan of work or to complete the research. Survey research design was used for this study. In the view of Denga (1983), a survey design is a form of descriptive design, which is aimed at collecting small and large samples from population in order to examine the distribution incidence and interaction that exist between them.

The survey design becomes relevant here because it studies both large and small populations by selecting and studying samples chosen from the population to discover the relative incidence, distribution and interrelationship among variables. It is equally oriented towards the determination of the status of the research phenomenon or subject. This is the case because in this research, the researcher is concern with the characteristics of the whole population, achieved through a determined sample size, which results, is given a generalization. In other words, the sample size is randomly selected, with greater accuracy.

3.2 Area & Population of Study

‘ This study is conducted in Ahoada East Local Government Area of River State. Members of staff of the state Environmental Conservation and Protection Agency formed the sample group for the study. These groups are chosen to help the researcher gather relevant information that is needful to conduct an insightful empirical study.

Out of 153 members of staff of the State Environmental Conservation and Protection Agency 120 members of staff were selected to form the sample group. These groups are chosen to help the researcher gather relevant information that is needful to conduct an insightful empirical study. It is this number that was used to collect relevant data used to testing the research hypotheses.

3.3 Sampling Procedure

A sample size of one hundred and twenty (120) respondents was randomly selected for study. The sampling technique used to determine the actual number of the individuals in the target population was the stratified sampling method. The method involved dividing a population into its strata from which random samples are drawn. It was appropriate; as it helped the researcher to divide the sample group into six strata, taking 20 respondents from each strata or group.

This procedure enabled the process of selecting scientifically valid samples from a population in such a way that each member in a group stands chance of being selected with or without bias in the selection. To achieve accuracy, the researcher stratified the

sample group into administrative department of the agency. This was to enable him get a broad based of information without bias about the impact of the activities of the agency in the state.

3.4 Instrumentation

A researcher questionnaire and an interview schedule was developed and used to obtain data in the study. First, the questionnaire was more efficient and practical as it highly impersonal and allows for the use of a larger sample. The questionnaire had two parts; Part A deals with the background data (sex, age, marital status and academic qualification) of the respondents while, Part B contained structured closed-ended and open ended questions about the express their opinions on issues not included in the structured questions. They structured questions were structured using the simple 'Yes' and 'No'.

A research questionnaire was developed and used to obtain data in the study. The instrument was more efficient and practical as it highly impersonal and allows for the use of a larger sample. The questionnaire was tagged "impact of rural development policies on rural lives". It contained two parts; Part A deals with the background data (sex, age, marital status and academic qualification) of the respondents while, Part B contained structured closed-ended and open ended questions about the research variables. The open-ended questions was to enable the respondents express their opinions on issues not included in the structured question. They structured questions were structured using 'Admitted, not admitted and undecided'.

The questions reflected the research questions earlier raised to guide in the study in achieving its objectives. The questions were carefully developed to reflect the variables in the research

hypotheses. This was to serve the singular purpose of helping the researcher use the data to test the variables and establish valid conclusions.

Secondly, a structured in-depth interview schedule was developed and also used to further obtain relevant data in the course of the study. It involves the use of interview guide which contains the list of issues and variables to be discussed and measure respectively. The interview was conducted on Members Staff (6 Directors) of the State Environmental Conservation and Protection Agency.

At the end of the exercise, responses provided the researcher detailed information on the research problem earlier stated. The method also offered the researcher the opportunity to obtain detail data on the project implemented its impact and challenges which the agency is faced within the course implementing environmental conservation and protection programmes.

3.5 Data Collection Technique

Predominantly the random sample, questionnaire and the interview method were used in this survey. However, personal observations were equally of importance in the survey. The educated segments of the rural population did not find it difficult to respond to the oral interview; however, for the illiterate ones, explanations had to be made and the questions were interpreted to them. At the administrative headquarter of the State Environmental Conservation and Protection Agency, the questionnaire were administered during official hours. The research questionnaire was distributed to the members of staff

selected for the study. At the end of the exercise, all questionnaire distributed were completed and returned.

3.6 Method of Data Analysis

In this research, the researcher will adopt a statistical tool known as Simple Percentage. This is often used in social science research to answer research concerning the difference or effect on a set of observed frequencies of a sample and corresponding set of expected or theoretical frequencies. With this the response generated from the questionnaire were stated and findings interpreted accordingly.

CHAPTER FOUR

PRESENTATION OF DATA & DISCUSSION OF FINDINGS

This chapter will examine the distribution of data of the respondents obtained from the research questionnaire. This will be followed with the analysis of such data with the discussion of findings to show the implication it has in the study.

4.1 PRESENTATION OF DATA

Background data of respondents

Table 1 Frequency distribution of respondents based on sex

Sex Distribution	Respondents	Percentage %
Male	50	41.7
Female	70	58.3
Total	120	100

From the table 1 above, it is shown that 50 respondents (41.7%) were male while 70 respondents (58.3) were female.

Table 2 Frequency distribution of respondents based on age

Age Distribution	Respondents	Percentage %
15-25	12	10
26-35	72	60
36-45	31	25.8
46 and above	5	4.5
Total	120	100

From the table 2 above, it is shown that 10 respondents were (10%) were between the age bracket of 15-25, 70 respondents (60%) were between the age bracket of 26-35, 31 respondents (25.8%) were between the age brackets of 36-45 and then 5 respondents (4.5%) were between the age bracket of 46 and above.

Table 3 Frequency distribution of respondents' base on academic qualification

Academic Distribution	Respondents	Percentage %
FSLC	25	20.8
SSCE	50	41.7
B.Sc	20	16.7
Others	25	20.8
Total	120	100

From table 3 above, it is observed that 25 respondents (20.8) had First School Leaving Certificate, 50 respondents (41.7%) had Senior School Certificate Examination, 20 respondents (16.7%) had Bachelor of Science Degree and 25 respondents (20.8%) forms of academic qualification.

Table 4 Frequency distribution based on marital status

Sex Distribution	Respondents	Percentage %
Married	90	75
Unmarried	21	17.5
Divorce	9	7.5
Total	120	100

From table 3 above, it is observe that 90 respondents (75%) were married, 21 respondents (17.5%) were unmarried while divorce 9 (7.5) had been divorced.

Answering of research questions

Each question raised in the study was developed in the research questionnaire for respondents to provide necessary data for answering those questions. Answers provided will further be discussed in the section below,

Question 1: what factors influence people's attitude towards conservation and their commitment towards protection?

Table 5 response by respondents

No of items	Responses/Percentages				
	Yes	%	No	%	Total
1	96	80	24	20	120
2	88	73.3	32	26.6	120
3	79	65.8	41	34.2	120
4	105	87.5	15	12.5	120
5	66	55	54	45	120

The data presented in table 5 above showed that the respondents were positive in their response on research question one stated above. The percentage for "Yes" was higher than that of "No" and this goes on to show that there are certain factors which influences people's attitude towards conservation and their commitment towards protection. The result shows that, there is a significant influence on people's attitude and the effective implementation of environmental conservation.

This implication reflects their perspectives towards conservation have not been fully developed. Rather than protect environmental species, rural dwellers take to cutting down trees meant for conservation for domestic activities like fire making. This therefore lays the importance of environmental education, to help educate the people either formally or informally on the needs to conserve the environment.

Question 2: what ways has environmental education influence people's attitude and commitment towards environmental conservation and protection in Ahoada East Local Government Area?

Table 6 response by respondents

No of items	Responses/Percentages				
	Yes	%	No	%	Total
6	111	92.5	9	7.5	120
7	78	65	42	35	120
8	73	60.8	47	39.2	120
9	66	55	54	45	120
10	81	70.8	35	29.2	120

The response in table 6 above was to help answer the second research question stated above. From the level of responses showed above, there is a high percentage of “Yes”, than “No”, on each of the questions asked. This again points to the fact that environmental education has an influence people’s attitude and their commitment towards environmental conservation and protection. It is therefore important that the government design strategies to sensitize and educate the people on the gains of conserving and protecting the environment.

Question 3: what is the influence of people’s participation in the decision making on environmental conservation and protection in Ahoada East Local Government Area?

Table 7 response by respondent

No of items	Responses/Percentages				
	Yes	%	No	%	Total
11	93	77.5	27	22.5	120
12	81	67.5	39	32.5	120
13	85	70.8	35	29.2	120
14	65	54.2	55	45.8	120
15	69	65.8	41	34.2	120

In table 7 above, the question were raised to examine the influence of people's participation in the decision making on environmental conservation and protection. The respondents were also positive in their response, as the level of response on "Yes", was higher than that of "No", on each of the questions asked. The need for extension educational services cannot be undermined, as it is one of the measures of increasing literacy level of rural dwellers so as to enable their effective participation in the decision making process on issues of environmental protection and conservation.

4.2 Discussion of Findings

From the analysis of data obtained above, it has been established that;

First, certain factors influence people's attitude towards conservation and their commitment towards protection. Primarily is their level of poverty and illiteracy. This supports position Heinman (1997) that, sustaining the environment has been affected by human activities. Such as bush fallow, inappropriate technologies, overpopulation, overgrazing, deforestation without adequate reforestation and profligate exploitation of mineral resources, are often not in tune with proper environmental management practices. The obvious result of these activities is the increasing inability of the environment to provide the necessary sustenance to agricultural and rural development programs because of erosion, desertification and pollution. It becomes therefore important that the government should positively improve the attitude of the people through sensitization and other activities as may be identified.

Secondly, the findings in trabke 6 shows, environmental education have a significant effect for achieving the objectives of environmental

conservation and protection. Lack of environmental education has been a crucial factor affecting the process of conservation and protection of the environment in Nigeria. Sandra (2006) stated the need for extension educational services. She noted that, it is even these rural vulnerable group that are engaged in the destruction of the environment. They cut down trees and use as fire woods and for other domestic activities. There is therefore need for a total ideological transformation before the objective of conservation and environmental protection can be attained.

Finally, individual participation in decision making is instrumental in influencing people's attitude towards environmental conservation and protection. Individual participation in decision making process, otherwise denoted as citizen's participation is central in the achievement of environmental conservation. Gary (2004) maintained that decisions involving the use of institutional Controls (IC) should include individual/ community's right to participate at level of the process of planning and implementation. In this context of short-term and long-term "principle threat wastes", IC should not be promoted as a way around treatment but rather an adjunct to treatment. The process of planning and implementation of IC should accommodate site-specialty vs. facility-wide differences, as well as on-site vs. off-site variations. All too often, IC is conducted by modeling rather than monitoring on-site. There are many examples that demonstrate the ineffective use of IC because of the lack of community-based information that escaped the controls. In several of these cases what was not monitored proved to be the most damaging in the long-term. There is also growing evidence that encouraging individual's participation in conservation and environmental protection in the most effective means sustaining government efforts (Sule, 2005).

CHAPTER FIVE

DISCUSSION, CONCLUSION & RECOMMENDATIONS

5.1 Discussion of research findings

The research study was designed to assess the attitude of people towards conservation and their commitment to environmental protection in Ahoda East local Government Area of Rivers State, Nigeria. Among other relevant literatures that were raised to help generate relevant data for the study. A sample size of one hundred and twenty (120) respondents was randomly selected for the study. An instrument, a questionnaire was developed and sampled to the respondents. The instrument contained two parts; Part (A) dealing with the background information about the respondent while part (B) contained questions about the research phenomena. Research items stated in section B were done with the use of the simple “YES” and “NO” pattern. At end of the exercise the entire questionnaire were correctly filled and returned. The response from the questionnaire was tested using Simple Percentage statistical tool.

From the result of analysis obtained, three basic findings were obtained and these were that people’s attitude has a significant influence towards conservation and their commitment towards protection of the environment, environmental education also influences people’s attitude and commitment towards environmental conservation and protection and finally, there is

a significant influence of people's participation in the decision making on environmental conservation and protection. From these findings, relevant recommendations were made from the study, one of which was the need to sensitize the people towards the need for environmental conservation and protection.

5.2 Conclusion

They need for environmental conservation and protection cannot be overstressed. its importance is buttressed in the recent global agenda and campaign for conserving and protecting the environment. This is also revealed in the on-going sustainable development practices and policies of the federal government. The focus of the study was another effort in the same direction, set on examining the attitude of people towards conservation and their commitment to environmental protection. The findings were that people's attitude has a significant influence towards conservation and their commitment towards protection of the environment, environmental education also influences people's attitude and commitment towards environmental conservation and protection and finally, there is a significant influence of people's participation in the decision making on environmental conservation and protection.

Conclusively, there is need to positively influence the attitude of the individuals, through environmental education, involvement in decision making process, and further encourage participation decision making and conservative activities in their environment.

5.3 Recommendations

From the findings obtained from the study, the following recommendations are submitted,

1. The government must positively influence the attitude of the people towards conservation and protection. This can be done through house to house sensitization, especially in rural areas. This will increase the level of awareness and participation in environmental conservation and protection.
2. Environmental education must be encouraged at all level of education (primary, secondary and at the tertiary level). This will help reduce the level of illiteracy of individuals and promote the consciousness in participating in government programs, especially of environmental conversation and protection.
3. There is need to encourage individuals participation in decision making. This will make them appreciate, participating and sustain the initiatives of the government in that regard. These strategies are useful in not just enhancing effective environmental conservation protection, but further help sustain the process.

References

Adebola, E.O. (2005). "A study of the industrial Effluents and Waste Disposal Habits of Some industries Discharging Directly into the Lagos Lagoon" M.S.c. Dissertation, chemistry Department, university of ibadan, ibadan, Nigeria.

Adele, R.G. (2006). "Evironment Policy for Developing Countries: issues in Science and Technology" . London; Macmillan Publishers.

Adnon, D.F. (2007). "Strategies of sustainable Environmental Conservation". Ibadan: Alpha Publishing House.

Agaki, T.R. (2004). "Government Policy and Environmental Protection in Developing World". *International journal on Environmental Management*. Volume 17, pp. 15-30.

Agbu, F. R. (2003). "Re-engineering Environmental Conversation and Protection in Nigeria". Uyo: Kan Books.

Antai, A.S & Anam, B. E. (2007). "Sustaining the Urban Environment" Calabar: Ushie Ushie Publishers.

Beierle, C.S. (1980). "Town and Country Planning and Environmental laws in Nigeria". Ibadan: University Press.

Chess, C. (2000). "Evaluating Environmental Public Participation: Methodological Questions". Journal of Environmental planning and Management Vol. 12, No. 6, Pp. 79-84.

Courier, A. (2004). "Democracy, Dialogue and Environmental Disputes: The contested Languages of social Regulation". New Haven, Connecticut: Yale University Press.

Charles, D. (2004). "Public involvement in Compartives risk Projects:Principles and Best Pratices". Boulder, Colorado: Western Center for Environmental Decision-Making.

Cunningham, B. & Saigo, H. (1997). "Beyond the Requirement: improving Public Participation in EIA". *Journal of Environmental planning and Mangement*, Vol. 40, No. 12, Pp. 23-30.

Dile, D. (2002). "Restoration Today Protects Readiness Tomorrow". Department of the Navy (DON), Febuary 2003, Washington, D.C.

Emineh, P.A (2003). "Pollution Levels in some Nigerian Rivers and Water Research". *International Journal of Environment Science and Health*. PP. 957-963.

Esaia, S.F. (2003). "Interaction between surface and Groundwater Qualities ". A case Study of Ogunpa Stream, Ibadan, Nigeria Conference Proceedings of the 1989 Symposium on Water Pollution and control in Nigeria, pp. 4: 1-4: 27, Hotel.

Federal Environment Protection Agency (1991). "National Environmental Protection (Effluent Limitation) Regulations (S.1.8)", Federal Environment Protection Agency" FGPL, Lagos Nigeria.

Fiorino, D.J. 1990). "Citizen Participation and Enviroment Risk: a Survey of Institutional Mechanisms". *Science, Technology, and human Values*, 15(2), 226-243.

Fiorino, D.J. (2000). "Innovation in U.S. Environmental Policy". *American Behavioral Scientist*, 44(4), 538-547.

Gary, G. (2004). "Beyond the Requirement: improving public participation in EIA". *Journal of Environmental Planning and Mangement*, Vol. 40, No. 6, Pp. 725-738.

George, E. (2005). "Principles For Sponsors of Community-Based Environmental Protection". Discussion Paper, Annual Conference of American Society of Public Administration, Atlanta, Georgia.

Godwin, L. (1994). "Promoting Involvement in Search of Sustainability" Towards Earth Summit. 2002. UNED Forum, London, United Kingdom.

Heinman, M. (1997). Science by the people: grassroots environmental monitoring and the debate over scientific expertise". Journal of Planning Education and Research, 16(4), 291-299.

Laird, f. (19930. "Partcipatory Analysis, Democracy, and Technological Decision Making, Science, Technology, and Human Values". London: Macmillan.

Leman, D. (2005). Study of some Physico-Chemical Properties of Nilwala River Water in Southern Sri Lanka with special Reference to Effluents Resulting from Anthropogenic Activities". *International Journal of Environment Science and Health*. PP. 391-398.

Leman, D. & Lox, F. (1991). "Seasonal Ecology of Hydrocarbon Utilising Microbes in the Surface Water of a River". International Journal of Environmental Monitoring and Assessment. Vol. 23, No. 5. PP. 175-191.

National Evironment Policy Act (NEPA). (1998) Effective Public Participation under the National Enviromental Policy Act. August. Second edition. Washington D.C.

O'Rourke, D. and Macey, G.P. (2003). Community environmental policies: assessing new strategies of public participation in environmental regulation. *Journal of Policy Analysis and Management*, 22(3), 383-414.

Pauline, O.N> (2002). "Effects of a sewage Lagoon Effluent on the Water Quality of the receiving Stream" international Journal of Environmental Science and Health. PP. 81-98.

Register, O.O. (2000). "Hydrogeological and chemical Basic Data Acquisition from NNPC Operational Areas". Technical Report, pp. 187

Sandra, T.C., (2007). Public Participation in Environmental Decisions: AN Evaluation Framework Using Social Goals". Resources for the future. Discussion paper 99-06. Washington, D.C.

Spyke, N.P. 1999. "Public Participation in Environmental Decision-making in the new Millennium: Structuring New Spheres of public Influence". Boston College Environmental Affairs Laws Review, 26(2), 263-313.

Titilola, H. D. (2004). "Principles for Sponsors of Community-Based Environmental Protection". Discussion paper. Annual Conference of American Society of Public Administration, Atlanta, Georgia.

Toye, D. (2005). Federal Facilities Environmental Restoration Dialogue Committee (FFER). Consensus Principles and Recommendations for improving Federal Facilities Cleanup. Washington, D.C. Environmental Protection Agency.

Ukpe, S. (2006), "New strategies for American Watersheds". Washington, D.C. National Academy Press.

UNU (1983). United Nations University Newsletter, 7 (2), 9, Tokyo, Japan. World Bank (1993): World Development Report 1993: Investment in Health, New york, Oxford University Press.

Warren. A.R. (1999). " Democracy, Dialogue and Environment Disputes: The Contested Languages of Social Regulation". New Haven, Connecticut: Yale University Press.

