

TITLE PAGE

TITLE:

**LAW AND POLICY FOR ENVIRONMENTAL PROTECTION AND
SUSTAINABLE DEVELOPMENT IN NIGERIA WITH SPECIAL
REFERENCE TO WATER RESOURCES DEVELOPMENT
PROJECTS.**

BY



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DEDICATION

I dedicate this thesis to the memory of my late father, Alhaji Ibrahim Dangadau, who met with his death on the tenth of February 1997 in a ghastly car accident; and also to the memory of Alhaji and Hajiya Baba Wakila. All of them passed away while i and my family were so far away from home. May Allah grant *al-jannah* to them all, amen.

ABSTRACT

There could hardly be any doubt that the pursuit of development objectives, especially in a developing country such as Nigeria, is a legitimate and in fact necessary path for economic, social and political advancement. Within the decades of the 1970s and 1980s however, increased concern about the adverse environmental and socio-economic effects of certain specific development activities have necessitated a search for appropriate development paradigms that would enable the attainment of development objectives with as little environmental and socio-economic adversity as possible. A concept that has so far become very popular in this quest for a development paradigm is that of "sustainable development" which, in simple terms, could be described as a paradigm which seeks to integrate the objective of protection of the environment with the traditional objectives of development. Furthermore, law is being increasingly considered an important tool in the provision of the framework for the pursuit of development and environmental management as whole; and recent international events, such as the Rio Declaration on Environment and Development for example, have placed a big emphasis on the possible contribution which could be made by law in the move towards the attainment of sustainable development. The development of water resources has for a long time occupied a priority position in the development programmes of Nigerian Government and various water resources projects have in the past resulted in serious environmental, social and economic problems. This thesis examines how the principles of sustainable development could actually be translated into specific legislative provisions with special emphasis on the development and management of water resources in Nigeria.

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GENERAL INTRODUCTION

AIMS, OBJECTIVES, JUSTIFICATION AND METHODOLOGY

This thesis examines the role of law and policy in securing environmental protection and achieving sustainable development. Its main concern is with the problem of tackling the adverse environmental and socio-economic consequences which have particularly bedeviled development projects in Nigeria with specific reference to water resources development projects. Adverse impact of some specific development projects on communities, their environment and economy, along with so many other kinds of environmental problems have been a common feature of many water development projects that were undertaken as part of the nation's efforts towards development. There is hardly any doubt about the role of development projects, such as the building of dams, as being an important vehicle for progress towards local and even national economic development. Along this line, in fact, the Nigerian state has invested a lot of financial and other resources in constructing dams and other water resource projects as part of its efforts for improving the nation's state of development. The problem with such development projects, however, has been the fact that they always occasion tremendous hardship to people and their environment both during the process of construction and thereafter. This obviously negates one of the prime objectives of the development process and presupposes a need for fundamental

changes in order to protect the environment and the people's interest.

Our argument here is that with the current trend of consensus amongst the International community about the need for the harmonisation of development objectives with those of the protection of the environment, there is a need for Nigeria to reform its development framework so that development projects can be pursued sensibly and in accordance with the recognised principles of sustainable development. This then leads to the issue of how to institutionalise a normative framework for development in the country which provides for the undertaking of specific development projects that would be sustainable in the sense of fulfilling people's needs as well as protecting their environment. It is this theme of sustainable development and its institutionalisation through law and policy which forms the bedrock of this thesis. The fundamental aim is to show how the notion of sustainable development can actually be translated into a practical legislative reality in Nigeria which will enable water resources to be sustainably developed and managed.

Justification

An important question to address at the beginning of this study about environmental law and policy in Nigeria is why should our focus be on the country's water resources development projects? Our choice of water resources

development projects has been informed by a number of reasons. Firstly, apart from land and air, water is the third most important resource on which life itself depends here on earth. It also stands out as one important resource whose provision, in certain quantity and quality, is of utmost importance to the development process of any nation today. This makes the development of water resources for the provision of water in order to satisfy human needs including clean drinking water and irrigation, one of the major areas in which the Nigerian state has expended enormous resources since its birth as a nation.

Secondly, since water occupies such an important position in the life of the human being and in sustaining life itself generally on our planet, there certainly exists a strong imperative for studying the way in which the principles of the concept of sustainable development can actually be used to ensure that water resources are developed and managed sustainably in the country. This follows the fact that, until recently, there had not been any clear environmental protection law or policy relating to water resources in Nigeria. The result of this situation is that water resources projects, which were pursued as part of the overall development effort of the nation, were planned and executed in such a way as to occasion unintended environmental, social and economic hardship to affected local communities and the country at large.

Thus, in a nutshell, the objectives of the study are:

1. To find out how the absence of a normative framework for environmental protection and sustainable development actually affected the implementation of water resources development projects in Nigeria.
2. To examine how the current understanding of the concept of sustainable development as articulated in the Brundtland Commission's Report and further developed by the Rio Conference Instruments could be translated into legislative reality in the context of water resources management in Nigeria.
3. To examine the concept and nature of environmental impact assessment and the role it could play as a legal technique for protecting the environment as well as the other principles of sustainable development.

The starting point of the whole discussion is, however, demonstrating how the failure to recognise any notion of sustainable development led Nigeria into a number of problems associated with its development projects. Several of these problems were environmental, and in addition to the water resources-related problems, there were also problems relating to oil production, urbanisation processes, etc. Furthermore, environmental law was developed randomly without any principles behind it at all

and the fact that in some situations where law was provided there was problem either with lack of its enforcement or that it is ineffective because it was old-fashioned and out of date.

Methodology

Three types of research methods were adopted in conducting this research.

1. Library research of published materials;
2. research trip to Nigeria for the following purposes:
 - a) to collect published and unpublished materials from the Federal Environmental Protection Agency (FEPA) (Abuja and Lagos), the Federal Ministry of Water Resources, Abuja, the Federal Department of Agricultural Land Resources of the Federal Ministry of Agriculture and Natural Resources, the National Water Resources Institute, Kaduna, and libraries in Bayero University, Kano, and the Centre for Arid Zone Studies, University of Maiduguri.
 - b) to conduct interviews with the following officials of the Federal Ministry of Water Resources, Abuja:
 - i) Director of Dams
 - ii) Deputy Director of Dams
 - iii) Director, Erosion and Flood Control
 - c) An interview with the Deputy Director of the Federal Department of Agricultural Land Resources of the Federal Ministry of Agriculture and Natural Resources.
3. I conducted interviews with traditional rulers, the local Government Council leader of Bade Local Government,

farmers and fishermen in Gahsu'a.

Summary of Chapter contents

The work is divided into two parts. The first part consists of five chapters in which general issues of theoretical and historical relevance to the thesis are discussed. It therefore provides a foundation to the more specific issues of the thesis which are covered in the second part. Chapter one takes off with an examination of the 'state of play' in the 'law and development theory'. It seeks to elucidate the various theories which have been advanced towards the analysis of the role and relevance of law in the process of development with particular emphasis on developing countries. An effort has also been made to link up the roles which law can play in development with the issue of how to institutionalise the principles of the concept of sustainable development and protection of the environment. The second chapter examines what the principles of environmental protection and sustainable development are and how they actually evolved.

In order to have a clear view of the state of environmental protection regulation in Nigeria at present, chapter Three takes a look at the current legal and institutional framework which obtains. The chapter also offers the opportunity to examine some of the emerging constitutional concepts such as right to a healthy environment and powers to regulate environmental protection in a federal system of

government which obtains in Nigeria. This is followed in chapter Four, by a historical examination of statutory framework for environmental protection in the country. In chapter Five, it is argued that the environmental protection framework has actually done very little to protect the nation's environment, and the enormous environmental problems confronting the country are put forward in support.

This takes us to the second part of the thesis in which a specific focus is made on the water resources development projects of the country. Chapter Six looks at the impacts of such projects on people and their environment which, it is argued, demonstrates a failure to recognise and apply the principles of sustainable development. Chapter Seven then examines the role which law could have played to protect the environment in the course of the water resources development projects. The main argument however is that it is not just any kind of law that could have offered that protection, but that it must be grounded in the principles of sustainable development as enunciated in chapter Two of the thesis. Thus chapter Eight examines two important pieces of legislation which have been enacted in the recent past with a view to providing a legal framework for protecting the environment in relation to the development of water resources development in the country. The question which is addressed in this chapter is to what extent these new laws would enable the Government to be

concerned with sustainable development. The most significant tool which has been proposed as the means of securing environmental protection and concern for sustainable development is the environmental impact assessment process. But the important question which has to be addressed is how effective has this tool been in other developing nations of the world? And can Nigeria learn from their experiences? This is the main question examined in chapter Nine. The tenth chapter states our conclusions about water resources development projects and the law in Nigeria.

CHAPTER ONE

THEORETICAL CONSIDERATIONS ON LAW AND DEVELOPMENT, ENVIRONMENTAL PROTECTION AND THE CONCEPT OF SUSTAINABLE DEVELOPMENT: A GENERAL INTRODUCTION.

1:0: Introduction

It is seen as a major function of governments throughout the world to formulate and implement development programmes that would lead to, among other things, improved and better health, education, infrastructures, water supply and indeed the provision of all the basic things of life. However, development efforts of the ^{1960s} and ^{1970s} in Nigeria, as in many other developing countries, have often failed to produce the desired results and have in fact left both people and their environment worse off. The consequence of such failure manifests itself upon the people in various ways which include poverty, powerlessness, degraded and polluted environment, backwardness and lack of economic development.

It was, in fact, the phenomenal failures of development efforts, particularly the damaging social and environmental consequences of development projects in Third World countries, which led to the adoption of a number of initiatives, primarily by the United Nations, for development frameworks that would lead to a better approach to development. It was part of this crusade for an appropriate development framework that the World Commission on Environment and Development (WCED) articulated certain principles under the concept of Sustainable Development in 1987, which have since been rapidly gaining acceptance as

an appropriate development paradigm for the present and the future. This is mainly because the concept is thought to provide for a development framework which combines mechanisms for tackling environmental issues alongside other basic goals of development.

The core consideration of this thesis is the implication of the sustainable development concept in the formulation of a normative framework of law and policy which would enable the development and management of Nigeria's water resources in such a way as to ensure sustainable development and environmental protection. The immediate question which comes to mind here, however, is that of the role and relevance of law to development, particularly in the developing World. In other words, we have to begin by asking the question whether law does aid the process of development as a whole and what are the implications for relying on law to secure the development in general and sustainable development in particular? It is important to note that this is not a new issue at all, and various scholars have tried to proffer ideas on the relationship between law and development. Our discussion in this chapter shall therefore focus on such general theories in an attempt to lay a theoretical foundation for the thesis.

By touching on some of the general points and theories of law and development and the concept of sustainable development this chapter provides the necessary background

and foundation for some of the more specific issues discussed in the chapters that follow.

1:1: Law and Development

1:1:1 A brief history

Before going into the various theories of law and development we may briefly examine some of the historical circumstances which contributed to the birth of the various intellectual movements in this area. This is necessary to an understanding of the contemporary theories of law and development as well as fully identifying the role of law in the development process.

Law and development is a special branch of the broader academic area of what is known as the study of law and society. In simple terms, law and society, as a subject of study, relates specifically to theories and ideas which concern the analysis of the relationship between law and development.¹ The law and development movement was said to have had its origins in the United States of America during the 1960's², and from its inception it became linked to various American aid programmes and Foundations. The most prominent of these being the United States Agency for International Development (hereinafter USAID) which was

¹ Burg, E.M. (1977) "Law and Development: A Review of the Literature and Critique of 'Scholars in Self-estrangement'", 25 *American Journal of Comparative Law*. p.492.

² Trubek, D.M. and Galanter, M., (1974) "Law and Society: Scholars in Self-estrangement; Some Reflections on the Crisis in law and Development Studies in the United States", *Wisconsin Law Review*. p.1065

established in 1961³ as the main outlet of the U.S. Government's foreign aid.⁴ The Intellectual movement thus became closely linked with the strategies by which the United States wanted to achieve its foreign policy objectives. A bolster to this relationship is seen in the enactment by the U.S. in 1961 of "The Foreign Assistance Act, 1961" under which foreign assistance could be extended to developing countries. Title IX of this law as originally passed stipulates that:

Title IX- Utilization of Democratic Institutions in Development.

In carrying out programs authorised in this chapter, emphasis shall be placed on assuring maximum participation in the task of economic development on the part of the people of the developing countries through the encouragement of democratic private and local institutions.⁵

The United States Congress stated in its policy statement on the implementation of the Act that:

The Congress declares that the freedom, security and prosperity of the United States are best sustained in a community of free, secure and prosperous nations....The Congress declares ... that it is not only expressive of our sense of freedom, justice and compassion but also important for our national security that the United States, through private as well as public efforts, assist the people of less developed countries in their efforts to acquire the knowledge and the resources essential for development and to build the economic, political and social institutions which will meet their aspirations..⁶

³See Arnold, H.J.P. (1966) *Aid for Development: A political and Economic Study*. The Bodley Head, London. p.46

⁴ Black, L.D. (1968) *The Strategy of Foreign Aid*. D. van Nustrand C. Princeton, New Jersey. p.71.

⁵ See Section 2167 of the Act which now forms Chapter 32 of the U.S. Codes.

⁶Ibid. Section 2151 of the Act.

It is important to observe here that though Title IX of the Act was amended in 1966, the amendment neither affected the substance of the title as originally passed nor the views of Congress on the need for U.S. foreign aid to Third World countries.⁷ There is also one point which stands out clearly from the Congressional policy statement above. This is the fact that the development of the Third World countries through foreign aid was viewed from the interests of the United States which was expressed in terms of its "national security". Furthermore, this same point was reiterated in a memorandum to the 1965 Congress hearings on assistance to developing countries. The memorandum stated that:

Total reliance on the former colonial power is often politically unacceptable in the newly independent state. Moreover, the U.S. position on, for example, issues before the U.N. may differ from that of the former metropole. In such cases a modest U.S. assistance program ... may demonstrate U.S. concern and interest and thereby increase receptivity to U.S. views on International issues...⁸

This memorandum shows that apart from the fact that the United States wants to put a stop to the continued primary reliance by the newly independent nations on their former colonial masters, it would also want to ensure that aid receiving nations are lured into taking similar views as

⁷ See Butler, B.E. (1968), "Title IX of the Foreign Assistance Act, Foreign Aid and Political Development", Vol. III No. I, *Law and Society Review*. p. 115

⁸ See U.S. Congress, Senate Committee on Foreign Relations, *Hearings, foreign assistance 1965*, 89th Congress, 1st Session, p.589

the United States in political thought and international issues.

But what was the exact involvement of USAID in the emergence of law and development as a special field of study? The answer lies in the fact that a good number of academic institutions in the United States received direct financial support from USAID for the purpose of encouraging research in law and development studies. For example, The University of Wisconsin Land Tenure Center benefited from USAID's financial support to institutions of higher learning with the aim of promoting law and development studies.⁹ Another major financial support from USAID in this regard was the one million dollars (\$1,000,000) grant made to the Yale Law School for the purposes of enhancing research in Law and Modernization in the year 1969. And so also was the seven hundred and fifty thousand dollars grant made to Stanford law School to assist in the study of Law and Development in Latin America.¹⁰

As indicated earlier, USAID was not the only source of financial support for the study of law and development. There were, for example, other Foundations which made available large sums of money for fellowships and other

⁹ See ^{style, decline} Merryman J.H. (1977) "Comparative law and social change: On the origins and revival of law and development movement" 25 *American Journal of Comparative law*, p.457.

¹⁰ Trubek, D.M. and Galanter, M. "Law and Society: Scholars in Self-estrangement; ..." *supra*. 1067

forms of scholarships for academic research into the area of law and development. Prominent among these foundations were the Ford Foundation and the Rockefeller Foundation. In its Annual Report for the year 1966, the Ford Foundation said of the International Center for Law in Development¹¹(hereinafter ICLD) that:

Working with the U.S. Foreign and International Agencies, Foundations, Universities, and practising lawyers and jurists, the Center will stimulate and support the systematic study of the role of law in International relations and the development of modern nations. The Center will also be concerned with ... projects to help developing countries establish legal institutions essential to the functions of modern and free societies ... ¹²

This Centre (ICLD) has devoted a considerable proportion of its resources in funding various works in law including law and development, as well as to the improvement of legal education and research in developing countries.¹³

The observation which one may make at this juncture is that the amount of interest created in the study of Law and Development in the 1960s in American Universities and other institutions of learning was largely, if not entirely, due

¹¹ The ICLD was initially known as the International Legal Centre(ILC) when it was established in 1966 but it was renamed to ICLD ten years later, in 1977. See ICLD Evaluation Report for 1984.

¹² See Ford Foundation, Annual Report, 1966 p.23.

¹³ See the two Reports published by the Centre: I.L.C. (1974) *Law and Development*. New York; and I.L.C. (1975) *Legal Education in a Changing World*. New York. Both materials are Reports of different committees of internationally distinguished scholars. They contain findings, comments and recommendations of these committees on legal Education and the relationship between law and development.

to the generous financial assistance given by USAID and the Foundations. The 1960s therefore marked the period of the emergence of intellectual movements for the study of Law and Development.

1.1.2 Intellectual Paradigms

Although we have looked at the events surrounding the emergence of the Law and Development movement, the most important aspect which requires highlighting is the intellectual paradigm that was actually developed by the scholars of law and development in America and how it was meant to be applied for the purposes of enhancing development in the Third World countries.

The scholars developed what was known as the liberal legalist paradigm. As far as law and development was concerned liberal legalism had two basic concepts. First of all there was the concept of the general relationship between law and society at large. Secondly there is the much narrower specific relationship between legal system and development. In both these general and specific ~~relationships~~ ^{relationships} emphasis was given to the central role of the State. The reason for this was that the State has the might or more specifically, the power, to regulate the behaviour of its subjects and at the same time it was itself limited by law. Thus the State could use law as a basic tool for regulating and changing society.¹⁴ This (liberal legalism)

¹⁴ See Trubek and Galanter, *supra*, pp.1070-1079.

was 'the original' paradigm of law and development studies in America. It was also a clear reflection of the basic ideas about the relationship between law and society and between the United States and the Third World which prevailed in the United States Universities in the late 1950s and 1960s.¹⁵ It is worth pointing out, however, that this liberal legalist paradigm came under strong criticism mainly on the ground that it was not elaborated clearly enough and that its assumptions about the relationship between law and development were vague.¹⁶ Along this line Francis Snyder observed that

...(T)he liberal legalist assumptions about the relationship between law and development were extremely vague. The meaning of development was specified only in general terms, devoid of any reference to social and economic forces. Law and development scholars, like modernisation theorists, assumed that under-developed countries would follow a path roughly similar to that of developed countries.¹⁷

In any case, the American liberal legalist paradigm failed as a model for the Third World countries and even by the beginning of the 1970s it became clear that there had been a loss of faith in it. As expressed by Trubek and Galanter, the liberal legalists "took for granted the existence of some natural tendency for legal systems in the third world to evolve in the direction of the model of liberal

¹⁵ Ibid. p.1088.

¹⁶ Trubek and Galanter, *supra*, pp.1070-1079.

¹⁷ Snyder, F. G. (1980) "Law and Development in the Light of the Dependency Theory" , *Law and Society Review*, Vol. 14 No. 3 (Spring 1980) pp.723-804 at 733

legalism."¹⁸ The limitations inherent in this paradigm came to light in the 1970s and fewer and fewer scholars became interested in its exportation to the Third World as a model for development.¹⁹ This trend of events even affected the funding Foundations who started questioning their own programmes and the funding of ICLD.²⁰

It is important, however, to observe that notwithstanding this decline in the financial support enjoyed by scholars and researchers in the area of law and development, interest in the subject became world wide. Many scholars, not only in America, but also in Europe and in some parts of the developing countries became interested in this area of study.²¹ This is evident from the various theories that were later evolved by eminent scholars to explain the relationship between law and development.²² Thus, despite some of the problems faced by the movement in the early

¹⁸ Trubek and Galanter, *supra*. p.1079

¹⁹ Griffiths, J. (1979) "Is Law Important?", *New York University Law Review*. Vol. 54 No. 2 at p.1089

²⁰ In 1975 an indication was given that the Ford Foundation was possibly going to stop funding the ICLD and by the year 1977 USAID's funding of law and development studies was considerably reduced. See Merryman, J.H.(1977) "Comparative Law and Social Change:..." *supra*. p.460

²¹ See for instance, McChesny, A. (1980) "The Promotion of Economic and Political Rights: Two African Approaches", *Journal of African Law*, Vol. 24 No. 2, pp.163-205; See also Ghai, Y.P. (1976) ***Reflections on Law and Integration in East Africa***. Uppsala, S.I.A.S. Research Report No. 36.

²² For instance, since the beginning of the 1980s, the Third World Legal Studies Association, which is an off-shoot of the African Law Studies Association in America, has become an important international forum concerned with the advancement of knowledge in the relationship between law and development with a Third World perspective. They publish an annual collection of papers under the title "Third World Legal Studies".

1970s and the decline in the funding of research in this area, law and development has survived as a separate and special field of study. We shall now consider some of the theories that have been developed to explain the relationship between law and development.

1:1:3: Theories of Law and Development

The lack of consensus in basic concepts and hypotheses appears to be the main feature of the intellectual movement of law and development.²³ This has remained as the major characteristic of the movement that has led to contrasting views and theories in the literature on law and development. It is however important to point out that this particular feature had a very positive impact on the development of ideas and concepts in this area of study. Firstly, the lack of specificity in and consensus concerning various theories and concepts helped to generate contributions by eminent scholars from different backgrounds and with diverse interests and theoretical persuasions.²⁴ Secondly, this relative lack of consensus meant absence of an explicit theory and that situation brought together some scholars who articulated some theories and assumptions that were apparently agreeable but

²³ Snyder, F.G. (1980) "Law and Development in the Light of Dependency Theory" *supra.* p.729. See also Merryman, J.H. (1977) "Comparative Law and Social Change: On the Origins, Style, Decline and Revival of the Law and Development Movement," 25 *American Journal of Comparative Law.* p.457.

²⁴ See Trubek and Galanter (1974), *supra.* pp.1063, 1067-1068; See also International Legal Center (1974) *Law and Development: The Future of Law and Development Research.* ILC, New York.

whose actual notions of "law" and "development" were ultimately contradictory. It could be argued, therefore, that had there been some defined and explicit theories which enjoyed very wide consensus from the outset, the movement would not have made full impact and the intellectual contributions made by scholars would have been limited. Thus, this relative lack of theoretical agreement was partly responsible for the attraction of a wide group of scholars to the study of law and development.²⁵ It must also be pointed out that despite the lack of consensus most law and development scholars shared certain presuppositions that suggested research questions, delimited the range of potential answers, and embodied social and legal values. Let us now examine in greater detail the works and ideas of these scholars starting with the liberal legalists.

An analysis of the liberal legalists approach to the theory of law and development shows that their theory strongly emphasises the instrumental relationship between development goals, specific legal rules and instrumental legal thought and ensuring that all rules enacted are those that seek to achieve social goals.²⁶ Their theory is therefore an instrumentalist theory of law and development. Its main weakness lies in the fact that, as a theory of law, it was very much centred on the ideology and interests

²⁵ As Trubek and Galanter (1974) *supra*. have pointed out, this was a factor that conditioned the incorporation of modernisation theorists directly into this intellectual movement. (p.1068)

²⁶ Ibid. 1079

of the Western developed countries. This particular feature made it far-removed from its intended audience in the Third World. It was thus essentially nothing more than a narrow expression of the Western legal style. It has been observed that, for the most part, United States liberal legalist view of law and development was an attempt to export and impose United States ideas on the Third World.²⁷

The instrumentalist theory of law and development conceives of law as a tool which could be used to alter human behaviour and to induce and regulate economic development. This conception is, in many ways, an extension of the theory of law as 'Social Engineering'. This theory, on the other hand, can be taken to be similar to the need often felt by policy-makers and scholars to solve certain urgent and pressing social and economic problems in society. In the face of such problems, law is often seen as the first step towards mitigating them or even achieving a permanent solution.²⁸ Let us now consider the instrumentalist approach to law and development.

1:1:4: The Instrumentalist Approach

One law and development theorist who is not a liberal

²⁷ Merryman, J.H. (1977) "Comparative Law and social change;..." *supra*. p.483

²⁸ See Nyhart, J.D. (1962) "The Role of Law in Economic Development" *Sudan Law Journal and Reports*, p.396; Also Allot, A.N., (1968) "The Unification of Laws in Africa" *American Journal of Comparative Law*, p.51

legalist but whose work demonstrates the instrumentalist theory is Robert B. Seidman. He emphasises the role of the State and legal rules to foster development.²⁹ He holds the view that the State (Government) is not merely formal and its actions are not merely epiphenomena but an integral part of the social structure.³⁰ In other words, since the need to channel change into desirable directions is considered by every Government as one of its basic functions and since law is the tool being used to initiate and regulate change, he regards the State and the legal order as two sides of the same coin.

One may also examine Seidman's model of law and development which attempts to explain why people behave in the way they do when faced with a particular norm (legal rule)³¹. In a nutshell the model constructed by Seidman is as follows:

(a) How Law affects behaviour:-

Seidman sees the society as consisting of individuals and collectivities. These individuals and collectivities have, in their behaviour, what he terms 'arenas of choice' which consist of the social and physical resources and constraints of the society as perceived by these individuals and collectivities. The set of rules and policies that are promulgated by the State as well as the

²⁹ See mainly, Seidman, R.B. (1978) *The State, Law and Development*. Croom Helm, London.

³⁰ Ibid. pp.22-23

³¹ Ibid. p.76-77.

activities of the State employees make up the legal order. A 'law' is such a rule. The collectivity or the individual to whom the rule or policy is addressed is described as a 'role-occupant'. Such a role-occupant's ability to conform to the behaviour required by the rule or policy is dependent upon the existence of certain conditions. These conditions are that: (i) such a rule or policy clearly defines and explains how the role-occupants should behave, (ii) that the role-occupants learn of the rule or policy through a two-way communication channel (by which is meant a feedback system of information instead of a hierarchical and authoritarian system), (iii) that the role-occupants have the capacity and ability to obey, (iv) that such obedience serves the interests of the role occupants, (v) that the role-occupants in fact perceive the obedience as serving their own interests, and (vi) that the role-occupants decide whether to obey in a public participatory problem-solving process (as opposed to a hierarchical and paternalistic process). Thus Seidman believes that by changing the arenas of choice of the role-occupants the State can consciously change their behaviour. He also thinks that the simplest way to do this is to put the role-occupants in a participatory relationship with the law-makers.³²

(b) The State and the legal order:-

³² Ibid. see particularly chapters 6, 7 and 8 and chapter 22, p.462-463.

There are various sets of individuals and collectivities in any given society with broadly similar economic interests. These collectivities or groups of individuals are described as 'strata' by Seidman. Every legal order (already identified as rule or policy and every activity of state employee) affects these strata differently. These various strata are therefore constantly engaged in a kind of competition to ensure the creation of legal order which works to their advantage. The legal order operates to the advantage of some strata and to the disadvantage of others through laws, policies and official government activities that delegate authority for decision making to some strata to the exclusion of others. These strata are conferred with some discretionary powers and they use such powers to enhance their social and economic status to the disadvantage of other strata. In the course of exercising these discretionary powers they maximise their economic interest and consolidate their political influence. Through the day to day function of these state officials the interests of the strata with power are protected and their privileges sustained.³³

(c) The State Structure:-

The range of decisions taken by the State depends largely on the nature of the State structure itself. Decision making by the State structure consists basically of the

³³ Ibid. see chapters 11, 13, and 14 and particularly chapter 22, pp.463-464.

processes of 'input, conversion and feedback'. These processes are clearly defined by the legal order and the decisions of the state structure necessarily concern the legal order. Since as discussed above, the various strata in society are in constant competition to create or maintain a legal order that serves their particular interests, it follows that in making decisions concerning the legal order, the nature of state structure determines which strata enjoy more privileges and influence. In other words, the state structure and the legal order do not act neutrally.³⁴

(d) The Conditions of Development.

Seidman sees 'development' as meaning the process by which the State acting through the legal order seeks to solve the problems of the poor, poverty and oppression.³⁵ The task of solving these problems requires, first of all, that the difficulties faced by the poor and the oppressed are identified and explained. Then the solutions must contain a new legal order, not the application of the existing one. Development in this sense also entails the need on the part of the political elite to have an ideology that instructs them to use the legal order to change institutions.³⁶

³⁴ Ibid. see particularly chapter 22, pp.464.

³⁵ Ibid. p.465.

³⁶ Ibid. see chapters 4, 11, 13 and 16 particularly chapter 22, pp.465-466.

Seidman expressed the view that in many parts of Africa, just before Independence from colonial rule, the legal order was structured in such a way that the social institutions created and perpetuated the economic advantage of foreign firms, their managers and owners. The legal order, at the same time, created and perpetuated in those countries mass poverty, political power in the hands of a small elite, and dependence on colonial metropolises. Long after Independence, the situation has remained largely unchanged.³⁷

Seidman also disagrees with liberal legalism. He holds the view that although great institutions of Western democracy, the rule of law, the separation of powers and fundamental freedoms worked in the West, they did not and could not function in the same way on the Continent of Africa. His rejection of liberal legalism as ideal for the development of the Third World (Africa in particular) is expressed in his law of non-transferability of law and in his law of the reproduction of institutions. The first law states that the same rules of law in different times and places, with different physical and institutional environments, will not likely induce the same behaviour as they did in their time and place of origin. The second law is that other things remaining equal, unless the legal order is changed, institutions will remain the same.³⁸

³⁷ Ibid. pp.464-465 and 466-467.

³⁸ Ibid. see chapter 2 particularly pp.36 and 37.

Seidman highlights the failure of liberal legalism to induce development by advancing the argument that the authoritarian structure of legal order limits its effectiveness in inducing any meaningful change. What inevitably results from the contradiction that exists between an authoritarian legal order and the participatory imperatives of development is what Seidman calls "soft development".³⁹ He argues that in Africa, this contradiction prevented the legal order from changing much behaviour.⁴⁰

We may now summarise the major points and issues raised by Seidman in his model of law and development. Simply put, from our own understanding of the principal issues raised by Seidman, the crux of his model boils down to the main contention that in order to induce development in general and Africa in particular, what is needed is not a hierarchical or authoritarian legal order but a participatory one. Both during and after the colonial era, the legal order in much of Africa has been the former type. With that type of authoritarian legal order competition between various interest groups in Africa was inevitable. The group that benefited most from that type of legal order was the small elite-namely, the state officials, the powerful politicians and the foreign firms. In order to achieve a just and egalitarian African society with equal

³⁹ Ibid. p.468-469.

⁴⁰ Ibid. p.469.

opportunity, equal rights and obligations to all citizens a new legal order (and a new state structure) is imperative. The creation of this new legal order, according to Seidman, must be based on a clear understanding of why people behave in the way they do. There is however one major question here which has not been answered by Seidman: On whose shoulder does this responsibility for creating a new legal order lie? He however seems to imply that this should be the responsibility of the political elite (this is suggested in his contention that development requires that the political elite must have an ideology that instructs them to use the legal order to change institutions). But what weakens Seidman's argument here is his failure to address the simple question of whether in reality a political elite (which benefits from existing legal order) can truly have an ideology for change. The simple truth is that such elites who are in a position of authority would always want to maintain the *status quo*. Such group of people do not welcome change in the first place let alone initiate one. For instance, the central bureaucracy is a definite class with definite interest and as such always aspiring to protect those interests and to consolidate their powerful position.

Seidman's "law of non-transferability of law" is also worth commenting on. One shares his view that legal transplants, not only in africa, but also in other parts of the world

practically never worked.⁴¹ However, it is important to observe here that in addition to the non-legal factors of custom, history, geography and technology which he puts forward as constraints to the workability of legal transplants, there is, in our view, the major problem of language. Language has most especially been a major obstacle to effective communication and reception of the English common law in many parts of Africa. Apart from the basic fact that law can only be effective if communicated, the level of literacy in the society determines, to a large extent, how the law is appreciated and conformed with. Not only Africa, but even the modern technological society depends on a sufficiency of literate and numerate people to run it, or even to simply respond to its road signs. It is therefore clear that knowledge of, and responsiveness to, any rule of law depends very much on the ability of the subjects of the law to understand the language in which the law is written. The failure of the legal rules in the Third World to induce development is therefore, due in part to the fact that they were written in a language which is foreign and spoken only by a minority of the population.

1:1:5: An Opposite View

Quite unlike Seidman, Bruno-Otto Bryde holds the opinion that irrespective of whether a legal order is authoritarian

⁴¹ Ibid. p.34. See also Seidman A. and Seidman, R.B. (1994) *State, Law and the Development Process: Problem-solving and Institutional Change in the Third World*. St Martins Press. p.44. Bart F. (1966) "Models of Social Organisation", Royal Anthropological Institute Occasional paper No. 23. Glasgow University Press.

or participatory, it is incapable of inducing change.⁴² In his work, Bryde seeks to find out whether one can expect governments in Africa to enact laws that are designed to bring fundamental change in their societies.⁴³ This, he thinks, depends to a large extent, on the power and motivation of governments, and that this motivation will depend on the existence or absence of a conflict between development goals and the interest of those elites in power.⁴⁴ In African countries, as in many parts of the world, political and economic powers are held by a small group of people who constitute the elite. These people in authority resist change. Bryde believes that the law-makers who may intend to effect change in the legal order must expect opposition from the elites of which the law-makers are themselves a part. The elites here are invariably the members of the legislature, the judges, the academic lawyers, the bureaucrats and the politicians-these form the "cream" of the society.

Bryde conceives of development as economic growth, egalitarianism, democracy and autonomy.⁴⁵ His description of power structures in Africa is that which consists of three main strata. First there is what he calls the stratum

⁴² Bryde, B. (1976) *The Politics and Sociology of African Legal Development*. Am. Main, Alfred Metzner Verlag, GMBH.

⁴³ Ibid. p.22.

⁴⁴ Ibid.

⁴⁵ Ibid. p.1 and pp.42-53.

of the strategic elite at the top. This is the group with the highest and the most powerful political and economic power base. Secondly, there is the middle stratum whose social and economic boundaries with upper stratum are rather fluid. Prominent among the members of this group are the top civil servants and chief executives of the public sector. Then at the bottom of the ladder there is the wage labourer and the peasant stratum with virtually no social status. They wield no economic or political power and yet they constitute the majority of the population. These are the poor ordinary peasants most of whom are law-abiding citizens. This power structure of African states serves as major impediment to development. This is because any legal rule that threatens the *status quo* or any policy that tends to change the position of the privileged elites will most often not be initiated. Bryde thinks that even if such rules are made they will only remain symbolic and their enforcement will be very difficult.⁴⁶ His sceptical stance was much more clearly expressed when he said:

In African political systems, law-making power and influence on law-making are monopolised by a small elite... Development as an improvement of the African socio-economic conditions requires as a priority an improvement of the conditions of the masses; and we cannot expect a privileged elite to use law as an instrument in the interest of the under-privileged. In the final analysis the role of law in Africa appears to be very much dependent on the political and administrative structures that create and apply legal rules.⁴⁷

⁴⁶ Ibid. p.52.

⁴⁷ Ibid. pp.191-193.

We now have two contrasting theories of law and development. One assumes that for a legal order to be capable of inducing development it must be a public participatory one. The opposite view is that we cannot expect the African state to institute a legal order, whether participatory or otherwise, which can induce development. It is interesting here to see what both Seidman and Bryde think of each other's propositions.

In reviewing Bryde's book, Seidman wrote that it was "a bundle of contradictions, at once brilliant and confused, important and trivial..."⁴⁸. He accused Bryde of misplacing the emphasis in the study of law and development. According to Seidman, Bryde ignored the legal sources of elite power and mass weakness. He equally failed to consider the consequences of various legal rules on economic class relationships and the law and institutions that linked political elite and the economic ruling class.⁴⁹ In replying to these criticisms, Bryde was of the view that Seidman's belief in the use of law to induce development only made sense if one assumed that benevolence of the elite is the rule in Africa rather than the rare exception.⁵⁰

⁴⁸ Seidman, R.B. (1977) "Elite, Law, and Development", *African Law Studies* (ALS) p.78

⁴⁹ Ibid. pp.78-81.

⁵⁰ See Bryde, B. (1977) "Elite, Dead Horses and The Transferability of Law". ALS No. 15, pp.91-92

The first observation one can make is the fact that both scholars have reached conclusions that are fundamentally different. Seidman concludes that a participatory legal order can induce development. On the contrary, Bryde concludes that, considering the nature of the power structure in African states, the elites who control both economic and political power will not be willing to pass any law or implement any policy capable of inducing development. Because of the amount of power they wield and the privileges they enjoy, all laws and policies that constitute a threat to their vested interests will not be effective. It is important to note that although as indicated by Seidman, Bryde has not identified the source of elite power, the consequences of various laws on class relationships, and the nature of the link between political elites and the economic ruling class, both scholars agree that the power structure or legal order in Africa is authoritarian.

However one endorses the views of Seidman that in attempting to understand the relationship between law and development the most appropriate starting point is to begin with the understanding of why people behave the way they do. This provides an understanding of why the political and economic ruling classes in Africa are linked and why they possess values and interests that deny the majority of the population development opportunities. It must, however, be acknowledged that it is not in every case where this

understanding is achieved that solutions leading to development are proposed or implemented.

1:1:6: Law and Development and the Dependency Theory

Another theory of law and development that blames the general poverty of the Third World on international development and mechanisms of capitalism is the under-development and dependency theory. We shall discuss this theory and particularly examine how it affects the study of law and development.

The major thrust of this theory has been to relate the development of capitalism to the under-development of the Third World. Under-development in the Third World is regarded as a direct consequence of the roles of certain nations and groups of people in the World Capitalist economy.⁵¹ As far as the study of law and development is concerned, this theory suggests that the conceptual framework of liberal legalism reflects the hegemony of Western capitalism. For this reason, it must be rejected since it, among other things, enhances under-development and perpetuates dependency. Thus any study of law and development which is not brought within the framework of political economy will not achieve the optimum result. In other words, we must always recognise the fact that legal forms and ideas are, to a large extent, secondary and

⁵¹ See Snyder, F.G. "Law and Development in the Light of Dependency Theory", *supra*.p.781.

shaped by world wide socio-economic forces.⁵²

The theory sees the failure of law to induce development in the Third World nations as a result of the mechanisms of capitalism which make these developing countries dependent on Western economies and hence their inability to enact and implement effective development policies. Thus, apart from what we saw as Bryde's thesis concerning the unwillingness of the African elites to institute legal orders that are capable of inducing development, the dependency theory has yet added another proposition which suggests that, due to the mechanisms of capitalism Third World countries are incapacitated in their efforts to initiate any meaningful development policy. It is also worth pointing out here that Seidman seems to accept the issue of dependence of the developing nations on the Western economies when he says that:

Because foreign firms dominated the economic order, and because the public positions and private prosperity of the political elites depended upon the continued existence and success of those firms, the political elites of Africa... in time became dependent allies of the foreign firms.⁵³

Snyder is of the view that what research on law and development in underdeveloped countries requires is a radical reorientation and also such research must involve

⁵² Ibid. pp.781-782. See also Mutunga W. (1980) "Commercial Law and Development in Kenya", *International Journal of Sociology and Law*, Vol. 8 No.1 pp.1-17

⁵³ Seidman, R.B.(1978) *The State, Law and Development*, supra.p.467

elaboration of the Marxist theory of law. The dependency theory is apparently based, to a large extent, on Marxist social theory. This is evident from its severe attack on capitalism. Marxist theory essentially refers to the body of social thoughts based on the writings of Karl Marx and Fredrich Engels. Although several voluminous writings of Marx and Engels contain many lengthy passages about law,⁵⁴ these writings did not give any separate treatment of law, neither do they give any emphasis or centrality to law in the analysis of the social bond.⁵⁵ The reason why law and indeed other social forces such as religion failed to have any centrality in Marx's analysis is that they were considered as being part of the superstructure which normally springs from the basic determinant of social relations, i.e., economic base⁵⁶. Thus, since law is only a part of the super-structure it cannot have a separate autonomy or an independent history.⁵⁷ This fact notwithstanding, however, there is what is generally regarded as a Marxist theory of law.

Marxist theory of law holds that it amounts to an error in reasoning to suppose that the content of the law simply

⁵⁴ Cain, M. and Hunt, A. (1979) *Marx and Engels on Law*. Academic Press, London.

⁵⁵ See Harris, J.W. (1980) *Legal Philosophies*. Butterwoths, London. p.251

⁵⁶ Relations of production, according to Marx, constitutes "the real foundation on which rise the legal and political super-structure". See Marx and Engels, (1969) *Selected Works*, Vol.1 Progress Press, Moscow. p.503

⁵⁷ Ibid. p.251-252

depends on the arbitrary choice of the legislature. It argues that it must never be forgotten that what the legislature does is controlled by the relations of production which forms the base of the society. In capitalist societies in particular, law and state are mere instruments of domination through which the ruling class protect their interests and continue to assert and perpetuate their interests at the expense of the mass of workers who remain poor. It is also important to highlight one similarity which exists between what Seidman identifies as the authoritarian legal order and what the Marxist theory identifies as "the law". This is simply the "authoritarian legal order" that Marxist theory defines as law. Also, the identification of law as a mechanism in the perpetuation of capitalism by the dependency theory tallies with the Marxists conception of law. Furthermore, despite the fact that Seidman and Bryde disagree on some points, both scholars share the view expressed by the dependency theory that the Third World has continued to have legal orders which benefit not only the national elites but also the international bourgeoisie. There is thus a common agreement between these scholars that this state of affairs has resulted in the perpetuation of mass poverty in the developing countries and dependency on the Western economies.

The foregoing represents the three major theories that emerged in the study of the relationship between law and

development in the Third World countries. There is however another important question that requires examination at this stage and that is the role of law and lawyers in the third world countries in the actual process of how law is made and implemented. The discussion here should shed light on the position which is accorded law and lawyers in the Third World in development efforts with particular reference to how the laws are made and implemented.

1:1:7: Law and Lawyers in the Third World

Having traced the historical background to the development of 'law and development' into a special and definite area of study and the subsequent theories that were evolved by eminent scholars, we shall now briefly examine how in actual fact law and lawyers can, in the world in general and in the developing nations in particular, contribute their own quota to the current quest for development. If development is seen as a self-conscious effort to transform society, the role of law and its effect in the development process of the Third World countries cannot be overemphasised. As was rightly stated by Lawrence Friedman:

.....Legal systems are clearly a part of political, social and economic development, just as are educational systems and other areas of the culture. No major social change occurs or is put into effect in a society which is not reflected in some kind of change in its laws.⁵⁸

⁵⁸ Friedman, L. M. (1969) "Legal Culture and Social Development" *Law and Society Review*, Vol. 14, pp. 29-44

Until quite recently law and lawyers in the Third World were not regarded as a force to be reckoned with in the areas of formulation and actual implementation of the development process. The role of law in society was seen as only that of ensuring the maintenance of peace and order, criminal and civil litigations and handling of other related legal issues. Attention was focused on development economists, social scientists and other specialists who operate within the area of development studies. As events began to unfold themselves however, both the policy makers and the general public began to appreciate the necessity of a legal framework to a programme of development which is meant to improve the living conditions of the people. People began to realise that the role of lawyers is much more than the conventional role of going to court to defend clients or executing deeds of conveyance for the wealthy land owners. In a statement highlighting the role of law and lawyers in the society, Akingkuba observed that:

The lawyers and the law can be instrumental in bringing about happier and better societies if both can be enlisted in non traditional though vital public service. This is part of the larger responsibility of our profession.... Because of their unique positions in society not only must they show interest, they must take the lead in influencing change and social improvement. They cannot be content with the conduct of their practice and administration of justice, they cannot remain strangers to important development in economic and social affairs if they are to fulfil their vocation as lawyers: they should take an active part in the process of change.⁵⁹

⁵⁹ Akingkuba, O.O. (1972) "The Role of Lawyers in Society", in T.O. Elias (ed) *Law and Social Change in Nigeria*. University of Lagos Press. p.14

The question which readily comes to mind here is: what exactly could one point to as the main factor responsible for the relatively poor role of lawyers and the legal profession in the process of development? In a report prepared by a committee of distinguished international scholars and published by the ILC, New York, the committee was of the opinion that researchers in development studies did not pay adequate attention to the utility of law and legal institutions as tools for effecting a planned social change. This, the committee noted, contributed to the apparent lack of proper involvement of law and lawyers in the development process. In the exact words of the committee:

...Decision-makers designing and implementing development plans, programs and projects, rely on development studies for guidance. Accordingly in LDCS and MDCS universities, research institutes, governments and international agencies have devoted substantial resources to development studies. Economic, social and political development have all been extensively investigated. The committee found, however, that despite the scope of this research relatively, little attention has been paid to "law" in the normative, instrumental and substantive sense of the word. As a result, the current body of development knowledge and doctrine is relatively insensitive to law and legal institutions. This gap, the committee felt, was a costly one. In ignoring law, development studies have overlooked a major dimension of the very process they are charged with examining. In failing systematically to examine the possibilities and limits of law as a tool of planned social change, development researchers have shown a surprising lack of interest in the nature of one of the tools that policy makers daily employ to reach development goals...⁶⁰

⁶⁰ ILC (1974) *Law and Development* supra, p.17

As the finding of this committee indicates, the almost total lack of attention on law as a tool for effective development by researchers explains why lawyers could hardly make any impact on ^{the} development process.

One other reason that is responsible for this state of affairs is the attitude of the lawyers themselves. Lawyers in the Third World countries often see their role only in terms of the traditional functions of protecting individual rights and interests and not being concerned with other disciplines. It is however interesting to note that this attitude of showing no interest in other professions is not only restricted to lawyers in the Third World countries. For example, this same restrictive attitude was observed by Professor Patrick McAuslan in the United Kingdom in the case of the average legal practitioner in the field of planning.⁶¹ McAuslan observed that three important factors shape the attitudes of the lawyer to land use planning, namely, the very nature of the traditional common law remedies available in the courts for dealing with different forms of interference with land; the normal clientele of lawyers; and the professional life-style of lawyers. The conclusion was that lawyers do not fully appreciate the benefit of planning.

In the first instance, by the very nature of his

⁶¹ McAuslan, J.P.W.B. (1971) "The Plan, The Planners and The Lawyer", *Public Law* p.247

orientation, the lawyer recognises more the individual proprietary rights of the land owner. Secondly, most of the wealthy landlords and landowners are clients of the lawyer. He represents their interests and speaks on their behalf in their attempt to either obtain property or prevent other parties from obtaining their property. Finally, the manner in which the lawyer's work is organised (especially the barrister) also serves as antithesis of planning. In this respect McAuslan observes that:

Barristers are virtually unable to plan their week's work, or in some cases, even their day's work. They live at the mercy of events over which they have scarcely any control.. Living at the mercy of events, dependent on market forces and individual efforts, the barrister easily adopts an attitude of opposition to the concepts and notions behind land use planning.⁶²

One can draw a number of conclusions from this analysis. Firstly, the very type of clientele which the lawyer represents and the nature of services he is expected to render to these clients influence his own concept of land use planning. Thus instead of appreciating certain merits in planning he sees the entire idea of planning as something having adverse effects on the proprietary rights and interests of the wealthy land owners who pay him to protect those rights. He does not therefore see the social effects of the existing land use planning on the lives and living conditions of less privileged members of the society.

⁶² Ibid.

This attitude depicts a common attitude among the members of the legal profession in England and in almost all Third World countries that have adopted the common law principles. Even in America, it was once observed by Bryde that the role of the American lawyer in social and economic development has been generally negative and even to some extent obstructionist.⁶³ This same attitude prevails in much of Africa. Until recently, there had been a total failure on the part of African lawyers to pay attention to other political, social and economic considerations which by and large predetermine the nature and conditions of the environment in which they practice. It is doubtless however that this state of affairs has been the grave concern of students and eminent scholars in the area of law and development. In any case the principal question that needs tackling by third world lawyers particularly from Africa has been well formulated by Modibbo Ocran, a ^{Ghanian} law Scholar, in the following words: "What contributions can legal Institutions and legal theory make towards the quest for economic development in Africa? Do lawyers have anything at all to say about the strategy for economic development? Which of their ideas and mental attitudes need to be modified or discarded if lawyers are to play a useful

⁶³ Bryde, E.M. Jr. (1963) "The Role of Lawyer in the Economic and Social Development of his country within the framework of the Rule of Law", *Journal of the International Commission of jurists*. Vol. V, Nos, 1-2 p.55

role in the development process?⁶⁴

These are the very questions which are pertinent to the law and development subject. The answers to these questions would not be far fetched if it is accepted that law should be seen in its instrumentalist capability. In this regard, laws should be fashioned in such a way that they are able to create simple understanding for major economic transactions, organising complex enterprises and structuring choices in decision making. This instrumental notion of law must be accompanied by a new concept of the lawyer's skills and the broadening of his horizon. In other words, it must be borne in mind that the use of modern law requires not only technical legal knowledge but, equally important, unique skills in formulating and interpreting rules, ascertaining evidence as well as weighing and mediating between competing interests. This is the challenge which faces the lawyer⁶⁵, particularly in the developing world, where the formulation, adoption and implementation of policies and measures that would ensure sustainable development would, for a foreseeable future,

⁶⁴ Ocran, T.M. (1978) *Law in Aid of Development*. Ghana Publishing Corporation, Accra. These questions were posed at p.xiii of the preface to the book.

⁶⁵ There are problems with the lawyer though, which have to be pointed out, that are quite capable of undermining the role that is expected of him here. Firstly, he is generally-and this certainly true of West Africa- part of the dominant elite that we discussed earlier on in the chapter. Secondly, in common with other professionals, his central concern is with establishing his own interests. Thus the legal profession has developed a particular-very expensive-culture both for transactions and litigation that suits its interests, not that of the wider public, despite the claims of legal ideology to the contrary. See Abel, R.L. (1986) "The Decline of Professionalism?" *Modern Law Review*, Vol. 49 pp. 1-41.

continue to be central to the development process. This then leads us to the issue of what sustainable development actually means and what its principles are.

1:2: The Concept of Sustainable Development.

Before examining the principles of sustainable development and how they evolved, we shall first consider the possible meanings of the concept. Thereafter we shall explain the particular sense in which it is actually used in this thesis. Such a clarification is crucial to an understanding of the linkages between the concept of sustainable development, protection of the environment and the law.

1.2.1: Meaning

It is very common nowadays to come across the term 'sustainable development' in almost every discussion about development and protection of the environment. It could in fact be argued that the growing body of literature⁶⁶ in the field of sustainable development is a clear testimony to its increasing usage and popularity both amongst development planners and practitioners on the one hand and environmental protection activists on the other. It must, however, be pointed out that although the concept of sustainable development has found widespread acceptance amongst development practitioners and environmentalists, it appears to be far away from having a unanimously accepted theoretical foundation as a concept. For example, Adam

⁶⁶ For a review of the literature on various aspects of the concept, see Mitlin, D. (1992) "Sustainable Development: a Guide to the Literature" *Environment and Urbanisation*, Vol. 4, No. 1. pp.111-124

criticises the concept on the grounds that it lacks a coherent theoretical core and that its attractiveness lies mainly in the fact that many different ideas about development can easily be grafted onto it.⁶⁷ In a similar vein, Lele observes that there is a lack of consistency in the interpretation given to it by various authors and also argues that it does not have a clear theoretical and analytical framework that could actually help in determining whether any policies undertaken would indeed foster the attainment of the so-called 'Sustainable Development'.⁶⁸

These criticisms are quite valid in the sense that they reinforce the need for a definite and generally acceptable meaning of Sustainable Development, if only to preserve its value as an effective development concept. It must however be observed that, the concept of sustainable development has now developed to such an extent that it could actually be said to be the development paradigm of the 1990s decade and beyond, particularly for developing countries such as Nigeria, which have tried various development strategies since the first development decade, declared by the United Nations, of the 1960s.⁶⁹ Since the publication of the report of the World Commission on Environment and

⁶⁷ Adam W.M. (1990) *Green Development: Environment, Development and sustainability in the Third World*. Routledge. p.66.

⁶⁸ Lele, S.M. (1991) "Sustainable Development: A Critical Review", *World Development*, Vol. 19, No.6 pp.607-621 at p.607.

⁶⁹ See Bartelmus, P. (1986) *Environment and Development*. Allen & Unwin. pp.3-5.

Development in 1987, *Our Common Future* (hereinafter "The Brundtland Report")⁷⁰ which had the concept of sustainable development as its central theme, a significant turning point was reached in the search for a development paradigm under which developmental and environmental concerns could be addressed and tackled at the same time. In addition to the Brundtland Report's articulation of the concept, the Rio Declaration and Agenda 21, which were adopted at the 1992 Rio de Janeiro Conference on Environment and Development, further strengthened the status of the principles of the concept by acknowledging them as the recipe for the kind of policies and laws that would be required if sustainable development goals are to be realised.

From a general perspective, Sustainable Development has had different meanings accorded it by different authors. Although such different conceptions might actually be justifiable in the particular context in which they were used, there has also developed a central connotation of it which appears to be the mainstream understanding of it. This mainstream understanding sees sustainable development as a form of societal change which, in addition to traditional developmental objectives (like meeting basic needs of people), has the objective or constraint of

⁷⁰ World Commission on Environment and Development (1987) *Our Common Future*. Oxford University Press. Oxford.

ecological sustainability added to it.⁷¹ The main working definition of sustainable development that represents this category of thinking is that given by the Brundtland Report. Within this mainstream thinking, 'development' refers to a *process of socio-economic change*⁷² and the conceptualisation embodies both the objectives of the process and the means of achieving those objectives. On the other hand, sustainability, which had its origins in the context of renewable resources such as forests and fisheries, essentially refers to *ecological sustainability*. Ecological sustainability in turn refers to the existence of 'the ecological conditions necessary to support human life at a specified level of well-being through future generations.'⁷³ Thus, the concept of sustainable development is meant to expand or modify traditional development objectives in order to imbue them with ecological sustainability. This became necessary as a result of the realisation that in the past, the pursuit of traditional development objectives has undermined ecological sustainability so that what is required now and in the future is a development paradigm which can help avoid that. In the mainstream interpretation of sustainable development therefore, ecological sustainability and traditional developmental objectives are not considered as

⁷¹ Lele, S.M. (1991) "Sustainable Development: A Critical Review" *supra*, p.610

⁷² *Ibid.* p.609

⁷³ *Ibid.* p.609

objectives, and the requirements for achieving sustainability - as it is understood at each stage - would remain a fundamental concern.

Thus according to this mainstream understanding of sustainable development, the process of development has become further loaded with responsibility to ensure that social and ecological conditions for sustainability are made part and parcel of the goals of development. In a nutshell, the mainstream view of sustainable development refers to a kind of development framework which provides for, among other things, the means of reconciling the need for development through the utilisation of resources for the welfare of human beings with the need to conserve and protect the human and natural environments on which life itself depends. In this sense, the concept provides for a reformatory agenda which redirects development efforts away from the kinds of development policies and practices that had neglected environmental protection in the past, to policies and practices which would enable the attainment of a kind of development which ensures environmental conservation and protection.⁷⁴ The principles which are contained in the concept of sustainable development have evolved over a long period of time and their recognition and adoption by comity of nations at various International foras, including the last 1992 Earth Summit in Brazil,

⁷⁴ See THIJS De LA COURT, (1990), *Beyond Brundtland: Green Development in the 1990s*. p.128

shows the prime position they occupy in matters of environment and development.

There is, however, another dimension to the concept of sustainable development and that is the role which law does or could play when it comes to the implementation of policies and principles which derive from the concept. There does seem to be an assumption, going by the various Declarations and Reports on Environment and Development, that law is an important instrument or tool in the possession of Governments which they could use to effectively manage the environment. Such an assumption could probably be justified on the ground that law has a traditional function of being a useful tool for implementing many kinds of reform.⁷⁵ In the course of our analysis therefore, we shall try to see the extent to which the principles of sustainable development as outlined in various Instruments could be used as the basis for a legislative foundation of environmental protection and sustainable development with particular reference to water resources development in Nigeria. However, in spite of any justifications that may be put forward for adopting law as an instrument for implementing social or other kinds of reform, there certainly are valid questions as to how much reliance should actually be placed on a legal framework alone towards realising the objectives of sustainable

⁷⁵ See for instance, Ghai, Y.P. (1991) "The Role of Law in the Transition of Societies: The African Experience", *Journal of African Law*, Vol. 35 Nos. 1 and 2. pp. 8-20

development. Nevertheless however, we submit that law does have the following functions to serve in the move towards sustainable development in Nigeria and indeed the rest of the developing World. The first most important function for law will be to provide a centralised co-ordination and steering of development activities in the water resources sector with a view to securing the full observance of those practices which conform with sustainable development framework. This links up with the second objective of using law, namely, the instilling of national sustainable development values both amongst development planners and activists throughout the whole country. It is certainly difficult to see how such an objective could be achieved otherwise than through a national legislative framework which applies throughout the whole nation. Thirdly, moving towards the implementation of sustainable development will almost inevitably involve some difficult choices which will produce losers and winners and even conflict sometimes. The resolution of such conflict is something that must be accomplished on the basis of legal principles which arguably gives some centrality to law.

1:3: Conclusion.

We have tried in this chapter to examine the various theories which have been developed concerning the role of law in development. It is our contention that these various theories do have a measure of reality in them, and we shall point this out accordingly in the course of our discussion

in the chapters that follow. In the case of the concept of sustainable development, it should be reiterated that it does provide a new challenge to law and lawyers, particularly in the developing countries where concern for economic development needs to be carefully balanced with the environmental reality. The next chapter examines the various understandings and principles of sustainable development and the propositions relevant to the formulation of a legal framework for sustainable development and environmental protection.

CHAPTER TWO

THE EVOLUTION OF THE PRINCIPLES FOR ENVIRONMENTAL PROTECTION AND SUSTAINABLE DEVELOPMENT

2: 0: Introduction

One thing that is certainly clear about the concept of sustainable development is that the United Nations has, through its various Agencies, Commissions and Conferences, played a crucial role in the articulation of the relevant principles which should guide the attainment of sustainable development goals. But the history of the concept shows that it actually evolved over a period of time, following various kinds of initiatives aimed at finding an appropriate development paradigm which enables socio-economic development and sound environmental management at the same time. This chapter discusses the concept's evolution as well as the principles which have so far been developed as the means to the attainment of sustainable development goals.

2:1: Evolution of the concept of sustainable development

The genesis of the concept lies in the concern for conservation and protection of natural resources and environment in the course of development. Before the wide recognition accorded the concept since the middle of the 1980s, it was generally thought that environmental concerns and developmental goals could not go hand-in-hand because they were contradictory. The need for a development

strategy for all nations of the world which would lead to the betterment of living conditions or standard of living for mankind while at the same time protecting the environment which provides the resource base for development, appears to be the main consideration in sustainable development. This can be seen from two perspectives. Firstly, the ideas of what may be called the first strand of the concept evolved over a period of time, mainly reflecting the various perceptions and views of the environmental preservation and conservation movement from the 19th Century to the beginning of the 1970s.¹ These ideas mainly concerned the protection and lasting utilisation of natural resources, the preservation of genetic diversity and ecosystem maintenance and in this regard Kula² has observed that:

Sustainable Development is not a new concept. For example in Forestry the sustainable management concept has been known to forest biologists, engineers and economists since the work of Martin Faustmann in 1849.³

¹ For a detail account of the historical evolution of the different strands of thought about Sustainable Development see Adams, W.M. (1990), "Green Development...", supra. Adams has tried to identify five themes, which overlap in time, on the evolution of the concept. These have been given as:

1. Nature Preservation and later Conservation in the Tropics.
2. Rise of tropical ecological science, particularly in Africa and the associated growth of concepts of ecological managerialism.
3. The growing global reach of scientific concern, particularly in the form of Man and Biosphere Programme.
4. Rise of perceptions of global environmental crisis.
5. Focusing of international environmental concern by the 1972 Stockholm Conference on the Human Environment. (p.15)

² Kula, E. (1994) *Economics of Natural Resources, the Environment and Policies*. Chapman and Hall, London. p.32

³ Ibid.

The need for conservation and preservation of ecosystems also led early environmentalists to become concerned with the ecological impact of development which resulted in the adoption of a number of efforts towards reducing adverse effects.⁴ The major kind of development with serious ecological consequences that drew attention amongst environmentalists was dam construction. Great attention was focused on how to take environmental factors into consideration in the building and management of dams which, in fact, resulted in important international efforts specifically relating to the planning and development of dams.⁵ On the whole, these efforts show the kind of success that was achieved, at least at rhetorical level, by environmentalists' attempts "to imbue development with ecological awareness."⁶

The second strand of the concept relates to the objectives and processes of development as a whole, particularly with regard to developing countries and the fact that the provision of basic needs of human beings requires both

⁴ For instance, in 1968 a Conference on the Ecological aspects of International development was held. The results of the Conference were published as '*The Careless Technology*', by Farvar & Milton (1973); See also, Freeman, P.H. (1977), *Large Dams and the Environment: recommendations for Development Planning*. Report of the United Nations Water Conference. International Institute for Environment and Development, London.

⁵ This can be seen in the fact that an International Commission on Large Dams (ICOLD) was set up which in 1980 published an important work entitled "*Dams and their Environment*." The commission has also published another material in 1981 entitled "*Dam Projects and Environmental success*". These two materials were published by ICOLD in Paris.

⁶ Adams, W.M. (1990), "Green Development...", *supra*, p.145.

development and good husbandry of the environmental resources which make that development possible. This also had its antecedents in the ideas of development such as, economic growth, meeting of basic needs, ecodevelopment, role of women, and so on.

The most important point, however, is the fact that meeting the development objectives of the developing world has become an important aspect of the concept of sustainable development as recognised and adopted at the 1992 Rio de Janeiro Earth Summit. But this was only achieved after intense efforts to overcome the differences of opinion between developed and developing countries during the preliminary negotiations leading up to the conference. The main difference was over how to tackle the issue of the priority that was to be given to environmental protection on the one hand and economic development on the other.⁷ The northern hemisphere group of participants, consisting of the developed countries, had the idea of environmentalism instead of development as their point of emphasis. The main focus of this group actually was on how to overcome present environmental constraints and maintain the current standard of living. On the other hand, there were the countries of the southern hemisphere, mainly underdeveloped or developing, who had as their main concern the need for

⁷ Panjabi, R.K.L. (1993) "From Stockholm to Rio: A Comparison of the Declaratory Principles of International Environmental Law." **Denver Journal of International Law and Policy**, Vol. 21 No. 2 pp.215-277. at p. 221.

satisfaction of basic needs and ensuring that their populace obtain the resources they require to survive and develop sustainably. This clearly illustrates the differing priorities of the two "halves" of the world. An interesting observation was made by a commentator on the rift at the Rio Conference in the following terms:

The original idea among the developed countries was to produce a ringing declaration in Rio which "kids all over the world could hang on their bedroom walls." But then the developing countries rather unhelpfully pointed out that many of the children in their part of the world don't have bedrooms.⁸(Quotation marks in original).

It is worth pointing out though that, despite the wrangling and misunderstandings that divided the world at the conference, its outcome in the form of the 1992 Rio Declaration on Environment and Development did help to squarely focus global attention on the importance of reckoning with the need for both development and environmental protection within the context of sustainable development.

As mentioned above, The Rio Conference was not the first forum at which the international community agreed on the need for finding a balance between protection of the environment and the pursuit of development. What makes the Rio Declaration unique and highly significant, however, is that it sets out a programme of action on various aspects

⁸ McDonald F., (1992) "If This is Progress, We're in Deep Trouble", *Irish Times*, June 11th, 1992.

of development and the environment and how the goals of sustainable development could be achieved in the document known as Agenda 21.⁹ But since we have noted that the concept has had its origin in some other International foras and concepts prior to the Brundtland Report of 1987, it is important to point out those antecedents. This would not only show how the concept developed but also how its meaning and understanding has evolved around the numerous kinds of understandings arrived at as the search for harmonising environmental protection and development objectives intensified.

2.1:1: The World Conservation Strategy

The term 'sustainable development' became prominent in 1980 after the World Conservation Strategy (WCS) of the International Union for the Conservation of Nature (IUCN) was published. The WCS was mainly concerned with the overall aim of achieving sustainable development through the conservation of resources. It identified three objectives for the kind of conservation it proposes. These were outlined as the maintenance of essential ecological processes;¹⁰ the preservation of genetic diversity, both the genetic material in different varieties of locally

⁹ See United Nations (1992) *Earth Summit: The final text of agreements negotiated by Governments at the United Nations Conference on Environment and Development (UNCED)*, 3-14 June 1992, Rio de Janeiro, Brazil. *infra*.

¹⁰ IUCN (1980) *The World Conservation Strategy*, International Union for Conservation of Nature and Natural Resources, United Nations Environment Programme, World Wildlife Fund, Geneva. Section 2.

adapted crop plants or livestock and in wild species;¹¹ and the sustainable development of species and ecosystems particularly fisheries, wild species which are cropped, forests and timber resources and grazing land.¹² However, the central argument of the WCS is that conservation and development are mutually dependent and therefore not incompatible as they have seemed in the past, when development practitioners viewed conservation as irrelevant or anti-development because they failed to understand 'real' conservation. Thus the WCS argues that if it had been properly understood, 'real' conservation would have helped to avoid ecological damage and the failure of development.¹³ It pursues the argument further by saying that environmental modification is a natural and necessary part of development, but not all such modification will achieve 'the social and economic objectives of development'.¹⁴ Therefore the solution is to give conservation a high priority in the development process, and to 'integrate every stage of the conservation and development processes, from their initial setting of policies to their eventual implementation and operation'.¹⁵ It was this integration that would end the apparent conflict between conservation and development which

¹¹ Ibid., section 3.

¹² Ibid., section 4.

¹³ Ibid., section 1(10).

¹⁴ Ibid., section 1(12)

¹⁵ Ibid., section 9(1)

previously obtained.

It was generally acknowledged that by identifying sustainable development as the basic goal of society, the strategy did make a profound contribution towards reconciling the interests of the development community with those of the environmental protection movement.¹⁶ The strategy was however criticised for being too narrowly concerned with ecological sustainability alone by 'restricting itself to living resources and focusing primarily on maintaining genetic diversity, habitats and ecological processes'.¹⁷ Opinion was also divided about the degree to which it had addressed the socio-political changes that might be necessary in order to realise its goals. Thus, while on the one hand Caldwell¹⁸ describes it as 'the nearest approach yet to a comprehensive action-oriented programme for political change'¹⁹, on the other hand, Redclift²⁰ argues that "despite its diagnostic value the World Conservation Strategy does not even begin to examine the social and political changes that would be

¹⁶ See Khosla, A., (1987), "Alternative Strategies in achieving sustainable development", In P. Jacobs and D.A. Munro (eds.) **Conservation with Equity: Strategies for Sustainable Development**. International Union for Conservation of Nature and Natural Resources, Cambridge. pp.191-208.

¹⁷ Lele, supra. p.610.

¹⁸ Caldwell L.K. (1984) 'Political aspects of ecologically sustainable development', **Environmental Conservation** 11:299-308.

¹⁹ Ibid, p.308

²⁰ Redclift M. (1984) **Development and the Environmental Crisis:red or green alternatives?** Methuen, London. p.50

necessary to meet ^{the} conservation goal."²¹ It should, however, be pointed out that the WCS had in a preliminary form pointed to populist development ideas which were later on developed in sustainable development works such as the Brundtland Report. The WCS states that: Conservation is entirely compatible with the growing demand for "people-centred" development, that achieves a wider distribution of benefits to whole populations (better nutrition, health, education, family welfare, fuller employment, greater income security, protection from environmental degradation); that makes fuller use of people's labour, capabilities, motivations and creativity; and that is more sensitive to cultural heritage'²²

Truly, WCS had its emphasis on ecological sustainability as the route to conservation in development, but it certainly was an important milestone in the evolution of the sustainable development concept, because it did clearly point out that traditional development objectives must take on board ecological goals as well.²³ Furthermore, the strategy did play a significant role in popularising the emerging concept of sustainable development and in this

²¹Ibid.

²². IUCN (1980) *World Conservation Strategy* supra, section 20(6).

²³ This point was made clear by the chairman of the World Wildlife Fund (WWF), Sir Scott, when he stated that the WCS was intended to show 'how conservation can contribute to the development objectives of governments, industry and commerce, organised labour and the professions'. See Allen, R. (1980) *How to save the World: strategy for world conservation*. Kegan page, london.p.7

regard, Adams²⁴ observed that:

In terms of the level of nominal adoption, the WCS is ...a success and certainly the proliferation of the phrase 'sustainable development' owes much to the successful capture by the WCS both of Media attention and f a place in development terminology.²⁵

2:1:2: Ecodevelopment

Apart from the WCS, there are other series of similar formulations made to imbue development with environmental ideas and principles. It is important to point out the most significant of these if we are to get a better picture of the evolution of the concept of sustainable development. A number of these formulations were generally labelled 'ecodevelopment', a term initially coined by Maurice F. Strong, the Secretary-General of the Stockholm Conference on the Human Environment as well as the 1992 United Nations Conference on Environment and Development.²⁶ The term was subsequently developed and promoted by the United Nations Environment Programme(UNEP)²⁷. Ecodevelopment appears to be mainly concerned with the need to understand ecosystems and ensure the environmental soundness of development projects.

²⁴ Adams, W.M. (1990) **Green Development: Environment and Sustainability in the Third World**. supra, p. 46

²⁵ Ibid.

²⁶ See Boardman, R. (1981) **International Organisations and the Conservation of nature**. Indiana university Press, Bloomington, Indiana.; Riddel, R. (1981) **Ecodevelopment**. Gower Press, Aldershot, England;

²⁷ UNEP (1978) **Review of Areas: environment and development and environmental management**. Report no.3. UNEP, Nairobi, Kenya.

This was in order to secure the economic well-being of people without impairment of the ecological systems on which they must depend for the foreseeable future.²⁸ In a fundamental way, therefore, ecodevelopment should be considered as an important forerunner of the later formulations of the sustainable development concept. In this respect one of the proponents of ecodevelopment argues that ecodevelopment is 'an approach to development aimed at harmonising social and economic objectives with ecologically sound management, in a spirit of solidarity with future generations'.²⁹ Also the various principles of ecodevelopment reflect a number of concerns current in the development thinking of the 1970s and which in fact consist of the populist thinking that has now become part of the sustainable development concept. The first of these principles was the concept of the satisfaction of basic human needs which was an important aspect of the United Nations-sponsored second International development decade of the 1970s.³⁰ Glaeser and Viyasulu³¹ brought out this aspect of ecodevelopment quite clearly when they stated

²⁸ See Dasmann, R.F. (1980) 'Ecodevelopment: an ecological perspective', in, J.I. Furtado (ed) **Tropical Ecology and Development**. International Society for Tropical Ecology, Kuala Lumpur. p.1331-1335

²⁹ Sachs, I., (1979) 'Ecodevelopment: a definition', **Ambio** 8(2/3), p.113.

³⁰ See for example, McHale J. and McHale, M.C. (1978) **Basic Human Needs: a framework for action**. Transaction Books. New Brunswick, New Jersey; Streeten, P., Burki, J. uL Haq, M., Hicks, N., (1981) **First things first: meeting basic human needs in developing countries**. World Bank and Oxford University Press, London; Stewart, F. (1985) **Planning to meet basic needs**. Macmillan. London.

³¹ Glaeser, B. and Vyasulu V. (1984) 'The Obsolescence of ecodevelopment?', in, B. Glaeser (ed) **Ecodevelopment: concepts, projects, strategies**. Pergamon Press, Oxford. pp. 23-36

that 'Ecodevelopment refers to a process which is geared to the satisfaction of basic and essential human needs, starting with the needs of the poorest and neediest in society.'³² The second principle is that of participation. Sachs calls for 'participatory planning and grass-roots activation'³³, while Glaeser and Viyasulu conceive of participation, in the context of ecodevelopment, as the situation whereby 'people who are to be affected by changes which they have decided are desirable cooperate voluntarily in the process of implementing the changes by giving them direction and momentum'³⁴

Both formulations of ecodevelopment have, however, been criticised for one reason or the other. On the issue of basic needs, it was said to be an approach that had political weakness resulting from the strength of vested interests and power which oppose wealth redistribution and decentralisation.³⁵ The second principle of ecodevelopment, which is public participation, has been criticised along the same line of political naivety. The suggestion about participation is said to be typical of the thinking about ecodevelopment which advocates non-

³² Ibid., p.25

³³ Sachs, I. (1979) "Ecodevelopment: a definition", *supra*, at page 113

³⁴ Glaeser B., and Vyasulu V., (1984) 'The Obsolescence of Ecodevelopment?', *supra*, p.26

³⁵ See Lee, E. (1981) 'Basic needs strategies: a frustrated response to development from below?', in, W.B.Stohr and D.R.F. Taylor(eds) *Development: from above or below?*. Wiley, Chichester. pp.107-127.

hierarchical systems of organisation and government.³⁶

It must, however, be pointed out that these formulations of ecodevelopment differ from the WCS in some fundamental respects. This is mainly in the scope of comprehension of socio-economic aspects of the development process. The United Nations Environment Programme (UNEP) for instance, emphasizes the decentralisation of bureaucracy, a disaggregation of development focus or the achievement of sustainable development at local level, self reliance and self-sufficiency, the priority given to meeting basic human needs, public participation and equitable distribution.³⁷ Glaeser makes this point very well when he stated that 'the goal of ecodevelopment is to pursue economic development that relies for most part on indigenous human and natural resources and that strives to satisfy the needs of the population, most of all the basic needs of the poor.'³⁸

In any case, it is necessary to observe that the ecodevelopment ideas as a whole served to put essentially environmentalist ideas into a development matrix in a way in which the WCS failed to do.

2.1.3: The Brundtland Report

³⁶ Ibid.

³⁷ Ibid. p.54

³⁸ Glaeser, B (1984) *Ecodevelopment in Tanzania: an empirical contribution on needs, self-sufficiency and environmentally sound agriculture on peasant farms*. Mouton, Berlin. p.11

The next most important phase in the evolution of the concept of sustainable development was its adoption and exposition by the Brundtland Commission where it was given a very radical and broader outlook in the published Commission's Report, *Our Common Future*. The articulation of the concept in *Our Common Future* now stands to be the most widely accepted, and its adoption by the Commission in the first place was what made it more popular and it was influential in making the United Nations General Assembly discuss and address the issues of development and the Environment as one subject.³⁹ For instance, Lele⁴⁰ observed that the concept had become the new development paradigm of many governmental and non-governmental organisations. Lele further noted that 'SD (sustainable Development) has become the watchword for International aid agencies, the jargon of development planners, the theme of conferences and learned papers, and the slogan of developmental and environmental activists. It appears to have gained the broad-based support that earlier development concepts such as "ecodevelopment" lacked, and is poised to become the development paradigm of the 1990s.'⁴¹

Unlike the WCS that preceded it, the Brundtland Report opposed any limitation of development concern simply to the

³⁹ Adams, W.M. *Green Development: sustainability and development in the Third World. supra.* p.58

⁴⁰ LeLe S.M. (1991) " Sustainable Development: A Critical Review", in, *World Development*, Vol. 19, No. 6, pp. 607-621

⁴¹ Ibid, p. 607.

environment and firmly places elements of sustainable development debate within the economic and political context of international development.⁴² This is clearly reflected in the Commission's definition of "sustainable development", which is development that meets the needs of the present without compromising the ability of future generations to meet their own needs.⁴³ There are two attributes of this definition which are themselves based on two important concepts of what development is about. The first is the concept of basic needs which stresses the need for development action for the poor. The second relates to the idea of environmental limits as set by technology and social organisation. This involves a subtle but extremely important transformation of the ecologically-based concept of sustainable development, by leading beyond concepts of physical sustainability to the socio-economic context of development.⁴⁴ The combined effect of these two concepts in the definition of sustainable development as given in the Brundtland Report is that in order to secure physical or environmental sustainability, the economic, social and political settings need to be strengthened as well. This

⁴² World Commission and Development (1987) *Our Common Future*, supra, p.xi.

⁴³ Ibid. p.43. At page 46, the report summarises what it takes the concept to mean in the following terms: "In essence, sustainable development is a process of change in which the exploitation of resources, the direction of investments, the orientation of technological development, and institutional change are all in harmony and enhance both current and future potential to meet human needs and aspirations."

⁴⁴ Adams, W.M. (1990) *Green Development: Environment and Sustainability in the Third World*. supra. p.59.

should be done through the making of policies which actively consider issues such as access to resources and the distribution of costs and benefits. In other words, sustainable development should be measured by the achievement of social and economic objectives and not merely by some notional measurement of the state of the health of the environment alone. Thus in comparison, whereas the WCS started from the point of view of what needs to be done to conserve ecosystems in development because it makes economic sense, the Brundtland Report makes people its starting point and then goes on to discuss what kind of environmental policies are required to achieve socio-economic goals. This new form of sustainable development thinking as outlined by the Brundtland Report was further explained in terms of the strategies which were thought by it as capable of enabling countries to move away from '...their present, often destructive, processes of growth and development onto sustainable development paths.'⁴⁵ It stated the policy objectives for attaining sustainable development as follows:⁴⁶

1. Reviving growth
2. Changing the quality of growth
3. Meeting essential needs for jobs, food, energy, water and sanitation
4. Ensuring a sustainable level of population
5. Conserving and enhancing the resource base

⁴⁵ WCED (1987) *Our Common Future*, *supra*, p.49.

⁴⁶ Ibid.

6. Reorienting technology and managing risk

7. Merging environment and economics in decision making

There are two important issues which this list of policy objectives addresses. The first issue is that of economic growth. It puts on top of the list, the imperative for reviving economic growth and then goes on to stress the need for changing the quality of that growth so that it will become orientated towards meeting people's needs. In elaborating the need for growth *Our Common Future* emphasised that "development that is sustainable has to address the problem of the large number of people who live in absolute poverty-that is, who are unable to satisfy even the most basic of their needs."⁴⁷ The emphasis on the alleviation of poverty as a means of getting closer to environmental protection is predicated on the belief, which has now become well acknowledged especially in the case of the developing world, that poverty happens to be a major cause of environmental degradation.⁴⁸ Thus, by attaining more and more economic growth, countries, it is hoped, will be in a position to achieve development and improve their environmental position. However, it is essential to point out here the need for caution in embracing the concept that

⁴⁷ Ibid.

⁴⁸ See also Beckermann, W., (1992) "Economic Growth and Environment: Whose Growth? Whose Environment?" *World Development* Vol. 20 No 4. pp. 481-496 in which Beckermann argues that it is through economic growth that the environmental needs of less developed countries could be tackled.

economic growth would, on its own, be sufficient to lead to poverty alleviation. In this regard one has to point out to the explanations which have been put forward by development economists that economic growth is not necessarily the same as economic development.⁴⁹ Also, the argument which Lele⁵⁰ and others⁵¹ have made in this respect is that it was actually the failure of policies based on the idea of the possibility of 'trickling down' of benefits of economic growth to the majority of populations which necessitated the adoption of other strategies, such as the basic needs approach to economic development, by the mid-1970s. However, the observation which we shall make here is that the sustainable development policy objectives of the WCED do in fact demonstrate an emphasis on the need for development policies and measures that would focus on alleviating poverty. For example, it stated that the meeting of essential needs for jobs, food, energy, and water should be a sustainable development policy objective.

The second issue is that of the protection of the environment in the process of development. The WCED Report

⁴⁹ See for instance, Lewis, W.A. (1966) "Is Economic Growth Desirable?", in D. Novack and R. Lekachman(eds) **Development and Society: The Dynamics of Economic Change**. St Martin's Press, New York. Distinguishing economic development from the notion of economic growth, Lewis argues that it is possible to have economic growth in the sense of increasing output per capita, without the majority of the people being any better off, because the increased output enriches only a few. p. 19.

⁵⁰ Lele S.M. (1991) "Sustainable Development: A Critical Review", **World Development** Vol. 19 No.6 607-621 at p.614

⁵¹ See for instance, Streeten, P., (1979) "Basic needs: premises and promises" **Journal of Policy Modelling**, Vol 1. pp.136-146

made reference to the need for conservation and enhancement of resources as well as the integration of environmental and economic considerations in decision making. It was in fact made categorically clear in the Report that "(t)he common theme throughout this strategy for sustainable development is the need to integrate economic and ecological considerations in decision making."⁵² The Report further asserts that the compatibility of environmental and economic objectives is often lost in the pursuit of individual or group gains, with little regard for the impacts on others, and in ignorance of the distant consequences of today's decisions. It further identifies the fact that institutional rigidities add to this myopia. One such rigidity is the tendency to deal with one industry or sector in isolation, which results from failure to recognise the importance of intersectoral linkages. Many sectoral organisations tend to pursue sectoral objectives and to treat their impacts on other sectors as side effects, to be taken into account only if compelled to do so. For instance, impacts on forests rarely worry those involved in guiding public policy or business activities in the fields of energy, industrial development, crop husbandry, or foreign trade. Thus, in a nutshell, fragmentation of responsibility is the root cause of many of the problems encountered in the environment and development relationship, and it is an important requirement of sustainable development that such

⁵² WECD (1987), *Our Common Future*, *supra*. at p.62

fragmentation be overcome.⁵³

The Report then goes on to propose that a means by which such fragmentation may be overcome is through the imposition of wider responsibilities for the impacts of decisions. This would require changes in the legal and institutional frameworks that will enforce the common interest. However, It was rightly recognised, in our view, that for the legal framework to be effective community knowledge and support is required and this entails greater public participation in the decisions that affect the environment. It is noteworthy perhaps to point out that public participation was envisioned in two main ways. The first is through the decentralisation of the management of the resources upon which local communities depend, and giving the communities an effective say over the use of these resources. The second perspective relates to the impact of large scale development projects for which participation is to be done on a different basis. It states that:

Public enquiries and hearings on the development and environment impacts can help greatly in drawing attention to different points of view. Free access to relevant information and the availability of technical expertise can provide an informed basis for public discussion. When the environmental impact of a proposed project is particularly high, public scrutiny of the case should be mandatory and, wherever feasible, the decision should be subject to prior

⁵³ Ibid. p.63.

public approval, perhaps by referendum.⁵⁴

It has to be observed here that the Brundtland Report, while not suggesting principles which are entirely new, (public participation and environmental impact assessment as the means of breaking down sectoral myopia in matters of development and the environment), its emphasis on the need for legal and institutional changes to reflect these concerns highlights a new and very important point of emphasis. This relates to the significance which attaches to legal and institutional frameworks as pre-requisites to the laying of a strong foundation for upholding the values and principles of environmental protection in the sustainable development process.

Further strategies for strengthening the political, economic, social and institutional frameworks for sustainable development were summarised as follows:

1. A political system that secures effective citizen participation in decision making.
2. An economic system that is able to generate surpluses and technical knowledge on self-reliant and self-sustained basis.
3. A social system that provides for solutions for the tensions arising from disharmonious development.
4. A production system that respects the obligation to preserve the ecological basis for development.

⁵⁴ Ibid. p.63-64.

5. A technological system that can search continuously for new solutions.
6. An international system that fosters sustainable patterns of trade and finance.
7. An administrative system that is flexible and has capacity for self-correction.⁵⁵

2:1:3:1: Legal Framework

Furthermore, although the Brundtland Report did make proposals for legal and institutional reforms towards attaining the goals of environmental protection and sustainable development, it was the Experts Group on Environmental law of the WCED (ELGEL) that developed detailed legal principles in this regard. The ELGEL was established by the WCED in 1985 to prepare a report on legal principles for environmental protection and sustainable development and proposals for accelerating the development of relevant international law, for consideration by the WCED.⁵⁶ A number of guidelines were given to ELGEL and the main ones were as follows:

1. To give special attention to legal principles and rules which ought to be in place now or before the year 2000 to support environmental protection and sustainable development within and among states.

⁵⁵ Ibid p.65

⁵⁶ World Commission on Environment and Development (1987) ***Environmental Protection and Sustainable Development: Legal Principles and Recommendations***. Martinus Nijhoff Publishers, The Netherlands. p.1.

2. To prepare proposals for strengthening the legal and institutional framework for accelerating the development and application of international law in support of environmental protection and sustainable development within and among states.

The principles developed by the group were intended to provide the legal principles which could be used to develop the legal framework for environmental protection and sustainable development both within and between countries. It proposed a total of 22 articles which were divided into four parts, but the part which mainly concerns the development of legal principles for environmental protection and sustainable development within national boundaries is Part I of the report entitled 'General principles concerning natural resources and environmental interferences.'⁵⁷

It seems that as with the main Brundtland Report, the legal experts group came up with a body of principles with the aim of providing a basis for the development of legal provisions that would embody the main concepts for environmental protection and sustainable development. These principles essentially revolve around issues such as the

⁵⁷ The significance of this Part of the Report to the national perspective of environmental protection and development was affirmed by H.E. Judge Nagendra Singh in a foreword to the ELGEL report, wherein he noted that principles of Part 1 containing Articles 1-8 "...do not merely apply in areas beyond the limits of national jurisdiction or in the transboundary context, but also in the entirely domestic domain, an area which, according to traditional international law, is subject to the exclusive jurisdiction of states." Ibid p. xi-xii.

fulfilment of the needs of the present generations of human beings as well as protecting the interest of future generations of human beings, the simple definition of the concept of sustainable development. Because of the interconnection between all the eight Articles in Part One of ELGEL's report, they need to be examined together.

The first Article contains a general principle which states that every human being has a right to an environment adequate for his health and well being.⁵⁸ The second Article relates to the important attribute of the definition of sustainable development as given by the Brundtland Report, namely, the satisfaction of basic human needs of today's generation while at the same time safeguarding the ability of future generations to meet their own needs. The Article proposes that countries have the responsibility to ensure that exploitation of their environment and natural resources is not confined to the benefits of the present generation alone. This basic obligation is further elaborated in a number of additional Articles. For instance, Article Three provides that

⁵⁸ As the group itself pointed out, this was an improvement on a similar principle contained in the 1972 UN Declaration on the Human Environment which provided that "Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well being." The main reason why the Group's proposition is an improvement is that its formulation has as its direct and immediate object, the maintenance and/or restoration of an adequate environment for mankind. The principle in the 1972 UN Declaration, on the other hand, had as its direct and immediate object, "freedom, equality and adequate conditions of life". Secondly, the formulation by ELGEL refers to the more concrete notion of "health" as an interest to be protected and avoids an explicit reference to the concept of a "life of dignity" which may be taken to have been covered in the notion of "well-being".

countries must maintain ecosystems and related ecological processes essential for the functioning of the biosphere in all its variety. They must also maintain maximum biological diversity and observe the principle of *optimum* sustainable yield as against *maximum* sustainable yield in the exploitation of natural resources or ecosystems. The optimality principle means that living natural resources or ecosystems must be utilised in such a way or to such an extent that the benefits from them will be available indefinitely, otherwise failure to do that will only lead to the resource in question being diminished or extinguished altogether. But the next question which obviously comes to mind is how this conservation of resources and ecosystems for the benefit of the present and future generations will be achieved. In other words, what are the strategies that countries must adopt in order to achieve these goals of environmental protection and sustainable development? The answers to this question, as given by the experts group, are not altogether novel as we shall see in Article Four which attempts to answer the question by laying down some auxiliary action which is of a procedural and/or technical nature. Article Four says that countries were to establish specific environmental standards and both collect and disseminate data concerning natural resources and the environment. Furthermore, Article Five states that countries should make or require environmental impact assessments before carrying out or permitting activities which may significantly affect a

natural resource or the environment. In order to ensure that the people whose use of a natural resource or environment might be affected by activities are properly alerted, Article Six provides that states should inform all persons, in a timely manner, of activities which may significantly affect their use of a natural resource or environment. In addition to that however, such persons must be granted access to, and due process in, administrative and judicial proceedings.

At general policy-making and implementation level, it was proposed in Article Seven that the conservation of natural resources and the environment should be made an integral part of the planning and implementation process of any development activities. It is pertinent to point out here that, in theory at least, the process of environmental impact assessment, such as was suggested in Article Five, does provide an important means of achieving such an integration when an assessment procedure is applied to plans as well as projects relating to development activities. Article Eight, on the other hand, seeks to secure the cooperation of all countries in the course of carrying out their respective obligations contained in the proposed charter for environmental protection and sustainable development.

There can be hardly be any doubt that ELEGEL committee had come up with a set of principles which may be said to

provide a basis for sound laws and policies for environmental protection and sustainable development. Most importantly, it could be argued that they indeed reflect most of the principles that underline the understanding of the concept of sustainable development as articulated by the Brundtland Report itself. Furthermore, with a benefit of hindsight, it can be said that, the principles have influenced a number of the underlining concepts contained in the outcome of the subsequent United Nations Conference on Environment and Development held at Rio in 1992. This is clear, for instance, from the fact that a whole convention was developed by the 1992 Conference concerning the conservation of biological diversity, a concept clearly outlined in Article Three of the Expert Committees report. There are indeed other principles such as inter-generational equity, and environmental impact assessment, that have been well reflected in the various instruments that came out of the 1992 Rio Conference and we shall examine next these principles as articulated in two of such instruments, namely, the Rio Declaration on Environment and Development and Agenda 21.

2:1:4: The 1992 Rio Conference on Environment and Development

The United Nations General Assembly in 1989 passed a Resolution calling for a global meeting to devise integrated strategies that would halt and reverse the

negative impact of human behaviour on the physical environment and promote environmentally sustainable economic development in all countries.⁵⁹ Thus, the 1992 Conference on Environment and Development held at Rio de Janeiro, Brazil, was in fulfilment of that Resolution; and by the end of the Conference the following three fundamental instruments were adopted. These are:

1. The Rio Declaration on Environment and Development.
2. Agenda 21, which is a programme of action for sustainable development worldwide.
3. The Statement of principles for the Sustainable Management of Forests.

These three instruments were together meant to fulfil the mandate given to the conference in the said United Nations General Assembly Resolution. The decision to hold the conference in the first place was arrived at by the United Nations General Assembly, following the unanimous acceptance of the need to take a balanced and integrated approach to environment and development questions.⁶⁰ It became the lot of the conference therefore to come up with specific measures and principles that would actually lay the framework that would help achieve such an integration. It was also to lay the foundation which would make it

⁵⁹ See United Nations General Assembly Resolution Number 44/228 of 22nd December, 1989.

⁶⁰ United Nations (1992) *Earth Summit: The final text of agreements negotiated by Governments at the United Nations Conference on Environment and Development (UNCED), 3-14 June 1992, Rio de Janeiro, Brazil*. United Nations Department of Public Information, New York. p.15.

possible for countries to make specific policies and laws that would consciously be directed towards achieving sustainable development. So, therefore, the Earth Summit represents the most important point in the evolution of the concept of sustainable development and its outcome testifies to this by laying out a framework of specific practical steps that could be taken towards the attainment of sustainable development.

2:1:4:1: The Rio Declaration on Environment and development.

The Conference's Declaration on Environment and Development (The Rio Declaration) made it clear in its preamble that it was building on the Declaration which followed the Stockholm Conference on the Human Environment of 1972 (The Stockholm Declaration). Both conferences paid particular attention to the formulation of principles which were to guide and chart a path for mankind that would lead towards realising the objectives of sustainable development, environmental protection and steps for national and international action and cooperation.⁶¹ Several of the 27 principles of Rio Declaration emphasise the well-known principles for achieving sustainable development. Like the Brundtland Report which made the

⁶¹ For some comparative studies made between the Stockholm and Rio Declarations see, Panjabi, R.K.L. (1993) "From Stockholm to Rio: A comparison of the Declaratory Principles of International Environmental Law", *Denver Journal of International Law and Policy*. Vol. 21:2 pp.215-277; See also, Kiss, A. "The Rio Declaration on Environment and Development", in L. Campiglio, I. Pineschi, D. Siniscalco, T. Treves (1994) (eds) *The Environment After Rio-International Law and Economics*. Graham & Trotman/Martinus Nijhoff. pp.55-64.

fulfilment of the needs of human beings its first priority, the Rio Declaration also adopted^a similar position in principles 1 and 3 which provide as follows:

Principle 1: Human beings are at the centre of concerns for sustainable development. They are entitled to a healthy and productive life in harmony with nature.

Principle 3: The right to development must be fulfilled so as to equitably meet developmental and environmental needs of present and future generations.

Having declared the important principle of fulfilling the developmental needs of human beings as being at the root of sustainable development, the Rio Declaration goes on to categorically state in principle Four, what effectively is the basis for securing the protection of environment in the course of development:

Principle 4: In order to achieve sustainable development, environmental protection shall constitute an integral part of the development process and cannot be considered in isolation from it.

Then on the issue of environmental protection itself within national boundaries, several principles have been proposed by the Rio Declaration. These include access by citizens to environmental information(principle 10); setting of

environmental standards by countries at the domestic level(principle 11); environmental impact assessment of development projects(principle 17); role of women in environmental management(principle 20); role of indigenous people and local communities in environmental management(principle 22) and the relationship between warfare, peace and environmental protection(principles 24, 25, 26.).

Other principles also talk about the need for international cooperation in a number of areas which are important for environmental protection and sustainable development; cooperation to conserve, protect and restore the health and integrity of the earth's ecosystem(principle 7), cooperation towards exchanges of scientific and technological knowledge(principle 9), cooperation to promote supportive and open international economic system(principle 13), cooperation to discourage or prevent relocation of polluting activities to other countries(principle 14), obligation to notify other states of any natural disasters or emergencies (principle 18), obligation to provide for prior and timely notification and information about harmful activities that might impact other states(principle 19), and cooperation to further develop international environmental law(principle 27).

2:1:5: AGENDA 21: A blueprint for action for global sustainable development into the 21st century.

Agenda 21 is a document which addresses, in great detail, the issue of how to achieve sustainable development as agreed upon by the participants of the 1992 Rio de Janeiro Conference. Its main focus is on the steps which should be taken by governments individually and collectively in order to achieve an integrated approach to environmental and developmental concerns in the process of development. It argues that it is the integration of environment and development concerns and paying greater attention to them which will lead to the "fulfilment of basic needs, improved living standards for all, better protected and managed ecosystems and a safer, more prosperous future."⁶² This preambular statement clearly points out the conception of sustainable development as used in Agenda 21 document itself. There is thus no doubt about its being mainly concerned with the issues of environment and development and quite in the same sense and fashion as the WCED conceived the concept in the Brundtland Report. But the next question is how does Agenda 21 goes about outlining its programme of action for sustainable development? The document has a total of 40 chapters on various aspects and issues that pertain to environment and development. Each chapter gives details of programme areas for that topic and within each programme area there is further information covering: the basis for action, objectives, activities and

⁶² United Nations Conference on Environment and Development (UNCED) (1992), "Preamble" of **Agenda 21: Programme of action for Sustainable Development**. United Nations Department of Public Information, New York. p.15

means of implementation. The most relevant chapters for our discussion, however, are chapters 8 and 18 dealing with integration of environment and development in decision-making and integrated approaches to the development and use of water resources, respectively. These two chapters allude to the role of law in achieving sustainable development as well as the essential principles for the sustainable development and management of water resources.

2:1:5:1: Integrating Environment and Development and the role of law.

Chapter Eight of Agenda 21 appears to have been based on the premise that the integration of environment and development concerns could best be achieved through the fundamental reshaping of decision-making systems. This becomes necessary because what tends to be the prevailing situation globally seems to be that environmental, social and economic factors are often treated or considered separately at the three important levels of policy-making, planning and management. The overall objective, therefore, is to improve or restructure the decision-making process so that consideration of socio-economic and environmental issues is fully integrated and a broader range of public participation assured.⁶³ The measures put forward here for achieving that include the strengthening of institutional

⁶³ Ibid., p.65

structures to allow a full integration of environmental and developmental issues at all levels of decision-making; and the development or improvement of mechanisms to facilitate the involvement of concerned individuals, groups and organisations in decision-making at all relevant levels.

The second programme area of chapter Eight relates to the role of law in the process of sustainable development generally. At the beginning of the chapter it was emphasised that law and regulations are among the most important instruments for achieving sustainable development.⁶⁴ Thus, an important principle for effectively integrating environment and development in the policies and practices of a country is the development and implementation of integrated, enforceable and effective laws and regulations. The essential precondition for these laws and regulations, however, is that they must be based upon sound social, ecological, economic and scientific principles. Furthermore, it is equally important to develop workable programmes for the periodic review and monitoring of compliance with laws, regulations and any standards that have been put in place. It must be pointed out though that the adoption of these measures followed the realisation that there are problems concerning the availability and effectiveness of laws in this area of environment and

⁶⁴ Ibid. It was stated that: Laws and regulations suited to country specific conditions are among the most important instruments for transforming environment and development policies into action, not only through "command and control" methods, but also as normative framework for economic planning and market instruments. (p.68)

development. Two problems were actually identified which represented the state of affairs then in many countries. The first problem is that although there is a steady increase of legal texts in this field, much of the law-making in many countries is ad hoc and piecemeal, or has not been endowed with the necessary institutional machinery and authority for enforcement and timely adjustment. The second problem is that while there is a continuous need for law improvement in all countries, many developing countries have been particularly affected by shortcomings of laws and regulations.

2:1:5:2: The Management of Water Resources.

The central message of chapter 18 of Agenda 21 is that because of the widespread scarcity, gradual destruction and aggravated pollution of freshwater resources in many regions of the world, and the progressive encroachment of incompatible human activities, the way forward lies in embracing integrated water resources planning and management. Such integration must cover all types of freshwater bodies including both surface and groundwater water. A number of programme areas were carved out for freshwater as indicated below:

- a Integrated water resources development and management
- b Water resources assessment
- c Protection of water resources
- d Drinking water supply and sanitation
- e Water and sustainable urban development
- f Water for sustainable food production and rural

development;

g Impact of climate change on water resources.

In terms of the general principles for the sustainable management of water resources in the context of sustainable development, the following is a synthesis of what the chapter provides:

(1) In the development and usage of water resources, priority has to be given to the satisfaction of basic needs of human beings and the safeguarding of ecosystems;

(2) Integrated water resources management requires a holistic basin or catchment-wide approach to water resource as a finite and vulnerable resource and the integration of sectoral water plans and programmes within the framework of national social and economic policy.

(3) Water-management policy-making and decision-making require full public participation, including that of women, youths, indigenous people and local communities;

(4) The practical application of the notion of holistic management of water resources requires the integration of water protection measures with land-use planning, forest resource utilisation, protection of mountain slopes, river banks and the like;

(5) All major water resources development projects have to undergo mandatory environmental impact assessment.

It can clearly be seen that Agenda 21's treatment of water resources has touched on the most important aspects and

principles of the concept of sustainable development as articulated by the Brundtland Report, such as fulfilment of basic needs, protection of natural environment, public participation and even a suggestion for mandatory environmental impact assessment of water resources development projects. In a way, the comprehensive approach to the management of water resources in Agenda 21 could be seen as having fully filled up the gap which the Brundtland Report created in its own work.⁶⁵ In many respects, therefore, it can be said that chapter 18 has laid an important foundation for the making of a water resources management framework within national boundaries, but, as McCaffrey⁶⁶ has noted, the issue of transboundary or international water resources should have received greater attention than it was given under the chapter.⁶⁷

2.2: The Role of Law in Sustainable Development

Going by the influence which the concept of sustainable development, as articulated by the Brundtland Report and

⁶⁵ Water resource was not included in the issues actually discussed by the Brundtland Report in spite of the massive impact that water scarcity has on Third World development in particular. See Falkenmark M., (1988), "Sustainable Development as Seen from a Water Perspective", in, Stockholm Group on Natural Resources Management (SGNRM) (eds) ***Perspectives on Sustainable Development: Some Critical Issues Related to the Brundtland Report***. Published by SGNRM, Stockholm.pp.77-84.

⁶⁶ McCaffrey S. (1994) The Management of Water Resources, in L.Campiglio, et al, (eds) ***The Environment after Rio: International Law and Economics***. Graham & Trotman. pp.149-160 at 159.

⁶⁷ Ibid. p.159, wherein he stated that: "Confirming the lack of emphasis given to transboundary water resources is the lack of a separate programme area for these water resources." And he went on to conclude at p.160 that "[f]inally it is to be hoped that states, as well as donor organisations and countries, will encourage holistic protection and management of international watercourses to the same extent that Agenda 21 does for national ones."(italics in original)

subsequently emphasised by the Rio conference of 1992, has had on discussions about environment and development, it is quite arguable that nations and indeed the international community have no alternative than to embrace the principles of the concept as forming the developmental paradigm of their present as well as future development programmes. But the obvious question that would come to mind here is actually about how to institutionalise this development paradigm i.e. sustainable development, as an essential aspect of the entire development process for individual countries as well as the international community. In other words, what are the means by which it will be ensured that all the issues and concerns about sustainable development are routinely addressed and implemented in the course of a nation's development process? This is a very important question because, as we have seen earlier on, the concept of sustainable development portends the adoption of some far-reaching public policy measures both at national and international levels. Furthermore the challenge of sustainable development both as a basis for a broad national developmental paradigm and also as a paradigm for the making and execution of specific development projects has implications for a number of disciplines, not least of which is the discipline of law. J. O. Saunders⁶⁸

⁶⁸ Saunders, J.O. (1990) "The path to Sustainable development: A Role for law." in J.O. Saunders (ed) ***The Legal Challenge of Sustainable Development-Essays from the fourth Institute Conference on Natural Resources law***. Canadian Institute of Resources Law. Calgary, Canada. p.2

emphasised this point when he stated that "...just as the concept of sustainable development arguably portends important changes in both domestic and international legal regimes, so too it holds far-reaching implications for other disciplines, with respect to both their assumptions and the tasks that may be required of them."⁶⁹ Saunders particularly points out that law has an important role to play in the move towards a world characterised by sustainable development and identifies three important lessons that would be enriching to the law's function. The first lesson is that the role of law would be an integrated one, whereby law (and lawyers) would more than ever before, be aware of the findings and contributions to the concept of sustainable development of other disciplines, especially in the physical and social sciences. This would provide a means of achieving a fuller understanding of societal values and goals. The second lesson which is a concomitant to the expanded interaction of law and other disciplines, is that law must become more creative in the instruments it brings to bear on issues of sustainable development. This might, to some extent, involve improving or extending existing techniques that have been developed by traditional environmental law and even other legal techniques not normally associated with environmental policy such as the tax system. The third and final lesson is the "translation" function of law. Here the fact that law is often used to translate general policy into specific action creates the

⁶⁹ Ibid.

opportunity for lawyers to become increasingly creative in addressing the new environmental agenda of sustainable development. Also, in the process of articulating the norms of sustainable development, law facilitates the circulation of ideas among disciplines and to a certain extent, then, "the common vocabulary in which the objectives of sustainable development will be discussed will be the legal language and principles that give voice to them."⁷⁰ This translation role can also be seen in the way developments in domestic arenas have effect amongst the wider international ones. This involves translating norms that have been developed within national jurisdictions into principles that have global application and validity. An important example of a domestic norm that appears to have been accepted as part of the international legal vocabulary is Environmental Impact Assessment, a technique which, as we shall see, has special relevance to the implementation of sustainable development.

It is perhaps necessary at this juncture to state the argument that the attainment of sustainable development and environmental protection goals in the process of development generally, boil down to one critical instrument. This critical instrument or method through which many concerns of sustainable development could be addressed and tackled is the process of Environmental Impact Assessment which appears to have gained widespread

⁷⁰Ibid. p.13

use and acceptance universally as an important tool in environmental protection and sustainable development.⁷¹ In fact, as P.S. Elder and W.A. Ross⁷² have argued, Environmental Impact Assessment is a sound vehicle that offers the best possibility for addressing some of the pressing concerns raised with respect to sustainable development. Their proposal is that there should be established, some "maximum feasible sustainability" criteria to be satisfied by a proposed project.⁷³ An environmental impact assessment procedure of development projects does have the potential to act as a medium for securing the achievement of sustainable development at two levels.

The first level is that of the specific development project concerned in a given sector, such as the building of a dam, which is a common water resources development project. At this level, an environmental impact assessment would enable the project proposal to be appraised about its sustainability or how it fares as far as the principles of sustainable development are concerned. The second level is that of the overall national strategy or programme for

⁷¹ See for instance, Elder, P.S. and Ross W.A. (1990) "How to ensure that Developments are Environmentally Sustainable", in J.O.Saunders (ed) ***The legal Challenge of Sustainable Development. Essays from the Fourth Institute Conference on Natural resources Law.*** Canadian Institute of Resources Law, Calgary. pp.125-140

⁷² Elder P.S. and Ross W.A. "How to Ensure that Developments are Environmentally Sustainable", in J.O.Saunders (ed) ***The Legal Challenge of Sustainable Development, supra.*** pp. 125-140.

⁷³ Ibid. p.131.

sustainable development. Here an environmental impact assessment would serve the function of determining whether a proposed project complies with the sustainable development criteria for such class of projects in the context of the whole country. In a nutshell therefore, this is what the principle of environmental impact assessment is about. Although environmental impact assessment could arguably be said to be a desirable process for implementing a sustainable development framework, an issue that is important is the instrumentality by which it is actually implemented in a country. That is to say whether the environmental impact assessment is to be carried out as a matter of law or simply left as an administrative measure. In this respect one would argue that the environmental impact assessment for development projects should be institutionalised by law. There are reasons for this. First, as we have seen both within the Brundtland Report and the Rio Declaration and Agenda 21, environmental impact assessment has been stated as an important aspect of the entire sustainable development paradigm. Secondly, a reflection upon the numerous principles for sustainable development would reveal that only some kind of legislative provision would guarantee that they are carefully adhered to. There is also no doubt about the significant transformation which sustainable development portends and certainly law has been identified as a strong medium for

attaining many kinds of societal transformations.⁷⁴

However, although there might be a case for using law to facilitate the attainment of sustainable development and as a tool for environmental management in general, it is equally important to consider how effective an instrument law could actually be in achieving those objectives. The general experience, particularly in some countries of the developing world, suggests that there are many constraints which limit the utility of law towards achieving the desired goals of development and societal transformation⁷⁵. These constraints, as we have seen, range from the reluctance to make the laws themselves unless they serve class interests and where they are even made, the deficiencies which they suffer from, to the problems of lack of observance and enforcement.⁷⁶ With this in view however, it is intended in this thesis to show that the development process in Nigeria, especially in the context

⁷⁴ See Seidman, R.B. (1977) *The State, Law and Development*, supra. pp.17 & 18. See also Paul, J.C.N. and Dias, C.J.(1982) "State-managed Development: A legal Critique", *Third World Legal Studies-Law in the Alternative Strategies of Rural Development*. A publication of the International Third World Legal Studies Association. New York. pp.35-58 who emphasised the instrumental function of law in the context of rural development programmes which are instituted by governments. They stated that: "State-managed programs to bring essential resources and other benefits to rural people are creatures of law as well as political economy and ideology. Different kinds of law can be used to organise administration and direct it toward prescribed objects, to create different kinds of institutions and to allocate power and roles within them. Similarly, different bodies of law can be used to prescribe processes for making decisions which dispose the agency's powers; and other bodies of law may be used to establish systems of review and regulation in order to hold actors accountable and to identify measures needed to reform existing structures."(p.35)

⁷⁵ See Chapter One, supra.

⁷⁶ Ibid. p.18

of water resources development and management, has not taken into account the significant contribution which law could make to protect the environment and help realise the essential socio-economic upliftment of people which now forms part of the core elements of sustainable development. In order to put the discussion in perspective, we shall begin from a general discussion of the nation's environmental problems and their legal regulation before narrowing on the specific problem of water resources development projects. The aim is to expose the fact that at a general level, the development of environmental law in Nigeria has not followed any coherent principles or framework which can be said to be in line with the current mainstream understanding of the concept of sustainable development.

2: 3: Conclusion.

This chapter has tried to present an overview of the essential elements necessary for the achievement of sustainable development. The conclusion one can draw from the discussion in this chapter is that the adoption of the principles of environmental protection and sustainable development has become unavoidable, if Nigeria is to attain the necessary socio-economic transformation of its society and protection of its environment, and most importantly, to live up to its wider International obligations on the protection of the environment.

CHAPTER THREE

THE CURRENT LEGAL AND INSTITUTIONAL FRAMEWORK FOR THE PROTECTION OF THE NIGERIAN ENVIRONMENT.

3: 0: Introduction.

By and large, the strength of any framework for environmental protection will undoubtedly be enhanced by the fundamental principles used in building its foundation. Such a framework can be contrasted with a situation in which laws and policies are simply made at random without regard to any pre-determined framework built on coherent principles. This chapter intends to show that the development of the framework for environmental protection in Nigeria followed the latter model and could not have enhanced its strength in the path towards sustainable development. It is intended to demonstrate that this failure has resulted in uncertainty and confusion over some constitutional and institutional issues concerning environmental protection.

The discussion shall first examine the constitutional perspectives to the protection of the environment. Thereafter a consideration will be made of the institutional framework for environmental protection and management at the various tiers of Government. On the Constitutional plane, the issues to be examined are those concerning human right to a healthy environment and the power to regulate environmental protection matters within

the Federation. It is important to point out that the decision to make the country's Constitution the starting point for our enquiry here is based on the understanding that it is the bastion of the safeguards for fundamental human rights as well as the basis of any legislative activity by the various tiers of government.¹

3.1: Constitutional Issues.

3:1:1: The Origins and Meaning of the Concept of Right to a healthy Environment.

The fact that the existence of a healthy and humane environment is a necessary condition to both the physiological and psychological well-being of every human being underlines the significance of the concept of a human right to the environment. This view had its first recognition at the United Nations Conference on the human environment held at Stockholm, Sweden in 1972 (the Stockholm conference). Principle 1 of the Declaration of the conference makes the point quite clearly and it states that:

Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality which permits a life of dignity and well-being...²

¹ Let it be made clear here that this presumption holds true in Nigeria only during those periods in which a democratic constitution is in place. Otherwise, as we shall see later in the chapter, the military dictatorships in control of Government have always made their military Decrees superior to any constitutional provisions that might be in force.

² See The United Nations Conference on the Human Environment and 1972, Declarations. Principle 1.

The Declaration recognises that the enjoyment of life of dignity and well-being has as a pre-requisite in, among others, the existence of a qualitative environment. The rationale here being the realisation that there is some kind of functional relationship between human beings and the environment. In the course of their existence, human beings need an environment in which it will be possible to fulfil their fundamental, inevitable and existential requirements both of a biological and psychological nature. In order to achieve this goal, it is necessary to have an environment of the required quality, fully secured and guaranteed to the degree that will make it possible to have the function of the environment in relation to man fulfilled.³

The concept of human right to a healthy environment was further expounded by the Experts Group on Environmental Law (ELGEL) set up by the World Commission on Environment and Development (WCED) which clearly stipulated that 'all human beings have the fundamental right to an environment adequate for their health and well-being.'⁴ Although the recommendations of ELGEL were not entirely adopted by the subsequent UN Conference on Environment and Development at Rio in 1992, their work did help focus attention on the

³ See Steiger, H. (1980), "The Fundamental Right to a Decent Environment.", in, M. BOETHE (ed), *Trends in Environmental law*. I.U.C.N. Gland. Switzerland.

⁴ See Lammers, J.G. (1987) (ed) *Environmental Protection and Sustainable Development: Legal Principles and Recommendations*, Graham & Trotman/Nijhoff, London/Dordrecht/Boston. p.38 (Article 1).

principle involved. This can, in fact, be seen in the way the Rio Declaration adopted by the said Conference made human beings the fundamental focal point of sustainable development. Principle One of the Declaration states that:

Human beings are at the centre of concern for sustainable development. They are entitled to a healthy and productive life in harmony with nature.⁵

The question which needs addressing here is: how useful is it to adopt a human right approach in the protection of the environment? The submission one makes here is that it is indeed important and necessary. The Rio Declaration has demonstrated for instance, that there is now a greater willingness amongst nations to accept that environment and development are no longer contradictory and that there is a need for the consideration of environmental concerns whenever development policies and programmes are made or undertaken. This is in line with the thrust of the concept of sustainable development. However, since development is a continuous process and developing countries, like Nigeria, would remain keen to exploit their natural resources and try to industrialise as much as such resources would sustainably allow, it becomes absolutely essential to have in place, a means of ensuring that a healthy environment for human beings becomes a prominent consideration of the process. This is achievable, it is submitted, by securing this human consideration as a human

⁵ World Commission on Environment and Development (1993) **The Earth Summit**. Graham and Trotman, London.

right within the legal framework of environmental protection and sustainable development.

As to the basis of the fundamental right to the environment, recourse should be had to those international conventions and declarations which provided the proforma of basic fundamental human Rights for universal adoption and application. Of particular significance is the right to life which has been accepted by all nations and enshrined in Constitutions. It is important to point out here that it is this fundamental right to life which actually makes the right to a healthy environment very significant. The preamble to the Declaration of the 1972 Stockholm conference on the human environment demonstrates the relationship that there is between the environment and the fundamental human right to life. The preamble in part states that:

Both aspects of man's environment, the natural and the man-made are essential to his well-being and to the enjoyment of basic human rights even the right to life itself.⁶

This part of the preamble thus acknowledges that for man to enjoy the much-coveted human rights, especially the right to life, he needs a sound environment both natural and human. It is also to be remembered that human rights in general are based on mankind's increasing demand for a

⁶ Report of the United Nations Conference on the Human Environment, Stockholm. June 5-16, 1972. New York p.3

decent civilised life in which the inherent dignity of each human being will receive respect and protection.

Also, Article 3 of the Universal Declaration of Human Rights and Article 6 of the International Convention on Civil and Political Rights provide for right to life in an adequate environment. Furthermore, Article 11(1) of the International Convention on Economic, Social and Cultural Rights and Article 25(10) of the Universal Declaration of Human Rights urge for provision of "standard of living for human beings including adequate food, clothing, housing and continuous improvement of living conditions." Although these merely urge for the provision of essential things required for a decent life, it is impossible to divorce them from the requirement for a healthy environment. This is because a healthy environment should be seen as part of the package of any imaginable and reasonable standard of living. The provisions cited so far do indicate that there is a sound basis in International Conventions for the guarantee in national legal systems and that of Nigeria in particular, of fundamental right to a decent environment.

It is interesting to point out that in India, which like Nigeria is a common law country, the fundamental right to life as enshrined in Article 21 of the Constitution has already been interpreted by the courts as a basis for the

fundamental right to an adequate environment.⁷ While laying the foundation for a positive interpretation of right to life Justice Baghwati ⁸ said:

The right to life enshrined in Article 21 cannot be restricted to mere animal existence. It means something more than just physical survival. The right to life includes the right to live with human dignity and all that goes along with it; namely, the bare necessities of life such as adequate nutrition, clothing and shelter over the head ...

It was through the positive interpretation of the right to life in the Indian Constitution and the enforcement of Articles 48(A)⁹ and 51(A)g¹⁰ of the Constitution that the Courts entertained and decided cases concerning the protection of the environment. Thus in the case of **MUNICIPAL COUNCIL, RATLAM V SHRI VARDICHAND**¹¹ the Supreme Court accepted a petition (not in compliance with the court's own procedural rules) from the members of the public who challenged the inability of the municipal

⁷ See Saxena, J.N. (1987) "Environment Protection: A much neglected Human Right.", in, R.P. Anand, et al, (ed), **Law, Science and Environment. supra.**

⁸ In the case of **Francis Coralie Mullin V The Administrator of Union Tertiary of Delhi and Others.** 1981 S.C. 746 at 752.

⁹ Article 51(A)g of the Indian constitution imposes a duty on citizens

...to improve and protect the natural environment including forests, lakes, rivers and wildlife and to have compassion for living creatures.

¹⁰ Article 48(A) of the Indian constitution provides:
The state shall endeavour to protect and improve the environment and safeguard the forests and wildlife of the country.

¹¹ 1980 A.I.R. S.C. 1622; see also **Rural litigation Entitlement Kendra V State of Utah Pradesh** 1988 S.C. 2187.

council to abate pollution problem which affected members of the public at large. The Supreme Court waived the necessity of compliance with procedural matters in the filing of such actions, stating that it did so because the problems were of grave public importance. It is interesting to note that in this case the Supreme Court clearly stated that the duty provided for under Article 47(A) of the Constitution of India, which imposes a duty to protect and improve the environment, requires the council to protect public health from insanitary conditions. The fulfilment of this duty must be given priority and the council should go to the extent of slimming its budget on "low priority items and elitist projects"¹² in order to use the savings on sanitation and public health.

A commentator on Indian constitutional and environmental laws, Errabi¹³ argues that the judicial interpretation given to the right to life is a welcome development, for it would be impossible to live with human dignity without a clean and healthy environment.¹⁴ He also submits that the combined effects of Articles 21 and 48(A) of the Indian Constitution is to create a positive right to compel the state to take affirmative steps to protect and improve the environment. This is because although the citizens have

¹² See Ratlam's case, Ibid

¹³ Errabi, B., (1987), "Environmental Protection: Constitutional Imperatives-Indian Experience", in, R.P.ANAND et al, (eds) supra.

¹⁴ Ibid, p. 190.

been similarly enjoined under Article 51(a)g of the Constitution not to indulge in wanton destruction and impairment of the environment, they could be under compulsion to do so due to the force of certain socio-economic circumstances which are beyond their control. It is here that the Government's Constitutional duty to provide the necessary wherewithal to enable them to exercise and enjoy their right to live with human dignity would become prominent. Hence, so long as the State does not fulfil this Constitutional obligation, it cannot expect the citizens to carry out their duty to protect and improve the environment.

Although judicial activism in India has led to positive developments in environmental protection in the country, some¹⁵ still think that it is necessary to have an express and explicit constitutional guarantee of a fundamental right to a clean environment. This is because what obtains now in India is attributable to the favourable interpretation given to the constitutional provisions mentioned. So it will be necessary to have a constitutional guarantee that will take away the issue from the vagaries of judicial activism which would only be sustained via judicial cooperation. The answer therefore should arguably lie in securing such a fundamental right in the justiciable

¹⁵ Ibid, 191; Cf. Chaser, (1990), **Pollution and the Environmental law**. Printwell Publishers. Jaipur, India p.164-165 who thinks that the courts have no option but to attain the constitutional goal through the judicial activism.

portion of the Constitution, namely, part III thereof.¹⁶

The general import of this Indian experience is that the right to a healthy environment should be secured through a framework of legal and institutional guarantees.¹⁷ It has been observed that there are two levels at which the human right to the environment may be guaranteed and these are the constitutional and the ordinary statutory levels.¹⁸ This distinction has been premised on the ground that not all states have provisions in their Constitutions protecting the position of the individual with respect to the environment. Such protection can be found only in ordinary legislation and sometimes, even in the states that have provisions in their Constitutions guaranteeing environmental rights, it might be necessary to pass the ordinary legislation in order to make them enforceable. An example of a country in which the right to a healthy environment has been expressly provided for in the Constitution is Portugal. Article 10 of Portugal's Constitution provides that everyone has the right to a healthy and balanced environment. Article 10(2) further provides certain duties on the state in order to complement the right guaranteed earlier on. Paragraph 3 of same Article 10 says that every citizen has the right to claim,

¹⁶ Errabi, B., *supra*, calls for the insertion into the Indian constitution, and in the concurrent list of the 7th schedule thereof, an item entitled "Environment Protection " with a clear definition of the matters to come within its ambit.

¹⁷ *Ibid.* p. 5

¹⁸ *Ibid.*

in accordance with the provisions established by law, the termination of the causes which infringe upon his right to a healthy environment and he can also demand for an appropriate compensation.

Similarly, Article 45 of the Spanish Constitution establishes the right of all persons to enjoy an environment suitable to their individual development. The same position is contained in the constitution of the state of Pennsylvania, U.S.A., which provides that people have a right to clean air, pure water and to the preservation of the natural scenic and aesthetic values of the environment.

3: 1: 2: The Right to a Healthy Environment in Nigeria.

The discussion so far has shown that there is indeed a recognition of the concept of a fundamental right to a healthy environment both in theory and practice and that it has even attained the status of a Constitutional provision in many countries. It is interesting to note, however, that the situation in Nigeria is far from being clear or certain. To start with, the constitution is silent about an express right to a healthy environment and neither is there any available literature expounding the concept from the country's perspective. The country's Courts have not as yet passed any judgement in which, like their Indian counterparts, they have interpreted any constitutional provision or statute affirming the citizen's fundamental

right to a healthy environment. This absence of any fundamental right to the environment could perhaps be explained only in the context of the total lack of concern for the environment in general by the various Nigerian Governments in the 1970's and early 1980's. There was very little consciousness about the need for a proper environmental protection framework amongst the nation's development planners which could have led to the evolution of environmental rights. It is curious to observe that it is a sad fact on our policy makers that they failed to focus attention on environmental protection in the country in the 1970s because that was the time when the concept dominated issues of development amongst the International community following the United Nations conference on Environment and Development at Stockholm in 1972. Generally one finds that environmental protection was never a distinct focal point of government policy or law until towards the end of the 1980's. It should be recognised though that there have been scattered legislations which had some environmental protection content in them but such a goal was usually a supplementary one. In this respect, in 1982, the then National Assembly considered a bill to provide for a national environmental policy with a federal Government backed Agency to administer it.¹⁹ The bill, though duly passed by the Assembly, did not materialise

¹⁹ See Shyllon, F., (1989), " Present and Future Institutional Framework for Environmental Management in Nigeria", in, F.Shyllon, (ed), **The law and the Environment in Nigeria**. Vantage Publishers, Ibadan, Nigeria. P. 91.

into law as the civilian regime was overthrown by a Military Government in 1983. The later part of the 1980s however saw the rise of environmental protection consciousness both amongst the policy makers and the population at large. This is attributable to the illegal dumping of toxic waste imported from Italy. Soon after the discovery of the waste the Federal Military Government swung into action and published two important Legislations in 1988 which provided for an environmental protection framework for the nation.

The 1989 Constitution of the country, abolished by the military even before it became completely operative, was under revision by a National Constituent Assembly when the illegal waste dumping took place. One would have expected that the framers of the new constitution to advert their minds to the important issue of guaranteeing environmental rights for this and future generations of Nigerians. But this did not only not happen, but the subject of environment completely escaped any mention in the new constitution. Thus the country does not at least have the kind of constitutionally imposed state and citizen duties and obligations in the constitution. It is important at this point perhaps to reflect on the possible advantage of this guarantee of environmental rights.

The fundamental significance of an express right to a healthy environment is that it will provide a clear basis

on which the courts will proceed to entertain actions in order to translate to reality the rights of citizens who wish to enforce their right to a clean and healthy environment. This is clearly necessary as the floodgate of locus Standi at the moment is a stumbling block to any such actions in the country. It is believed that the public interest litigation as it now obtains in the U.S.A. and India does serve the interest of individuals and communities who wish to intervene and force authorities to live up to their environmental responsibilities. This mechanism of judicial enforcement would be very much strengthened if there was in place a constitutional provision which guarantees the right of the citizen to a clean and healthy environment instead of leaving it to the vagaries of judicial cooperation.

But since there is no express provision at the moment in the country that the courts can invoke to permit the citizens to maintain an action in the name of protecting their environmental right, the question which comes to mind is: should the courts give a positive interpretation to the provisions in the Nigerian constitution which are similar to, say, those in the Indian Constitution? In the context of environmental obligations and duties of both the state and the citizens, the Nigerian Constitution does not have any parallel to Articles 48(A) and 52(A)g of the Indian Constitution which were incorporated in 1976 to provide for such obligations and responsibilities. Therefore decisions

based on such sections of the constitution in India might not even be of the required persuasive effect to the Nigerian courts. However on the question of looking at the fundamental right to the environment as emanating from the right to life, there is a case to be made for the Nigerian courts to grant a positive interpretation and uphold that the citizen has a fundamental right to a healthy environment which is a pre-requisite for the enjoyment of life itself. In addition to the right to life itself, there is to be found in the Federal Government's published National Environmental Policy, a clear commitment on the part of the government to "secure for all Nigerians a quality of environment adequate for their health and well-being."²⁰ Although this has not yet been translated into any legislative product, it does provide a basis for saying that the intention exists on the part of government to provide a healthy and adequate environment for its citizens. With this background, the Nigerian courts, when faced with the opportunity, should be able to impute into the right to life section of the constitution, the right to a healthy and qualitative environment. But this certainly will not be as good as having an express provision to that effect in the constitution since people are entitled to have a sense of security which the constitution, as the fundamental law of the land, ought to provide.

²⁰ Federal Environmental Protection Agency, (1989) **National Policy on the Environment**. p. 5.

3: 2: Legislative Capacity on Environmental Protection Matters.

There is no mention of the term "environment" or "environmental protection" as a legislative subject in the current or any of the previous constitutions of the country.²¹ The term cannot be found either in the exclusive or concurrent legislative lists contained in the schedules to the constitution. It should be conceded though that the express provision of environmental protection matters within legislative lists is not yet a common occurrence or something very universal as such. It is noteworthy that even in an environmentally conscious country such as India²², the constitution there has not expressly provided for environmental protection in the legislative lists, although it has imposed general obligations on the protection of the environment in the Directive principles and Objectives of state Policy as far back as 1976.²³ This, however, is not to say that there are no provisions in Nigeria's Constitutions which provide for the regulation of matters relating to the protection of the environment.

²¹ Since independence the country has had three constitutions. The independence constitution, 1960; the 1963 Republican constitution; the 1979 constitution, and the 1989 constitution. Following the return of the military to power in 1993, the 1989 Constitution was suspended and a return was made back to the 1979 Constitution. A new Constitution has however been fashioned out and would come into force in 1998.

²² The reference to India here is because it provides a good example of a developing nation where environmental issues appear to have been well recognised and embedded in the legal system.

²³ See Sharma, S.P., (1987), "Constitutional law Perspectives for Environmental Protection in India: A brief Study.", in R.P. Anand, et al, (eds), **Law, Science and Environment**. Lancer Books. New Delhi. P. 244.

Rather what is absent is a direct provision which focuses on the protection of the environment in the Constitution. So the various pieces of legislation which different Governments have passed having some bearing on environmental protection were passed pursuant to some incidental or supplementary powers to other substantive powers conferred by the constitution.

It should be noted though that the subject of environmental protection and management is increasingly becoming an essential element of the development process. This makes it very important in the scheme of things and therefore requires some specific mentioning in the fundamental law of the country. There is little doubt left in people's minds nowadays that environmental degradation is a real threat and that the responsibility for regulating the environment requires a clear definition in the nation's most fundamental law, the constitution. It is thus submitted that the power to regulate the environment in a federation such as Nigeria's should have been clearly defined and the appropriate tiers of government accordingly conferred with their appropriate roles. In the absence of this clear definition and conferment of legislative capacity in the constitution, what then is the basis on which the federal and state legislatures could legislate on environmental protection matters. It has to be pointed out that there is a potential for conflict between the two tiers of government [state and federal] over who should regulate

what on matters of the environment, which could either be avoided or easily resolved where there is a clear definition by the constitution.

With the non-inclusion of environment protection as a subject in the legislative scheme of the constitution the question that may be asked is: are matters relating to the environment to be considered as incidental or supplementary to the items contained in the exclusive and concurrent lists or are they simply to be considered as residual matters? Each of these two options has its own disadvantages. If environmental matters are to be considered as incidental and supplementary to matters in the exclusive and concurrent lists then the desired aim of achieving a comprehensive environmental policy, as opposed to mere focus on sectoral perspectives, will hardly be realised. On the other hand, if they are to be considered as residuary matters which then puts them in the exclusive legislative competence of state legislatures²⁴, then it will be difficult to achieve a fairly standard uniform approach to the measures for the protection of the federation's environment.

A way out of the conundrum is to consider matters of the environment as coming within the concurrent legislative competence which enables both the national and state

²⁴ The only exception being where the matter to be legislated upon relates to the implementation of a treaty. See section 13(2) of the 1989 Constitution.

legislatures to legislate on them as against making them exclusive to either of the tiers. Although concurrent powers are not co-extensive in all cases²⁵ there seem to be supportive reasons for saying that both tiers can legislate with a view to protection of the environment on various aspects thereof. Two reasons will be advanced for this position. Firstly, the 1979 constitution²⁶ has provided that both National and State legislatures could make laws for the sake of "maintenance and securing of public safety and public order"²⁷ within the Federation. Under this provision it could be argued that a law made for the regulation of emission of hazardous effluent in order to prevent and control pollution could be said to have been made for the sake of public safety.²⁸ Thus the provision provides a common ground on which the exercise of legislative powers over environmental protection matters by both tiers of government could be justified. Secondly, one finds a number of enactments at both federal and state levels of Government that relate to the protection of the environment. This is more pronounced at the federal level where laws were made pursuant to the supplementary powers conferred on it on some legislative items. So it would only

²⁵See Nwabueze, B.O., (1983) **Federalism in Nigeria Under the Presidential Constitution**. Sweet & Maxwell, London. P. 59.

²⁶ See Section 12 subsections (2) and (3) of the 1989 constitution which is similar to section 11(2) of the 1979 constitution.

²⁷ Ibid.

²⁸ See Osinbanjo, Y., (1990), " Some Public law considerations in Environmental protection ", in, J.A.Omotola, (ed), **Environmental laws in Nigeria Including compensation**. Faculty of law, University of Lagos. P.131.

be appropriate that both are allowed to legislate *albeit* within a more clearly defined environmental policy framework.

3:2:1: Concurrent Powers and Laws.

It is quite important to the discussion to examine the philosophy of including matters within concurrent legislative provisions and the legal consequences of legislations made thereunder. The issue of concurrent powers and legislation is an important component of a federal system of government because that is the section of the constitution wherein legislative items of common interest to both the federal and state governments are provided.²⁹ Thus the concurrent provisions usually contain provisions on matters which represent some kind of compromise positions on the legislative capabilities of both the national and state legislatures on those issues.³⁰ In practice however certain conflicts do arise over the jurisdiction of either of the tiers of government to make laws on a concurrent subject so that safeguards had to be devised for their resolution. There are two perspectives from which to appreciate the operation of the concurrent powers. In one perspective, the Federal or National legislature simply aims at providing a national framework within which the state legislatures are to provide the

²⁹ See Awa, E.O., 1976 *Issues in Federalism*. Ethiope publishing company. Benin, Nigeria. P.44

³⁰ See Osinbanjo, (1990), *supra*.

details principally to reflect and make necessary adaptations to their local circumstances. In another fashion, the national legislation provides the detailed provisions of the law and allows the states expressly to adopt them and make further regulations where necessary to cover local circumstances.³¹ In each of the two situations mentioned, the federal and state laws complement each other and operate side by side as a composite body of regulations on the matter in question. When one considers that the kinds and nature of environmental problems in the country are varied and diverse, the standard and extent of regulation ought to be made a matter of choice which will allow the state legislatures to deal effectively with their local circumstances. This becomes very pertinent in the country as the divide in the concern for the environment between the southern and northern states is very apparent; while the pollution from oil exploitation is the most pressing problem in the southern Riverine states of the federation, it is the threat of desertification and loss of agricultural land to soil erosion that is the primary worry in the northern states. This then calls for the kind of flexibility in law-making within the environmental regulation framework. And in cases where there is a need for a national minimum environmental standard, a national framework legislation by the federal legislature would serve to stop unhealthy rivalry between states who might wish to lower standards to hazardous levels in order to

³¹ See *Price V Parsons* (1936) 54 C.L.R. 332.

attract industrial investments to their states.³²

While the concurrent powers as enshrined in the constitution guarantee the right of the respective legislatures to make laws on the particular subjects, the continuous co-existence of such laws has been made subject to a consistency requirement by the constitution. The constitution provides that laws made by both the National and State legislatures shall co-exist unless there is some inconsistency between them. Such inconsistency may take the form of different penalties for similar offence or different conditions and standards.³³ Where such inconsistency is established the consequence is that the state law shall be void to the extent of the inconsistency.³⁴

Apart from the inconsistency rule, the doctrine of "covering the field" is also used to determine the likelihood of the co-existence of federal and state laws on a concurrent matter. The doctrine has been expounded to mean that where a federal law expressly or impliedly evinces an intention to cover the whole field of a concurrent subject, or provide a complete statement of the law governing the matter and so long as a law made pursuant

³² See Akanle, O, (1981), " A legal perspective on Water Resources And Environmental Development Policy in Nigeria.", *The Nigeria Law Journal*. Volume 12 No. 1. P.18.

³³ Section 4(5) of the 1989 constitution.

³⁴ Ibid.

to this intention remains in force, a state legislature is precluded from making any law on the subject; and where a state law precedes the federal law, the former shall be void and inoperative.³⁵

The Nigerian Supreme court had an opportunity to consider the application of the doctrine in the case of **Attorney-General of Ogun state Others V Attorney-General of the Federation**³⁶. It used the doctrine to affirm the supremacy of a federal legislation on a concurrent matter over that of the states. It should be emphasised though that the effect of the doctrine is not to remove the power of the state legislature to legislate over the concurrent subject, because that power having been conferred by the constitution cannot be removed otherwise than by the way provided by the constitution itself. Rather all it does is to put the state law into abeyance until such a time the federal law is either repealed or it expires by its own terms. When the federal law is no longer in force, the state law automatically revives. As Justice Eso stated "If for any reason the Federal Legislation is repealed, it is my humble view that the state legislation, which is in abeyance, is revived and becomes operative until there is

³⁵ See Nwabueze, B.O., (1983), **Federalism in Nigeria under the Presidential Constitution**. supra. PP. 62-75.

³⁶ (1982) 3 NCLR 166; See also, Nwabueze, B.O., (1983), **Federalism in Nigeria under the Presidential Constitution**. supra. PP. 62-75 for an historical analysis of the origins and development of the doctrine in America, Canada and Australia. For America see **Houston V Moore**, S. Wheat. 1 (1820) p.22, **Priggs V Pennsylvania** 16 Per (1842) P.617, **Davis V Beason**, 13 U.S. (1889); For Australia see **O. Sullivan V Noarlunga Meat Ltd**, (1956), 95 C.L.R. 177; also at [1957] A.C. 1.

another Federal legislation that covers the field."³⁷

At this juncture, it is important to point out that the enactment in 1988 by the Federal Military Government of the Federal Environmental Protection Agency Decree³⁸ has some implications for the future in terms of jurisdictional conflicts between the federal and state legislatures over environmental protection matters. It does seem to have been made with a view to avoiding such conflicts though, for it has provided a general framework for the protection of the environment in the whole country. The law sets up the Federal Regulatory Agency and vests it with power to formulate, co-ordinate, guide and set the pace for environmental policy administration in the country. Section 4 of the Decree provides that the Agency is responsible for the making of general principles and guidelines which may then be adopted or modified by the states or even local governments. It is important though to pinpoint that this piece of legislation was enacted by a federal military government which, due to its aberrant nature, does not work within the confines and stipulations of the nation's constitution.³⁹ This must account for the imbalance in the distribution of legislative powers between the federal and

³⁷ Per Justice Kayode Eso, Ibid, at page 169

³⁸ Decree No. 58 of 1988.

³⁹ See Osipitan, T., (1986), " Federalism under the new military Administration.", *Journal of Private and Property law*, University of Lagos, Vol. 5 PP. 52-54 where the author, rightly in our view, contends that the division of power under the military governance was "unfederal".

state governments under the military with the states left with very little powers and always subjugated to the will of the federal government.⁴⁰ There is thus room for asserting that the Federal Military Government has pre-eminence in legislative competence over the states including matters of the environment as section 2(1) of Decree No. 1 of 1984 especially provides that the Federal Military Government has the power to "...make laws for the peace, order and good government of Nigeria and any part thereof with respect to any matter whatsoever."⁴¹ The State Governments under the military have the power to legislate upon the directives of the Federal military Government and on matters contained in the concurrent list of the 1979 constitution, but only with the consent of the Federal Military Government. In spite of this, however, it is submitted that if the spirit of allowing the federal and state legislatures to legislate on matters relating to the environment as exhibited in the federal environmental protection Agency Decree of 1988 is maintained, the chances of any conflict between the federal and state legislatures over environmental matters are very small even when the country returns to the governance of a constitutionally elected government.

⁴⁰ *Adamolekun V Council of the University of Ibadan* (1967) All N.L.R. 213; See also S. 2(1) of Decree No. 1 of 1984.

⁴¹ Laws of Nigeria, 1984.

3: 3: The Institutional Framework

The Nigerian Federation consists of three tiers of government, namely, federal, state and local Government. Matters relating to the protection of the environment are dealt with at the various levels of government depending upon whether the particular problem falls within the competence of any of the tiers. Where a problem is of a national, regional or inter-state character, the federal government is much more likely to handle it, while a problem of state or local nature is expected to be dealt with by the respective state or local government. As, for example, the exploration, prospecting, drilling and refining of oil and the environmental consequences such activities give rise to are dealt with by the federal government. Similarly, environmental sanitation in terms of urban clearance or noise control are controlled at state levels. The local government has responsibility for the provision and maintenance of public conveniences, sewerage, execution of the function sanitary inspection, refuse and night soil disposal. The implication here is that there exists at the various levels of government, institutions responsible for one kind of environmental protection role or another. It is the intention in this part of the chapter to examine these institutions so that the total picture of the environmental framework will be brought out with a view to assessing the coherence and linkages between the various institutions.

3: 3: 1: The Federal Level.

3: 3: 1: 1: Before 1988.

The history of the institutional role played by the federal government is related to the origins and development of mineral mining in the country. It played an environmental protection role in the sense of protecting land and water from the effects of mining activities. This was done through the 1946 Mining Ordinance⁴² which provided for the control of pollution of water by mining companies. In addition, the discovery of large oil deposits and the subsequent exploration, mining and refining processes triggered off the Federal Government into providing a framework within which environmental spoils resulting from these activities could be controlled. Thus one finds several principal Statutes and regulations specifically dealing with oil pollution.⁴³ The administration of these regulations was placed in the minister of petroleum Resources and the Inspectorate Division of the Federal Ministry of Petroleum Resources. As a matter of fact it is in the area of oil pollution that Nigerian environmental law is fairly developed. This must have been as a result of numerous oil well blow-outs and the consequent severe damage inflicted on the surrounding environment which in

⁴² See The laws of the Federation 1948

⁴³ The most prominent ones are the Petroleum Act, 1967; Oil in Navigable Waters Act, 1968; Petroleum, (Drilling and Production) Regulations, 1969; Petroleum Refining Regulations 1974; Associated Gas Re-injection Act, 1979.

turn led to several compensation claims.

In the area of the natural environment, the colonial authorities did take steps to provide protection for wildlife and forests. Nature conservation though, it must be pointed out, preceded colonial rule amongst several communities. For instance, in the many parts of the country, the responsibility for the control of flooding, soil erosion, and measures to combat desert encroachment was that of the community.⁴⁴ The colonial Authorities enacted the Forestry Act⁴⁵ for the purpose of preserving and controlling selected forests and forest produce. Laws were also made to protect and preserve the country's wild animals, birds and fish.⁴⁶ |

3: 3: 1: 2: Since 1988.

The year 1988 marks a significant turning point in the environmental protection history of the country because it was in it that the federal government swung into action to enact the Federal Environmental Protection Decree and the Harmful Wastes (Special Criminal Provisions) Decree. The first decree was long overdue as it bears similar title and contents to the bill which was passed by the civilian legislature in 1982 but was ousted before it could become |

⁴⁴ See Ewehika, D.I.O., (1976), " Legal Protection of the Environment in Nigeria." *Earth Law Journal*, Volume 2, P. 317.

⁴⁵ See The Laws of the Federation, 1958, Cap. 72.

⁴⁶ See Wild Animals Preservation Ordinance, laws of the Federation, 1958 Cap 221.

law. Therefore one would have thought that the subsequent military government would have enacted it immediately it took over in demonstrating concern for a clear national environmental policy and legislation after making the necessary revision of it. It is thus arguable that it was the lack of concern shown by the Federal Government with the environmental safety and well-being of Nigerians demonstrated by the absence of appropriate legal framework that led to an illegal dumping of toxic waste at a Nigerian sea port.⁴⁷ This unfortunate incident led to the death of the person who let out his land to the firm that imported the waste from Italy for "safe-keeping". The landlord was unaware of the content of the containers kept in his land and the postmortem examination on his body showed evidence of excessive radiation which suggests that he must have suffered serious radiation from the waste. But most significantly, when the waste was discovered analysts found out that there was no law or regulation prohibiting such imports or at least controlling them. Soon after the discovery and subsequent repatriation of the waste back to Italy, the two laws mentioned were enacted. The Federal Environmental Protection Agency law set up a Federal Agency. It is vested with wide powers⁴⁸ over the protection and control of the environment. It has the power to advise the federal government on environmental policy as well as

⁴⁷ See Ikahriale, M., 1989, "The Koko incident, the environment and the law ", in, F. Shyllon, (ed), *supra*, pp 73-89.

⁴⁸ Sections 1 and 4.

laying down principles and minimum standards for air and water quality through out the country and monitor the observance of these standards. The Agency is also to coordinate environmental matters in the country. There is no doubt, therefore, that the establishment of the Agency represents the most important institutional development in the field of environmental protection in the country. The second Decree, the Harmful Wastes (Special Criminal Provisions) decree, appears to be an impromptu reaction to the Koko toxic waste incident. This becomes apparent as the Decree simply addresses the issue of dumping toxic waste illegally and then goes on to provide that importation of toxic waste henceforth becomes illegal and carries about ten years jail sentence for individuals and heavy financial fines on corporate bodies. More significantly, it says that diplomatic immunity to diplomats by virtue of the Diplomatic Immunities Act 1964, will not be recognised in respect of diplomats held or being tried under the provisions of the Decree. This particular point shows the seriousness the federal government attaches to the issue of illegal importation of toxic waste into the country.⁴⁹

⁴⁹ The stance of the federal government on this matter appears to be connected with the fact that the discovery of the toxic waste illegally imported from Italy, at the moment it was made, caused serious embarrassment to it. This is because the President of the country had just chaired a meeting of the Organisation of African Unity in which the practice of toxic waste/debt swap which was then going on between some poor African nations and certain developed countries was condemned. So it was very important for the federal government to be seen to be taking tough position on the illegal dumping both at national and international levels having spearheaded the condemnation of the practice.

3: 3: 1: 3: The State Government Level.

In the states, the structure of the machinery for the protection of the environment is predicated on the Environmental Sanitation Edicts of each state where there is one.⁵⁰ These edicts direct authorised bodies or persons with the implementation of the objectives of the edicts.⁵¹ Generally the authorised bodies and/or persons perform, inter alia, the functions of ensuring proper disposal of wastes, refuse and sewage in the urban centres. In addition, the Federal Environmental protection Decree⁵² expects all the states of the federation to establish an environmental protection body which would then cooperate with it. The Decree however falls short of compelling the state Governments to establish such Agencies and leaves it to the persuasive ability of the minister in charge of environmental Affairs to convince the states and even Local Government Councils to set them up. This is inappropriate and the Decree should have imposed a duty on the state and local Governments to establish the an appropriate body or agency where one is lacking.

Following the federal structure of environmental

⁵⁰ See Olisa M.N. (1988) "Legal Framework for Environmental Sanitation" in E.I. Nwogugu (ed) **Current Legal Problems in Nigeria**. Fourth Dimension Publishers, Enugu Nigeria. pp.205-210

⁵¹ For example in Lagos state, the lagos state Waste Disposal Board is responsible; In Oyo state the state edict charges both the state and the local government sanitation committees with the implementation of the edict; In Adamawa state three bodies have been charged with the responsibility and these are, the state task force, the zonal task force and the state ad-hoc Environmental Advisory Committee.

⁵² Decree No. 58 of 1988 section 24

protection, state ministries whose functions affect the environment are expected to integrate protection of the environment in the discharge of their primary and secondary functions. This undoubtedly is what is expected of the local Government councils. The most important point however as far as the federal structure on environmental protection is concerned is that there should be a clear definition of roles at the various levels of government as well as the improvement of consultation and co-ordination within and between them.

3:3:1:4: The Local Government Level.

At the Local Government Council level there were environmental management functions that were conferred by statutes. For instance supervision of household sanitation was entrusted to the local councils during the colonial era through the Public Health Act and it appears that the councils were executing the function quite well through the system of household sanitary inspectors. Generally speaking, the traditional functions of a local council have been construction of drainage, management of sewerage, refuse collection and disposal. The local councils were therefore participating in the management of the environment which was mainly carried out through the public health department.⁵³

The major problem which cuts across the states of the

⁵³ See Stock, R. *supra*.

federation is that the Local Government Councils have experienced the usurpation of their traditional functions under military governments through the use of Environmental Sanitation Boards and Task Forces. This usurpation of functions has not helped the cause of overall environmental management in the country. For instance it has not allowed the local government councils, whose responsibility it is under the constitution to execute those functions, to develop the necessary strength and enjoy the benefit of accumulated experience in waste collection, disposal and management. Fundamentally therefore the assignment of those functions to Environmental Sanitation Boards prevented, to a large extent, the emergence of a strong, resilient and workable institutional framework for resolving the environmental sanitation problems of most Nigerian cities, towns and villages.⁵⁴ This is also seen as a contributing factor to the current situation in the country where refuse collection is in a state of chaos with people simply dumping their ^{refuse} on every available space they could find. Heaps of rubbish thus characterise a number of the urban centres as the Sanitation Boards and the local government councils bury themselves in disputes over whose responsibility it is to clear the refuse.⁵⁵ It has thus led to inter-departmental and even inter-governmental disputes

⁵⁴ See Bello-Imam, I.B., (1983) "Administrative Framework for Environmental Management in Nigeria with Emphasis on Refuse collection and Disposal", *Journal of Environmental Focus*, Vol.1 no. 1 &2. pp.66-73.

⁵⁵ Ibid.

over who has the responsibility to collect refuse in the country. It must however be stated that the concept of Sanitation Boards has led to the development of agencies which do have a specific focus in the wide area of environmental management, namely, waste and refuse management. This is quite a welcome development. However the Sanitation Boards are state Government creations and therefore have jurisdiction over the whole of the state, although in practice they limit their activities to a very few of the urban centres in a state. Thus practical reasons do hamper the functioning of the Sanitation Boards beyond some few urban centres with the rest of the state neglected. On the other hand when the Local Councils are considered, there are a number of factors which favour them as being the most competent to carry out the functions and that they should be allowed a free reign and given the resources which the state governments were expending on the sanitation Boards so that they could manage the waste and refuse of their domains. First of all, there is the practical problem which the sanitation boards face. It is proving difficult for them to manage all the refuse of just the urban centres of the state let alone the entire state. Secondly the local councils are closer to the people and they are fairly distributed to all the nooks and corners of the state. Thirdly, the local councils have got the advantage of accumulated experience in refuse management which, when combined with greater infusion of required resources, would enable them to handle the waste

problems much more effectively and efficiently alone. If all these are taken into account it could be argued that local government councils are better placed to carry on with environmental sanitation management in their respective areas of authority compared to the state environmental Sanitation Boards.

In addition, Professor Ola is of the view that it is illegal and unconstitutional to take away the responsibility of environmental sanitation from local governments and give it to a sanitation Board. His analysis was on the case of Lagos state. He argues his case thus:

The idea of setting up a waste disposal board to take care of environmental sanitation in Lagos State is both illegal and unconstitutional. Under the Local Government Law enacted by the Lagos State Government itself, and more importantly, the Nigerian Constitution, sanitation-including waste disposal-is a responsibility specifically assigned to the local governments. And this is how it should be. The local governments stand a better chance of keeping our environment clean and healthy than a single octopus called Waste Disposal Board. Afterall, the local governments are now funded both by the federal and state governments as well as by funds generated by themselves. They should be able to cope with their responsibilities under the Constitution, which include environmental sanitation.⁵⁶

It is clear from this that Ola supports the principle of allowing the local governments to handle environmental sanitation matters. The only thing which must however be pointed out is that the law and practice of Environmental

⁵⁶ Ola C.S. (1984) *Town and Country Planning and Environmental Laws*. University Press Limited. P. 172.

Sanitation Boards had its origin during the military government era which in fact preceded the 1979 Constitution that was referred to. This means that by virtue of the Supremacy and Enforcement of Powers Decree made by the Military Government, a Decree supersedes the provision of a constitution, which therefore means that the state sanitation law made by the military in 1978 was legal at that time. But as at the time Ola was writing the military Government had left, and therefore when the civilian government of lagos was considering a revision of the sanitation edict of 1978, it should have taken into account the constitutional provision he referred to and allow the local government councils their constitutionally assigned responsibilities. To that extent therefore, Ola was right, in our view, to assert that the law was illegal and unconstitutional. However, it is worthy to note that since 1984, the Military have come back to power in the country with all the tricks of making their Decrees and Edicts supreme over any constitutional provision, and a number of Sanitation Boards have been established through military edicts giving sanitation responsibility in many states to the Boards. Therefore the provisions of such sanitation edicts must be taken to have superseded whatever the constitution might have differently provided. However for the reasons adduced above, there does seem to be a case for restoring that function to the local government tier in the states.

3: 4: Conclusion

This chapter has tried to examine the kind of foundational concepts used to build the current environmental protection framework of the country. It was shown that not enough consideration has been given for certain basic principles for environmental protection and sustainable development by the government. Thus, there is a need for further strengthening of the existing framework.

CHAPTER FOUR

THE EVOLUTION AND DEVELOPMENT OF THE USE OF STATUTORY CONTROLS IN THE PROTECTION OF THE NIGERIAN ENVIRONMENT.

4.0. Introduction

This chapter provides a historical development perspective to the adoption of statutory measures for the general protection and management of the environment in Nigeria. Its main purpose is to explore the various statutory responses which Nigeria has made, or indeed failed to make, in dealing with the various problems relating to the protection and management of its environment as a means of showing the contribution which that state of affairs has made to the emergence of a framework for environmental protection and sustainable development in the country.

Perhaps not unexpectedly, statutory regulation of the environment in Nigeria, particularly during the early period of colonial rule, may be said to be part of the general strategy for consolidating a proper grip on the colonised people and their natural resources. Thus most statutory provisions in the country that relate to the protection and management of the environment have had their origins in the era of colonialism.¹

In addition to the control of ownership and use of natural

¹ It must be added here that the essence of the discussion in this chapter is to demonstrate the roots of legal environmental control framework which had their origins principally during the colonial era.

resources, the colonial period saw the introduction and use of the concepts of the protection of public health and sanitation. In this regard, several statutes were enacted to ensure that environmental sanitary standards were attained and maintained.² This is attributable mainly to the fact that the concept of public health protection was already accepted and in use in Great Britain, which was the colonising power, and it was only appropriate that the colonies benefit from such a regulatory regime.³

At this point it is important to point out that although Nigeria had its independence from Britain in 1960, it is interesting to note that its statutory laws relating to the protection of the environment have remained substantially unchanged since the colonial era when they ^{were} promulgated. This had to do with the failure to update the substance of the laws as well as the way the political structure of the country had developed before independence and is still developing. During the colonial era, all laws, including those relating to the protection of the environment were first made and administered by one central government based in Lagos, although a great deal of power thereunder devolved upon regional or territorial governments and local government bodies. Since the establishment of a federal

² Stock, R. " Environmental Sanitation in Nigeria: Colonial and Contemporary." *Review of African Political Economy, infra.*

³ For an interesting account of the history of the development of public health control in Great Britain see Hughes, D. (1992) *Environmental Law*. Second Edition Butterworths.

system of administration in 1954, however, various states have at various dates adapted, for use within their respective areas of authority, most of those centrally enacted laws. For example, the former, Eastern, Western and Northern Regions each had its own forestry law, wild animal law, town and country planning law and public health law, which are now in force in the states carved out of that region.⁴ Thus as adaptations of the same central enactment, the forestry laws, the wild animal laws, the town and country planning laws or the public health laws of the states have identical or nearly identical provisions. Another important point is that under earlier unitary system of administration that the country had, the central government had the final say in matters relating to the use and control of lands. When the country adopted the federal system of administration, the power to control and direct the use of land in various parts of the country vested initially in the Regional Governments and later on in the state governments which replaced them. Therefore, outside the federal capital territory of Lagos and under the provisions of the 1960 and 1963 Constitutions, the Federal Government had no direct control over lands, forest and game reserves and the development of urban centres.⁵

⁴ See, for example, the Forest law of Eastern Nigeria, Cap. 58 of 1963 laws of Eastern Nigeria; the Forestry law of Western Nigeria, Cap 38 of 1959 laws of Western Nigeria; The Forestry law of Northern Nigeria, Cap. 44 of 1963 laws of Northern Nigeria.

⁵ Under the 1979 Constitution however a new federal capital territory was created in Abuja a new land tenure law called the Land Use Act 1978 was incorporated in it. The situation however, remains the same, i.e. the control of land and its use still resides in the state governments to the exclusion of the federal government.

In examining the history of statutory environmental regulation in Nigeria, three main sub-headings come to mind. These are, land and forest conservation and management; wildlife protection and management; and planned development of the human urban environment.

4: 1: The Protection of Lands and Forests.

By the year 1900, the British had conquered and established their rule over all the territories in the present day Nigeria. The territories were however administered as three separate entities, namely, The Colony and Protectorate of Lagos; the Colony and Protectorate of Southern Nigeria; and the Colony and Protectorate of Northern Nigeria, as they were then called. It was only in the year 1914 that the decision was taken to unite them into one country, thereby having them administered as a single unit.

Life amongst the communities of pre-colonial Nigeria, however, was very much dominated by the exploitation of natural resources, chiefly land, in the form of agriculture and hunting. As a result of the central role which they play for the survival of the population, natural resources of land and forests had to be guarded and protected.⁶ This means that measures to protect certain aspects of the environment existed among local people long before the coming of colonial rulers and these were carried out by the

⁶ Eweluka, D.I.O. (1976), "Legal Protection of the Environment in Nigeria", **2 Earth Law Journal**, pp.317-346.

various communities and tribal groupings which inhabited the areas constituting the present day Nigeria. Such protection and preservation was dictated by the perceived needs and threats of degradation among such communities. For example, the need to tackle environmental problems such as conservation of soil fertility, checking of soil erosion and combating of desertification did stimulate various kinds of measures by those communities to prevent or at least minimise them. Thus, communal labour was used in this regard to create catch pits and build dams to trap or divert flood water; and techniques of shifting cultivation⁷ and crop rotation⁸ were used to prevent flood and control soil fertility, respectively.⁹ Also lands, forests or trees communally owned were closely monitored in order to prevent their indiscriminate and uncontrolled use and exploitation by individuals.¹⁰

The establishment of colonial rule during the latter part of the Nineteenth Century and early part of the twentieth Century in Nigeria, however, did witness the introduction of a new system of control towards the protection of lands

⁷ This is a process by which a farm land is abandoned for one or more farming seasons in order to allow it to rejuvenate its nutrient contents.

⁸ This is a practice of substituting various crops on the same ^{farm} in subsequent farming seasons. Like shifting cultivation, it is also a process by which a farmland is made to become very productive through nutrient content rejuvenation.

⁹ See D.I.O. EWELUKA "Legal Protection of.....", supra, p.318

¹⁰ Ibid.

and forests.¹¹ This was basically characterised by the imposition of restrictions upon local inhabitants on the use of lands and forests. These were usually promulgated as laws, named 'Ordinances', which institutionalised the colonial Government's view of how the control and management of these lands and forests should now be done.¹²

It is perhaps important to point out that the primary factor which initially stimulated the colonial administration into taking measures to protect the forests and woodlands was the desire to ensure that the forests of Nigeria continued to supply industrialised Europe with timber and wild rubber.¹³ Prior to the introduction of regulation by the colonial administration, European traders interested in timber or rubber entered into concession agreements freely with the local chiefs who were the trustees of the forests for the various communities.¹⁴ The main problem with the system under the chiefs was that it became very difficult to control the activities of timber cutters and rubber tappers who, in their attempt to make

¹¹ See Egboh, E.O. (1979) "The Establishment of Government-Controlled Forests Reserves in Nigeria, 1897-1940", *Savanna*, Vol.8, Number, 2.p.3

¹² See Lugard, F. (1919) ***Political Memoranda: Revision of Instructions to Political Officers on subjects chiefly political and administrative***, 1913-1918. Printed by Waterlow and Sons Ltd, London Wall, London. p.433

¹³ Colonial Office(CO) to Henry McCallum, 19 August 1897, C)897/65/635/49.

¹⁴ Foreign Office(FO) to CO, 15 September, 1898, CO446/3/20914; W.D. MacGregor to CO, 13 July 1899, CO147/143/20969.

more money, cut down even the immature timber trees and tapped the rubber plants to death; and neither were the chiefs successful in checking the activities of farmers, who continued to destroy large forest areas. The colonial government thus maintained that as long as the forests were under the control of the chiefs, it could not ensure the long-term prospects of the timber trade.¹⁵ In view of this, the Colonial Office empowered the Governor of Lagos, William McGregor, to protect the forests by inducing the African communities to make land available for the creation of what were to be known as 'Forest Reserves'.¹⁶ This marked the beginning of a policy which became the most prominent policy in Nigeria's forest protection efforts.

Initially, a persuasive approach was adopted under which Governor MacGregor instructed his Forest Supervisor to take steps to persuade the African communities to surrender some of their forest lands to be constituted as forest reserves by the government. This move had some initial success as local chiefs and kings were persuaded to grant lands for such reserves under the control of the local authority.¹⁷ However, straight forward grants made by some local authorities met with opposition by local farmers and so had to be converted into leases, instead. For example, the

¹⁵ W.D. MacGregor to CO, 13 July CO897/65/635/49

¹⁶ CO to MacGregor, 24 August 1899, CO897/65/635/114

¹⁷ For instance, in Ibadan local Authority, a forests reserve was created. See *Southern Nigeria Government Gazette* 12, No. 844 of 20 November 1907. pp. 2239-2240.

Alake (King) and Council of Egbaland, only successfully leased to the government, a forest at Olokemeji as a reserve for 99 years. But even then the Egba farmers opposed the lease on the ground that it limited agricultural land, and they expressed their opposition by squatting on the reserve. The squatters were not ejected but, under an agreement with the government, were allowed to occupy a particular enclave in the reserve.¹⁸

As it turned out to be, lack of co-operation from local farmers hindered the achievement of any remarkable success at forest reserve creation through the policy of persuasion in Southern Nigeria. Therefore, the colonial government had to resort to the use of the force of law, and the year 1901 saw the promulgation of an Ordinance which empowered the governor to create forest reserves. This power was however not invoked to create any forest reserves until 1905, when the Forestry Service of the Colony and Protectorate of Southern Nigeria was merged with that of the Colony and Protectorate of Lagos.¹⁹

Two types of measures were adopted by the colonial government in dealing with the problem of opposition to the

¹⁸ *Colonial Annual Report, Southern Nigeria*, 1908, p.13. Certain rights were however guaranteed for such local people under agreements between local authorities and the government. They were to continue to hold permanent possession of the farmlands within the reserves, but were not to increase their holdings without the consent of the governor. Any breach of such a condition was punishable by expulsion from the reserve. (See MacGregor to CO, 9 July 1901, CO147/155/26688.)

¹⁹ Egoh, E.R. (1979) "The Establishment of Government-Controlled....", *supra*, p.5

successful creation of forest reserves. The first was a policy which fixed a minimum amount of forest reserves to be created. The figure of 33% was initially fixed, but it had to be scaled down to 25% because it was feared that the higher figure could only worsen the already bad problem of local opposition. It was Governor Lugard, in fact, who scaled down the figure to 25% with a strong emphasis that the area reserved in each province should vary according to the density of population; and areas of low population densities had to provide more reserves than those with high population densities.²⁰

The second measure was the promulgation of an Ordinance in 1908 in order to find a solution to the problem of how to protect certain timber trees that were located outside protected forest reserves. Under the 1908 Forest Ordinance, certain valuable timber species located outside forest reserves were declared protected and could not therefore be cut or used by the farmers. The motive here was to save them from destruction by the farmers before the government could select suitable areas for reservation. Criminal sanctions were provided for violation of the law but, prosecutions of those who cut down or damaged such trees during the burning of farm clearings only increased the unpopularity of forest reservation.²¹ Thus, in 1919 alone,

²⁰ Lugard F. (1918) *Political Memoranda*, supra. pp.434-535

²¹ Egboh, E.O. (1979) "The Establishment of Government-Controlled Forest Reserves...", supra. p.6

there were 1,303 prosecutions for forestry offences in Southern Nigeria and the government became quite anxious to meet its target of minimum reserved forest in order to relinquish the policy of protection of trees in unreserved forest. The Government stated that:

Many first class trees have been felled and injured during farm operations, and prosecutions for this offence have been numerous; such prosecutions tend to make the forest law unpopular and it will be an excellent thing when sufficient forest has been reserved to make them unnecessary.²²

The next major statute enacted concerning the control and management of forests was the Forest Ordinance of 1916. The Governor-General of Nigeria then, Sir Frederick Lugard, stated the colonial government's forest policy which, as we have seen, has been mainly anchored on the creation of forest reserves. We shall here make two observations about the 1916 Forestry Ordinance. Firstly, the creation of forest reserves continued to be the major instrument adopted by the colonial regime in its determination to protect forests and secure the required supply of forest products.²³

Secondly, it demonstrates how the problem of land tenure in the Southern Provinces, unlike in the Northern Provinces,

²² Annual Report on Forest Administration, 1919. p.39

²³ In explaining the objectives of the 1916 Forestry Ordinance, Lord Lugard stated that in a tropical country like Nigeria, only the creation, maintenance and proper protection of large forest Reserves can help achieve "the continuous supply of forest produce for public requirements, local and foreign markets" amongst other objectives. Ibid. p.435.

affected the creation of forest reserves at the outset of colonial rule.²⁴ This necessitated the enactment of a legislation that would empower the Governor-General to use his statutory power to get a forest reserve created. Lord Lugard said:

The only effective method of conserving forests is by expansion of forest reserves. There is no difficulty in this matter in the Northern Provinces where the land is vested in the Governor as trustee for the people, but in the Southern Provinces prior to the Forestry Ordinance of 1916, there was no power to create a Reserve on communal land if an obstinate community chose to object to it. In the truest and best interest of the country, in order to protect an ignorant people against themselves, to secure the welfare of future generations, and to safeguard the interests of one community against the selfish action of another such powers were acquired under the Ordinance as are necessary for the creation and management of Forest Reserves in the Southern Provinces, wherever they are required. It is not necessary that Government should acquire the formal title to the land, provided that it has the right to maintain a Reserve upon it, and owns the forest produce in perpetuity.²⁵

Here Lord Lugard has clearly emphasised the difficulties faced by the colonial government in creating forest reserves on communal land in Southern Nigerian Provinces. Nevertheless a number of forest reserves were created especially after the end of World War One when there was an

²⁴ In Northern Nigeria, as C.K. Meek has noted, forest reservation did not present the same problems as in the South. This, in his view, was due partly to the difference in the character of land rights between the North and the South, and partly to the sparsity of population in the North. See C.K. Meek (1957) *Land Tenure and Land Administration in Nigeria and the Cameroons*, London. p.46

²⁵ Ibid. p. 433-434

increase in the demand for timber in Britain.²⁶ It is also worth pointing out that a clear objective of the forest policy came through in this statement. This is that the colonial government apparently was much more concerned with the benefits that would accrue from a reservation rather than a determination to rid the local communities of their titles to the land.

4: 1: 1: The Native Authority (N.A.) Reserves.

Following the end of World War One, the next most important phase in the development of forest protection in Nigeria was the devolution of certain measure of forest management responsibility to the Native Authority.²⁷ All Forest reserves created in the whole of Nigeria before 1927 were called "Government Reserves". This meant that they were under the direct administration and management of the Colonial Government. The Native Authorities were excluded from such responsibility. But following the enactment of the Forest Ordinance of 1927, efforts were made to create another class of reserves known as 'Native Authority Reserves', which were put directly under the control of N.As. Owing to the fact that the colonial government was less interested in the direct control of reserves in the North than in the South, more N.A. reserves were created in

²⁶ See Egboh, E.O. (1979) "The Establishment of Government Controlled Forest Reserves" supra. p.12

²⁷The Native Authority was the administrative unit exercising traditional authority within the framework of British Indirect Rule System.

the former. In fact, the government transferred most of its reserves together with the cost of maintaining them in the North to the Native Authorities.²⁸ Explaining its policy of creating more N.A. reserves in the North, and fewer in the South, the government said:

It will be noted... that most N.A. reserves are confined to the Northern Provinces and most Government reserves to the South; this is as it should be. The forests of Southern Provinces have, in addition to their climatic and local values, immense exports and trade possibilities and require much more detailed care than the native authorities can as yet give; in the Southern forests also many other outside interests are involved which require consideration, not only from a local or national point of view but from an imperial standpoint as well; to such consideration, the local authorities do not always pay due attention. That more Northern forests are mainly of local or internal value can be more easily understood and more fully appreciated by the local authorities and hence the management is generally left to them under skilled guidance.²⁹

This statement reveals not only the local but also the imperial economic importance which the government attached to forestry in Southern Nigeria. It also demonstrates the conscious use by the Colonial Government of N.A. reserves as the major means of protecting local environmental conditions in the North.

4. 1. 2. The process of Creating a Forest Reserve.

It is quite arguable that the most important feature of the forest policy established by the Colonial Government was that of the creation of forest reserves. The year 1937

²⁸ Annual Report on Forest Administration, 1927, p.2.

²⁹ Annual Report on Forest Administration, 1932. p.2.

however marks an important point in the development of Nigeria's forest policy, because it was in it that a new and comprehensive law was enacted to replace all previous forestry Ordinances. This followed two important developments. The first event was the publication of Major Oliphant's report on Nigerian timber resources,³⁰ which showed that farmers had been destroying the forests at an alarming rate and an immediate action was required. The second event was the decision of the Empire Committee which, having studied Major Oliphant's report, came to the conclusion that for commercial reasons Nigerian forests should be regarded as imperial asset of the first importance. The Empire Committee regretted that valuable forests had been destroyed by farmers in the past, and viewed with concern that the process was still continuing. The committee expressed the view that the area already under reservation was totally inadequate, and called upon the colonial government to substantially increase it.³¹ Pressure was therefore mounted on the colonial government to ensure that the Forest Department constitutes reserves with greater speed and this was exactly what the 1937 Forestry act was designed to achieve.³²

Under the forestry law of 1937 the Governor was empowered

³⁰ Oliphant, F.M. (Major) (1934) **Report on the commercial possibilities and development of the forests of Nigeria**. Government Printer, Lagos.

³¹ Committee of Privy Council on Scientific and Industrial Research to CO, 10 July 1933, CO583/191/11655/1.

³² Annual Report on Forest Administration, 1936, p.6.

to, at any time, constitute as forest reserve any lands which are at the disposal of the government or in respect of which it appears to him that the forests growth thereon should be protected or on which he considers it necessary to establish forest growths.³³ It must be observed however that the real intention behind the creation of such reserves was to keep away intruders from lands required or acquired by the government on account of its mineral contents or because they are threatened by natural forces of erosion or human acts of excavation, deforestation and intensive cultivation. Clearly some of these acts were quite harmful to the lands and forests and the law rightly provided a useful tool for protection.

A significant aspect of the Forestry Act with respect to the constituting of a forest reserve is the building of some kind of consultation process between the government and the communities in whose area the reserve was to be created. The Act provides that when the governor became desirous of constituting a forest reserve he must first have his intentions widely publicised by having the plans published in the state gazette, posted in the customary court of the locality and read in the local vernacular and explained to the traditional rulers, community council of the locality and the local inhabitants

³³ The Forestry Act, 1937, section 4; Forestry laws of former western states, section 4; Forestry laws of former northern states, section 4; Forestry laws of former eastern states, section 7; Forestry laws of lagos state, section 4.

generally.³⁴ More specifically the kind of information which should be publicised has been defined as including a specification of the location and limits of lands and forests involved; the purpose for which they are being reserved or protected; the official (the reserve settlement officer) empowered to receive and determine claims to rights in and over them. Having and exercising the powers of a magistrate, the reserve settlement officer receives, considers and determines the nature and validity of any claims and counterclaims to the lands and forests in question. Based on that officer's findings and recommendations, the government may then publish a notice in the gazette and among the people concerned, specifying the limits of the lands comprised in the proposed reserve, the rights which individuals and communities still have and may, therefore, exercise in and over them and any other relevant conditions to which the proposed reserve may be subjected.³⁵

The laws further provide that any individual or community whose rights or claims may adversely be affected by the creation of the reserve is free within one year of the publication to lodge an appeal with the High Court having

³⁴ Ibid., sections 5 & 6. This could be regarded as an effective way of publicising the government's intention down to the most local level in the language presumably understood by the local population.

³⁵ See for example the forestry law of former Northern Nigeria, section 4.

jurisdiction in the locality.³⁶ At the expiration of the time limit or, after the determination of any appeal lodged with the High Court, the governor may issue an order constituting the lands involved as a forest reserve and setting out the limits of those lands and the rights or claims which individuals and communities still have and may, therefore, exercise in or over them. Every right or claim not thus saved or preserved for the owners by the order shall, upon the publication of the order, be extinguished unless otherwise subsequently revived by the governor.

There is however the need to distinguish here between the modern concept of public consultation or participation and that which was scheduled in the forestry laws. In the forestry laws it seems the intention is simply to have the information about the prospective forest reserve disseminated as widely as possible so that any outstanding interests in the land or resources that might be affected could be identified. Thus the affected members of the public are simply being informed so that they may take steps to protect their subsisting interests. They are not expected in any way to contribute or influence the decisions which are to be made over the reserve, as for instance, over whether to proceed with the reserve or not or how, when created, it should be created. This is a clear

³⁶ Forestry law of former Eastern, Western, and Northern Nigeria section 16. The period of limitation in the Former Eastern Region is 3 months and not one year.

contrast to the modern concept of public participation where members of the public are consulted both for information and action, as they are usually expected to contribute with ideas about how things should be done or what should actually be at all.

It is pertinent however to mention that forest reservation policy remained as much a focus of Nigeria's forest policy after the end of colonialism as it was during the colonial rule. Thus the 1937 Forestry Act became the main law relating to the protection of the nation's forestry resources. However, in 1946 a major constitutional change affecting the political structure of the country was introduced by the colonial government through the instrumentality of the 1946 Arthur Richard's Constitution. This change introduced a federalist feature into the way the country was being governed, in a radical move away from the unitary system that had existed since the amalgamation of 1914. Under this 1946 Constitution the country was divided into three Regions, namely, the Northern Region, the Western Region and the Eastern Region. The consequence of this reform on the administration of forestry laws and policies was that the Regional Governments took over completely, the functions that were being carried by the Central Government.

The creation of the new tier of government in the form of the regional governments situated between the central

government and the native authorities, transformed the responsibility for forestry management by transferring the central government's responsibility to the newly created regional governments. This divested the central government from responsibility in forestry matters. The interesting point however, is that there was no change in the substance of the laws and policies as they were under the previous two-tier system of government. Thus within the provisions of the 1937 Forestry Act, 'The Government', i.e. referring to the central government, was now replaced by 'The Regional Government', while there was no change at all about the position of Native Authorities and the NA forest reserves. In 1960 Nigeria gained her Independence from Great Britain but there was hardly any major changes in the policies and laws relating to forestry or the political structure. ³⁷ The next major development in the political structure of the country was in 1964 when a new regional government, 'The mid-western government', was added to the existing three regions. The four-region structure was not to stay for too long however, because in 1967, the system was abolished but replaced with another three tier system. The new structure adopted a new nomenclature for the middle tier thereby naming the new political units 'states'. In the 1967 exercise twelve states were created across the

³⁷ In fact the next change which occurred was the creation of another regional government to add to the three which have survived since their creation under the 1945 Richard's Constitution.

whole nation.³⁸ Henceforth forestry responsibility became a concern of the state governments and native authorities which also have had a change of nomenclature to local authorities and local governments. It has to be pointed here though that following the adoption of the states structure by the country, the creation of more states has since become a continuous process with the last exercise done in 1996 which increased the number of the states from the twelve that it was in 1967 to thirty-six.

The only principal and consistent measure that accompanied this transformation of the country's political structure was the adoption and adaptation of the 1937 Forestry Act to fit the new structures put in place. It was the regional governments which first adopted the central government's powers and responsibilities in respect of forestry matters, followed later on by the state governments which replaced them and succeeded into all their functions. Apart from this there was not any substantial changes so that the law has virtually remained the same. What this means now is that the procedure for creating forest reserves under the Katsina State Forestry law of 1987, for example, is exactly the same as under the 1938 Forestry Law.³⁹ Therefore since

³⁸ In fact by this time the civilian system of government in the country was replaced by a military one following a military coup in 1966.

³⁹ See the Katsina State Laws of Nigeria, Number One of 1987. See also the Forestry law of Ogun State of Nigeria, 1978 Chapter 39.

all the provisions are substantially the same in all the states of the federation of Nigeria the procedure for the creation of forest reserves today is exactly as it used to be under the 1937 Forestry Act outlined above.

4: 1: 3: Management and Control of Reserved and Protected Forests.

Under the forestry laws which currently apply in the states, the power to manage, control and protect reserved and protected forests vests in the governor of a state who normally delegates such function to the state commissioner responsible for agriculture and forestry. The administrative machinery for protecting the forest and lands in each state has a forestry department as its hub. The department consists of officials whose duty it is to see that trespassers are kept out of the forest and licensees operate within the limits of their permits. The forestry regulations of each state set out rules for the collection, movement and identification of timber and other forest produce from each forest. For example, every timber produced under licence must bear some identification marks and it is an offence for any licensee to move any timber without having it properly stamped with the appropriate marks. Administrative officers, forestry officers and police officers have the power to stop and inspect any vehicle, vessel or raft engaged in transporting or moving any forest produce on any road or inland waterway. The

officer may himself or by any person acting under his directions seize any forest produce reasonably suspected to have been unlawfully obtained or to have been unlawfully removed and any instrument or thing reasonably suspected to have been used in the commission of an offence under the law. He may also arrest without warrant any person trespassing on the land or forest or reasonably suspected to have committed an offence under the appropriate forestry law, but he must without unnecessary delay take such a person to a court or to the nearest police station.⁴⁰

Furthermore, outside the forestry laws and regulations, the rules relating to the protection of lands and forests could be found in a number of other enactments, such as the Minerals Act, 1946 (as amended); the Petroleum (Drilling and Production) Regulations, 1969; the Quarries Act, 1969; and the Quarries Regulations, 1969. With respect to mineral oils mining, although an oil prospecting licensee or oil mining lessee enjoys a considerable amount of freedom of action in the country, he is enjoined by the Petroleum (Drilling and Production) Regulations, 1969 not to enter upon any land under cultivation, held to be sacred or set aside for public purpose. He is not to enter or occupy any part of any town, village, market place, burial ground or any private land or cultivated, any land placed under his control or tampering with or taking away any of the

⁴⁰ The forest law of former Eastern Nigeria, sections 36-38; the forestry law of former Western Nigeria, sections 52, 54; the forestry law of former Northern Nigeria, sections 53, 55.

protected trees or objects of veneration.⁴¹ The rules further provide that he may appropriate and use any water found in any land under his control, provided that he does not unreasonably interfere with other people's fishing rights or rights of water and that he does not deprive any lands, villages houses or watering places of cattle of a reasonable supply of water.⁴² Also he may erect any building or facility in the land provided that he complies with all relevant town and country planning laws and regulations.⁴³ The right has also been given to a prospecting licensee or mining lessee to dredge any water course or excavate and take away any gravel, clay, sand and stone. This right has however been qualified by the requirement that any excavation made must be filled in or levelled out to the satisfaction of the federal Ministry of Petroleum Resources.⁴⁴ This clearly was a conscious effort to ensure that land excavated is not left to degenerate through degradation and therefore kept in check.

Quarrying and Mining are two economic activities which often result in serious degradation of the environment and they have also seen the light in the field of statutory

⁴¹ Petroleum (Drilling and Production) Regulations, 1969, sections 15, 17.

⁴² Ibid. sections 15, 23. It is important to point out that in reality these rules do not appear to have restrained incessant oil spillage in the riverine areas of the country which have suffered enormous pollution of water courses and flora and fauna.

⁴³ Ibid., section 18, 19.

⁴⁴ Ibid. section 15.

regulation in the country. Thus, the Quarries Act and Regulations sought to control and regulate indiscriminate excavation of soil for sand, stones and minerals, which expose farms and villages to the menace of soil erosion, damage roads and footpaths and interfere with watercourses. The Quarries Act makes it unlawful for any person to engage without a lease or licence in any surface working or excavation of land for purposes of extracting "quarriable minerals" other than sand, clay, laterite and stone required purely for local use by local inhabitants of an area in accordance with their local custom.⁴⁵ It was also made unlawful for any person to divert any watercourse for the purpose of conducting any quarrying operation.⁴⁶ A lease or licence entitles the holder thereof to enter upon a given piece of land, conduct some quarrying operations and acquire, stack or dump therein any quarriable mineral. He is usually free to deface the land in question by excavating the soil, constructing and maintaining necessary communication and electrical transmission lines and facilities. He may cut, take and use any tree in the course and for the purpose of his operations, but he is not to cut or take away protected trees without the consent of the forestry authority.⁴⁷ He is not to claim or enjoy any exclusive right in or over any natural body or source of water in or adjacent to the land under his control; nor is

⁴⁵ The Quarries Act, 1969, section 14.

⁴⁶ Ibid., section 2(3).

⁴⁷ Ibid., section 8(2)(3).

he free to the flow of any navigable water to an extent likely to obstruct or interfere with the free and safe passage of any vessel, boat or canoe or other craft.⁴⁸ The quarries Act however failed to provide for some kind of rehabilitational measure in order to protect the environment. It would certainly have been helpful if the Act had mandated for the filling of worked areas and tree replanting to regenerate growth of tree cover. These were indeed necessary for the prevention of degradation and the bringing back to life of the quarried areas.

An important question which should be asked here however is to what extent were these laws able to contribute towards the defence of the country's land and forests? There is little doubt that the concept of having reserved and protected forests was quite appropriate as a necessary measure towards the protection of land, flora and fauna. It is obvious that once the reserves have been delineated all human access could be controlled and regulated and so is tampering of the natural resources. But as indicated earlier on, the policy which is good in principle did occasion some difficulties for the local populations which had almost been relying on the forest resources for their daily survival. There is little wonder therefore that in the end it proved difficult to actually enforce the rules and regulations that established these reserves. It has also been observed that despite these laws, the rate at

⁴⁸ Ibid., section 8(4)(5).

which the country's natural resources are being cut or destroyed has not actually been slowed down.⁴⁹ They have not thus been able to make the desired impact in the protection of the forests. The two possible reasons advanced are financial backing to the administrative agencies and the terrible inefficiency of the staff of those agencies. These are quite important factors to the successful implementation of any laws such as the forestry laws considered above. It is also likely that the lack of proper attention to the cutting of trees not cited within a protected forest could have contributed. As it stood, there was no law that prohibited the cutting down of trees outside forest reserves so long as they were not going to be turned into merchantable pieces such as planks and other building materials. It is understandable that when the forestry laws were made a prime consideration was to preserve the customs and practices of the local population, for example, in the use of firewood as domestic fuel, but enough attention should have been given to the need for alternative sources of energy. In any event, during the 1980s some states which are situated in the far northern part of the country and therefore prone to accelerated desertification problem have been enacting laws to ban the indiscriminate cutting of trees anywhere not just within the forest reserves. The case of Borno State is a good example where an Anti-Tree Felling law was enacted in

⁴⁹ See Eweluka, D.I.O., *supra*, page 342.

1986⁵⁰ to regulate the indiscriminate cutting of trees in the state. It is doubtful, however, whether this law alone would help in reducing the incidence of illegal tree felling, taking into account the facts of life in the state. These include the fact that fuelwood is the predominant means of cooking and heating in the area and the fact that alternatives such as cooking gas and kerosine are not cheap and their supply is highly unpredictable in the market. It is worth mentioning though that the Borno State Government did try to introduce a policy of procuring gas cookers and selling them to the residents of the state at a subsidized rate. This of course could be said to be a step in the right direction as far as taking people away from tree felling for cooking is concerned.⁵¹

It seems that the nation's forestry resources are dying out and there is thus the need for an appreciable investment in protective forestry, not only as means of multiplying timber resources, but also as a means of preserving the fertility of the soil, protecting streams from either drying up or silting up and controlling sheet and gully erosion which now is a great menace to the country's

⁵⁰ The Tree Felling Edict of 1986 of Borno State of Nigeria.

⁵¹ The experience with the implementation of the policy however leaves much to be desired. It turned out that the new cookers were mostly sold to the civil servants who are residents of the urban areas to the neglect of the rural dwellers and urban poor whose activities in the first place necessitated the policy initiative. The urban poor and the rural dwellers must be the focus of such a policy if it were to succeed.

agricultural industry.⁵² It is significant however to point out that the concept of forest reserve has now been transformed into National Park. The National Park in practice resembles all the features of the reserved forests except that the former now does have the principle of revenue yielding through tourism wielded into it. In 1991 the Federal Government promulgated the National Parks Decree⁵³ which constituted some previous forest reserves into National Parks and set up Boards to manage them.

4: 2: Wildlife Protection and Preservation

Along with the protection of lands and forests, the colonial regime's effort was focused on wildlife protection including wild animals, birds and fishes. The first legislative enactment dates back to 1916 when the Wild Animals Preservation Ordinance was first introduced.⁵⁴ This enactment was later adapted by each of the former regions of the country and handed down accordingly to the states that were created to succeed the regions.⁵⁵ Each of these laws singles out certain species of animals for protection, prescribing conditions under which they may be hunted,

⁵² See Anakwenze, F.N. (1976), "The role of Forestry in National Development" 2 *Extension Newsletter 11, Agricultural Information Section, Ministry of Agriculture and Natural Resources, Enugu, Nigeria*; cited by Eweluka, D.I.O., supra.

⁵³ The National Parks Act 1991. Laws of the Federation of Nigeria.

⁵⁴ This was subsequently renamed Wild Animals Act and contained in the laws of the federation of Nigeria, 1958 vol.6

⁵⁵ See the Wild Animals Preservation laws of: former Eastern Region of Nigeria, cap. 133, 1963; former Western region, cap. 132, 1959; former Northern Region, cap. 140, 1963; laws of lagos state, cap. 140, 1973.

captured or killed. It provides for the creation by the state administration of game reserves or game sanctuaries and sets out or authorises the setting out of conditions under which animals found in such reserves or sanctuaries may be hunted, captured or killed. It regulates or authorises the regulation of the methods of killing or capturing, and prohibits unauthorised trafficking in trophies.

In addition to the direct regulation by the Wildlife law, wildlife were also protected and managed through the use of administrative orders and regulations. Commissioners and administrative officers issue licences and permits under which the animals may be hunted, captured or killed. It was made an offence to hunt, capture, or kill a protected animal. A protected animal was defined as an animal that is found in a game reserve or in its natural state but designated as protected.⁵⁶ According to the northern states law, protected wild animals are classified into three- 'prohibited', 'specially protected' and 'protected'. This classification determines whether a permit would be required by a person willing to hunt, capture or kill any animal. For instance, without the permission of the commissioner responsible for animal and forestry resources, a person was not to hunt, capture, kill or be in possession of any prohibited or specially protected animal; but a

⁵⁶ Former Northern law, sections 4-9, and 1st, 2nd and 3rd schedules; Former Eastern law, sections 6-10 and 1st, 2nd and 3rd schedules.

local Government body, acting with the consent of the commissioner may authorise a protected animal to be hunted, captured or killed. There is an exception provided in order to protect young animals. The exception is to the effect that even a licence holder shall not hunt, capture or kill the female of a prohibited or specially protected animal when accompanied by its young or the young of the same species unless there is an express permission granted specifically for that purpose.

In the southern states of the country, however, three types of licences are available to a foreigner wishing to hunt, capture or kill a protected animal. He must obtain a bird licence if he wishes to hunt, capture or kill any of the birds classified as game bird, while he needs a special licence if he sets his mind upon specially protected animals; and he has to obtain a visitor's or non-Nigerian's licence from an administrative officer before chasing, capturing or killing any of the protected animals. A Nigerian citizen on the other hand does not need any licence to hunt, or kill any of the game birds, provided he uses no firearm other than a flint-lock gun. Acting alone or in combination with other Nigerians, he may, with the permission of an administrative officer hunt or kill any other protected bird or animal. However, each licence must set out the species and number of the animals to be hunted, captured or killed thereunder. The licence may also, stipulate the conditions under which the killing may be

effected such as the method of hunting, capturing or killing. A licence is again required in the northern as well as southern parts of the country for taking the egg or egg-shell of any of the protected birds not in a domesticated state.⁵⁷

In what appears to be an attempt to make the protection of wildlife in the country very effective in practice, the law goes further to restrict deals or trafficking in trophies and to regulate the method of killing, capturing or taking animals, birds and fishes. A Trophy has been defined as "any protected animal dead or alive or anything part of or produced from any such animal when dead, or any protected bird or eggs, egg-shells, nets or plumage of any such bird, but does not include any trophy or part of a trophy which by a process of *bona fide* manufacture has lost its original identity."⁵⁸ It has been made an offence for any person to possess, purchase, export, sell or transfer any trophy or to manufacture anything from it without the written permission of the commissioner or an administrative officer. Such a permit, known as a free disposal permit, must have a full and clear description or the identification mark of the trophy in respect of which it is

⁵⁷ Eastern law section 9; Western law section 7; Northern law section 49.

⁵⁸ The Wildlife Act, section 2. Eastern law, section 3; Western law, section 3; Northern law, section 2.

issued.⁵⁹ There is a presumption that anybody found to be in possession of a trophy has acquired it illegally so that the onus of proving otherwise thus rests with such a person.⁶⁰

Also regulated by statute and administrative orders is the method of capturing or killing animals, birds and fishes. It is an offence for any person acting without the written permission of the responsible commissioner to use any poison, dynamite or other explosive or any electrical means or device for killing, capturing or taking any fish or protected animal.⁶¹ Furthermore, it is an offence for anyone to shoot at any wild animal other than wild fowl or crocodile, from any aircraft or from any vehicle or craft propelled by mechanical means. The use of motor vehicle or aircraft either for hunting, killing or capturing any animal or bird or for driving, stampeding or disturbing any such animal or bird for any purpose whatsoever, including that of filming or photographing is prohibited.⁶² The law also prohibits the making or the use of any game pit, net or trap for killing or capturing any protected animal or

⁵⁹ Eastern law, section 11-17; Western law, section 15; Northern law, section 36-39.

⁶⁰ Western law or lagos law, section 15; Eastern law, sections 15, 17.; The Federal Act, sections 13, 15.

⁶¹ Eastern law, section 18; Western or lagos law, section 16; Northern law, section 33; The Federal Act, section 16.

⁶² Northern law, section 34; The Wild Animals Preservation (licences) Regulations of the Former Eastern Nigeria, section 10. This regulation prohibits the hunting of animals with dogs and the firing at a protected animal or bird from any steamer in motion.

bird as well as the use of bright lamps or other portable lights for killing or capturing animals by dazzling them or otherwise rendering them more easy to prey.⁶³ The use has also been prohibited of any explosive or noxious substances for fishing in the country's territorial waters.⁶⁴

On the whole, protection of Wildlife in Nigeria has been statutorily placed in the hands of administrative authorities acting under the close supervision of the respective state commissioners. They have very wide discretionary powers to grant, refuse or cancel licences; they may require an applicant to provide some security for his licence. Above all, the commissioner may issue regulations prohibiting the capture or killing of fish or any kind of specified fish either generally or in specified waters; prohibiting the use of any kind of net or instrument for the killing or capture of fish; protecting spawning beds; prohibiting the firing at animals or birds from any steamship or regional waters; prohibiting the use of poison for the purpose of killing any animal or bird; prohibiting the making or use of any pits, nets or traps for the purpose of capturing or killing any animal or bird; prohibiting the use of fire for the purpose of hunting,

⁶³ Section 10(c) of the Wild animals (licences) Regulations, *supra*. See also, The Wild Animals Preservation (Prohibition of Dazzle) Regulation of the former Eastern Region of Nigeria.

⁶⁴ See The Sea Fisheries Act, 1971, section 8. See also, the Sea Fisheries (Fishing) Regulations, 1972, sections 1 and 2 which among other things prescribe the size of fishing equipments in the territorial waters of the country.

killing or capturing any animal or bird; providing for the marking with identifying marks of elephant tusks and rhinoceros horns; prohibiting the possession of specified kind of arms lamp of any other article used or likely to be used or capable of being used in hunting; prohibiting the carrying of any specified kinds of arms. lamps, or any other articles while hunting; and generally for ensuring that wild animal, including birds are effectively protected and preserved.⁶⁵

There is however a serious indictment of the wildlife law about its inability to help attain the necessary protection of animals and birds in the country. For example, it has been observed that:

On the whole, it may be said that wild animals in Nigeria have not been effectively protected largely because the laws designed for the purpose are usually not seriously enforced. Most of these laws have virtually become a dead letter, neither heard nor ever observed by the common man. The existence of each law and its contents are not brought to the knowledge of the people... As a result, the man in the street does not know... that he is required to obtain a licence before hunting, killing or capturing any wild animal other than an elephant. He may know that the killing of an elephant requires state approval, simply because he knows that the tusks of an elephant are valuable and that governments are interested in them.⁶⁶

The observation by Eweluka here concerning the lack of seriousness in the enforcement of the laws for the protection of wildlife, the result of which is lack of

⁶⁵ Western or lagos law, section 42; eastern law section 43; Northern law, section 43.

⁶⁶ Eweluka, D.I.O., supra p. 328.

knowledge amongst the populace could be said to be largely true. In fact it appears to be the fundamental problem of the authorities that the laws are not always readily enforced for maximum results. But much more fundamental from the perspective of the local people who view the hunting of animals as their means of livelihood, is the fact that they require consultation and perhaps education about the ways of sustainable hunting so that they could still hunt the animals, but within a given conservation framework. Moreover it is possible that local people have their own traditional principles of sustainable management of the wildlife which could easily be discovered through the consultation process, research and education. Once this is done, a basis would have been found for incorporating the local people's principles of sustainable management into the government's own framework of sustainable management of wildlife resources.⁶⁷ In another sense, even if the people do not have any sustainable practices amongst themselves which could be promoted, the consultation process would certainly serve to educate them about the need to preserve the wild animals which stands the chance of success once they realise it is in their own long term interest so to do. This must of course be supported by the provision of alternative sources or ideas about the use of alternative sources of food.

⁶⁷ One could perhaps here point to the experience of the Japanese fishing communities whose local customs of managing common resources were sifted and incorporated into a legislation which was found out to be working well. See chapter five, *infra*, for more discussion on this.

Furthermore, it has been observed that the treatment of wildlife matters betrays the fact that conservation of the nation's wildlife heritage is not high on the government's agenda or national scale of values.

4:3: Statutory Control of Planned Development of the Human Environment.

While concerned with protecting and preserving the conditions of the natural environment, the fact is that human beings must change and alter the environment in order to cope with scientific and technological developments. In fact, without changing the environment and transforming it into a happier and healthier place to live in, the human being cannot benefit much from his civilization and technological advancement. This is an issue that appears to have been tackled quite early in the colonial period in the country. Thus one finds that the first statutory attempt to plan and direct land development was made in 1946 when the Town and Country Planning Ordinance was enacted to provide for the replanning, improvement and development of different parts of the country.⁶⁸ The main issue here is

⁶⁸ This was contained in Ordinances No. 4 & 29 of 1946 otherwise known as Cap. 155 of the laws of Nigeria, 1946. This law did not last long in the Statute Books as it was not even contained in the 1958 volumes of the laws of the federation of Nigeria. This was due to the fact that Urban development ceased to be under the power of the Federal government with the adoption of the federal system and the creation of regional and later states as units of power in the country. The significance of the law lies in the fact that it was the starting point for the formal enactment of the planning law of the country which should be seen as the first attempt at regulating and controlling land development by man in the country.

that as Utuama⁶⁹ has tried to demonstrate, planning law should be considered as part and parcel of the environmental management framework of the country and that it has played a significant role in the management of the Nigerian environment.⁷⁰ This can be seen from the fact that the law provided for a development control framework which has been designed to ensure that the development of the human environment proceeds along a defined line which would have enormous implication for health and safety of the urban dwellers. In this regard the 1946 enactment provides that the government could periodically constitute parts of the country into planning areas, the development of which must proceed according to development schemes or plans approved for the areas concerned. Urban centres have grown up since then and are still growing within the framework of schemes prepared and approved under the provisions of these enactments. It must be added that urban centres are also required to comply with the provisions of certain enactments such as the public Health laws of each state which prescribe the environmental standards of sanitation and health to be maintained by those living within them.

The two laws referred to above, namely the town and country planning laws and the public health laws do represent the first generation of environmental protection laws that the

⁶⁹ Utuama, A. A. (1991) "Planning Law and Environmental Protection", in J.A.Omotola, (ed) **Environmental Laws in Nigeria**. Faculty of Law, University of Lagos. pp.16-34.

⁷⁰ Ibid.

country has had. It is significant to note that their importance lies in the fact that they are to a very large extent responsible for the state of some of the urban centres which are reputed to have been well planned with modern facilities. Also, these laws were responsible for the kind of environmental sanitation standards which were attained during the colonial era, and to which now people refer to nostalgically and even wish that a system of environmental sanitation inspectors who were thought to have been effective, be reinstated.⁷¹ This last point shows how effectively those laws were administered during the colonial period since a system they put in place is now being considered as the possible solution to the enormous environmental sanitation problems of the urban centres. Although the state of environmental sanitation had deteriorated in the country, the reality is that the system of sanitary inspectors has not been abolished under the public health laws of today and in fact has never been abolished at all. What happened seems to be that there was a shift of emphasis on the part of the government which made the role of the sanitary inspectors somewhat irrelevant and inconsequential. Otherwise sanitary inspectors still exist under the Public Health laws of the states and located within state ministries of health. The fact which this points to is that any consideration of the

⁷¹ See for example Ola C.S. (1984) *Town and Country Planning and Environmental Laws in Nigeria*. University Press Limited, Ibadan. Ola says at page 58-59 that "Refuse depots should be constructed within easy reach of the inhabitants and the old system of visitation of homes by Public Health Inspectors should be revived."

kind of legal framework which the nation desires for the attainment of proper sanitation in its towns and cities should start from an examination of the pre-existing laws which in this case would include the Public Health laws.⁷² In fact such an examination might even show that there is indeed no need for the promulgation of any new laws so that only a facelift might be given to the old law and a great deal more attention to the administration of the laws in terms of giving resources and equipment to the administering staff, which could in turn obviate the need for a new law or organisation to deal with the problem.⁷³

Having said that, it is also important to further consider the actual role of the town and country planning laws and the public health laws of the states in the development and protection of the human environment which could be seen as their contributions to environmental management in the country.

4: 3: 1: The Town and Country Planning Laws (TCPL).

From being a federal law applicable to the entire nation in 1946 when it was first enacted, the TCPL over the years

⁷² It is worth noting that the experience of environmental law experts who advise United Nations Agencies on projects about sanitation laws also shows that there is a lot to be gained from analysing the existing laws before deciding the appropriate laws to recommend. See lecture notes on Urban and Environmental law in developing Countries class of Professor P. McAuslan, may 1990.

⁷³ This could also make unnecessary the setting up of a new organisation within the bureaucracy which could be starved of funds and enter into hostility with the existing government departments or bodies that feel, perhaps quite rightly, that they could have executed the same functions with a little more resources and attention from the government.

metamorphosised into a legislation which is applicable at state level only. The significance of its being a state law particularly lies in the fact that it allows for disparity in the content of the laws between states in order to reflect some cultural or other peculiarities of particular states. There seems, however, to be no remarkable differences between the laws of the various states at the moment. This appears to be the reason why several discussions about the laws by Nigerian authors have treated them as if they are having uniform provisions and approach.⁷⁴ There does not seem to be any strong basis for disagreeing with this approach though, particularly if the way state structures and institutions were developed in the country are taken into account, whereby a series of state creation exercises were made which simply increased the numbers of states from existing ones with the new states succeeding almost every structure, including applicable laws, of the old ones. Thus it is the intention here to look at some of the provisions of certain state planning laws as a way of having a representative view of the ways in which planning laws could be said to have contributed to the environmental management in the country. The function of planning law as mentioned earlier is to subject the development and use of land in a given jurisdiction to certain standards with the aim of achieving a degree of environmental quality.

⁷⁴ See Eweluka, *supra*.

Under the Town and Country Planning Law a state government could, pursuant to its powers, constitute any municipality, urban area, town, village, settlement or rural area within its jurisdiction, a planning area with the object of controlling the development and use of the lands comprised therein. This is to be achieved by, among other things, controlling and regulating the nature and quality of buildings to be erected there, and prescribing and enforcing therein proper sanitary conditions and conveniences, securing the co-ordination of roads, public utility services and transport and communication facilities in the area. The body which is responsible for ensuring that all the requirements of the planning law are complied with is the Planning Authority which has been solely formed for that purpose. The Planning Authority functions by way of preparing a planning scheme which provides a comprehensive structural framework with which any future development or use of land in the area should conform. In short a planning scheme may prescribe or regulate the extent to which an owner of a piece of land within the planning area may go in defacing the general environment of the area. It may even specify the percentage of a piece of land to be occupied by buildings and other structures and specify how those structures may be spaced out or located. Planning schemes generally do this by "zoning" land, that is, indicating its suitability for particular purposes, prohibiting inconsistent uses and granting discretion to the local planning authority to decide in other cases

whether a proposed development or use of land may or may not be inconsistent with the purpose of the zoning. Thus a planning scheme may divide an area into zones, permitting or prohibiting buildings of a specified class to be built in particular zones, and reserving particular areas of land for the purposes of any industry, trade or undertaking. The Shomolu-Ilupeju Scheme in Lagos provides a typical example of the few planning schemes that were made by some planning authorities in accordance with the town and country planning laws of the country.⁷⁵ This scheme illustrates not only the kinds of requirements which are normally stipulated in order to achieve a planned development within a planning area, but also played a significant role in the management and protection of the environment within it. This it did by, among other things, regulating the space that must be maintained between buildings and that between buildings and streets; and how the state of buildings must not be allowed to threaten the existing environment in a planning area. In terms of details, it sets out the minimum distance to be maintained between the building lines and boundary walls of each plot in the area and also provides that, apart from boundary walls or fences that may be built, no building or other structures should be erected between a street and building lines, and that no goods or merchandise, wares or other obstruction should be placed, deposited, kept or displayed in the area between the street

⁷⁵ See the Somolu-Ilupeju Scheme (Approval) Order, 1961. made pursuant to sections 12 and 13 of the Nigeria Town and Country Planning Law, Cap 123, laws of the Federation of Nigeria, 1958.

and any building line.⁷⁶ For the purpose of conservation, it provides that whenever the planning authority in charge of the area is of the opinion that any growing tree ought to be preserved for any reason, it may register the tree in question and notify the owner or occupier of the premises in which it stands that the tree has been registered and henceforth not to be cut down, logged, tapped or wilfully destroyed, except in compliance with the provisions of an enactment.⁷⁷ The planning authority has also been given the power to see to the maintenance of minimum standards of safety in built up areas within its jurisdiction. Thus in accordance with this power, where it appears to the local planning authority that the amenity of any part of a planning area or of any open space created therein is seriously injured by the condition of any building, garden, fence or curtilage in the area, it may call upon the person by whose action or omission the injury arose to take action immediately to abate the injury or nuisance. ⁷⁸

This brief overview of the planning law shows the measures that were provided in order to plan and control the use of land for development purposes. It remains however to state that although the planning law was designed to achieve the emergence of a planned environment which indirectly helps

⁷⁶ Ibid section 35

⁷⁷ Ibid. section 36.

⁷⁸ Ibid. Section 18(b) also provides that "no land comprised in a zone shall be used for the purpose of refuse tipping, sewage disposal or cemeteries without the consent of the Authority."

towards making things easier in the management of developed urban areas, it must be acknowledged that it was not first and foremost an environmental conservation or protection legislation. It worth mentioning still that its environmental protection function, which was also recognised by Utuama in his analysis of the Nigerian planning law, is enormous. And as Utuama has found out there is a strong relationship between the emergence of decent environment in some of the urban centres and the implementation of the town and country planning laws. He says that:

It is now indisputable that areas where decent environment exists in our urban communities, are areas to which the Town and Country Planning Laws have been applied and sustained.⁷⁹

Furthermore, as experience in other jurisdictions has proven, planning law has an enormous potential for controlling unwanted or undesirable environmental impacts or problems thereby contributing towards environmental protection and management. The potential here relates to the power of planning authorities to use their power to control building development to protect the interests of

⁷⁹ Utuama, A.A. (1991) "Planning Law and Environmental Protection", in J.A.Omotola, (ed) ***Environmental Laws in Nigeria including Compensation***. Faculty of law, University of Lagos, Nigeria. pp. 16-34. But as Ayeni has pointed out also, the potential of planning law which operates through the system of planning schemes and master plans, is limited as it is actually no more than an ad hoc approach for the solving of pressing urban problems of overcrowding, housing shortage, slum clearance, or street-trading and so forth. See Ayeni, B.A. (1979) "A Critique of Master Plan Approach to Metropolitan Planning in Nigeria.", in P.O. Sada and G.E.D. Amuta (eds) *Spatial Perspectives in National Development*. p. 247

the environment. In the U.K. for instance, planning law procedure which consists of a system of consent requirement for planning applications has become an important means through which environmental protection and management issues affecting development projects are closely examined and considered.⁸⁰ This is to a large extent what obtains in Australia where the planning process is employed in environmental protection through the tying of environmental preservation, conservation, protection and management issues to the granting of planning approvals to proposed developments.⁸¹

It has to be stated however that in Nigeria and perhaps many other developing countries, attempts to deal with the problems of the environment through planning law medium has had only a partial success. In many of the growing urban centres, the planning system has only resulted in the creation of pockets of improved environment here and there which often take the form of Government Reservation areas or new layouts. It has remained difficult to have an entire urban centre for example to which a planning scheme applies being fully developed in accordance with the same uniform standards. There is also the issue of how the levels of environmental sanitation and management in both planned and "unplanned" parts of urban centres are supervised and

⁸⁰ ALDER, J. (1993) "Environmental Impact Assessment-The Inadequacies of English Law. *Journal of Environmental law*.

⁸¹ See for instance, Bates, G.M. (1992), *Environmental Law in Australia*. Butterworths. 3rd Edition, chapter four.

maintained. Although the planning law did have references to the issues of safety of buildings and sanitation of built up areas, the responsibility for supervising the state of buildings with a view to monitoring their safety^{and} sanitation^{not} with the public officer of health under the public Health law.

4: 3: 2: The Public Health Laws.

It is certainly right to say that public health laws and planning laws have developed side by side in Nigeria. They have similar historical background in the country. Historically speaking, public health laws followed the same fate of development with planning laws in the sense that they started as national laws but have now ended up as state laws. The primary function of public health law has been to improve health conditions in urban areas through the control of nuisance, infectious diseases and instilling of hygienic habits in people. The responsibility for the enforcement of the laws was vested in the public health inspectors who were considered to be very effective particularly during the colonial era. They carried out famous house to house inspections which, though not popular with the people, they nonetheless helped to a large degree in the maintenance of a state of environmental sanitation in built up areas generally. Thus through the public health law, a legal framework was brought into being for dealing with the mainly domestic environmental problems of built up areas in the country. It must be pointed out that the role

of the public health officers and inspectors was very crucial to the success of the implementation of the laws.

By and large both the planning laws and public health laws should be considered as significant landmarks in the development of statutory environmental regulation in the country. It is important however to remember that these two laws which laid the foundation for the regulation of environment related problems of the country were in themselves inadequate for addressing the new and ever increasing environmental problems that the nation faces. These include problems of oil pollution, desertification, environmental impact of water resources development projects, e.t.c.⁸² which had to be tackled through separate pieces of legislation. Oil pollution of water for instance was regulated under the Oil in Navigable waters of 1968.⁸³ Another pollution caused by oil and separately regulated was gas flaring by oil drillers, a problem which caused serious damage to the farms of communities living in the oil producing areas. The Decree which actually addressed this problem was promulgated in 1979,⁸⁴ although its primary aim was to control the wastage which was being occasioned through the useless burning of natural gas by the oil companies. Thus the period just before the end of

⁸² See chapter Five, *infra.*, for a discussion of the numerous environmental problems facing Nigeria.

⁸³ See the Oil in Navigable waters Act No. 34 of 22 April, 1968. See also, the Petroleum Act, 1969.

⁸⁴ See the Gas Reinjection Act, 1979.

the 1960s saw the beginning of federal legislative activity in order to protect the nigerian environment from the hazards of oil pollution. The essential feature of this activity was the singular focus of the legislation, i.e., the pieces of legislation were mainly concerning the particular activity which it was being sought to control. This did not change the old trend of legislating on a particular activity through which the protection of the environment becomes an incidental matter. This was the approach in the mining Ordinance of 1946, which sought to regulate mining activity in the country, but at the same time introduced therein some measures to ensure that the deleterious effects of mining and quarrying activities were controlled and thereby protecting the environment.

It is necessary to point out that it was only towards the end of the 1980s that the trend at the federal government level changed, and an encompassing legislation setting out environmental quality standards in respect of land, water and air was put into place.⁸⁵ But then at the state level, the problem of urban environmental waste had compelled state governments to swing into legislative action to provide the legal and institutional frameworks for establishing some kind of environmental sanity. For

⁸⁵ Here the reference is to the Federal Environmental Protection Agency Decree, 1988.

example, in 1978⁸⁶ Lagos State enacted the Environmental Sanitation Edict, which established a Waste Control Board for the State and given the responsibility of combatting the problem of collection and disposal of refuse and maintenance of the drains of lagos which had become unsightly and posed serious threat to public health in the lagos metropolis.

4:4: Conclusion

This chapter has shown that statutory means of environmental control and management featured quite early in the nation's history, going back even to the early days of the establishment of British colonialism. Thus by the time, the country secured its independence in 1960, a basis had been laid for a number of the current legislative controls relating to the protection of forests and urban development. However, these laws did not adequately cater for the more complex environmental problems that were to arise in the country such as the adverse environmental effects of water resources development projects and problems related to the oil industry. It is such problems, which are mainly linked to the pursuit of modern development projects, that we shall pursue in the next chapter.

⁸⁶ See the Lagos State Environmental Sanitation Law, 1978 which was subsequently repealed and replaced by the Lagos State Environmental sanitation law of 1982, which came into force on 30th September, 1982.

CHAPTER FIVE

THE STATE OF THE ENVIRONMENT.

5.0 Introduction.

This chapter takes a look at the major environmental problems in Nigeria. It is quite obvious that some environmental problems are supra-national, i.e., their impacts extend beyond national boundaries. This is more evident in cases such as damage to the ozone layer, acid rain, e.t.c. At international level, these supra-national environmental problems have prompted cooperation and action which have led to some positive developments in international Law and now form a rapidly growing body of International Environmental Protection and Management Laws. The concern in this chapter, however, is with those problems of the Nigerian environment resulting from acts or omissions of persons in Nigeria which could therefore be remedied and controlled through the active use of Nigerian environmental control policies and laws.

The main purpose of the chapter is to show that the failure to recognise environmental protection as an important component of Nigeria's development process has only served to increase the enormity of the environmental crisis which it faces. A two-tier approach-urban and rural contexts-has been adopted in the discussion in this chapter. The main reason for adopting this approach is that most of the existing policies and laws that address the problems at the

moment have been so contextualised, i.e., their focus in content or in the manner of implementation is either towards the urban environment or the rural environment.

5:1: The Urban Environmental Problems.

It could be argued that one way of ascertaining the existence or otherwise of a phenomenon, especially for the lawyer, is to examine the statute books in order to discover whether any legislation dealing with such a phenomena was made in the past or not.¹ This is not necessarily a conclusive proof that, as a matter of fact, the problem exists or not, but where such a law is found it could provide a basis for a strong assumption that the problem was indeed recognised at a point in time and might still be in existence. Going by this argument, urban environmental problems in Nigeria are discernible from the fact that almost all the states of the federation have an environmental sanitation Law which provides for the control of the problems and management of the urban environment.² This kind of law usually provides for the setting up of a State Environmental Sanitation Board which, in conjunction with an environmental sanitation court administer and

¹ This will of course be in addition to some other ways like an empirical enquiry that could provide data as to the existence or otherwise of the problem.

² Uchegbu A., (1989), "The legal Regulations of Environmental Protection and Enforcement in Nigeria.", *Journal of Private and Property law, University of Lagos*. Vol. 8 & 9. pp 62-63.

enforce the sanitation laws respectively.³ As the name clearly mentions, the laws are concerned with the sanitation of the environment within the respective states. This concern is, however, with the urban environment although this fact does not come out clearly from the name. In most states the evidence suggests that emphasis on the implementation of the provisions of these laws is on the urban environment.⁴ In addition to the environmental sanitation board system, use has also been made in some states, of environmental sanitation "Task Force" to help enforce the sanitation laws. The activities of both the Environmental Sanitation Boards, Task Force committees and Sanitation Courts are most visibly noticeable during the national Environmental sanitation weekends which take place on the last saturday of each calender month of the year.⁵ This exercise is mostly observed in the urban centres while people in the rural areas go about their normal activities of the day such as going to the farm. This observance in the urban centres is, perhaps, because of the

³ See for example the Borno State Environmental Sanitation Edict, 1986 and the Environmental Sanitation Court Edict, 1986 where a Board and "Court" have been created to administer and enforce the law respectively; See also the Rivers State Environmental sanitation Edict, 1984, where a Task Force and a "tribunal" were established to administer and execute the law.

⁴ This fact was obtained from an interview with a president of the Environmental Sanitation Court in Maiduguri, Borno State in July 1991. Although the judge said that the court moves round the State to sit and try offenders of the Sanitation laws, that fact by itself does not detract from the contention that the focus of activity is on urban problems because all the areas that the court goes to sit at are urban areas outside the state capital.

⁵ On each sanitation day all persons throughout the country are expected to personally clean their compounds and common areas. Movement of the members of the public is prohibited during the exercise period which lasts from 7.00-10 a.m.

enormous amount of filth and garbage evident in the urban areas which primarily led to the concern for environmental sanitation in the first place.⁶ It is possible though that another reason might be the lack of adequate manpower and resources that will help to enforce the observance of the cleaning exercise on the sanitation day throughout the urban and rural areas of the country. This effect of this is to keep the rural areas outside the control of the sanitation Boards in their attempt at the implementation of environmental sanitation laws in all parts of the state.

Apart from being able to discern environmental problems from the available environmental sanitation and protection laws, a number of works have pointed to the nature and kinds of urban environmental problems in Nigeria. A number of factors have been identified as being responsible for the development of urban centres and amongst these are population explosion and the rural migration to urban centres because of the desire amongst the rural populace to live and enjoy the perceived urban good life.⁷ Also the development programmes of all the tiers of Government in Nigeria have contributed significantly to the accelerated

⁶ See Stock, R., (1988), "Environmental Sanitation in Nigeria: Colonial and Contemporary.", *Review of African Political Economy*. No. 42. pp.19-31.

⁷ In lagos for example, the population increase attributable to migration is 59% while only the remaining 41% is the result of natural increase. Taylor, R.W. (1993), *infra*.

pace of the growth of urban centres.⁸ A number of problems that affect the urban environment have been identified and an attempt will be made to address the major ones.

5:1:1: Urban Waste and its Management.

Generally speaking, waste (solid or liquid) is one of the most pressing environmental problems associated with industrialisation and urbanisation. Its successful management and disposal could perhaps have a lot to do with technological advancement and appropriate harnessing and utilisation of the resources at the disposal of any nation. Owing to the necessity for good waste management, several countries have devised various institutions, structures and provided facilities for dealing with it. In Nigeria the existence of the phenomenon is well documented⁹ and so are the various attempts made at the management and disposal of the waste. Both solid and non-solid wastes are considered as posing serious degradation menace to the Nigerian urban environment. There has been a phenomenal increase in the volume and range of solid wastes generated daily in the country as a result of an increased rate of population growth, urbanisation, industrialisation and general

⁸ See Taylor, R.W. (ed) (1993) **Urban Development in Nigeria-Planning, Housing and Land Policy**. Avery, Aldershot. Taylor states that urban growth rate in Nigeria is about 5 to 6.5% per annum which is double the rural growth rate.(p.5)

⁹ See for example, Federal Ministry of Housing and Environment, (1982), **The state of the Environment in Nigeria-Solid Waste Management in fifteen cities and Urban Areas in Nigeria**. Monograph series no. 2; Okuofu, C.A., (1991), " The Solid Waste Problem of the Nigerian Savanna Belt" **Paper presented at the International Workshop on Ecology and Society in the History of the African Sahel and Savannah, University of Maiduguri, Nigeria**(hereinafter the Maiduguri Conference), 23rd-28th September 1991.

economic growth.¹⁰

The Environmental Sanitation Boards mentioned above do normally have as part of their tasks the responsibility of the collection and disposal of domestic waste and litter. They use their own vehicles in the collection and transportation of domestic waste to the dumping sites. In other words the Boards directly engage in handling domestic wastes. On the other hand however, the function of collection and disposal of urban domestic waste has traditionally been known to be that of the local government councils in the country which they carry out directly or hire out the function to the private sector. Here one finds an overlapping of functions between the Local Government Councils and the Environmental Sanitation Boards. But it does seem that the creation of special bodies to deal with the problem of waste collection and disposal in the urban centres emerged onto the scene in the late 1970's and early 1980's, as a result of a perceived failure of the local Government Councils to effectively deal with the problem. The interesting point however is that the resort to the Sanitation Board system does not seem to be providing the required result either. This could be attributable to the confusion and rivalry which has been generated between the Sanitation Boards and the Local

¹⁰ Sada P.O. and Odermeho, F.O., (eds), (1988), ***Environmental Issues and Management in Nigerian Development***. Evans Brothers, Ibadan, Nigeria. p. 403; Also according to the Federal Ministry of Housing and Environment (1982), supra, about 2.2 million tonnes of waste was being generated annually in the country and there is the likelihood of the figure doubling by the end of the century.

Councils over who should control and manage waste and litter in the various states. It is curious to note though that the responsibility of the local councils for management of waste is still entrenched in the nation's most recent constitution¹¹ and the councils still maintain a level of presence in the handling of waste and its management in various states of the federation. Here there is a fundamental question of how appropriate it was to create another body and assign to it a function of the local council given to it by the constitution. It is however important to observe that these sanitation bodies were created by military governments in the country who normally rule and exercise governmental functions through the enactment of Decrees and Edicts which are clearly declared to be superior to any other law including the constitution. Actually nothing would have been considered objectionable about the concurrence of both the local councils and the environmental sanitation boards in handling environmental sanitation in the country with some kind of organised supplementary role for the latter or working jointly to ease the problem of waste in the country. However, despite the existence of both the local councils and sanitation boards or task forces the problem of waste still overwhelms most Nigerian cities, which is particularly said to be responsible for a number of urban

¹¹ It is still contained in Item 1(h) part 1 of the Fourth Schedule to the 1989 Constitution.

floods and many other problems.¹² It therefore seems quite reasonable to suggest that the overlapping of functions could have been responsible for the confused state of waste management and disposal in the cities as a result of which the cities are never free from heaps of waste indiscriminately dumped at any available open space.¹³

5:1:2: Air Pollution.

The fact of air pollution in Nigerian cities has also been investigated and found to be real and threatening.¹⁴ It has been found out that the environmental side effects of rapid industrial development that accompanied the 1973-78 oil boom in the country have gradually made the problem of air pollution a fact to reckon with over the last decade.¹⁵ For example, the air over Lagos city which is reckoned to be accommodating about 38 per cent of the manufacturing industries of the country, has since 1983 been associated with characteristic unpleasant odour and with its skyline invisible until about midday due to a greyish industrial haze.¹⁶

¹² Nigerian Environmental Study/Action Team, (NEST), (1991) ***Nigeria's Threatened Environment-A National Profile***. Printed by Intec Printers Ltd, Ibadan. p.229.

¹³ Ibid.

¹⁴ See for example, Akeredolu, F. (1989), "Atmosphere Environment Problems in Nigeria-An Overview", ***Atmospheric Environment***. pp. 783-792.

¹⁵ NEST, *supra*, p.124.

¹⁶ Yebovi, D., (1983), "All that trash", ***The Guardian*** (Nigerian Newspaper) of August 28th. p. 17-22.

In addition to air pollution from industrial processes also, human beings face the hazards of fumes emitted from vehicles, especially in urban areas with heavy traffic loads. Vehicular movement is also accountable for dust pollution just like wind, bush burning, harmattan haze and industry. The intensity of the harmattan dust haze, which not only disrupts traffic but also causes respiratory infections, has been observed to be on the increase. The total annual harmattan dust load over the country was estimated to have increased from 160,000 tonnes in 1979 to between 300,000 and 600,000 tonnes in 1988.¹⁷ Furthermore there is air pollution threat from gas flaring which has been found to have destroyed crops completely at about 200 metres away.¹⁸

Thus the problem of air pollution in the country is threatening like many other environmental problems and need definite attention. The case of air pollution becomes particularly worrisome because it is an area with hardly any significant control measures in existence over the amount of emissions of noxious gases either by industry or vehicles which pose serious danger both to people and

¹⁷ NEST, supra p.125.

¹⁸ See Okezie, D.W. and Okeke A.O. (1987), " Flaring of Associated gas in Oil Industry: Impact on Growth, Productivity and yield of selected farm-crops, Izombe Flow Station Experience". **Paper presented at Nigeria National Petroleum Company Workshop, quoted in NEST, supra, at P.131.**

environment.¹⁹

5:2: The Rural Environmental Problems.

It could be said in general terms that the rural environment faces its greatest threat from the desire by government to give priority to the material needs of the population which in many instances involves the exploitation of natural resources of the rural areas. In an attempt to satisfy this desire, the government faces a dilemma because although it must exploit the rural resources it must not at the same time allow the resources to be exploited to such an extent that their regeneration capacity is sapped and destroyed by mismanagement. This means that in the pursuit of its development policies and programmes the government must ensure that the environment is well conserved and protected. But the fundamental question at the moment is how much consciousness of the need to conserve and protect the rural environment can be gleaned from the efforts of the government towards development so far. It is this theme of environmental quality of the rural areas that will be explored in this portion of the chapter. This will help in highlighting the major environmental problems that afflict the Nigerian rural environment both as a result of development efforts and those that could be said to be inherent or natural. In

¹⁹ It should be pointed out that the Criminal Code does provide some penalties for the emission of fumes but only where such fume causes harm to a human being. Thus the provision is quite narrow in focus since it does not cover the harm that could be caused to the human and natural environments and only concerned with human health.

the course of doing this, necessary analysis will be made of government policies designed to protect the environment and also point out those areas where these are lacking. This will contribute towards getting a clear picture about the state of the Nigerian environment in general. Focus shall be made on activities that have so far had great consequences on the rural environment such as mining, deforestation, desertification, soil erosion and pastoralism on the one hand and water resources development projects and pollution on the other.²⁰

5:2:1: Mining, Quarrying and Oil Exploitation.

Environmental degradation resulting from mining, oil exploration, drilling and refining has become one of the major sources of environmental pollution in rural Nigeria.²¹ Mining has a long history in human civilisation. It was one of the developed commercial activities that were being practised when the Europeans arrived the country in the late nineteenth century.²² Mining then was being conducted with local technology appropriate and adequate for that time. The minerals generally mined included gold, clay, iron ore, tin, salt and soda. After the British

²⁰ This is not an exhaustive list but it is believed to be sufficient to illustrate the point of environmental degradation in the country.

²¹ See Okafor, F.C., (1988), "Rural Development and the Environment: Degradation Versus Protection", in, P.O.Sada & F.O.Odermehor, (eds), **Environmental Issues and Management in Nigerian Development**. Evan Brothers Ltd, Ibadan. p.154

²² See Bower, P., (1948), "The Mining Industry", in, in M. Perham (ed), **Mining, Commerce and Finance in Nigeria**. Vol.II. Faber & Faber Ltd, London

Colonial Power had established its hegemony over the country by about 1900 attention was focused on regulation of mining activity, being one of the major economic activities of the time. This should be understandable because one of the primary reasons for colonisation in the first place was to secure some economic advantages and this inspired the vigour with which regulations conferring rights to natural resources and imposition of conditions that guaranteed maximum exploitation of natural resources were pursued.

Before the discovery of petroleum in large quantities in various parts of the country in the late 1950s mining of other minerals was the major income earner superseded only by agricultural produce. It is noteworthy to observe that open cast mining of minerals such as tin, marble, zinc and limestone was the norm with a series of environmental problems developing as a result. The major environmental ills which usually accompany any mining activity include land surface devastation, erosion, land subsidence, disruption of drainage, deforestation, lowering and contamination of water table, and creation of mine pits.²³ These consequences as we shall see, were all identified as having resulted in various mining areas of the country.

The case of the Jos plateau illustrates this more than any other place. Nowhere in Nigeria has been as excessively

²³ NEST, *supra*, p.34

mined as the Jos plateau in the northern part of the country where series of research have established that the landscape of the area has suffered serious degradation as a result.²⁴ The local population living around the mining areas of the Jos plateau suffered extensive loss of agricultural land and crops. Although sometime later a formula was developed by the state government to force the mining companies to pay compensation to the local population for loss of their crops, the arrangement was not entirely satisfactory as no compensation was to be paid to the people for the loss of the land which was very dear to them, being the source of earning their livelihood. Not only that, from the environmental perspective, land had suffered damage and only some kind of reclamatory policy and action could have helped out. It is interesting to note that there was of course a provision made by the colonial government for the reclamation of mined land in the country. This was done through the Minerals Act of 1946 which primarily concerns the vesting of ownership and control of all mines and mineral oils in the Government, but goes on to specifically place the responsibility for restoring and reclaiming mined land on mining companies. The restoration arrangement was to be implemented through the imposition of specific responsibility to restore in a

²⁴ See Alexander, M.J., (1985), *An Historical Introduction to the Reclamation of Mineland on the Jos Plateau*. Interim Report, No.4, Jos Plateau Environmental Resources Development Programme, Department of Geography, University of Durham(U.K.) and University of Jos, Nigeria.; See also Sati, S.A., (1990), "Some Ecological Problems and Policy Issues within the Nigerian Rural Environment", in, U.M.Igbozurike, et al, (eds), *Empiricism in Rural Development*. Karto Press, Owerri. PP. 284-292.

mining company's mining lease or license.

One has to observe however that the desire of the government to ensure that land made derelict through mining activity was restored was not properly reflected in the wording of the Act.²⁵ In the final analysis one can say that the colonial government then was not fully committed to the restoration of mined land and even if it was in principle, this was not well articulated in the 1946 legislation. Therefore a sizeable amount of land was left in derelict state with serious consequences for the environment. For example, Reclamation at various mining areas was not carried out primarily because the mining companies probably were not willing to commit the extra costs it would entail to do so in compliance with their terms of mining leases or licences.²⁶ Consequently, most surface mining environments bear scars of mining degradation. Also, in addition to the case of the Jos

²⁵ . Section 34(1) of the Act provides that:

The Minister may grant mining lease and, in particular, may require the reasonable restoration of any area for mining operations by the replacement of any soil, the filling in of worked areas, the removal of any tailing or other dumps or heaps caused by mining operations, and such other methods as may reasonably be required...

First of all it says that the minister "may" order a mining company to restore a mined land. In this case, for a more positive result the law should have made the requirement for restoration a mandatory one so that every company would automatically be held responsible for the restoration of its land. This was the first loophole. Secondly, the effective date for the restoration of the land was from 1946 onwards so that any damage done by a mining company prior to that date would have to either remain like that or the government was to bear the responsibility for restoring it.

²⁶ See Okafor, F.C., *supra*, p.156.

plateau mentioned above, in the Nkalagu area of Anambra state, ecological disintegration as a result of limestone quarrying by the Nkalagu cement company has destroyed the aesthetic value of the original landscape, vegetation and animal life.²⁷ A similar environmental catastrophe was said to have befallen another rural environment where stone and limestone quarrying was carried out.²⁸

Mining activity is still a big source of environmental degradation in the country which poses serious danger to the rural environment. The only policy instrument ever produced to help check the enormous pollution and degradation dangers was the mentioned 1946 legislation which as indicated did not actually achieve much in terms of land restoration or protection of the environment in general. There certainly is room for saying that tackling environmental problems resulting from mining would require an integration of any control measures with other policy initiatives that relate to the overall environmental protection framework of the nation. This is because the concept of sustainability must be applied in the solid mineral mining sector just as it is applied to other economic development activities. This could mean imposing

²⁷ See Nwafor, J.C., (1981), " An Evaluation of land conservation problems of extractive and manufacturing Industries in Nigeria: A case study of Nkalagu cement Industry", in U.M. Igbozurike, (ed), **Land Use and Conservation in Nigeria**. University of Nigeria Press. pp. 128-136.

²⁸ Omuta, G.E.D., (1984), **Rural Industrialisation and Environmental Documentary: The case of Bendel Cement Company, Okpella, Bendel State**. Unpublished Manuscript, Department Of Geography and Regional Planning, University of Benin. Cited in Okafor, F.C. supra.

some strict conditions for the mining companies in order to ensure that they take protection of the environment as seriously as they should.

The major argument made against the imposition of strict obligations on mining companies for the sake of protecting the environment is that such requirement could destabilise the mining companies as the cost of restoration could be very high and prohibitive so that when added to the dwindling prices of minerals in the international market only few companies, if at all, might be able to continue with likely undesirable consequences for the nation's economy. In this case the responsibility of government is to try and strike a proper balance between the economic benefits of mining and the environmental costs it imposes. In any case there certainly is a case for making sure that in a bid to protect the economic interests and benefits derived from the mining industry, some kind of mechanism is put in place to ensure that the mined areas are not unnecessarily degraded to the extent of making the activity an unsustainable one. This might be achieved by providing that the mining companies should use the best available technology that would inflict the least harm on the environment both in the processes of mining and restoration which would not entail excessive costs. Then some kinds of incentives could be provided to the companies but certainly not the kind that would lead to the undermining of the quality of the environment.

Another activity with serious consequences for the environment and related to solid minerals mining is oil exploration, drilling and refining (exploitation). Oil at present is the country's and probably world's most important and widely used source of energy. The country is a major producer and exporter of petroleum and is likely to remain so for sometime. The environmental questions associated with oil exploitation in Nigeria are oil spillage and gas flaring. With respect to oil spillage, from the period when oil was first shipped out of the country in 1958 to the present there have been not less than three thousand oil spills.²⁹ There are a variety of reasons said to be responsible for oil spills ranging from break-up of or damage to oil tankers or storage vessels to damage to or leakage of oil pipelines, oil tank overflow, rupture or failure of loading, e.t.c.³⁰ In the year 1989 two local Government areas were hit by oil spill and the consequences were horrific.³¹ Rivers, wells, springs and other sources of drinking water were polluted and agriculture and fishing, the major economic activities in the area, were brought to a standstill as crops and fish were destroyed. A government investigation later about the incident said that the source of the spill was the burst of

²⁹ NEST, supra, p.44

³⁰ Nwankwo, J.N. (1983), " Oil Spills in Nigeria- Causes, Effects and Remedies." **Paper presented at the National Conference on Development and the Environment, Ibadan.** National Institute for Social and Economic Research [NISER], Ibadan.

³¹ **National Concord** (Nigeria national newspaper) of 22nd September, 1989

an oil pipeline owned by a leading company. It does seem that the high number of occurrences of oil spill in the Nigerian rural environment raises serious questions about the efficacy of the regulatory framework of the oil industry both in terms of the laws themselves and the way they are administered. To buttress this point, a study of oil spills between 1976 and 1979 shows that "equipment failure" was responsible for 92% of the net volume of crude oil spills during this period.³² This idea of "Equipment Failure" always offered by the oil companies as an excuse appears to have become the euphemism for faulty or negligently maintained equipment which, naturally, would always be likely to fail.³³ The question therefore should be why the oil companies were so relaxed as to allow such failures to become a very frequent event? The answer lies, as indicated earlier, on the loose regulatory framework in the country which has become very notorious. For example, in 1981 after an oil spill incident, the then Senate arm of the National legislative Assembly instituted a committee to investigate the cause(s) and possible remedies for the incident. The chairman of this Senate committee observed that "Nigeria is about the only country where oil companies operated without making adequate provisions for anti-

³² Ogbuigwe, I., (1985), "Compensation and Liability for oil pollution in Nigeria", *Volume 3 Journal of Property and Private Law, Faculty of Law, University of Iagos, Nigeria*. p.23.

³³ Ibidapo-Obe, A., (1990), "Criminal Liability for Damages Caused by Oil Pollution.", in J. A. Omotola, (ed), *Infra*. p.32.

pollution and oil spillage measures..."³⁴ It could certainly be said therefore that oil companies have been very reckless with the Nigerian rural environment in failing to take the utmost precautions to prevent most of these spills.

It is interesting to note that oil exploitation in the country is being regulated under the Petroleum Act, 1969, the Petroleum (Drilling and Production) Regulations, 1969 and the Oil Pipelines Act, 1967 further strengthened by the Oil Pipelines Act of 1969; The Oil in Navigable waters Decree of 1968, which enjoins holders of oil exploration prospecting and mining licences to guard against injurious effects in the course of their activities. Several studies of these laws suggest that they fall short of providing an adequate framework for the prevention and control of oil pollution.³⁵ Ibidapo-Obe³⁶ who examined the criminal provisions in the various laws controlling the activities of the oil companies concluded that the existing regime of criminal liability for oil pollution is inadequate, haphazard, ineffective and lacking a coherent philosophy

³⁴ Remark made by Dr Taribo Sekibo, chairman of the Senate Committee on Funwa Oil Spill reported in the National Concord Newspaper of August 28, 1981.

³⁵ Okwechime, V.M. (1988), "Oil Pollution Liability: Nigerian law", in P.O.Sada & F.O.Odermeho, (eds), **Environmental Issues and Management in Nigerian Development**. Evans Brothers Limited, Ibadan. p.377; See also, Mowoe, K.M. (1990), "Quality of life and Environmental Pollution and Protection", in, J.A.Omotola, (ed), **Environmental laws in Nigeria Including Compensation**. Faculty of law, University of Lagos. p.175

³⁶ Supra, note number 33

for the effective punishment of pollution as an offence.³⁷ He observed that while the penalties provided for in the Decrees were quite low like the maximum fine of twenty thousand Naira under the Oil in Navigable Waters Decree it is even more absurd that the culprit oil company is to be absolved from further clean up of the mess. This is because the Oil in Navigable Waters Decree provides that the fine imposed on an erring oil company could actually be utilised towards paying for the costs of any possible clean up operation. One agrees with Mr Ibidapo-Obe here and adds that it would have been more sensible to require the offending company to, as part of its punishment, be responsible for rehabilitating the polluted area and made as clean as possible since it was adjudged responsible for the pollution. Thus a kind of restitution was required not just in terms of monetary recompense but that as much as possible, the oil companies or any party found liable for the spill should be made responsible for the cost of cleaning-up the polluted area and reinstating same to the position before the spill. It should be pointed out though that the oil in Navigable waters Decree does provide for some kind of compensation to be paid to the victims of spillage but it is the Petroleum Inspectorate Division of the Federal Ministry for Petroleum Resources that is authorised by the Decree to supervise both the negotiation and payment of the quantum of compensation, making it an entirely administrative matter. The courts, according to

³⁷ Ibid p. 252.

this Decree cannot interfere in the process of the compensation settlement and there have been cases where dissatisfied victims had tried to invoke the authority of the courts to review settlements but to no avail as the courts interpreted the Decree as having excluded them from the issues.³⁸ It is necessary to distinguish this provision which provides for an individually negotiated compensation from restitution, since the latter would be ordered by a court of law taking into account what would actually be required to rebuild and restore the polluted area thereby enhancing its environmental quality. This is not the case with the compensation agreement to be reached between the victim and the polluter as the focus here is monetary compensation to the victim for what he has lost with no consideration for restoring the environment to its pre-pollution state. It should be pointed out though that oil companies have been experiencing problems in the course of the implementation of the compensation provision which they claim prohibits them from discharging their obligations effectively.³⁹. For instance, Shell Oil Company pointed to a number of such problems which include, difficulties in determining the rate of compensation that is commensurate with damage suffered by the victims; fair representation where rival communities are involved; accountability of

³⁸ See *Godpower Nweke & Another V. Nigeria Oil Company Ltd*, (1976) 9-10 S.C. 101.

³⁹ Ademiluyi, A. (1989), "Difficulties and constraints encountered in the compliance with the relevant Environmental laws in Nigeria - Shell Petroleum perspective." *Paper presented at the seminar on the Petroleum Industry and the Nigerian Environment at the Petroleum Training Institute, Effurun Bendel State. 6-9 November, 1989.*

community representatives when it comes to actual disbursement of monies received from oil companies to individual victims; and the disruption of clean up exercises by aggrieved communities.⁴⁰

In addition to restitution, an oil pollution offence should be a "strict liability" offence in view of the increasing difficulty in proving responsibility for oil pollution. This is in line with the trend in civil cases on oil pollution following the impact of the 1976 London Convention on Civil Liability for Oil Pollution Damage from Offshore operations where the concept of strict liability was affirmed for pollution damage except caused by war, insurrection, force majeure (Act of God) or natural affliction.

The noted impact of oil pollution so far includes loss of fish and other aquatic animals, devegetation, destruction and reduction of agricultural activities, increased economic and other burdens entailed in pollution clean-up, population resettlement. The combined effects of oil spills in the country has made the people living in the oil producing areas to be less than enthusiastic about oil exploitation in their midst. Thus they engage in sometimes violent campaigns in order to disrupt the exploitation with resultant losses. For example, in 1989 while on a protesting campaign, an oil community destroyed drilling

⁴⁰ Ibid.

equipment worth 10 million naira and inflicted injuries on a number of the oil company's staff.⁴¹

In the course of oil exploitation the companies involved have had to flare a lot of natural gas. Economically this has been calculated to have cost the nation billions of naira in terms of lost income.⁴² This means that the country has a lot of gas reserve which is a source of joy. At the same time there is a need to take the necessary precautions to balance up the likely environmental consequences. The adverse environmental impact of gas flaring which should be guarded against include atmospheric pollution by combustion, destruction of vegetation and wildlife, damage to soil and crops.⁴³

5:2:2: Soil Erosion.

Soil erosion is yet another contributory activity that forms part of the processes responsible for the degradation of land in Nigeria. It has been variously defined but the main essence from the definitions is that soil erosion is a pernicious process which makes the affected soil less useful for both human occupation and agricultural production.⁴⁴ It could also occur naturally or be

⁴¹ *The Vanguard* (Nigerian Newspaper) of 25th October, 1989.

⁴² See Okezie, D.W. and Okeke A.O. (1987), "flaring of associated gas in Oil Industry: Impact on Growth, Productivity and yield of Selected farm-crops, Izombe Flow station Experience." *supra*.

⁴³ Ibid.

⁴⁴ Federal Department For Agricultural land Department (FDALR), 1982, *Efficient Use of Nigerian Land Resources, Kaduna*. p.177

accelerated by human activity.⁴⁵ An interesting theory about the control of soil erosion is that whereas natural or geologic erosion cannot be entirely controlled, accelerated erosion can be controlled. This is because accelerated erosion being a result of human activity, an effective regulation of such activity does present the potential for controlling it. It must be pointed out though that there are differing views among scholars about the human component in the process of soil erosion. Ofomota⁴⁶ argues that the human component in soil erosion is often exaggerated⁴⁷. On the other hand Okafor⁴⁸ believes that there is enough evidence in Nigeria to suggest that the depletion of rural land through human activities is very extensive. He argues that "Intensive demands on sparsely vegetated lands for firewood, overcropping, over-concentration of domestic animals and the careless act of bush burning are such human acts which have started and exacerbated soil erosion in Nigeria."⁴⁹ It does seem however that there is little doubt about the human component in the process of soil erosion. The extensiveness

⁴⁵ Ibid.

⁴⁶ Ofomota, G.E.K., (1978), "Man as a factor of soil Erosion in South-Eastern Nigeria.", *Geological Ecology of the Tropics, Vol.1.* pp. 143-154.

⁴⁷ In an article later however Ofomota did appreciate the magnitude of human dimension to the problem of soil erosion in the country. He particularly noted the impact of road building activities on roadside erosion along the Enugu-Onitsha motorway. See Ofomota, G.E.K., (1981), "Impact of Road Building Urbanisation and General Infrastructural Development on the Nigerian Rainforest Ecosystem." *Landscape Planning*. Vol. 8 pp. 21-29.

⁴⁸ Okafor, F.C. *supra*, p.154

⁴⁹ Ibid.

of the problem in Nigeria testifies to this as well as the experience of some other countries which recognised that the human component needed some form of legislative action to control. In the United States⁵⁰, after the dust bowl of the 1930s attention had to be focused at enacting legislations that would coerce people to adopt soil conservation ethics with a view to controlling human activity that exacerbated soil erosion. This is also true of Australia⁵¹ where some states passed soil conservation legislations in order to control soil erosion.⁵²

As to the types of soil erosion, particularly those prevalent in the Nigerian environment, they are, gully, sheet, rill, and coastal.⁵³ Of all these types of erosion, the most serious which affects farms is sheet erosion. It causes gradual but significant losses of soil particles and mineral nutrients which are carried away in surface run-off

⁵⁰ Napier, T.L., (1990), "The Evolution of US Soil Conservation Policy: From Voluntary Adoption to Coercion.", in, J.Boardman, I.D.L.Foster, & J.A. Dearing (eds), **Soil Erosion on Agricultural Land**. John Wiley & Sons ltd. pp.627-644.

⁵¹ See Bradsen, J., & Fowler, R. (1987), "Land degradation: legal issues and institutional constraints.", in, Chisolm, A. & Dumsday, R., (eds), **Land Degradation: Problems and Policies**. Cambridge University Press. pp. 129-167

⁵² Ibid. It is interesting to note that the problem of the human component in soil erosion led to a debate in Australia about whether the nature of land tenure in the country did have any impact on the incidence of soil erosion. The debate centred on the role of land tenants who had no long term security in their tenancy and therefore thought to be reckless with the way they manage those lands thereby causing degradation including soil erosion. On the other hand it was thought that freehold interest holders in land with their long term interests secure in the land were more disposed to manage their lands better. In the end the debate did make some impact in the way soil conservation policies were made in that country.

⁵³ FDALR, supra.

during rainfall or blown away as loose particles by strong winds in the drier areas. But other kinds of erosion like gully erosion do pose serious threat to agriculture, roads and even populated areas. The most important factor responsible for exposing the soil to sheet erosion is the activities of man and other land animals that destroy the vegetal cover of the land. Such activities have been considered to include inappropriate farming practices, increased run-off from built-up areas and highway construction.⁵⁴

Over 90 per cent of the total land area of Nigeria suffer one form of erosion or the other. Sheet erosion is prevalent throughout the country. Dangerous gully erosion is also widespread but more pronounced in the southern parts of the country. The most important point about soil erosion in Nigeria is that despite the fact that it was recognised as posing a serious danger of environmental degradation quite a long time ago, not much was done to enact policies and possibly legislations that would help in counteracting it. The problem was treated ad hoc and restricted to the areas perceived as being under threat. Thereafter certain practical measures were adopted to ensure soil conservation and recover areas ravaged by gully erosion. A specific kind of measure adopted was tree planting and cashew trees were planted in various parts of

⁵⁴ Ofomota, G.E.K., (1980), "Perspectives on Environmental Deterioration in Nigeria". *The Tropical Environment*. Vol. pp. 6-19.

the eastern region of the country. The major problem with the measures taken was that most of them did not succeed. This failure has been attributed to lack of adequate knowledge of the environment by the policy makers as well as failure to properly educate and involve farmers who were expected to change their farming habits in order to guarantee high degree of success in the conservation efforts.⁵⁵

The solution perhaps lies in the adoption of a policy that would tackle soil erosion within the broader issue of environmental resource management in the country. It is noteworthy to consider some of the strategies suggested as necessary for encapsulating soil conservation within the national environmental resource management. Firstly, the local people who were not enlisted in the previous government efforts should be so involved. This is because it has to be realised that before any reasonable farmer could be attracted to change his methods of cultivation, he must first be convinced of the need to change and be satisfied that the new methods to be adopted would lead to better results. Secondly there is the need for the generation of an adequate information about the environment which would lead to the utilisation of the correct methods and materials in the conservation process. This is likely

⁵⁵ Ofomota, G.E.K., (1982) "Use and Misuse of Nigeria's Agricultural Land Resources", *Efficient Use of Nigerian Land Resources*. Proceedings of the first National seminar on Agricultural Land Resources, held between 13-18, 1982 under the auspices of the Federal Department of Agricultural Land Resources. p. 127.

to obviate the past mistake where ill-informed measures were taken like the use of the cashew trees in the eastern region to control gully erosion whereas they were not suitable ^{for} such purpose.⁵⁶ Thirdly, and most importantly from the legal perspective, is the enactment and enforcement of laws that would regulate people's conduct especially in relation to agricultural practices. For example, there should be laws regulating bush burning which is a very important aspect of agriculture at the moment.⁵⁷ Such an activity should be restricted to certain periods of the year like the end of the rainy season. The current practice of uncontrolled bush burning in the middle of the dry season poses a serious danger and has in fact resulted in serious degradation of soil as well as massive loss of agricultural produce. Also, movement of animals should be regulated through demarcation of grazing areas as their movement has well been established as a source erosion.

5:2:3: Desertification

The problem of desertification or desert encroachment seems to be the most common environmental scourge of the northern parts of the country. It is mostly associated with rainfall drought and agricultural drought where remarkable decline

⁵⁶ Ibid

⁵⁷ In some states, the subject of bush burning has been legislated upon. Borno State passed "The Burning of Bush (control) Edict, 1986, for example.

in both rainfall and agricultural products becomes the rule.⁵⁸ In addition to drought, inappropriate farming practices like cutting and burning of trees and shrubs on farms contribute. While drought is generally considered to be a natural phenomenon, it has been found to be aggravatable by man's indiscriminate baring of land.

Desertification itself is the encroachment of desert-like conditions in the sahel and savanna areas. In the northern states of Nigeria which occupy the Sahel and Savanna areas, the effects of desertification have been observed to include, a decline in the farm stocks, decline in soil fertility, significant encroachment on and degradation of the forest and Game Reserves.⁵⁹ The impact of all these on the society is horrifying with some suggesting that unless drastic steps are taken people would have to be moved completely and resettled elsewhere.⁶⁰

5:2:4: Deforestation.

Deforestation has been defined as "the removal of forest and other forms of vegetative cover from a site without its replacement."⁶¹ The southern parts of the country are covered with forest vegetation while the north are covered

⁵⁸ Mustapha, S. (1991), "Drought and Desertification in Water Resources Development". **Paper presented at the Maiduguri Conference.**

⁵⁹ Arifalo. E.I., (1991), "Ecology and Desertification: Facts in the Nigerian Savannah and Arid Regions". **Paper presented at the Maiduguri Conference.**

⁶⁰ Anderson, D. (1987), **The Economics of Afforestation: A case study in Africa.** The World Bank Occasional Paper no. 1.p.29

⁶¹ NEST, supra, p.160.

by the savanna consisting of arid and semi-arid regions. Deforestation phenomenon has been part of human history since the dawn of civilisation. Recent reports worldwide however indicate that it is on the increase as a result of increase in the level of socio-economic activities. This threatens to a large extent serious economic and environmental disasters.

The main causes of deforestation in Nigeria are population growth and the expansion of economic activities including wood logging, farming, bush-burning, firewood collection, grazing and infrastructural development.⁶² The oil boom which the country enjoyed in the seventies saw a rise in the demand for timber both for construction and furnishing purposes. This led to the depletion of the forest estates in some southern states of the country. It is even said that this led to a breakdown in the regulation of logging activities which was responsible for the serious depletion of the timber resources.⁶³

Apart from the depletion of timber reserves through logging activity, farmers have been said to be responsible for the reckless clearing of the forests mainly for food. It is amazing that about 75 per cent of the total area cleared yearly in the country is by farmers. One might link this

⁶² Okafor, F.C., *supra*.

⁶³ Onokerhoraye, A.G., (1986), "Environmental Issues and Policies concerning Rural Recreational Resources in Nigeria.", in E.O.Adeniyi & I.B. Bello-Imam (eds), *Development and the Environment*. NISER, Ibadan. p.339

massive forest loss with the government's drive for increased food production which emphasises that people should go back to the land in order to attain increased food production in the country. This becomes more evident from a campaign initiated in 1985, which was further improved in 1987, for people to go back to farming in order to reduce unemployment in general following the massive public sector retrenchments of workers and increase food production in the country. The measure taken to consolidate this campaign in 1987 was the creation of a special Federal Government Agency called the Directorate of Foods, roads and Rural Infrastructure (DFRRI). Being a federal Institution, the agency had a branch in each of the states of the federation and a lot of money was pumped into it in order to build feeder roads into remote villages so that agricultural surpluses could be transported out. Although no direct study could be pointed towards that, at the moment it will be reasonable to assume that the provision of better infrastructures particularly motorable roads could have encouraged people to increase their efforts towards food production. Thus the drive for increased food production which is at the instance of, and having the backing of the government was a reason for increased forest clearing which in turn increased the chances of environmental degradation.

Also further expansion of cities and other urban centres does contribute to the problem. In the new federal capital

city for example, forests and woodlands are being destroyed to make way for the construction infrastructural facilities such as roads, airport, housing accommodation and industrial estates.

As we have seen before, bush burning is another notorious agent of deforestation. It is acceptable that bush burning could be useful to the farmers who would like to clear their farms, regenerate grass for grazing, e.t.c. But the usefulness could be missed if the fire is not properly managed and kept under control. It is this lack of control which leads the fire to damage adjacent vegetation that has been the experience in the country.

The impact of deforestation in the country is very much felt in the northern parts in socio-economic terms. People, particularly the rural dwellers, are quickly running out of firewood which is the main source of energy supply. Not only that deforestation has been responsible for the destruction of wildlife habitat which threatens the extinction of endangered species; it also has the potential to lead to the destruction of soil cover with the consequent soil erosion and flood disasters. The problem of deforestation in the country has been well recognised by the Food and Agriculture Organisation, (FAO), of the United Nations which in fact refers to it as tragedy.⁶⁴ It says that as a result of the careless exploitation and husbandry

⁶⁴ FAO(1984), *Forest Destruction and Agriculture in Nigeria*. Rome.

of the Nigerian forest Resources, what is now left can hardly meet the firewood demand of the nation. The answer, as it rightly observed, is investment in alternative sources of energy for the vast majority of the population and conscious policies to effect proper husbandry of the nation's forest resources.

5:2:5: Nomadic Pastoralism.

Pastoralism is an important component of the Nigerian economic activity. There are many kinds of pastoralists but they could generally be categorised into two, namely, sedentary and nomadic. While the first category are settled at one place but may be engaged in pastoralism full-time or part-time, the nomadic pastoralists are on the move. Nomadic pastoralism is an important feature of the Nigerian rural environment. The nomadic pastoralists have been reputed to be responsible for providing the bulk of the nation's meat and milk requirement.⁶⁵ Their main stocks usually consist of cattle, sheep and goats. The nomadic way of life is dictated by the natural availability of water and forage for the animals which is very seasonal. Therefore, they move to areas where there is availability of and easy access to water and pasture. Once a pasture site is found, the nomads invade such an area during which process grasses and herbs are uprooted and eaten up by the

⁶⁵ See Igbozurike, U.M., (1974), "The West African and Sub-saharan Drought in geographic Perspective." *Paper presented at the 18th Annual conference of the Nigerian Geographical Association held at the University of Nigeria, Nsukka.*

devegetation. This has been clearly established as a source of soil erosion in the northern parts of the country because of the high cattle population in the area which has proved difficult to control.⁶⁶ Apart from the fact of uncontrolled animal numbers and densities there is erosion damage following the destruction of the top-soil as the animals trample upon it on their way to and from grazing and drinking. The top-soil so pulverized is easily washed away during the rains and blown away by the winds during the dry season which leaves the soil eroded. Furthermore, uncontrolled bush burning is equally said to be a habit of the nomads which does have serious negative environmental consequences such as soil erosion. It is also said that the nomads help in disease spreading and water pollution. This happens because the veterinary care given to the animals is minimal or even zero either due to ignorance about the need for modern preventative or curative therapies or lack of veterinary facilities or perhaps sheer unwillingness to use such facilities. Thus as the animals move from place to place they distribute various disease pathogens through skin contact, dung or by oral transfer^{of} water of bodies from where diseases are picked up by rural villagers who drink

⁶⁶ Okaiyeto, P.O., (1987), "Constricting Rangelands in Nigeria and Pastoral Economic Activities", in, M.Mortimore, et al, (eds), **Perspectives on Land Administration in Northern Nigeria**. Bayero University, Kano. pp. 82-89.

the water.⁶⁷

While, as indicated above, nomadic pastoralists are responsible to a large extent for land and water degradation in the country, it is necessary to point out that the nomadic pastoralists must be taken as the victims of their circumstances. Their way of life necessarily dictates the kind of behaviour they exhibit in order to survive. In other words, their predicament ought to be understood and appreciated so that necessary policies and laws could be made to alleviate their situation as the first step towards reducing the harm they cause to the environment. There does seem to be a case also for saying that while their pastoralism should survive because of its significant contribution to the nation's economy, their way of life and the environment should be equally be preserved and least eroded. However, achieving this would require very serious reforms about grazing rights and grazing routes within the federation. At the moment, the routes and grazing areas which the nomads use are not securely guaranteed under customary law or statute in most parts of the country. So in many states they make use of the routes, water and grazing areas at the pleasure and customary tolerance of the nearby sedentary communities.⁶⁸ Thus the nomads are left with no sense of security. A more

⁶⁷ NEST, *supra*, p.29.

⁶⁸ Mortimore, M., (1987), "The lands of Northern Nigeria: Some Urgent Issues", in M. Mortimore, et al, (eds), *supra* pp.13-23.

intriguing issue is the recent trend in large scale farming in the country. Large-scale farmers are springing up everywhere and as a result pressure is mounting on the nomads as they tend to loose the lands ^{they} were to graze upon. Some of these farmers even fence up the land thereby clearly restricting the accessibility of the nomads to grazing. This has led to bloody clashes in some instances. Thus there is a need on the part of the government to provide a formula that would lead to the resolution of this apparent conflict of land use between agriculture and pastoralism. One of the suggestions offered an integration of both systems of land use which could lead to sedentarisation of the nomads.⁶⁹ Although this appears to be an attractive solution, it is doubtful if the integration would still resolve the important issue of land degradation. It is acceptable though that if sedentarisation is ever achieved, it will be much easier to control the cattle and other animal population which is a source of degradation in itself. The greatest threat from sedentarisation however is the threat it poses to the preservation of the way of life of the nomads. Equally in the short run it will be appropriate to provide grazing reserves as of right to the nomads putting it beyond the customary tolerance and administrative recognition that it currently endures.⁷⁰

⁶⁹ Baba, J.M., (1987), "Reconciling Agricultural and Pastoral Land Use systems in Nigeria", in M. Mortimore, et al. *supra* p.61-71.

⁷⁰ Mortimore, m., *supra*.

5:3: Water Resources Development and Water Pollution.

There is no doubt about the immense significance of water to the sustenance of life on earth. It is arguable that without water, human activity, be it agricultural production, industrial processing, manufacturing and energy generation could hardly be possible. It is therefore to be considered as the lifewire of any society, whether primitive, developing or industrial.

The discussion about the problems of water conservation in the context of the Nigerian Environment shall be undertaken at two levels. First is at the level of water Resources Development for the purpose of water supply for domestic, industrial or agricultural uses. More specifically, the issue of Dam construction as a means of solving water supply problems and the environmental consequences which it usually produces will be considered. Secondly, the use of water as a means of disposing waste created by human activity which in turn occasion harm (pollution) and degradation of the environment is the other angle of focus.

5:3:1: Water Resources Development.

It has been argued that the related problems of drought and desertification have been the major catalysts in forcing the Nigerian Government to examine the possibility of harnessing the various water sources in the country, both surface and underground, for the purpose of improving water

supply.⁷¹ Thus, from the early period of political independence, policy makers were convinced of the need for the building of Dams to improve the water supply of the nation for various uses. The principal uses envisaged of the Dams are mainly irrigation and electricity generation. To date several Dams have been built and a lot more are being contemplated as feasibility studies are already in progress on many Nigerian rivers.⁷²

While the building of Dams was accepted as being inevitable by the policy makers, only little concern was, however, shown on the likely environmental consequences of such ventures. But as it turned out later serious environmental problems such as human displacement, health hazard, deprivation of the downstream population of water, water logging and salinity beclouded any real benefits that the projects were designed to bring.⁷³ Some seriously wonder about the wisdom of the projects completely. For instance, a study of the effort made to develop the water resources of the sudano-sahelian zones of the country confirms the existence of unintended consequences of water logging, salinity, soil erosion and health problems to the

⁷¹ Adams, W.M. (1983). *Downstream Impact of River Control, Sokoto Valley, Nigeria*. Unpublished Ph.D. thesis, University of Cambridge.

⁷² Federal Ministry of Water Resources, (1991). "Special Report on the activities of the ministry", *National Concord* (Nigerian Newspaper) of 14th August, 1991.

⁷³ Kolawole, A. (1986). "Ecology and Water Resources Development Projects in the Sudano-Sahelian zone, Nigeria". *Paper presented at the Maiduguri Conference*.

surrounding communities.⁷⁴

Apart from the problems which befall the immediate Dam environment there are others which relate to the proper management of the water resources which would guarantee equity, fairness and sustainable development. For example, in several cases people living downstream of a dammed watercourse have often been deprived of the necessary waterflow along the course to enable them to use the water for their means of livelihood to which they had been accustomed for generations.⁷⁵ Most of such downstream communities are either fishermen or farmers who rely on the water for irrigation and therefore find it very hard to survive where the waterflow has been stopped or made insufficient by the construction of the Dam upstream. This had its undesirable consequences in the form of stagnation of the socio-economic development of the people.⁷⁶

From the wide range of opinions available as to the genesis of these unintended consequences of water resources development in the country, one could argue that they had to do with the way the projects were conceived and executed. It seems that this had to do with the absence of

⁷⁴ Ibid

⁷⁵ Odihi, J. (1991). "Regulating Water Resources Development/Need in the African Sahel, a Necessity or luxury? Evidence from Borno State Nigeria". ***Paper presented at the Maiduguri Conference.***

⁷⁶ Yerima, D., (1988). ***The Socio-economic Effects of the Hydrologic Decline of River Yobe.*** Unpublished B.Sc. thesis in Geography, University of Maiduguri, Nigeria.

any kind of regulation to govern water resources development and management in the country.⁷⁷ Some kind of regulation outlining the responsibilities of any water resources development body with respect to environmental impact would have helped. Similarly, there were no requirements either by law or policy that a thorough environmental impact Assessment should precede such water resources projects at that time. And had an assessment of the possible environmental impacts of such projects been carried out, an opportunity would have been had for anticipating the problems and thus steps taken to deal with them right at the planning stage. This would have helped to reduce or even avoid them completely, where possible. It is important to note that the pressure of the United Nations Agencies which participate in water resources projects in the country resulted in the adoption of environmental impact assessment of projects as a matter of policy by the Nigerian Government during the 1980's.⁷⁸

5:3:2: Water Pollution.

In addition to the fulfilment of daily domestic and industrial needs, water is also seen as a means of

⁷⁷ The first legislative effort at regulating water resource ownership and use was in 1979 when the Food and Agriculture Organisation of the United Nations (FAO) advised and drafted a piece of Legislation for the Federal Government. Unfortunately the proposed legislation has not yet been enacted into law.

⁷⁸ During an interview with the Director of Dams at the Federal Ministry of Water Resources in August of 1991 he revealed the fact of the United Nations pressure and indicated that the Government had accepted the idea and a legislation that would embody that was underway.

discharging wastes or pollutants resulting from human activity be it agricultural, industrial or domestic. This usually results in pollution of the water which then adds to enormous problems of the environment in general. Various attempts have been made by experts to try and define what amounts to water pollution, but it is the definition given by the World Health Organisation (WHO) that has a general acceptance. WHO says that water is polluted:

When it is altered in composition or condition so that it becomes less suitable for any or all of the functions and purposes for which it would be suitable in its natural state.⁷⁹

Such an alteration usually results from the discharge of any liquids or solid wastes or matter into the water which then changes the properties of it either physically, chemically, or biologically. Thus the sources of water pollution are as varied as human activity. In Nigeria, the literature indicates that water pollution has been a serious problem in the country for quite some time and it has not been effectively put under control.⁸⁰ The reasons for the increase of water pollution in the country can be said to be connected with the trend of neglect of the environmental problems of the country until fairly recently. This has been clearly admitted by the Federal

⁷⁹ World Health Organisation, *Health Hazards of the Environment*. p. 47

⁸⁰ See Smith, V.G.F., (1975) "The Effects of Pollution in a small stream near Samaru in Northern Nigeria.", *Savanna*, 4

Government in the Fifth National Development Plan Programme.⁸¹ It is also attributable to the upsurge in industrial activities as a result of the oil boom which increased the rate of industrial wastes and agricultural pollutants such as fertilizers, herbicides, pesticides, which found their way into the water. Also in his book, Professor Ola⁸² submits that the reason for the continuous pollution of our water has to do with the feeble implementation of certain laws and regulations which were designed to deal with polluters of water in some specific sectors of the economy.⁸³ Although these laws were commendable as steps in the right direction in an attempt to help manage the nation's waters, it is doubtful if they would ever be enough in themselves to solve the rather complex issues of water pollution in the country. This point is rather strengthened by the fact that the newly established Federal Environmental Protection Agency (FEPA) started off its functions with laying standards for industries in order to control the growing menace of water pollution.⁸⁴

⁸¹ Federal Republic of Nigeria (1980) *Fifth National Development Plan*, 1980-1985. Lagos.

⁸² Ola C.S., (1984), *Town and Country Planning and Environmental laws in Nigeria*. University Press Ltd. p.155-159. Some the laws are: Sea Fisheries Act, 1971; The Petroleum Act, 1969; River Basin Development Authorities Act, 1976; Chad Basin Development Authority Act, 1973; Sokoto-Rima Basin Development Authority Act, 1973.

⁸³ Ibid

⁸⁴ Federal Environmental Protection Agency, (1991). *Water Pollution Standards*. Lagos.

5:4: Conclusion.

As stated at the beginning of this chapter, the intention has been to provide a general picture of the major environmental problems that are facing the entire nation today. In doing this, an attempt has also been made to highlight some of the causes of these problems which in the main are related to the nation's efforts at sustainable economic development and upliftment of the standard of living of the people.

The major theme that cuts across the various problems is the non-availability of effective measures, or where there are some the feeble implementation thereof. This is largely seen as the result of the lack of environmental consciousness among development policy makers and administrators. It is fair to say, however, that the principle of encapsulating environmental considerations in development projects is of very recent origin largely brought to the forefront of development discussions by two major publications. The first one is the "World Conservation Strategy" launched in 1989 by the International Union for the Conservation of Nature. The second one is "Our Common Future", published by the World Commission on Environment and Development of the United Nations in 1987. There is no doubt that these two have particularly had significant impact on the raising of consciousness about environmental issues both globally and

in Nigeria.⁸⁵ In the next Chapter we shall try to see what legal and administrative frameworks there are at each of the three tiers of the country's governmental structure, namely, federal state and local government levels for the protection of the environment.

⁸⁵ A Nigerian former Minister for Agriculture and later chairman of the Federal Environmental Protection Agency, served as a member of the Brundtland Commission that worked on and published "Our Common Future".

CHAPTER SIX

CASE STUDIES OF ENVIRONMENTAL IMPACT OF WATER RESOURCES DEVELOPMENT PROJECTS.

6:0 Introduction.

This chapter considers certain environmental, social and economic consequences of development projects with reference to water resources development projects in Nigeria. It is intended through the discussion to demonstrate the nature and extent of the environmental consequences which have so far plagued almost all the water resources development projects in the country. The issue to be considered here is the relationship between development projects and environmental conservation, protection and management in the context of water resources projects. Of course it is now a universal aspiration that development and conservation should fare hand-in-hand. The general debate before had been about whether or not development is at all necessary, particularly in cases where it only serves to worsen environmental problems which in turn overshadow any benefits that may accrue from it.¹ However it has been shown by some that lack of development could be as fatal to the environment, if not more. For example, it

¹ An example of the adverse effects of water resources development has been marshalled by Scudder, who has argued that African river-basin development has tended to subsidize the urban industrial sector at the expense of local rural populations. See Scudder, T. (1980) "River Basin Development and Local Initiative in African Savanna Environments", in, D.R. Harris (ed) *Human Ecology in Savanna Environments*. Academic Press, London. pp.383-405. See also, Scudder, T. (1988) *The African Experience with River Basin Development: achievements to date, the role of institutions and strategies for the future*. Institute of Development Anthropology and Clark University, Binghamton, New York.

has been shown that poverty could be a major factor in enhancing environmental degradation, through deforestation and land use practices that are driven by the need to survive rather than any sense of environmental conservation. Therefore the scale appears to have tilted in favour of development, for the development which enhances standard of living could also further enhance environmental quality, as opposed to a no-development situation which perpetuates poverty and desperate reliance on the most basic of environmental resources for survival.

The most important thing however is that although development is necessary, it would only be desirable in some kind of framework that emphasises environmental conservation. Thus there is a need for development projects to be planned and executed within defined environmental protection frameworks. There are various kinds of development activities which are carried out in a given country, but in this discussion it is intended to focus attention on water resources development projects because they represent one of the sectors in which huge investments are made with very little thought being given to the need to conserve and protect the environment.

An important point that needs addressing at this point is why should water resources development projects be used to illustrate the point being made about environmental consequences of development projects? The response to this

is two-fold. Firstly, water resource development projects, whether for water supply to an urban settlement, hydro-electric power generation or agricultural development purposes, form part of the general development strategies of the country and this in fact is true of most developing countries, the world over. Allied to this is the severe environmental consequences that almost always accompanied such projects, particularly among the developing nations of the world.² This experience, it is submitted, makes the environmental impact of water resource development projects a crucial area of concern to development planners and executors alike. In this respect, a significant attention is required over the techniques and instruments which could be devised and brought to bear on the development projects in order to reduce to the barest tolerable level of such negative impacts. Secondly, in Nigeria, water resource development projects appear to be in the forefront of the Governmental development agenda consuming huge chunks of

² Negative environmental impacts of water resource development projects have been studied in a number of other countries and those carried out on the African continent are particularly significant in highlighting the terrible effects. For the studies on the Zambezi river see, Scudder, T. (1973) "Ecological Bottlenecks and the development of the Kariba lake basin", in M.T. Farvar and J.P.Milton, (eds), **The Careless Technology: ecology and International Development**. London. pp. 206-235; Scudder, T. (1980), "River basin Development and local Initiative in African Savanna Environment", in D.R. Harris, **Human Ecology in Savanna Environment**. London. pp.383-405; For the Kafue River in Zambia, see Williams, G.J. and Howard, G.W. (1977), **Development and Ecology in the lower Kafue Basin in the Nineteen seventies**. University of Zambia; For the Tana River in Kenya, see, Hughes. F.M.R., (1984) "A comment on the Impact of Development Schemes on the Floodplain forests of the Tana River in Kenya." **Geographical Journal**. 150: 230-244; for the Nile see, Tahir, A.A. and El-Sammami, M.O., (1980) "Environmental and socio-economic Impact of the Jonglei canal Project". **Water Supply Management**. 4: 45-53; for the River Volta in Ghana, see Hilton, T.e. and Kuwo-Tsri, T.Y. (1970) "the Impact of the Volta Scheme on the Lower Volta floodplain." **Journal of Tropical Geography**. 30: 29-37.

the nation's resources during the last two decades.³ There does seem to be a continuous commitment to the further development of water resources by the Federal Government as indicated by the recent re-launching of some Dam projects in the country. This fact of priority being given to this aspect of national development efforts does necessitate the study and generation of ideas over how future projects might be shaped and developed, particularly with the world wide recognition that environmental protection ought to be harmonised with development programmes. The specific water resource development projects that will be considered are those which have been mainly cited in the northern parts of the country, which is considered to be semi-arid climatically and therefore has attracted a lot of these projects in order to enhance the availability of water there. Thus focus shall be on Bakolori Dam Project in Sokoto State, Tiga and Challawa Dams in Kano State; River Alau Dam; and the South Chad Irrigation Project. The problems shall be examined from the environmental and socio-economic perspectives.

³ The special significance accorded water resource development programmes can be seen from the statements and financial allocations made in the National Development Plans. For example, in the Third National Development Plan covering the period 1975-1980 (vol. 1, p.92) the development of water resources for agriculture was considered a prerequisite for the realisation of the full agricultural potential of the country. This made the federal and state Governments to make special financial allocations to irrigated agriculture. Thus in the 3rd development plan referred to above, a total of N306.466 million Naira (about \$612.932 U.S. Dollars at that time) was budgeted for irrigation alone. At the State level, the Kano state Government put in N76.24 million which was about 87% of the total allocation to the crop sub-sector as a whole. Furthermore, during the Fourth National Development Plan, the allocation to water resources development was increased to N2.266 Billion Naira (about \$4.532 Billion American Dollars).

6:1: Water Shortage to Downstream Users.

It is a recognised fact that river systems and the floods which usually result from them are of tremendous importance to those communities which have settled along them. Members of such communities utilise such water for a number of functions and in most cases rely on it for their basic means of livelihood such as fishing and agriculture. Thus water becomes essential for their survival and its supply and certainty therefore non-negotiable. ^{Consequently,} whatever it is that tends to affect the stability of water flow touches on the roots of those peoples' survival. Therefore water resource development projects such as dam construction is an important development activity with tremendous consequences for those who are used to relying on natural water flows for their daily means of livelihood. Such a project could ultimately improve water availability for those who are settled in close proximity to the dam and at the same time constrain the supply of water to those communities that are settled downstream. Thus when dams are built they engender a mixed blessing for those communities which rely on the water and as experience so far has shown one of the most serious impacts on the environment is the restriction on the flow of water which affects the supply which the downstream users have been relying upon. This is a problem that has been experienced in almost all the dams that have been built, as we shall see in the case of a number of studies made of water resource development projects in the country. What,

however, appears to be curious here is the fact that the problem keeps occurring with all the difficulties in which it throws the affected communities into but the governments do not seem to have taken enough measures that would provide a measure of security in water supply for those communities.

6:1:1: Tiga and Challawa Dams of the Kano River Project.

Briefly put, Tiga and Challawa Dams are the two main dams built in Kano state in order to improve the water supply of the Kano city and also garner enough water for irrigation projects designed to increase the food production in the country as a whole. The whole project was conceived in the early period of the 1970s and scheduled to be executed in phases. Tiga dam was the first to be constructed and it is situated on the Kano river. The Kano river itself goes through to join river Hadejia, also in Kano state, and then joins with river Katagum in the Hadejia/Nguru wetlands. The two rivers of Hadejia and Katagum together join the Komadugu-Yobe river which then proceeds to join the Lake Chad Basin, a basin which encompasses the three nation states of Nigeria, Chad Republic and the Niger Republic. This description provides a picture of the region in which the problem of water shortage has been recognised and accepted as resulting from the activities of the Kano river project. The impact thus stretches through five states of the Nigerian federation, namely, Kano, Jigawa, Bauchi, Yobe, and Borno states.

The area recorded as registering most impact of water supply to the downstream of the Kano river project was mostly at Nguru and Komadugu-Yobe basins. All these areas have at various times been said to experience severe shortage of water flow as a result of the damming upstream.⁴ It should be noted though that although the water shortage was mainly attributed to the damming upstream, the natural fact of rainfall drought was also considered to be a contributory factor to the worsening of the problem.⁵ The Tiga Dam was especially noted as being responsible for water shortage at the downstream areas during the early 1980s and the problem became worse during the drought of 1984. The communities living within the Basin had to start crying out for the release of the water held upstream at Tiga Dam so that they could have sufficient water to use for their farming and fishing.⁶

⁴ The latest of the reports of complaints about water shortage that affected the downstream population of the Komadugu-Yobe was in 1992, when, within just six months of the completion and commissioning of the Challawa Dam, farmers in the neighbouring Nguru Local Government Area complained of shortage of water to their farms. During the period in which the Challawa Dam was in operation, it was estimated that the farmers have lost about N5 million Naira in lost crop production. See **the National Concord** (a Nigerian national newspaper) of 20th October, 1992. The information was carried under the caption "Water Shortage hits Nguru Rice Farmers".

⁵ An analysis of the natural flow of water to the Basin at Gashua (a town located by the Yobe River) was made for the periods before and after Tiga Dam. It was discovered that rainfall drought could have lowered the natural flow between 1974 and 1985 by as much as 23%. See Adams, W.M. and Hollis, G.E. (1993) **Hydrology and Sustainable Resource Development of a Sahelian Floodplain Wetland**, Hadejia-Nguru Wetlands Conservation Project, University College, London.

⁶ In 1985 the people of Gashua, upstream of Tiga Dam and situated by the Yobe river seized the opportunity offered by the visit of the then head of state of the federation to air out their concern over the problem of water shortage occasioned by the Water development upstream. In his address to the head of state, the traditional ruler of the Bade Emirate spoke of the peoples' plight.

It is important to point out that although the problem of the Komadugu-Yobe Basin communities over water supply pursuant to the dam building upstream was quite serious and they tried to make some representations to Government, they were only lucky to get some response after several years of concerted efforts to have their case across to the Government. Thus it was only in 1987 that the pressure maintained by the people materialised into something concrete for it was only then that then Governments of Kano and Borno States, which had direct jurisdiction over the areas actually decided to set up an inter-state committee of experts to study the problems. The experts committee was specifically mandated to examine the alleged effects of the water resources development projects in Kano state upon the Komadugu-Yobe Basin. Quite interestingly the report of the committee prompted a formal meeting of the two state Governors. The result of this meeting by the two state Governors shows what amounts to a formal acceptance by the Governments of the serious impact the dam upstream was making on the life and economy of the downstream populations. The communique issued at the meeting stated that:

1. There is need to work out modalities for the release of water from Tiga Dam to enable the people of Borno along the River Yobe to get enough water and on time for their irrigation activities.
2. That the entire basin of the Hadejia/Jama'are Yobe must be seen as one unit i.e., water resources development

projects on any particular river should not be studied or designed in isolation;

3. There is a need to carry out detailed studies of Jodahadin, Madachi swamps on the river Hadejia and Katagum to Gashua;

4. That the Two state Governments will do everything possible to assist the farmers along the Hadejia/Yobe Valley who are affected by the construction of Tiga Dam, with small pumps;

5. The Federal Ministry of Agriculture and Water Resources should intensify effort in 'training' of rivers (improving the regime condition of rivers to minimise conveyance losses) more especially Hadejia/Jama'are rivers;

6. The entire Hadejia/Jama'are /Yobe basin is an ecologically disadvantaged area and should be seen as such."⁷

This communique does have an indication of the degree of seriousness which the meeting of the two governors attached to the problem. It shows quite clearly that the state Governors have admitted that there was indeed a serious problem with the planning, construction, and operation of the water resource development projects. It formally acknowledges the depth of the problem and the need to embark upon programmes that would at least ensure that the farmers downstream are supplied with adequate water for their farming. Related to this was the realisation that

⁷ Quoted by Adams W.M. and Hollis,G.E. (1993), *supra*, pp. 124-125

notwithstanding the political and territorial division of the affected river basins, there was an urgent need to regard them entirely as an integrated unit so that development projects in one part must take cognisance of the consequences they might have on the other parts. This means that the entire basin requires some kind of integrated development planning which should adequately reflect upon the consequences that would ensue for both people and the environment. Although these points which were arrived at by the governors of the two states might not be considered as laying down any concrete official policy over the water shortage of the downstream areas, their significance rests on the fact that the two states have accepted the existence of the problem and have expressed the willingness to explore the means of resolving them.

Furthermore, it is interesting to note that despite the fact that the federal Government through the Hadejia/Jama'are and Chad Basin River Development Authorities was responsible for the building of the dam projects, and also the fact that several representations were made by the affected communities to the parent Federal Ministry of the River basin Development Authorities, namely, the Federal Ministry of Water Resources, there was virtually no action taken immediately to help restore the

peoples water supply.⁸ However, the Federal Ministry of Water Resources indicated its willingness to look into the problem. As part of the move to do this a national conference was organised and held at the instance of the Water Resource Ministry. All interest groups involved in the water resource development sector, especially the water resource development agencies in the country, participated in the conference. The conference in its communique acknowledged the existence of the problem of water shortage being experienced by the downstream areas of the Kano river projects. Having accepted the existence of the problem as a reality and the necessity for an integrated management of the whole Basin, the following resolutions, were made:

1. Sustainable wetlands depend on the availability of water from upstream.
2. There should be an increased level of cooperation and coordination among all states within the Yobe Basin.
3. Decree (federal legislation) on water resources to be promulgated soonest, if possible this year((1990)⁹ to allow for proper coordination through the regulation of the Basin's water.
4. Full Environmental Impact Analysis of all major water resources should be undertaken, Cost Benefit Analysis should be done and openly circulated for comments.
5. Rehabilitation and extension of the hydrometric network

⁸ Discussions with the Bade Local Government Council and Emirate Council officials in September 1991 at Gashu'a, Yobe State.

⁹It was only promulgated towards the end of 1993.

should be undertaken in the Yobe Basin up to lake Chad by the Federal Ministry of water Resources in cooperation with the states. This should also include assessment of the water quality.

6. The existing hydrological model should be further developed and research into ground water/ surface water relationships be undertaken.

7. A water resources master plan study of the Yobe Basin should be prepared by the Federal Ministry of Water Resources.

8. Monitoring land use changes and economic activities within the wetland should be undertaken.

9. There is need for the intensification of the afforestation programme within the wetlands by the national committee on drought and desertification control.

10. The water resources agencies within the Basin, in collaboration with the appropriate groups, should consider the organisation and sponsorship of bi-annual seminars to discuss the research results.

11. Exotic fish species should be discouraged in the wetlands by the federal department of fisheries in collaboration with the states.

12. It should be noted that there is an existing federal policy that the flow passing Gashua should be guaranteed at $1350 \times 10^6 \text{m}^3$.¹⁰

These resolutions speak for themselves in terms of the

¹⁰ Adams, W.M. and Hollies, G.E., (1993), *supra*.

degree of improvements required to be executed in the Komadugu Yobe Basin in order to enhance the quality of life, following the disruptions occasioned by the Kano river projects. They have added to the volume of ideas which are essential if the impact of the water supply shortage were to be rectified. Thus, the need to maintain the annual floods at the Komadugu Yobe was once again made unequivocally clear and in this regard the concept of a minimum annual waterflow at a point in the downstream area was explained as being a federal Government's policy initiated to ensure that a defined amount of water reaches the downstream areas. This could be considered as an important step towards the resolution of the problem. It still however raises a lot of issues such as the expected role of the downstream residents in the enforcement of this policy. Certainly a policy such as this would require some monitoring to ensure that the expected amount of water is accordingly released to the people. But how certain are the people that this policy would be implemented to their full advantage? An alternative might be the empowerment of the local population through some legislative enactment so that they can be competent to request for the release of the water. It should be noted that as indicated earlier on, and as will be seen in the experience of some other water resource development projects, it was always the farmers who organised themselves to demand that the Government comes to their rescue in the event of water shortage. This would strengthen the position of the local communities who

are threatened by a development project. The need for a systematic means of releasing water by dam authorities for the use of downstream users in the Komadugu Yobe was further addressed at a national workshop in 1993. Having been satisfied that there was indeed the problem of water shortage which hits the environment of the downstream areas of Komadugu-Yobe as a result of the damming activities in Kano state, it was concluded that water management and the operating regimes of existing and planned Dams should be improved. The following suggestions were proffered at the workshop:

1. That in order to meet the many water needs of the Komadugu-Yobe basin such as water supply, irrigation, groundwater recharge, flooding, it has been recommended that Tiga, Challawa and Kafin Zaki (in Bauchi state) dams and the Hadejia Barrage should be operated to satisfy the downstream requirements.
2. The multiple contribution to the national economy of the wetlands (rice, dry season agriculture, fuelwood, timber, fish, grazing, wildlife, biodiversity and groundwater recharge) requires the maintenance of flooding which will require artificial releases from the dams in the wet season.
3. A plan for the integrated operation of the existing and planned dams should be formulated and implemented... Test releases will be required to examine the relationship between surface and groundwater in both wet and dry seasons in order to quantify the volume and timing of artificial

flood releases. Flow depletion/conveyance studies should be undertaken to identify the appropriate level of releases from dams to maintain acceptable flows during the dry season throughout the basin.

4. To enhance efficient and equitable distribution of water within the basin, a water use Decree should be promulgated by the Federal government. National and regional water policies must be consistent.

6:1:2 The Bakolori Dam Project.

The Bakolori Dam project in Sokoto state also symbolises the enormous environmental impact which downstream water users could be subjected to. The Dam is situated along the river Sokoto in the northwestern region of the country. Both the river and the project are located within Sokoto state. The primary purpose of the dam initially was to control the excessive flooding in the productive lower Rima floodplain which lies just below the Sokoto city. This initial intention was however revised and it was decided that the Dam could be used principally to support a large scale irrigation project. Construction work on the Dam started in 1974. From 1977 to 1980 the farmers who were affected by the construction work, either because they were to be resettled or they were living downstream and relying on the flow of the river sokoto for agriculture and fishing, experienced severe shortage of water supply as a result of the work. Several of the farmers were forced to suspend farming altogether for about three farming seasons.

The members of those communities who were generally affected in one way or another by the water shortage either because they lost water completely or there was severe reduction in the amount of the flow, joined hands together and put forward their complaint through to their traditional leader, the Sultan of Sokoto in 1988.¹¹ The Sultan took their problem further by taking it to the government, as a consequence of which the problem of water crisis affecting the people was formally recognised to exist. It is worth noting that in 1979, a visit was made by W.M. Adams to the affected communities and an amazing statistics of the extent of the water shortage during the wet season was obtained principally through physical visits and village meetings. Adams found that of the 18 villages visited, flooding was only normal in about 29% of the villages in 1977 and there was almost none in the years 1978 and 1979.¹² This does provide a picture of the extent of the crisis the communities were facing as a result of the Dam construction.

6:1:3 Alau Dam and the Jairi Farmers.

The Alau Dam is situated at lake Alau, which is part of the river Alau that passes through the Maiduguri metropolis. This dam illustrates an interesting conflict of interest in water supply between the urban and rural populations and

¹¹ Adams, W.M. (1985) "The Downstream Impacts of Dam construction: a case study from Nigeria." *Transactions of the Institute of British Geographers*. N.S. 10:292-302.

¹² Ibid. p. 302

how the interest of the rural dwellers could always be ignored unless there is some kind of mechanism that would provide for an objective resolution of such conflicts. The Dam was principally initiated in order to relieve the acute water shortage of the maiduguri metropolitan area. The project was conceived, planned and financed by the federal Government with capital assistance, in the form of loan, from the World Bank. The entire project's feasibility studies which consisted of discovering the hydrological data to support the viability or otherwise of the project were carried out without taking into account the nearby rural community of Jairi. The Jairi rural community had been settled at the downstream area of the project for a very long period of time. Ironically, the Jairi people happen to be a mainly rice producing community and have been responsible for supplying a significant proportion of the Maiduguri metropolitan rice and vegetable requirements. They were able to survive their farming activity because of the flooding which results from river Alau and were therefore in a position to suffer seriously from any reduction in or stoppage of water supply from the river. This was indeed what happened and the people of jairi have since then been experiencing tremendous water shortage which has led to a series of social and economic consequences.¹³ Thus the water security which the Jairi

¹³ Odihi, J. (1991) "Regulating Water Resources Development/Use in the African Sahel: A necessity or Luxury? Evidence from Borno State, Nigeria." *Paper presented at Conference on Ecology and Society in the History of the African Sahel. Held at the University of Maiduguri, Nigeria.* 25th -27th september, 1991. pp.5&6.

community enjoyed was taken away with the construction of a Dam primarily to satisfy the water supply needs of an urban centre.

The Jairi problem of water shortage attributable to the Dam project, has attracted the attention of researchers. In particular, the drying up of the Jairi flood land has brought about a number of effects both environmental and socio-economic. Prominent among the impacts discovered by Odihi¹⁴ to have befallen the Jairi farmers are as follows:

1. Rice cultivation has dwindled over time from over 90% of cultivated plots for the period up to 1985 to 0.0% from 1989 to the present. Other crops such as millet and groundnuts have increased their importance in the agricultural economy of the study area.

2. household income has declined from an average of N2,500.00 in 1985 to less than N200.00 in 1990. this decline in household income is related to the loss in comparative advantage in rice production due to lack of seasonal floods which has made many jobless and underemployed.

3. Famine and vice have replaced conditions of food and general security.

4. Unemployment and underemployment conditions have worsened employability status which is still a function of their little skills beyond domestic and rice culture.

- 5 There is increasing net out-migration in the post rice

¹⁴ Ibid.

culture period as opposed to the net in-migration during the rice culture period.

6. There is a growing feeling of insecurity, malcontent, denial and even betrayal by the Government.

7. Lack of flood water for rice cultivation has dislocated, impoverished, alienated or made jobless many people who were hitherto gainfully employed and making substantial contributions to the quest for self-reliance in food and economic terms.

8. Water supply problems have resulted in poor personal and environmental sanitary conditions.

9. The Alau river has not flowed for many years since the dam construction began.

10. The riparian sections are experiencing desiccation due to increasing aridity.

11. Soil erosion on the riparian section has increased in tempo and space due to the combined factors of enhanced erodibility and erosivity conditions.

12. Floods have declined in frequency and magnitude since the mid-1980s.

These findings no doubt reflect the terrible conditions which the Jairi rice farmers were thrown into with the dam construction. It has been found out that with completion of the dam project in 1985, floodwater ceased reaching the community and that made it difficult to cultivate rice any more. This had the consequence of reducing the household income in the area by a very significant proportion. It

also affected the food security which they were enjoying and in fact led to increase in famine and crime in the area. The Alau Dam therefore proves to be an experience in the lives of the Jairi community members which is typical of the impact that water resource development projects throughout Africa have so far brought about.

6:2 Water-logging, Salinity, Soil Erosion, Public Health.

It has been attempted so far to point out a fundamental environmental problem associated with the construction and operation of Dams, namely, the deprivation of adequate water supply to the downstream users. There are also however some other ecological problems which experience has proven to be attendant upon water resource development projects, particularly irrigation projects. These are mostly associated with the irrigation spots which are sought to be enhanced through the water projects. There seems to be quite a number which have been studied on some irrigation projects but it is intended here to refer to the most prominent ones. Those to be looked at are, water-logging, salinity, soil erosion and public health.

A. Kolawole carried out a study of the South Chad irrigation project about the ecological impact the project has made on the local environment and compared the results

with those obtained in some other places.¹⁵ He discovered that a number of environmental problems have affected the projects and concluded that "the un-intended and non-beneficial effects of those projects in form of biological, ecological and environmental hazards ...seem to have overshadowed their intended and beneficial socio-economic objectives."¹⁶ In detailing the specific kinds of impact the project had made, he alluded to water-logging, soil salinity, weed infestation, soil erosion and deteriorating health conditions of farmers as the major environmental problems confronting the settlements. The problem of water-logging seems to be a prominent concern at the Kano and Sokoto irrigation projects as well. Water-logging essentially results from a number of factors including poor drainage system on the irrigation sites and poor water management practices, such as over-irrigation. It does seem from Kolawole's findings that the poor land management practices by the farmers on the irrigation sites was caused by the vagaries of water supply to their lands. There was a lot of uncertainty about when and how much water was going to come to the farmers. They could not often be able to predict the supply. This resulted in bund breaking and abandonment of the recommended level of water they were suppose to siphon. Also the extent of the problem could be

¹⁵ Kolawole, A. "Ecology and Water Resources development projects in the Sudano-Sahelian Zone." *Paper presented to the International Conference on Ecology and Society in the History of the African Sahel. Held at the University of Maiduguri, Nigeria between September, 24th and 27th.*

¹⁶ Ibid. p.7

seen from the fact that about 61.1% of the farmers sampled during the 1990 cropping season at the south Chad Irrigation project experienced water-logging on their irrigation fields. The problem is further confounded by the fact that the water-logged area was always abandoned because the technology to reclaim the land immediately was not available. It therefore became a problem affecting both the environment and agricultural output.

Related to the problem of water-logging and found to be a serious threat in most of the projects was soil salinity. Salinisation is simply the process of salt build-up in water and soil and has as its major cause in Nigeria according to Kolawole, "water mis-management practice either through under-irrigation or through over-irrigation."¹⁷ The lead cause as discovered happens to be over-irrigation which results when farmers trend to maximise the water supplied at a given time which as a result water-logging and salinity ensue. The actual nature of salinity discovered was marked by a change in soil condition, development of white powder on the soil surface and poor seed germination or ~~stunted~~ plant growth. These were found on the Irrigation project with the following percentage distribution: 74.8% of the sampled farmers noted a change in soil condition, 37.45% experienced yield reduction, while 19.1% witnessed white powder on their

¹⁷ Ibid. p.8

fields.¹⁸ Generally, salinity was said to have caused wheat yields to drop by half during the three years preceding 1991. This must have been a big blow to the projects designed to enhance agricultural development in the entire country.¹⁹

The health conditions of the farmers themselves, particularly those that have had to be moved to the irrigation sites as migrants were found to be less than satisfactory. The projects have given rise to a phenomenal increase in the cases of water-borne diseases and even the emergence of new diseases. Specifically, about 74.8% of the farmers questioned at the Bakolori irrigation project observed an increase in the incidence of human diseases. The diseases commonly mentioned by the farmers include, chronic fever, diarrhoea with blood, itching, jaundice, groin swelling, scrotal swelling, e.t.c. It was observed that the neglect of health facilities for the farming settlements was the main aggravating factor in the deterioration of the health care of the settlements. The provision of health care facilities both for short and long term purposes was not taken into account during the planning of the projects as the major preoccupation of the planners was apparently how to boost agricultural

¹⁸ Ibid.

¹⁹ In addition to the two major problems of water-logging and salinity, Kolawole has detailed the findings he made on other ecological menaces on the irrigation projects such as soil erosion, weed infestation, new crop diseases, and phenomenal increase in real or potential human health hazards emanating from the emergence of new diseases and spread of water-borne diseases.

production even at the expense of the farmers welfare. Thus farmers have ended up residing in squalor where there is no basic sanitation and have to do with stagnant pools where they and their animals drink from and dispose of their wastes at the same time. It will be hard to imagine a more sorry situation for a people who were promised development and prosperity with the coming into being of the irrigation project.

6:3: Socio-Economic Impacts.

The water supply shortage occasioned by the water resources development projects considered above had as their natural consequences certain effects upon the people which could be characterised as social and economic. The communities in the affected areas largely depended on the seasonal floods which had sustained their means of livelihood. There is no doubt that rivers and lakes and water basins in general have been responsible for human settlement and human civilisation. But most especially, areas of water abundance have an unparalleled role today in the creation and development of human population centres in the developing countries. Thus people rely almost entirely on the supply of water for their various activities of life. These consist of fishing, agriculture, irrigation, and animal pasturing. It is the intention to examine some of the specific socio-economic adverse effects which such projects have inflicted on people in the country. These include loss of occupation (agriculture and fishing), loss of income,

problems of resettlement and adjustment, health, food insecurity and crime, and environmental problems such as acidity, salinity, aridity and soil erosion. It will be interesting to see the extent of the total economic loss suffered by the nation through the execution of some of these projects as a means of discovering the total adverse effects of these projects as a whole.

In the case of the Bakolori project, as indicated earlier, the socio-economic impact which the dam brought about have been studied by several persons. Adams's study attempted to shed light on the impact the dam had on the downstream agriculture, fishing and fisheries and total impact on the economy. On floodplain agriculture it was observed that both wet and dry season farming were adversely affected. An important feature of the area before the dam was its capacity to support cultivation using residual soil moisture into the dry season and after the end of the rains. Thus during the wet season rice was cultivated and during the later part of the rainy season through to the dry season a number of vegetables were cultivated to bring a large family income. This was made possible by the natural flooding regime provided by the sokoto river. The construction of the dam however brought about a serious change in the flood regime with some consequences on the area's agriculture.²⁰ In particular those areas that relied

²⁰ Adams observed that "The reduction in the extent, depth and duration of flooding in the sokoto valley has brought changes to both wet and dry season cropping. In the wet season the most striking change

on flood water to cultivate water-demanding crops such as vegetables during the dry season were hit hardest, for lack of adequate water curtailed that ability. Generally therefore, the number of crops that could be cultivated in the area dropped and similarly, the number of households that were able to engage in dry season cultivation fell quite significantly. In two villages, Adams found out that reduction in the number of households that could cultivate plunged; in Rane village, from 100 per cent to 27 per cent and Birnin Tudu, from 93 per cent to 59 per cent.²¹

With respect to fishing, substantial decline was noted in the valley during both wet and dry seasons.²² There was an immediate implication of this on the fishing population. They had to emigrate in large numbers to other areas where they could fish in the dry season. It has to be said though that migration during the dry season was a common practice in the area. But this time the emigration was of high magnitude as about 67 per cent was the number of those who left when the dam was closed as compared to just 33 per cent during the period before 1977. Thus while out-

has been a reduction in the area under rice (from 60 per cent to 14 per cent of plots in the study area at Birnin Kudu)... I. the dry season, reduced flooding caused a decline in both the area cropped (falling from 82 per cent to 55 per cent) and a change in the types of crops grown..." P.296.

²¹ Ibid. p.297

²² Ibid. Adams observed that "In a number of villages fishing had virtually ceased, and in others had become confined to the river bed in the wet season. Five villages reported no fish at all to be caught, all villages complained of reduced catches... Fishing had stopped altogether in five villages (24 per cent) and had declined in almost all others, thus in Durbawa the number of households containing fishermen fell from 17 per cent to 8 per cent with the decline in floods." p.297.

migration to some other areas for the purpose of fishing during the dry season was a cultural phenomenon in the area, it was evident that the dam closure did induce a larger number to emigrate as a result of the impact.

The Bakolori Dam Project also have some other social impacts which related to resettlement of people and land ownership crisis. On land ownership, from the time the project was conceived to the time when the dam was actually constructed, a lot of the villagers lost their lands to elite speculators who foresaw the likely enhancement in value of such lands with the completion of the project. This resulted in poor villagers having their lands ending in the hands of teachers and civil servants. This problem was further compounded by the serious error of omission in the feasibility study, namely, failure to provide for a record of land ownership in the area.²³ The result of this land speculation and the poor handling of the registration was that a lot of the villagers lost their lands and the compensation that they would have received from it. The tension which this engendered was exacerbated by the poor handling of the resettlement of those who had to be displaced to provide space for the reservoir of the dam. The farmers were dislocated together with their families and livestock, and even those verified as entitled to

²³ See Igbozurike, M, and Diatchabe, O., (1982) "The Social Cost of Irrigation: the case of Bakolori." *Paper presented at the fourth Afro-Asian Regional Conference of the International Commission on Irrigation and Drainage, Lagos, Nigeria*. Volume II (publication 27). p. 349

compensation had their payments delayed by bureaucratic bottlenecks. Also the fact that the farmers were estranged from the project managers and were only allowed to channel their grievances through the local Government added to their frustration.²⁴ The situation erupted into a serious violence in April 1980 in which many farmers laid down their lives in an effort to defend themselves and what they saw as their legitimate right.²⁵ The loss of lives has obviously left an imprint on the nation's consciousness and has provided a classic example of how a planned development activity could all go wrong if not adequately implemented and monitored. The social cost therefore of the bachelor dam project was evidently high and has been cited as an example of the strong need that there is for an institutional and legal reforms of water resources development projects in the country in order to protect people and the environment.

The economic impact of the Bakolori project on the

²⁴ See Adams, W.M. (1992) *Wasting the Rain: rivers, people and planning in Africa*. Earthscan, London. Here Adams recalled the instance of a downstream farmer who attempted to converse with the project management directly over waterflow and was just sent away with the note that those of them living downstream should no longer rely on flood flow from the river and that if they wanted to go further over the issue they should do that through the Local Government Council. (p.128) This was despite the fact that the project is a federal government project and if they had to go through the local government council the bureaucracy was not likely to consider the expediency of their situation. Not only that, one would have thought that the farmers should have had the right at least to discuss exhaustively how their rights would be affected by the project.

²⁵ The immediate cause of the riot was said to be the pulling down of the farmers residencies rendering them homeless and without any property. See Wallace, T., and Oculli, o. (1989) "Land and Agricultural projects in northern Nigeria". *African Environment*, 23-24 volume 3-4 Dakar, senegal.pp.47-68.

downstream communities and their environment makes an interesting study as it exemplifies the instance of failure to realise the huge economic benefits that should have accompanied the project. The Food and Agriculture Organisation of the United Nations (FAO) was responsible for the effective report which showed the possible viability of an irrigation project which could utilise the water to be captured at the Bakolori dam.²⁶ In addition to the FAO's report, the designers of the project, IMPRESIT, produced its own report which made forecasts about how much food production could be enhanced in the area and therefore improve the economic conditions of the region as a whole.²⁷ In both reports an economic prosperity forecast was made. Unfortunately however, the experience of the project after some time, almost a decade after its completion, shows that the losses incurred by both upstream and downstream populations were colossal and the predicted gains were yet to materialise.²⁸ The losses were both in terms of fish and fisheries and agricultural production. On

²⁶ FAO (1969) *Soil and Water resources survey of the Sokoto valley, Nigeria*. Final report, Rome.

²⁷ IMPRESIT (1974) *Bakolori Project: first phase of the Sokoto Rima Basin Development*. Final Report, Rome.

²⁸ Etuk, E.G. and Abalu, G.O.I. (1982) "River Basin Development in Northern Nigeria: A case study of the Bakolori Project". *Fourth Afro-Asian Regional Conference of International Commission on Drainage and Irrigation*, Lagos, Nigeria. vol. II pp.335-346. These two collaborative researchers found out during their study that there was a disappointing result as far as agricultural development was concerned at the Bakolori Project. Although they had not written off the project entirely as a failure at that time because they envisaged a possible long term success for it, still did point out that "Actual agricultural productivity, as measured by average yields, is found to be less than half the potential productivity for most of the crops grown in the scheme." (p.345.)

the other hand if the total agricultural and fisheries losses that have been directly and indirectly linked to the project are added up to the costs of infrastructural development, construction, and resettlement, the project was still considered as a huge economic loss to the nation during its early years.

The story of the Bakolori dam is not an isolated instance in terms of social and economic impacts in the country. Problems along the lines of Bakolori were experienced as a result of the Kano river projects. On resettlement of persons affected by the Tiga dam reservoir, the project planners found that they had to resettle about 13,000 people as a whole.²⁹ It should be pointed out at this stage though that the resettlement process in Kano, unlike that of Bakolori, was quite smooth and did not engender the kind of social friction that accompanied the Bakolori project. Nonetheless however, the people resettled did suffer from the fact of torment of forceful relocation, particularly when they had to move to an almost barren land, far from water and made dependant on water tankers to provide even the essential drinking water.³⁰ This becomes important when it is realised that they were hitherto living on rich fertile *fadama* land(land that is flooded by the river and

²⁹ See Voh, J. "Strategies for Improving Agricultural production among farmers displaced by a man-made lake: The case of Tiga dam in Kano state of Nigeria." ***Paper presented at the Fourth Afro-Asian Regional Conference of International Commission on Irrigation and Development***, Lagos, Nigeria. vol.II pp.353-365.

³⁰ See Wallace, T. and Oculli "Land and agricultural projects in northern Nigeria". *supra*, p.48.

often farmed all year round). Similarly, these resettled farmers did experience difficulties in settling down to the new farms given them on the new site.³¹ No satisfactory efforts were made by the state Government and/or management of the project to actually ensure that they had the necessary tools, machinery, seeds and the services of agricultural extension officers, although these were badly needed to see them through the initial years of resettlement.³²

The problem of resettlement mainly affected populations that were living close to the dam reservoir and its immediate surroundings. But what about the population living downstream? It has already been noted that the projects resulted in shortage of water supply which obviously posed serious challenge to the agricultural and fishing activities of these downstreamers. Existing studies about these downstream areas do indicate that the dams have contributed to a great slump in the productivity of the Hadejia-Nguru fisheries.³³ A further consequence of the reduction of the fish resources in the area is the possibility of a spiral of degradation that could ensue as fishermen are prompted to maximise their fishing effort in

³¹ Voh, J. (1982) " Strategies for Improving agricultural production among farmers displaced by a man-made lake: The case of Tiga Dam in Kano state of Nigeria." *supra*, p.356.

³² Ibid. p.263

³³ Hollies, G.E. and Adams, W.M. (1993) *The Hadejia-Nguru Wetlands: Environment, Economy and Sustainable Development of a Sahelian floodplain wetland*, *supra*, p.114

order to maintain their income from the dwindling resource. Although such pressure on the fishery alone could increase the degree of degradation of the fish resources, the further impact of a number of dam construction on the upstream rivers would make matters worse. This is because it has been estimated that flooded areas will keep reducing to the extent that only about a third of the current fish production could be obtained in a not too distant future. This would be at an annual cost (economic loss) of about thirty million naira at 1989/90 prices based on an annual fish output of 6263 metric tonnes.³⁴ There is another implication of this which is that a large proportion of the 73,150 people who rely on fishing in the area would have to quit fishing. The social consequences of reducing this important component of the rural economy are hard to measure. The effects would also spill over to people employed in the fish processing, marketing and immigrant fishermen would also find themselves ousted from an area that happens to be an essential part of their annual migration. Similarly, people could start to suffer from the loss of fish as a source of cheap and readily available nutritional supply.

In addition to professional fishermen in the area who have been affected downstream of the Kano river projects, there are farmers who cultivate during and after the rainy season relying on the availability of flood water. These farmers

³⁴ Ibid.

have had an overwhelming experience of difficulties in relation to loss of cultivation. A recently reported experience was that of April, 1992, when due to the closure of the Challawa Gorge dam a massive loss of water resulted in a widespread loss of rice paddy in the wetlands of Yobe state. This prompted the local Government Councils that were affected to demand for compensation and relief from their state Governments. The problem was graphically explained by a farmer who wrote on the 3rd of July, 1992:³⁵

Now there is much fear about the flood reaching some parts of the wetland... Now the farmers understand that the part of their farming in floodplain is in the hands of the people building dams upstream... I have seen almost all parts of the floodplain and I fully understand how badly and dangerously inadequacy of the floods is destroying everything in the area. People can now not even exploit their environment in order to sustain a living, for the farmers in most of the area everything is coming to a standstill. For example in Dagonna, Arinchasko, Galdimari and many other villages, many farmers lost their pepper and wheat and there is no water in many streams to irrigate maize which matures with the rain. In other areas where the flood is very scarce, the people are taking to wood cutting as a dry season occupation. There have never been a year or a time when there were so many cattle in the *fadama* near our farms, as this year. Even now the fulanis are still staying in the *fadama*."

6: 4: Conclusion

An attempt has been made in this chapter to present some of the environmental problems which have resulted directly or indirectly from water resource development projects in Nigeria. These problems could be categorised into two

³⁵ Quoted by Hollies, G.E. and Adams, W.M. (1993). The Hadejia-Nguru Wetlands: Environment, Economy and Sustainable Development of a Sahelian Floodplain Wetland. *supra*, p.218

according to whether they actually resulted from dam construction, such as water supply shortage and those that have resulted from the operation of irrigation schemes designed to be supported by the dam. The various projects, as we have seen, have ended up causing damage to the environment and impoverished the society particularly the rural poor and it is definitely doubtful whether or not they have actually produced development that could be said to be sustainable.³⁶

The sheer amount and scale of the environmental problems which have befallen most of these projects could be seen as the result of the failure of the nation's development planning system to provide for a framework that would allow for a proper and adequate evaluation of the impacts of such projects on the environment, the society and the economy of the country.

³⁶ Experts that have worked on and researched some of these projects are of the view that water resources development projects in the African continent as a whole have actually failed. An example of this view could be found in Adams, W.M., (1992), *Wasting the Rain... supra*, p.189.

CHAPTER SEVEN

THE POTENTIALS AND LIMITATIONS OF LAW IN THE PROTECTION OF THE ENVIRONMENT IN WATER RESOURCES DEVELOPMENT

7:0: Introduction.

In the preceding chapter an attempt has been made to examine some of the environmental and socio-economic problems that have resulted from water resources development projects in the country. In this chapter attention will be focused on the potential role and relevance of law in the protection of the environment within the context of water resources development projects. In particular, we shall examine the issue of whether or not law could have been of any significant impact in the prevention or reduction to the minimum, ^{of} such adverse environmental effects at all. In order to do this effectively however, it would be necessary to first examine the available body of laws and regulations constituting the legal framework that governs water development projects in the country. To start with, although too much importance should not be placed on this, there was no specific law or regulation that specifically governs either the planning, construction or even operation of water resource projects in the country. But since the function of water management has been broadly entrusted to the River Basin Development Authorities that were created, the legal framework for

those Authorities will be examined to see whether or not the function of environmental protection could be said to have been reasonably or adequately provided for therein. This will then take us to the question of the possible kind(s) of legal frameworks that could actually make environmental protection and management highly significant issues to be taken account of in any water development project. It must however be stated that useful though law might be in providing a structured framework for environmental protection in water resources development process, it will be necessary to point to the possible limitations of law therein.

7. 1. The Legal Framework for Water Resources Development.

The first question which comes to mind here is that of whether or not it was at all necessary to have any kind of law in place in order to define and direct how water resources development projects should be planned and executed in the country. In other words, is law important at all in achieving a desired level of environmental consciousness in the planning and designing of water development projects? This is in view of the fact that it could be argued that these water projects have been handled administratively so far and therefore why place any emphasis on an untested role of law?

7:1:1: The Relevance of Law.

The position which is argued here is that law has a

significant role to play and could contribute positively to the process of environmental protection and management in the context of the nation's water development projects. There are various reasons for this position.

First, the availability of some kind of legislation which directs that development projects, water resources ones inclusive, be designed and undertaken only after taking into account their likely environmental and socio-economic consequences, would have made it very difficult to ignore the consideration of such consequences by the planners and executors of such projects. It is also highly probable that the existence of such a law could have led to the development of a clear consciousness of environmental and socio-economic drawbacks of development projects. This could also have fostered the development of environmental protection policies in the country as a whole. Therefore the absence of such a law leaves the door wide open and there was not any enthusiasm on the part of officials and planners of development projects to consider the environmental impacts of their projects, let alone take measures to mitigate them.¹ The experience in some places has shown how decisive the act of legislation could be in

¹ In the course of an interview with the Director of Dams at the Federal Ministry of Water Resources, he pointed out that there was worry amongst officials in the ministry about the absence of any legislation on the supervision and operation of Dams from construction to operation. He also averred to a number of Dam failures in the country, which he blames on the absence of regulations that could have laid down safety standards and environmental considerations. (Interview with Engineer S. Mahmoud, Director of Dams, Federal Ministry of Water Resources, Abuja, Nigeria. August, 1991.)

bringing about significant change in the way environmental impact of proposed development projects were dealt with. In the United States, for example, until the passage of National Environmental Protection Act (NEPA), environmental consideration in development projects was based only on mutual arrangement between Government Departments or Agencies. The passing of NEPA, however, ushered in an era of mandatory environmental consciousness amongst development planners who, by law, are now required to take the environment into account when pursuing their development projects and this is considered as the most important step taken in environmental control within the context of development projects.² The existence of the law did make environmental perspective more respectable in contrast to the hitherto administrative arrangement amongst Government departments. This point was made quite clearly by A. Teclaff, an American professor of Water law, who observed that:

Assessments (of environmental impacts) formally mandated by statutes or regulations stand at the apex of measures for the rational management of the environment because they command more respect and attention than the best *ad hoc* arrangements. The effect of NEPA's mandate was dramatic and apparent immediately upon passage of the Act, when the Federal Court of Appeals for the fifth circuit reversed a lower federal court decision that the Corps of Engineers had no power to deny a water project license on ecological grounds.[Case of Zabel v. Tabb³] ... There is less discretion left to the administration in the statutes which, like NEPA, explicitly require a written evaluation

² See Teclaff, L. (1978) "Harmonising Water Use and Development with Environmental Protection.", in, A.E. Utton and L. Teclaff (eds) *Water in a Developing World-The Management of a Critical Resource*. Westview Press/Boulder, Colorado. p.91.

³ 430 F.2d 199 (5th Cir. 1970); 401 U.S. 910 (1971)

of the environmental effects of proposed actions or projects.⁴

Secondly, the ideas put forward by the legal experts group of the World Commission on Environment and Development in its report, "Our Common Future", emphasised the role which law could play in the balancing up process between development and environmental protection. The legal experts group identified certain legal principles which show that there were a great deal of benefits to be had by harmonising environmental protection needs with those of development programmes and that legal and institutional changes are necessary within national and international legal systems in that harmonisation process. These principles have been set to ensure that development activities in general are sustainable, which essentially means the utilisation of resources without compromising the ability of future generations to enjoy same resources. An important feature therefore of sustainable development is environmental protection and management which must be pursued as integral parts of any development programme.⁵ The route to achieving sustainable development would thus

⁴ Ibid.

⁵ WCED makes the point rather more clearly when it says further that environmental protection and sustainable development should be on the agenda of every development initiative. It says that: "Environmental Protection and Sustainable development must be an integral part of all agencies of governments, of International organisations, and of major private-sector Institutions. These must be made responsible and accountable for ensuring that their policies, programmes and budgets encourage and support activities that are economically and ecologically sustainable both in the short and longer terms." Ibid., p. 32.

become clearer where development programmes are planned and executed in compliance with the requirements of the law that has itself been made in fulfilment of those principles which were designed to lead to the attainment of sustainable development. Thus, these legal principles underpin the need that there is for the provision of a legal framework that would promote or enhance the possibilities of achieving sustainable development. The WCED principles were intended to lay down a set of principles for a universal Environmental law to be adopted by nations and also form the basis of action between nations.⁶ They consist of four parts and the first part mainly focuses on those relating to the integration of environmental protection with development planning and implementation. They state in part that:⁷

...

4) States shall establish adequate environmental protection standards and monitor changes in and publish relevant data on environmental quality and resource use.

5) States shall make or require prior environmental assessments of proposed activities which may significantly affect the environment or use of a natural resource.

6) States shall inform in a timely manner all persons likely to be significantly affected by a planned activity and to grant them equal access and due process in administrative and judicial proceedings.

7) States shall ensure that conservation is treated as an integral part of the planning and implementation of development activities and provide assistance to other states especially in developing countries in support of environmental protection and sustainable development.

⁶ WCED (1987) *Legal Principles for Environmental Protection and Sustainable Development*. Graham & Trotman Limited, London. pp.25-27

⁷ Ibid.

8) states shall cooperate with one another in good faith with other states in implementing the preceding rights and obligations.

It is clear from these principles that certain rights and obligations such as the responsibility of conducting environmental impact studies of proposed projects, establishment of environmental quality standards, making environmental information easily available and unhindered access to environmental justice were intended to be created by the WCED legal experts. The experts see them as the rights and duties that would condition the attainment of sustainable development. This could certainly be true although it must be added that the most likely effective means of guaranteeing them within national or International frameworks is through the use of law or legislation.

Thirdly, the existence, *albeit* in draft form, of two laws, one on Dam supervision, dating back to 1973, and the other on Water Resources, dated 1981, shows that there was some feeling somewhere within the officialdom that some law was indeed relevant to the effective planning and implementation of development projects in the water resources area. The 1981 Water Resources law in particular, was concerned with the definition of water rights and control of water resources development in the whole federation. It was drafted by a consultant appointed by the Food and Agriculture Organisation of the United Nations (FAO). There was an obvious lack of the will to see through the promulgation and operation of such laws. An argument

which could be made here by those who doubt the relevance of law in the water development process is to the effect that the fact that the laws were shelved by the Government and water development projects still went ahead shows that law was not an important factor as such. However, the point which is being made here is that the presence of the law could have made a lot of difference for it could have provided for some kind of environmental protection consciousness either through the requirement of an environmental impact assessment of projects or some other means. This would obviously have paved the way for a more environmentally conscious development projects.

7:1:2: Any Law for Water Resources Development?

The next point to consider is that of the existence or otherwise of a law that was specifically designed to ensure that water resource development projects are undertaken in accordance with certain laid down rules and regulations. It is within such a framework that one would expect a requirement to the effect that water resources development projects do take into account the need for the protection and management of the environment from the plan/design of a project through to its construction and operation. As indicated earlier, the usual kind of law that one finds which requires development planners and executors to bear in mind the environmental consequences of their projects is in the form of either a National Environmental Protection law or an Environmental Impact Assessment law. The

situation in Nigeria prior to 1992, was that no direct legal provision was available which expressly provides for an environmental impact assessment of prospective development projects by bodies or persons undertaking such projects. This means that there were no binding rules and regulations which could force bodies and persons to resort to an EIA when undertaking a project. However, the general environmental awareness amongst the populace following the illegal toxic waste dump episode of 1988 and particularly, the pressure from International Aid and lending Agencies such as the World Bank to conduct EIAs on projects, made some of the Government Departments to seek to institute EIAs for projects they were concerned with.⁸ This was merely an administrative initiative, mainly necessitated by the desire to secure the grant of whatever money was expected on the project, which fact could definitely cast some doubt on the commitment of such Government Departments to actually abide by the findings of the assessment. It is important to note that, however welcome an administrative arrangement might be, there remains the issue of coordination of the various development activities being undertaken by different Departments and Organisations having tremendous impact on the environment. In spite of this though, there was not in existence, in Nigeria, an arrangement amongst Government Departments which satisfies

⁸ For example the Federal ministry responsible for water resources management in the country did confirm the existence of such a pressure from the world Bank to carry out EIAs on its projects financed by the Bank.

the need for a coordinated approach to EIA. Similarly, Government bodies and agencies responsible for authorising projects or the granting of licences for development projects were not required by any law or indeed any customary or administrative convention to order an EIA by a prospective development proposer.

With regard to the case of water resources development projects, it is necessary to examine the River Basin Development laws in order to understand the enormous development functions given to the River Basin Authorities, but without any corresponding obligation to consider the environmental implications of such developments. The RBDA laws were enacted to provide for the establishment of River Basin Development Authorities almost completely along the lines of the Tennessee Valley Authority of the United States of America. Thus, the Authorities were to effectively plan and carry out development of their respective river basins for socio-economic enhancement of their regions. River basin planning started in the country with the setting up of the Niger Delta Development Board in 1960 which was followed with the Niger dams Authority in 1961. Then in 1973 the Federal Government established two river basin Development Authorities, the Sokoto-Rima River Basin Development Authority and the Chad Basin Development Authority. In 1976, other seven RBDAs were established through another Law. In 1979, all the previous laws setting up the various Authorities were consolidated and enacted

into a single law for the whole RBDAs. The 1979 RBDAs Act provided a very wide set of functions for each of the Authorities. These are:-

- a) to undertake comprehensive development of both surface and underground water resources for multi-purpose use,
- b) to undertake schemes for the control of floods and erosion, and for watershed management including afforestation;
- c) to construct and maintain dams, dykes, polders, wells, boreholes, irrigation and drainage systems and for other works necessary for the achievements under this section;
- d) to provide water from reservoirs and lakes under the control of the Authority for irrigation purposes for farmers and recognised associations as well as for urban water supply schemes for a fee to be recognised by the Authority concerned, with the approval of the commissioner;
- e) the control of pollution in rivers, lakes, lagoons and creeks in Authority's area in accordance with nationally laid down standards;
- f) to resettle persons affected by the works and schemes specified in this section or under special resettlement schemes;
- g) to develop fisheries and improve navigation on rivers, lakes, lagoons and creeks in the Authority's area;
- h) to undertake the mechanised cultivation and clearing of land for the production of crops and livestock and for forestry in areas both inside and outside irrigation projects for a fee to be determined by the Authority to be approved by the commissioner;
- i) to undertake the large-scale multiplication of improved seeds, livestock and tree seedlings for distribution to farmers and for afforestation schemes;
- j) to process crops, livestock products and fish produced by farmers in the Authority's area in partnership with the state agencies or any other person;
- k) to assist the state and Local Governments in the implementation of the following rural development work in the Authority's area:
 - i) the construction of small dams, wells and boreholes for rural water supply schemes and of feeder roads for the evacuation of farm produce;

ii) the provision of power for rural electrification schemes from suitable dams and other types of power station under the control of the Authority concerned;

iii) the establishment of agro-service centres;

iv) the establishment of grazing reserves

v) the training of staff for the running and maintenance of rural development schemes and for general extension work at the village level.

This was later replaced by another law in 1986 with similar title but with a reduced number of functions. It essentially limits the activities of each Authority to the development of irrigation and agriculture. The 1986 law defines the functions of each of the RBDAs as follows:

4. (1) The functions of each Authority shall be-

(a) to undertake comprehensive development of both surface and underground water resources for multi-purpose use with particular emphasis on the provision of irrigation infrastructure and the control of floods and erosion and for water-shed management;

(b) to construct, operate and maintain dams, dykes, polders, wells, boreholes, irrigation and drainage systems, and other works necessary for the achievement of the Authority's functions and handover all lands to be cultivated under the irrigation scheme to the farmers;

(c) to supply water from the Authority's completed schemes to all users for a fee to be determined by the Authority concerned, with the approval of the Minister;

(d) to develop, operate and maintain infrastructural services such as roads and bridges linking project sites; provided that such infrastructural services are included and form an integral part of the list of approved projects;

(e) to develop and keep up-to-date a comprehensive water resources master plan, identifying all water resources requirement in the Authority's area of operation, through adequate collection and collation of water resources, water use, socio-economic and environmental data of the River Basin.

The range of activities laid down for the RBDAs in the laws

that were made prior to the 1986 one could be described as extraordinarily wide. As could be seen from the details above, they encompassed irrigation, flood control, watershed management, pollution control, fisheries and navigation as well as activities remote from water resources such as food processing and seed multiplication. There were various reasons projected for this breadth of activities.⁹ Firstly, as indicated earlier on, the concept of river basin planning and development was a borrowed one from the United States of America where the Great Depression induced the then American Government to embark upon the idea as a means of economic and social transformation of its poor regions. Therefore it is understandable that when the Federal Government of Nigeria employed the concept in the Nineteen-seventies, it embraced the whole of it with the underlying ideology behind it which was reflected in the breadth of tasks and functions granted the Authorities.¹⁰ The Authorities were thus expected to become the engines of rapid regional socio-economic development. Secondly, the Federal Government used the RBDAs to attempt the acceleration of the rate at which resources could be moved into agriculture and rural production in the 1970s which saw the rapid rise of oil

⁹ W.M. Adams and G.E. Hollis (1993) **Hadejia-Nguru Wetlands Conservation Project-Hydrology and Sustainable Development of a Sahelian Floodplain Wetland**. University College London, London.p.120

¹⁰ For an interesting discussion over the ideology of River Basin Planning and its transplantation in the African continent, see W.M. Adams, ; For another interesting discussion on the subject of ideology and development planning in the context of planning law see, McAuslan, P. (1984) **The ideologies of planning Law**. Pergamon Press, Oxford.

→ (1992) "Washing the Rain..." *Supra* at p. 246.

production which massively increased the federation's revenue. Thirdly, The ~~F~~ive-year plans increased in size but the lack of sufficient manpower and bureaucratic constraints limited the amount of money that could be disbursed by the government to execute projects effectively. In view of these circumstances, the RBDAs offered a wholly new planning and development structure to the federal Government.¹¹ This planning and development structure was parallel to that obtaining at the state level and so the Federal Government had found in the structure of the Authorities, a means of direct engagement in rural development projects.¹² It is interesting though that in the 1986 law there was a reduction in the variety of functions which an Authority could undertake which therefore narrowed the development activities of the Authorities to the provision of irrigation infrastructure and control of erosion.¹³ However, coming down to the actual powers given to the Authorities to undertake development of water resources within their respective

¹¹ See Adams, W.M. and Hollis, G.E. (1993) *supra*.

¹² It is important to point out that the move to participate directly by the Federal Government in rural development through the RBDAs led to conflicts with state Government Ministries. There was a considerable overlap between the Two bodies of responsibilities-in livestock, or fisheries for example- and duplicated efforts. In some cases there was actual competition for the right to develop particular resources such as dam sites. This was experienced in the case of the Oyo state Water Board owned by the Oyo State Government and the Ogun Oshun River Basin Development Authority. See Siann J.M.(1981) "Conflicting Interests in River Basin Planning: A Nigerian Case Study", in S.K. Saha and C.J. Barrow (eds) **River Basin Planning: Theory and Practice**. John Wiley & sons. pp.215-234

¹³ See Section 1 of the 1986 RBDA Law where unlike its predecessor, the function of agriculture was specifically emphasised irrigation, control of erosion and water-shed management as the focus of the Authority's development projects.

river basins, it is clear that Section 4(1)(a) of the 1986 RBDA law provided them with the power to undertake water resources development projects. But the section does not expressly confer any duty on an Authority to plan its development projects taking into account the possible environmental consequences of such activity. In fact there is only one section in the law that provided for an environmental protection responsibility and even this section only makes reference to a general duty to prevent pollution of water courses in accordance with 'nationally laid down standards'¹⁴. This requirement is quite important in the context of environmental management responsibility of the Authority particularly since irrigation, which has great pollution potential, happens to be its major preoccupation. It is, however, inadequate as far as the creation of an obligation to undertake an environmental impact study of its projects is concerned. Thus pollution control is the only express environmental protection responsibility imposed by the 1986 RBDA law on an Authority.¹⁵ Thus no express duty to consider the environmental impact of the activities of the Authorities was ever provided and there is little wonder that the River

¹⁴ See section (1) (e) of the 1979 RBDA law.

¹⁵ It should however be noted that Section 4(e) of the 1986 RBDA law does require the Authorities to develop and keep up-to-date a master plan for their areas of operation through the "collection and collation of water resources, water use, and socio-economic and environmental data of the River Basin". Although this provision is in the right direction as it requires the accumulation of environmental information, it certainly cannot be said to be enough for the purpose of instilling the necessary environmental protection consciousness in the course of water project development management. The Section appears to have requested the discovery of information by the Authorities only for their usual development planning functions.

Basin Authorities ended up building projects with negative environmental consequences. They operated without having any obligation to consider the environmental impacts of their projects.¹⁶ Most significant point here though is the absence of any other independent body or authority vested with power to require that such environmental interests were taken into account by the authorities when exercising their functions. This could be explained by the absence of any such requirement by any law or policy of the Government. It is quite arguable to say that the Authorities should not be condemned for the failure to consider environmental impacts of water resource projects in view of this legal and policy lacunae which in general agrees with the policy vacuum on environmental protection that characterises the nation.¹⁷ The need to have the mandatory environmental implication study and action by the Authorities in their water resource development projects becomes more imperative with the recent action taken by some of them to pursue such projects without proper environmental evaluation. The example which is relevant here is the resumption of work by the Hadejia/Jama'are River Basin Development Authority with another phase of the Kano River Project without consideration being given to the various environmental consequences. This is in spite of the

¹⁶ The remarkable failure of the River Basin Authorities to provide an effective control and management of the environment has also been similarly observed by Akanle, O., (1984) "A Legal Perspective on Water Resources and Environmental development policy in Nigeria ", *Env. & Nat. Resources* 12(1) *Nig. L. J.* pp 1-20. pg.

¹⁷ See chapter three, *supra*.

fact that advice for a proper environmental evaluation of the project had been given by experts and others who have studied the impact of water resources development on the environment and the local people of the area. It is quite unlikely that the Hadejia/Jama'are River Basin development Authority could have ignored the environmental impact requirement if a law had mandated for one in such cases. It is further possible to absolve the Authorities over lack of environmental consciousness, for the 1986 RBDA law has vested in the Minister for water resources, the power of final approval of projects that have been proposed by them.

Section 4(2) of the law provides that:

Projects within the limits of the functions enumerated in subsection (1) of this section shall be executed with the approval of the Minister responsible for matters relating to water resources.

Thus it lies within the competence of the Minister to approve or disapprove any proposals on water projects by an Authority and he can, by using this provision, require that an Authority amends or modifies its project plan to take into account an environmental protection measure. At the moment however, this power of the minister does not seem to have been exercised in this respect which fact reinforces the need for some kind of mandatory legal requirement to be established.

Having discounted the possibility of an effective contribution of the 1986 RBDA law provisions in forcing the RBDAs to give heed to environmental consequences of their

development programmes, it is important to look elsewhere in the statute books in order to discover whether some other laws could be said to have made provision for that. It is important to point out that, as indicated earlier on, it was only in 1988 that a National Environmental Protection law was enacted, a period well after a lot of water resources development projects have been undertaken and even completed by the river basin authorities. The provisions of the law would still be important for future projects by the authorities however. The surprising thing though is that unlike the American statute, Federal Environmental Protection Act 1969¹⁸, on which it seems to have been modelled, the Nigerian Federal Environmental Protection Agency Act (FEPA), did not provide for an environmental impact assessment of development projects in the country.¹⁹ This shows that there was little or no consideration of the need to provide for environmental impact assessment in the same law that establishes the federal body responsible for environmental protection in the country, the Federal Environmental Protection Agency. This obvious omission could have been deliberate or that

¹⁸ National Environmental Policy Act. 42 U.S.C. 4321. Section 102(2)(C) of the Act required all federal agencies to prepare a statement about the impacts of all their actions that significantly affected the environment.

¹⁹ There was an amendment however in 1992 which provides the Federal Environmental Protection Agency with duty of making the procedure for environmental impact assessment of all development projects. See Section 5(b) of Decree No. 59 of 1992 entitled, "Federal Environmental Protection Agency (Amendment) Decree 1992." The said Section 5(b) provides that it is the responsibility of the Agency to "prepare a comprehensive national policy for the protection of the environment and conservation of natural resources, including procedure for environmental impact assessment for all development projects".

perhaps the law(FEPAA) was not thought as being the appropriate place to require an environmental impact assessment. This proposition of inappropriateness seems supportable by the fact that in 1991 a draft Environmental Impact Assessment Law was prepared by the Agency's lawyers and was promulgated into law in 1992. Thus, it is only the EIA law which could be said to be the governing law on environmental impact assessment by which all Government departments and bodies would be required to comply with a stated procedure for the carrying out of the environmental impact assessment for all their water resources development projects.

In addition to the EIA law, there is another law in the water resources field which expressly provides that River Basin Authorities must take into account the possible environmental impact of their projects. This is the Water resources law whose draft was completed in 1991. A rather curious point here is the way in which the promulgation of laws to protect the environment or regulate/manage environmental resources always drag in the country. This is an interesting issue because, as shown in chapter three, supra, even the Federal Environmental Protection law itself took a long time to mature into a full legislation. It was only after the discovery of the illegally imported toxic waste into the country by an Italian firm that the

Government swung into action and promulgated the laws.²⁰ The only explanation for this kind of attitude towards the legal framework for environmental protection in the country seems to be that there is a lack of understanding or appreciation of the role and relevance of law in this regard by those placed in authority.

Thus, the situation now is that neither the RBDA laws nor any other statute in force, has expressly provided for an environmental Impact Assessment of water projects in the country despite the fact that such a legal requirement could have greatly enhanced the protection of the environment in the water resource development process.

7:2: Specific Potentials of Law towards the Protection of the Environment in Water Resources Development Projects.

In the preceding chapter an attempt has been made to identify and discuss problems such as insufficient water supply to downstream areas, resettlement of people, public health deterioration, e.t.c. as some of the socio-environmental problems which accompany water resources development projects. It is important to point out the ways in which, through the use of law and policy, persons or

²⁰ It is interesting to note that one reason which was advanced to explain why the toxic waste was imported into the country in the first place was the absence of a law that prohibited such import. It was even said that the chemicals which made up the toxic waste were in fact authorised chemicals to be imported into the country under the then current Import Tariff Regulations. So the importing firm simply exploited the apparent loophole in the existing legal framework. For a review of the Toxic waste incident and the legal perspective to it see, M. Ikhariale

organisations, private or governmental, undertaking water resources development projects, could be made to take steps to prevent or ameliorate them. In other words it is the intention here to examine what could be said to be the legal framework for the protection of the environment in water resources development projects.

The first point here is the concept of EIA which provides a general framework for the assessment of a development project in order to determine its likely environmental and socio-economic consequences and also determine any possible alternatives. The conducting of an EIA should therefore provide the necessary avenue for discovering all the potential environmental impacts of a water resources development project. The information generated through an EIA study would thus be quite helpful when decisions are taken on whether or not to proceed with the project or what definite provisions should be made to cater for those problems. It is necessary however to examine the concept further in order to understand it and how it would relate to the water resources development projects and environmental protection. In addition to EIA, which essentially serves as an information generator quite important towards an effective decision-making, some other legal mechanisms would have to be provided for in order to ensure that effective protection is guaranteed for the environment.

Reference has been made to the fact that an Environmental Impact Assessment law holds a key to successful environmental protection planning and management in the context of water resources development projects. There is a need to first consider what EIA is all about.

7:2:1: What is an Environmental Impact Assessment (EIA)?

It is important to stress that there is no general and universally accepted definition of EIA. There have been various definitions of the concept offered which itself reflects some of its inherent problems. The following examples selected at random from a number of authorities illustrate the great diversity of definitions. Munn²¹ says it is "... an activity designed to identify and predict the impact on man's health and well being, of legislative proposals, policies, programmes and operational procedures, and to interpret and communicate information about the impacts."²² The United Nations Environment Programme (UNEP) defines an EIA in the following words:²³ "EIA means an examination, analysis and assessment of planned activities with a view to ensuring environmentally sound and sustainable development."²⁴

²¹ Munn, R.E. (ed) (1979), *Environmental Impact Assessment: Principles and Procedures*. John Wiley, Chichester, England.

²² Ibid.

²³ UNEP (1987) *Goals and Principles of Environmental Impact Assessment*. Decisions 14/25 of the Governing Council of 17th June, 1987.

²⁴ Ibid.

Following this, an EIA can simply be described as a process whereby the environmental problems likely to be generated by a proposed project are studied for the purpose of developing environmental protection measures that would be required to ameliorate those problems. The emphasis is on the study of the prospective impact of the proposed project with a view to understanding the potential threats to the environment. An EIA also helps in determining the positive contributions which a proposed project could make to the people most likely to be affected by the project, in addition to the identifiable range of environmental management options it should help in determining.²⁵ It is not, however, likely that each and every development project in a country must go through an EIA. This means that a criteria for determining when or in what circumstances a proposed project should be subjected to it, becomes necessary.

The concept of EIA as an approach to the evaluation of development projects evolved in the early 1970s, as a response to a number of factors. The first one was the growing scale, pace and associated repercussions of

²⁵ See a discussion of the various kinds of advantages which an EIA could help uncover, by, Thanh, N.C. and Tam, D.M., (1992) "Environmental Protection and Development: How to achieve a balance?", in A.K. Biswas and S.B.C. Agarwala, (eds), **Environmental Impact Assessment for Developing Countries**. Butterworth/Heinemann. pp.3-15. Also, for an articulation of the role of EIA in general as an important tool in the process of modern economic development, see, Geping, Q., (1987) "The Role of Environmental Impact Assessment in Economic Development", in, A.K. Biswas and Qu Geping (eds) **Environmental Impact Assessment for Developing Countries**. Published for United Nations University by Tycooly International, London.

resource development schemes which produced largely unforeseen harmful impacts which consequently reduced any predicted benefits of the projects. Secondly, there was an upsurge in environmental activism as members of the public became increasingly aware of the environmental consequences of development actions. Thirdly, there was the discovery that the project appraisal process in existence was quite inadequate, because the focus of such appraisal process was quite narrow. Projects were assessed mainly on the grounds of technical and economic feasibility to the neglect of environmental, social and health impacts. These latter impacts were rarely examined explicitly or rigorously and even when considered, the assessment usually took the form of cost-benefit analysis which attempts to express all impacts in terms of resource costs valued in monetary terms, and many environmental, social and health impacts were, and probably still are, not easily calculated in economic terms. They could be very difficult to quantify as in the case of disturbance caused to the traditional social patterns of natives of an area. Not only that, they may be long term and indirect in their effects as in the case of Dams which produce secondary effects such as a decrease in agricultural productivity. Finally, there was the need for an examination of the policy context in which development proposals were being put forward which necessitates the addressing of fundamental issues such as the need for development, possible alternatives, and appropriate levels of safety and environmental protection. A special mechanism

was required which would institutionalise a regular examination of these issues which would put any development scheme in its proper perspective within a national development strategy and environmental management. The concept of EIA clearly satisfies this requirement as it brings into existence a system of project appraisal during the preliminary stages which provides an opportunity for a broader consideration of possible impacts, alternatives and linkages of specific projects with national development strategy and environmental management.

Hence, an EIA law could be said to be that law which provides for the procedure and conditions under which the study could be made, reported and possibly, acted upon. Thus, EIA is essentially a way of harmonising development with conservation or achieving sustainable development by providing the opportunity for the integration of development prospects with environmental concerns.²⁶ An EIA law should thus be seen as a tool which provides for the legitimisation of environmental planning and management as it provides for the procedure which governs the conduct of an EIA which in turn offers the general opportunity for the improvement of quality of life by helping to avoid the negative environmental effects of a project or an

²⁶ See Robinson, N.A. (1990) "A legal Perspective on Sustainable Development", in, J.O.Saunders (ed) ***The Legal Challenge of Sustainable Development***. Essays from the Fourth Institute Conference on Natural Resources Law. Canadian Institute of Resources Law. Robinson opines that:

A more pervasive method to bring human conduct rapidly into harmony with natural systems is the law of Environmental Impact Assessment (EIA). (p.21.)

undertaking.²⁷

Furthermore an EIA can be said to be a planning tool which assists planners in anticipating potential future impacts of alternative development activities, both beneficial and adverse, with a view to selecting the "optimal" alternative which maximises beneficial effects and mitigates adverse impacts on the environment. EIAs are also necessary not only for discovering potential environmental implications but also for the monitoring of environmental changes once a project is operational. Such monitoring is necessary not just for those projects for which EIAs were carried out during planning stages, but also for the vast majority of currently existing development projects, particularly in developing countries, which had received very little environmental attention during their planning and construction phases.

EIA can further be used to bring environmental perspectives to planning and programming dimensions, so that it is not just limited in application, to projects. Often many projects are the outcome of the implementation of plans and

²⁷ See further, UNEP (1990) ***Legal and Institutional Arrangements for Environmental Protection and Sustainable Development in Developing Countries***. Nairobi. It makes clear the role of an EIA in the following terms:

As a planning tool, EIA seeks to upgrade the place of environmental factors in decision-making so that unnecessary damage to the environment can be avoided. This does not imply that environmental considerations occupy a paramount position vis-a-vis economic, technological or financial considerations but it does imply that the environmental factors should receive due and balanced consideration before final decision is made. (p.3)

policies and quite often also, the implementation of a plan or policy requires a variety of different individual projects to enable the objectives to be achieved. If EIAs were restricted to individual projects only, it then becomes likely that regional and national impacts of development actions would be ignored. An assessment of the impacts of such regional and national levels of development actions like programmes and policies becomes necessary in order to gain a greater understanding of the cumulative impacts of development. This kind of EIA, conducted at a high or policy level, would in general be in contrast to a project-level one. The latter ought to deal with details and specifics of a project and in addition, data obtained at the former level could be used to ensure that it is not expensive, time-consuming and is implemented in a cost-effective manner.

When conducted at any level, EIA offers an opportunity for information-generation about the consequences of a proposed project. Its principal purpose being to set in motion this information gathering process. Upon the conclusion of an EIA study, the results are then made available to the necessary Authority or Agency of Government that would be expected to take a final decision on the matters raised in the assessment report. The decision-making process is usually exclusive to the Agency or body having the final say over the matter.

It is important here to point out that there are a number of issues of concern which relate to the effectiveness or even desirability of the EIA process. These relate to the role of interest groups, communities likely to be affected by a project and other members of the public who would like to have access to the EIA statement in order to contribute to the environmental review of the proposed project. These issues are important as they underpin a very important doctrine of modern development process, namely, public participation. It becomes imperative that the point of public participation be clearly incorporated into the process, at least at the information-gathering process although this should not preclude the grant of a further right to the members of the public to participate again when the determining body comes to take a final decision over which of the various alternatives should be adopted by the development proponent.

In fact, the practice in many jurisdictions is to allow for some degree of public participation at an early stage of the EIA process. It is important to stress that public participation would strengthen the EIA process by opening it up to public scrutiny. This fact of public participation has been an underlying assumption of the American NEPA which is well developed in subsequent guidelines²⁸ and

²⁸ The American Council on Environmental Quality (CEQ) produced Guidelines are quite specific on public participation. It is to be encouraged at the earliest possible time; agencies are to publicise the availability of draft environmental impact statements through means such as local newspapers or direct notification to interested parties; copies of draft statements are to be provided without charge or at a

backed up by a positive attitude from the courts. An American court emphasised this when it categorically stated that:

where experts, or concerned public or private organisations, or even ordinary lay citizens bring to the attention of the responsible agency environmental impacts which they contend will result from the proposed agency action, then the section 102 statement (environmental impact statement) should set forth these contentious opinions, even if the responsible agency finds no merit in them whatsoever.²⁹

American courts have further encouraged public participation by allowing interest groups to contest a final decision by an agency about which of the alternatives identified in an EIA should be adopted.³⁰ In some jurisdictions however, the role of the members of the public is very much restricted. In two instances, Australia and the state of Ontario in Canada, statutory limitations were placed on the roles of the public although there were rights to notification and opportunity to comment. In Australia, the Minister responsible for an EIA is not

nominal reproduction fee to organisations and individuals that request the opportunity to comment. The Guidelines further require agencies to actively seek out all major points of view and discuss them in the draft statements, to make a meaningful reference in the final statement to the existence of any responsible opposing view not adequately discussed in the draft, and to attach all substantive comment received to the final statement whether or not each such comment is thought to merit individual discussion by the agency in the text of the statement. See, CEQ, *Preparation of Environmental Impact Statements: Guidelines*. Section 1500.9(d), 38 Fed. Reg. 20550, 20555 (1973); 1500.10(a).

²⁹ This was in the case of **Environmental Defense Fund v. Corps of Engineers**, 325 F. Supp. 749, 759 (1971)

³⁰ In the states of California and New York the courts have ruled that adverse environmental impacts of projects should be mitigated. See **Friends of Mammoth v. Board of Supervisors** (1972) 8 Calif. 3d 247; **Village of Laguna Beach v. Board of Supervisors** (1982) 134 Calif. App. 3d 1022, 185 Calif. Rep. 41 (C.A.); **Webster Associates v. Town of Webster** (1983) 59 NY 2d 220; **H.O.M.E.S. v. New York State Urban Development Corporation** (1979) 69 A.D. 2d 222.

required to make anything public, unless he receives a written request for particular information,³¹ or unless he decides, in his discretion, to direct that an inquiry be conducted.³² If he decides that an enquiry be conducted, he then appoints a commission of inquiry, which is required to make public its findings and recommendations (with certain exceptions). The commission however has a discretion to prohibit or restrict publication of evidence or documents.³³ This degree of secrecy in hiding the EIA from public view was further emphasised in some administrative Procedures promulgated subsequent to the mentioned Act. As a matter of fact a specific Administrative Procedure provided that an EIA statement could be withheld completely from the public through one of three ways-after consultation between the administration and the proponent, after interdepartmental consultation, and by the Minister's determination.³⁴ Under the Ontario statute,³⁵ the responsible body is required to review the EIA submitted by a proponent before there was any public involvement at all.³⁶ It is only after such review that the minister gives notice to the public, of the EIA and its review, in such

³¹ Australia Environment Protection (Impact of Proposals) Act, No. 164 of 1974, section 10.

³² Ibid., section 11(1)

³³ Ibid., section 11(2), 4 and 5.

³⁴ See Australia, Governor-General, Order under Sub-section 6(1) of the Environmental Protection (Impact of Proposals) Act 1974-1975, June 20, 1975, paragraphs 6.2.2., 6.2.3. and 6.2.4.

³⁵ Canada, Province of Ontario, Environmental Assessment Act, 1975.

³⁶ Ibid., section 7(1)(A)

manner as he considers suitable, whereupon any person can make written submissions which the minister is bound to consider.³⁷ Although bound to consider any written comments, the minister however has the right to accept or reject any comments but in each case he is enjoined to notify the author of the comment of his decision. Clearly the two cases indicate the trend in some countries, incidentally all sharing the membership and traditions of the Commonwealth, where public participation in water resources management and environmental protection is very much restricted, and has been described as being usually limited to "associating the representatives of local interests with policies, plans and decisions in an advisory capacity and seeking comments or advice of professional or scientific bodies."³⁸ This contrasts sharply with the American situation where public right to participate in this context has been made stronger by the active and supervisory position assumed by the Courts in respect of final decisions taken by agencies on an EIA. The American Courts use NEPA provisions in conjunction with the Administrative Procedure Act³⁹ to review the procedural aspects of environmental decisions as well as evaluate the

³⁷ Ibid., section 7(1)(b), 7(2)(a), and 8

³⁸ Teclaff, L., "Harmonising water Use with Environmental Protection" *supra*, p.96

³⁹ Administrative Procedure Act, 5 U.S.C. (1970) Section 701.

merits of decisions taken,⁴⁰ although later the courts
reclined to enquiring just^{about} the procedural aspects.⁴¹

In any case, however, both approaches do indicate the fact that it is essential to provide a degree of freedom, if not rights, to members of the public who are willing to contribute towards the decision-making process on environmental protection matters. Their participation is likely to open up the way for the presentation of some first hand information about what particular environmental concerns local people may have and also help in drawing attention to what they consider to be "the" environmental issues to be considered. This point was also identified by C.P. Wolf⁴² while outlining the potentials of the EIA process. He said that :

The Public (or Publics) enter as active participants in the formulation of environmental issues and the expression of environmental concerns. Environmental impact assessment is

⁴⁰ The decision in *Environmental Defense Fund v. Corps of Engineers*, 470 F.2d 289 (8th Circuit, 1972) is said to have extended judicial review to environmental administrative decisions. The court said that: "...given an agency obligation to carry out the substantive requirements of the Act, we believe that courts have an obligation to review substantive agency decisions on the merits." at p. 298. This decision was further upheld in the case of *Sierra Club v. Froehlke*, 486 F.2d 946 (7th Circuit, 1973)

⁴¹ See *Environmental Defense Fund v. Armstrong*, 487 F.2d 814 (9th Circuit 1973); see also *National Helium v. Morton*, 486 F.2d 995 (10th Circuit 1971). It is pertinent, however, to observe that the difference in the degree of public participation between America and some of the Commonwealth countries we have seen could only be attributable to the legal and administrative culture prevalent in the countries. The Commonwealth countries owe a lot to the experience of the British public administrative culture which is characterised by secrecy and the unwillingness of the British courts to easily open up their doors to the members of the public seeking a judicial review of an administrative action.

⁴² Wolf, C.P. (1983) "The U.S. model of Environmental Impact Assessment", in, PADCEIA & Planning Unit, (ed) *Environmental Impact Assessment*. Martins Nijhoff Publishers. pp. 21-40

a rational means of systematically relating these conditions and concerns in a process of collective decision and action.⁴³

7:2:2: EIA and Environmental Protection in Water Resources Development in Nigeria.

It is the requirement for a systematic assessment of the impacts of a proposed project on the environment that is crucial to the protection of the environment in water resources development projects. It is from a careful assessment that several things about the project could be determined. The magnitude of the impact of a proposed project, environmental and socio-economic, the discovery of various possible alternatives in order of degree of the impact, and the totality of projected benefits of the project to the people and the environment are some of those things that could be ascertained through the process of an EIA. Thus the process generates a lot of the information necessary for a supposedly sound environmental decision by whoever it is that has the responsibility for the decision-making. As we have seen, two things are important from an effective environmental protection perspective. Firstly, there is the issue of the existence or non-existence of a legal obligation on project proposers to start up the EIA process. The second relates to the role of the members of the public in the process, i.e., whether they are asked to contribute with information or not, and whether they could challenge any final decision by a

⁴³ Ibid. p.21

responsible agency after the project has been evaluated and alternatives or mitigation measures identified.

On the first issue, we have seen that Nigeria has just promulgated a law which requires that EIAs be conducted on many kinds of development projects including water resources ones. It is important however to point out that it is possible to use some existing law in order to achieve the objective of environmental assessment, such as the land planning development procedures, as used to be the case in the U.K.⁴⁴, or the use of RBDA law, 1986 whereby the Minister has been empowered to have the final say on whether or not a project could go ahead. None of these non-mandatory arrangements for an environmental impact assessment could actually guarantee that such a process would be observed in every appropriate case. Not only that, the absence of a specific legal requirement would make any kind of supervision almost impossible and it would be more difficult for any interested member of the public who might be in a position to make a meaningful contribution to contribute at all. Thus in the case of the U.K. for instance, although the government thought that there was no need for a separate body or authority to enforce the EIA process as it has already incorporated the EEC's Directives

⁴⁴ See Alder, J. (1993) "Environmental Impact Assessment-The Inadequacies of English law." *Journal of Environmental Law*. Vol. 5 No. 2 pp.203

on EIA requirement into its existing procedures for development planning consent, there are still those who maintain that the effective implementation and supervision of EIA requires the setting up of an independent body.⁴⁵ The argument for this position is not unconnected with difficulties which relate to issues such as the right to judicial review of administrative actions which could be overcome through the use of a new and separate review agency established with its own powers and functions defined in its enabling law.⁴⁶ There should be little doubt about the significant role which a reviewing and monitoring body could perform towards the effectiveness of an EIA law in general, at least in terms of securing compliance with laid down procedures under the law. Such a body may not be in a position to satisfy the demands of an environmental zealot who would struggle for the implementation of a least environmentally harmful option by a development project proponent, but it would have at least given the opportunity for an honest and independent monitoring of the way EIAs are conducted. Therefore the absence of a law in this regard leaves a wide gap as much as the absence of a law to require that EIA be conducted at all.

⁴⁵ See Alder, J. "Environmental Impact Assessment-the Inadequacies of English Law", *supra.*, p.219. He says that "It would be desirable to create an independent monitoring body with wide powers along the lines pioneered by the council on Tribunals. This body could monitor practice and advise upon procedural standards. It could also commission research and possibly investigate complaints from the public. It could liaise between the European Commission and the U.K. environmental assessment community." (p.220)

⁴⁶ Ibid. See also Wood and Jones (1991) **Monitoring Environmental Impact and Planning**. Department of the Environment. para 5.22.

The second issue relates to the role which members of the public whether as commissioned experts or just environmental protection interest groups. This is generally known as public participation. It is generally the need for openness on the part of the decision makers when dealing with the protection matters of environmental protection has underlined the significance of public participation. The regime of secrecy which surrounds government decisions cannot be compatible with the need to ensure that the essential aspects of peoples health, security, welfare and above all, the environment in which they live are adequately considered and protected. Thus the very process of EIA helps in realising the objective of having persons who are likely to be affected by a project and other members of the public interested in protection of the environment to participate in pointing out the issues that the decision makers ought to consider. In the case of water resources development projects in Nigeria for instance, the large Dams and irrigation schemes built caused enormous difficulties for people and their environments and in many cases leading to unsustainable development so it would only be sensible to suggest that members of localities likely to be affected be properly consulted and sustainable alternatives found with their active participation. Perhaps it would also be easier to for the local people to understand why they need the development project and why they might have to do some sacrifice in terms of temporary lack of water or having to relocate to somewhere else,

provided there is an understanding on their part that it is possible to have better ways of life and a protected environment after the project's completion. The only snag here though is that a lot of the villagers would argue that they have heard it all before, where government officials had come and promised them heaven as a result of dam construction, irrigation, e.t.c. but they have actually had nothing but misery and dissatisfaction from the accompanying water shortage and dwindling agricultural production. The challenge therefore will be to provide a framework of EIA which ensures that local and other interests are effectively represented in the process. "Effectively" here refers to the fact that the views and opinions of those interest groups should be given proper hearing and consideration by the body or agency that makes final decisions on the matters. This kind of approach was the one taken by the United States courts when they emphasised that every view which is proffered by members of the public should be carefully examined irrespective of whether or not the agency thinks there is any merit in them. Also, there should be a monitoring body which could oversee the conduct of EIAs and/or a special environmental tribunal which could have as part of its jurisdiction, the power to investigate and review governmental environmental decisions on proposed projects. Therefore an EIA framework which incorporates a defined role for the members of the public so that their views and opinions are considered by the decision-making agency and further strengthened by the

provision of a monitoring body or tribunal could go a long way in ensuring environmental and other socio-economic perspectives to water resources development projects are fully evaluated and taken into account during decision-making. But there is another issue which relates to the extent to which reliance should be placed on the existence of a legal framework alone for a successful regime that would protect environmental and socio-economic interests in relation to water resources development projects in Nigeria.

7:3: Limitations of the potentials of a legal framework for environmental protection in water resources development projects.

There is some justification in raising the question of how much law and legal framework could actually contribute towards solving the problem of environmental protection associated with water resources development projects in Nigeria. For instance, on a United Nations assignment to advise the Kano State Urban Development Board, Professor McAuslan noted that there was so much cynicism about suggestion that law could make a difference to the way things are done at the Board, such as compliance with some of the provisions of the Town and Country Planning laws and regulations.⁴⁷ He was told by an official of the Board that it was authority and power not law that matters amongst the

⁴⁷ McAuslan, P. *Law For a Developing World*. Third world Legal studies Association, *infra*.

officialdom of the time.⁴⁸

Secondly, in his thesis about the role of law and administration in urban development in Nigeria and Tanzania, Hassan Lawal observed that there was very little recognition, not to talk of appreciation, of the role and significance which law and lawyers have both in the formulation and implementation of policies by the officials of the Urban Development Authorities of the two countries.⁴⁹ To be more specific, he found out that in the case of Nigeria, although a legal department was set up within the Federal Capital Development Authority which was responsible for the development of the new federal capital city of Abuja, the law officers were not at all given roles that would have made them part of the policy making organ of the Authority. The legal officers of the Authority simply gave their legal opinions on matters after decisions

⁴⁸ McAuslan recalls that

"Similarly in Kano; a master plan was published in 1966 and successive urban development authorities had attempted to implement it, yet none of the legal steps necessary to publicise the plan, consider objections to it, and approve it, thus giving it legal status and legal backing to enforcement action had been taken by the time I began my consultancy there in mid 1979, nor, despite my explanations and recommendations to that effect, have these steps yet been taken [in December 1980]. No legal challenge has been mounted to any enforcement action. As it was put to me by the Kano Urban Development Board, authority and power rather than law was what counted in Kano. The Board had the power and the apparent authority to get its way on development issues vis-a-vis the average person, and, where it had to give way (e.g., to the State Government or a local notable) this was because the adversary had more power, though not necessarily more law on its side." (Emphasis added) See McAuslan, P. (1982) "Law and Lawyers in Urban Development: Some Reflections from Practice", in, *Law in Alternative Strategies of Rural Development*. A publication of the Third World Legal Studies Association. p.60.

⁴⁹ Lawal, H. (1984) *Law and Administration in Urban Development: the case of Nigeria and Tanzania*. Unpublished Phd thesis, School of Law, University of Warwick.

have been taken by the Authority upon them. These are usually issues which they could well have contributed upon while they were first being considered at the policy making level council, a body from which they were excluded. This exclusion demonstrates clearly the lack of appreciation of the role which the legal officers could make at the policy making-level of the Authority through bringing in their legal knowledge to bear on the deliberations which could actually help save a lot of time and problems later on. He also found a certain degree of confusion about the appropriate applicable planning law in the federal capital territory which arose as a result of the lack of consideration of the pre-existing applicable laws in the area constituting the territory before the enactment of the law which set up the Development Authority. The Nigerian situation was even better than that of Tanzania, since at least an endeavour was made in Nigeria to enact a specific law in order to have an enabling legal framework for the new federal capital. No similar legal steps were actually taken in Tanzania when the new capital was being established.⁵⁰

The two instances above have been cited simply to illustrate the fact that the existence of a law or legal framework might not be enough in certain cases to bring about some desired changes in the way things are done in the society. Clearly the actions of the Kano Urban

⁵⁰ Hassan Lawal, *supra*, chapter six.

Development Board in enforcing the master plan were not legal, since the plan itself has not been validated in accordance with the necessary legal stipulations. But they have been getting away with that situation because, as it turns out, law was not that important at all. The argument here is that this kind of cynical attitude about the role of law which results in total disregard of the provisions of the law and its substitution with power and authority is quite pervasive in the country and therefore affects many other sectors of the society. The implication here is that the danger of official cynicism towards law in the country does hang over any proposals for a reform that has much of its reformatory power in the due implementation of the provisions of a legal framework, such as suggested in this chapter. It will be recalled that the option of having an EIA legislation which would institutionalise and define Impact assessment procedures was seen as a possible means for the attainment of better environmental protection and management in the country. The possible limitation to the realisation of environmental protection goals in this context is that this attitude of not allowing free reign for law in terms of its full observance, would definitely cast some shadows over how far the reform would be carried through in the first place. And even if it were legislated upon there would be a certain degree of legitimate concern over its observance by officials in an environment where it is power and authority that matters, but not law. The issue becomes more relevant here as the role of an EIA in the

context of environmental protection is only to essentially raise those environmental concerns for the consideration of those who are to make the final decisions about whether projects need improvement or even abandonment on environmental protection grounds. The experience recounted by McAuslan about how planning law and regulations are brushed aside in Nigeria and Tanzania⁵¹, for instance, becomes a legitimate source of concern about how serious an impediment that could be to the successful realisation of all the policies articulated in a legal framework. Furthermore, recent research has also shown that the relationship between law and the attainment of sustainable development projects, particularly in the African context is ever so complex, and subject to an interplay of often conflicting interests, that it would be extremely difficult to forecast favourable improvements via the instrumentality of law alone.⁵²

7:4: Conclusion

The conclusion which one has to arrive at from the analysis in this chapter is that the provision of a legal framework

⁵¹ Ibid. Professor McAuslan says:
"An issue which must first be considered is whether there is a case of using law to structure urban or rural development at all. The arguments against can be put at two levels. The cynical was put to me by a planning consultant in Dodoma, Tanzania. 'Why bother,' he said, 'Does it really matter whether the agency(in this case the Capital Development Authority) obeys the law or not? Wouldn't everything go on as 'normal' if they didn't bother and your recommendations were ignored?' It would be hypocritical to pretend that this sort of attitude is unique: it is widespread amongst officials and consultants not least because it is grounded in reality." (p.59)

⁵² See England, P. (1995) "Tree Planting and Sustainable Development in Bongo District of Northern Ghana: The Roles of Law", *Journal of African Law*, Vol 39, No. 2 pp.138-155

could be central to the attainment of environmental protection and sustainable development in water resources development projects in Nigeria. However, a major obstacle to the utility of the law here is the barrage of near-universal problems which hinder the effectiveness of legal frameworks. But it is perhaps necessary to point out that having the legal framework in place is the first most important step after which, then, the issue of its implementation or observance arises. Without the legal framework in place, things could be much worse, especially for those people whose environment stands to be seriously affected by proposed development projects but whose access to power and authority is very much limited. In any case, since the Nigerian Government has now provided a legal framework for an EIA, we shall turn our attention to its provisions in the next chapter.

CHAPTER EIGHT

CONTROL OF ENVIRONMENTAL IMPACT OF WATER RESOURCES DEVELOPMENT PROJECTS THROUGH THE ENVIRONMENTAL IMPACT ASSESSMENT AND WATER RESOURCES LAWS

8:0: Introduction.

We have shown in Chapter Six that water resources development projects have been responsible for a number of degrading environmental problems in Nigeria. It has also been shown that the need to meet the increasing demand for water and energy supplies of the country has led to, and will continue to require, massive investment and pumping of money into water resources development projects towards meeting those needs. This means that the need for an environmental protection framework that would ensure that such negative consequences are minimised or avoided altogether is compelling, if sustainable development is to be attained at all. Furthermore, in chapter Seven an attempt was made to explore the relevant existing laws of the country in order to discover whether or not there is in existence, some kind of legal or even administrative requirement for environmental impact assessment of water resources development projects to ensure environmental protection and sustainable development. But as we have seen, until 1993 a void existed in this respect as there was no law or policy that clearly made an EIA obligatory or simply recommends that environmental protection issues be taken into account either in the making of development

policies or the execution of any development projects in water resources development.

Our discussion has also shown that the use of environmental impact assessment has generally been an acceptable means of ensuring that environmental considerations are taken on board by those who decide whether or not a development project should proceed to execution. Not only that, it seems that making a legislation in which conducting an EIA is made a mandatory requirement and its procedures clearly outlined is the way forward, if environmental protection is to be taken seriously during development processes. In fact this is exactly what the Nigerian Federal Government has tried to achieve by promulgating an EIA law as well as expressly incorporating the EIA requirement in the National Environmental Protection Agency Decree and the National Water Resources Decree.¹ An analysis of the EIA law and how it has been designed to function would shed some light on the kind of framework it establishes and the extent to which protection of the environment would be guaranteed in water resources development projects in the country.

8:1: The Water Resources Decree, 1993² and EIA

¹ Under the Federal Environmental Protection Agency (Amendment) Decree, No. 59 of 1992 the federal agency has had its functions enlarged to include the preparation of " a comprehensive national policy for the protection of the environment and conservation of natural resources, including procedure for environmental impact assessment for all development projects. "(Section 5(b).)

² The Water Resources Decree, Number 101 of 1993. Official Gazette Extraordinary No. 27 Vol.80 of 1st September, 1993.

The analysis in chapter Seven about the River Basin Development Authorities laws has shown that there was no express requirement that an EIA should be conducted for water resources development projects. This must be considered as a serious omission which made the focus of the River Basin Authority laws to be narrowly restricted to the issues of management of agricultural and irrigation projects. If the laws had contained the broader issues of conservation of both water resources and protection of the environment, the conduct of environmental impact assessment of water resources development projects would have been an effective option for achieving that. This has in fact been shown by the fact that the latest water resources Decree of 1993, which is much more concerned with the ownership and use of water resources of the country, has recognised the need for EIA on water resources development projects and emphasises the need for the provision of adequate procedures that would ensure that environmental factors are considered before the execution of any project. The Water Resources Decree provides that in the discharge of his duties, the Minister responsible for water resources shall have regard to the need to make proper provision for "ensuring that the possible consequences of particular development proposals on the environment are properly investigated and considered before each proposal is approved."³

³ Ibid. section 5 (f) of the Decree.

This provision clearly puts an obligation upon the responsible authority in the water resource sector to make proper provision for the carrying out of EIA water resources development projects.⁴

8:2: The 1993 EIA Decree⁵

The Environmental Impact Assessment Decree (hereinafter referred to as "The EIA Decree") is the first legislation of its kind directly dealing with the specific issue of environmental impact assessment of development projects in the country. It essentially lays down the procedures which should be followed by public and private organisations in undertaking an environmental impact assessment. It obviously marks a significant development in the field of environmental protection and the quest for sustainable development in the country. Hitherto, as we have seen above, the conduct of EIA was not clearly stated to be mandatory for development projects. The enactment of the EIA Decree, however, changed the situation, by expressly laying down a mandatory requirement for environmental impact assessment and a framework for how the process should be administered.

Although the EIA Decree has now established the process which has to be followed in the conduct of the EIA, there

⁴ This should certainly entail the making of internal rules and regulations for the conduct of an EIA in such an organisation.

⁵ Environmental Impact Assessment Decree 1992, Decree No. 86. Official Gazette Extraordinary No. 73 Vol. 79 of 31st December 1992.

are certain pertinent questions we shall address here in order to understand the extent of its contribution to the whole process of ensuring environmental protection as well as achieving sustainable development in the country. The main questions here are: what are the aims and objectives of the EIA Decree? Secondly, how well does it actually comply with the principles and practice of the EIA process worldwide?⁶

8:2:1: Objectives of the Decree.

The usual practice in the making of legislation is to set out its objectives at the out set and that is what the EIA Decree has done here. It actually takes off with a statement of the "Goals and Objectives" of the Decree which show its fundamental areas of concern and what it aims to achieve. The first section of the law states that:

1. The objectives of any environmental impact assessment...shall be-

(a) to establish before a decision taken by any person, authority, corporate body or unincorporated body including the Government of the Federation, State or Local Government intending to undertake or authorise the undertaking of any activity that may likely or to a significant extent affect the environment or have environmental effects on those activities shall first be taken into account *(sic)*;

(b) to promote the implementation of appropriate policy on all federal lands(however acquired) States and Local Government Areas, consistent with all laws and decision making processes through which the goal and objective in paragraph(a) of this section may be realised;

⁶ Worldwide standards here are important because the issue of environmental protection is as much an international concern as it is a domestic national issue.

(c) to encourage the development of procedures for information exchange, notification and consultation between organs and persons when proposed activities are likely to have significant environmental effects on boundary or trans-state or on the environment of bordering towns and villages.

As we can see clearly, three principal objectives have been laid out for the EIA Decree. The first objective is to ensure that EIA becomes an important component of the decision making process when proposed projects are being considered for approval by responsible public authorities. The second objective is to ensure that land use policies and laws are consistently implemented as part of the measures for the prior consideration of environmental impact of development projects. Finally, transboundary environmental impact of development projects is made to become a focal point through the development of procedures for consultation and information exchange between the authorities of affected political and geographical units.

The observation one can make about these objectives is that there has not been an express statement about any commitment to the observation of sustainable development principles. This contrasts sharply with the objectives provision in an earlier draft of the same law proposed by the Federal Environmental Protection Agency.⁷ Let us examine the whole objectives section of the earlier draft which provided that:

⁷ The draft EIA Act of 1992 was obtained from the Director of legal services of the Federal Environmental protection Agency, in December, 1992.

The objects of this Act are to ensure to the greatest extent practicable that:

(1) the potential impacts of a proposal are fully assessed and taken into account before a decision is made as to the carrying out of that proposal;

(2) that any proposals carried out in whole or in part are monitored, evaluated and audited as to their present and future environmental impacts;

(3) that any decisions under this Act are made in accordance with the principles of sustainable management.⁸

These objectives as articulated in the first draft have quite clearly established three targets which the law was intended to attain. These are to ensure that to the greatest extent practicable, environmental impact assessments are made and taken into account before a project proposal is approved; environmental impact monitoring is done through evaluation and auditing of executed projects; and ensuring that the principles of sustainable management are observed when decisions are being taken in accordance with the provisions of the Act. This leaves no lingering doubt about the commitment to the principles of sustainable development. There was thus a significant difference in the point of emphasis in the objectives clause between the first draft and what eventually reached the statute book in the context of the express articulation of ensuring compliance with the principles of sustainable development in the course of the implementation of the law.

⁸ Section 4 of the Draft Environmental Impact Assessment Act, 1992.

The question may also be asked, namely, that, must the objects clause expressly encompass a commitment to the observation of sustainable development before such principles are actually observed? The answer here would be that while it may not be necessary to have such an express commitment to sustainable development, it would certainly serve as a constant reminder to those responsible for administering the Decree that they should make the adherence to the principles of sustainable development a strong priority in their activities. Also, there could hardly be any doubt about the significance attached to defining the objectives of a law not least because they provide the overall direction for the statute. The most important issue, however, is that of the kind of strategy which has been adopted in the whole body of the legislation towards achieving those objectives. In this connection, it is important to consider the provisions of the EIA Decree in the light of some well known principles which are essential to an EIA legislation. In this regard the "Goals and Principles of EIA"⁹ published by UNEP does provide a good background about the kinds of principles which an EIA framework should contain.¹⁰

⁹ UNEP (1987) **Goals and Principles for Environmental Impact Assessment**. Decision 14/25 of the Governing Council of 17th June, 1987. Nairobi. pp. 1-4.

¹⁰It should be understood that UNEP's views in this regard have been taken on their merit for they have outlined clearly all the essential points that would necessarily be contained in an EIA that is geared towards the attainment of the goals of environmental protection and sustainable management.

The UNEP principles for the making of an EIA may be summarised as follows:

- (a) The kinds of activities which are likely to have significant impact on the environment and therefore require an EIA should be defined through some kind of lists or schedules;
- (b) The significant environmental issues that need to be studied in the EIA process should be identified early in the process;
- (c) Environmental effects should be assessed in an EIA with the degree of detail commensurate with their likely environmental significance;
- (d) The information provided as part of an EIA should be examined impartially prior to a decision;
- (e) Granting of opportunity to members of the public, experts in relevant disciplines and interested groups to comment on an EIA;
- (f) That a decision on whether or not a proposed activity should be authorised should not be taken until after a period of time has elapsed so that enough time can be given for comments on the EIA;
- (g) The decision on any proposed activity which is subject to an EIA should be in writing and it should specifically include any provisions made to reduce, prevent or mitigate any environmental damage and copies thereof made available to any interest groups;
- (h) The establishment of appropriate measures to ensure the implementation of EIA procedures.

Although these principles may be said to have been couched in general terms it should be acknowledged that they do clearly provide those fundamental directions which could help in the making of a meaningful EIA. One thing that has not been mentioned and is worth pointing out here is the issue of who bears the cost of preparing the EIA. The question that could be asked here is who bears the financial cost of preparing an EIA? Should it be the proponent alone or should there be some form of subsidy to be given by the government either in full or in part towards the cost of the EIA? The issue of cost bearing is very important as excessive cost could have a negative impact in terms of having an inhibitory effect on private proponents who are willing to invest in projects but are put off by the likelihood of incurring huge costs on the undertaking of an EIA. But the certainty that a public agency would bear the whole cost or at least part of it would certainly serve as an incentive to prospective investors. In any case as we shall see later on, the EIA Decree encompasses or reflects a number of the principles which are becoming recognised as essential to the effective operation of an EIA as demonstrated by those which UNEP has worked out.

The responsibility for administering the EIA process in the country has been placed on the Federal Environmental Protection Agency (FEPA) (hereinafter "the Agency"), a body

established in 1988.¹¹ The statute establishing the Agency was amended in 1992¹² in order to, among other things, establish a governing council for the Agency which has also been allocated a decision making function in the administration of the EIA process.

An important issue which relates to the successful operation of the proposed law relates to the likely impact it will have on prospective developers who might feel hamstrung by lengthy procedural requirements and having to go through unpleasant bureaucratic rigmarole, which might be established in order to have the environmental impact assessment properly carried out. Naturally, the establishment of EIA requirement puts in place certain more obstacles in the way of development projects, but in doing so there is a need to be cautious and to ensure that the EIA process works out with the least possible ^{hindrance} to developers while not compromising the need to remain on course for a sustainable development. Thus, the examination of these provisions shall enable us to judge whether or not all interests are likely to receive fair consideration and balancing in the process, including those of social and economic enhancement of the population.

¹¹ The Federal Environmental Protection Agency Decree, Number 58 of 1988.

¹² See The Federal Environmental Protection Agency (Amendment) Decree, Number, 59 of 1992. Official Gazette Extraordinary No.68 Vol. 79 of December, 1992.

8:2:2: Initiating an environmental impact assessment under the EIA Decree

The Decree has been explicit in stating that before proceeding to start carrying out their development projects, all proponents must submit an application to the Agency for a screening in order to find out whether or not an environmental impact assessment is necessary. In this regard section 2(4) of the Decree provides that:

All agencies, institutions (whether public or private) except exempted pursuant to this Decree, shall before embarking on the proposed project apply in writing to the Agency, so that subject activities can be quickly and surely identified and environmental assessment applied as the activities are being planned.

The starting point for an environmental assessment therefore is the filing of a written application to the Agency which would enable it ^{to} decide whether or not an environmental assessment should be applied to the proposed project. It is interesting to note though that the Decree has given room for the exclusion of certain projects from an EIA.¹³ Although it is understandable that certain projects would have to be allowed to be carried out without due regard to the environmental consequences, such as in emergency or war situations, the provision would only

¹³ Section 15 of EIA Decree provides the circumstances under which an EIA may not be required.. The Section states that:

15(1) An environmental assessment of a project shall not be required where-

(a) in the opinion of the Agency the project is in the list of projects which the President, Commander-in-Chief of the Armed Forces or the Council is of the opinion that the environmental effects of the project is likely to be minimal;

(b) the project is to be carried out during national emergency for which temporary measures have been taken by the Government;

(c) the project is to be carried out in response to circumstances that, in the opinion of the Agency, the project is in the interest of public or safety.

strengthen the belief that EIA is a weak instrument because people could always go round it through the system of exemptions. But it is also arguable that the system of mandatory study list¹⁴ adopted in the Decree would guarantee that, under any circumstance, there will always be certain projects that would be subjected to an EIA before they are permitted to be implemented.

8:2:3: The Environmental assessment of projects.

Upon the receipt of a proponent's application, the Agency has to determine whether or not an EIA should proceed on the basis of the information received about the proposed project. The Decree has basically created three kinds of assessment to which a proposed project could go through. These have been provided as:

1. Screening or mandatory study and the preparation of a screening report.
2. A mediation or assessment by a review panel.
3. The design and implementation of a follow-up program.¹⁵

8:2:3:1: Screening of Projects.

It is the result of the first examination of a proponent's application which will determine whether or not it requires a screening. The main yardstick for undertaking a screening, according to the EIA Decree, is when a proposed activity has not been described in either the "mandatory

¹⁴ See section 13(1) of the EIA Decree.

¹⁵ See section 16 of the EIA Decree.

study list" or "exclusion from study list" of the Decree.¹⁶ Where a project does not fall into any of the two lists, then the Agency becomes obliged to have a screening exercise conducted on it and a screening report prepared accordingly. It is the report so prepared that would enable the Agency to decide on what course of action to take. There are basically three kinds of outcomes that the Agency could arrive at. The first outcome is where the Agency takes the opinion that the environmental screening report has shown that the project is **not** likely to cause significant adverse environmental effects or that such effects can be mitigated.¹⁷ Once the Agency takes this view, then the EIA Decree authorises it to permit the project to go ahead but it would have to ensure compliance with any mitigation measures that would be prescribed for the proponent.

Secondly, where the Agency is of the opinion that the project is likely to cause significant adverse environmental effects that may not be mitigable, then it has to refer the project to the Council of the Agency which would then further refer the project to a mediation or a review panel.¹⁸ Another factor which could force a referral to mediation or review panel is where there has been a strong public expression of concern over the environmental

¹⁶ Ibid., section 19(1).

¹⁷ Ibid. section 22(1)a

¹⁸ Ibid. section 22(1)b

effects of the project which may not be mitigable.

Finally, where the Agency, upon the consideration of the screening report arrives at the conclusion that the project is likely to cause significant environmental effects which **cannot** be mitigated, then it has no option but to refuse permission for the execution of the proposed project.

The most significant thing to point out here though is that the Decree has, in compliance with the principle of public participation through consultation, provided that before it takes any of the courses of action defined above, the Agency must give "the public an opportunity to examine and comment on the screening report...and shall take into consideration any comments that are filed."¹⁹

The main observation which can be made here about the functions given to the Agency is the introduction of mediation and review, in cases where there is no certainty as to the extent to which any possible environmental impacts could be mitigated. The procedure and principles governing the review have been provided in detail in the Decree but we shall return to them later. Suffice it here to say that the introduction of mediation and review by a panel appears to be one of the most significant innovations made in the Decree particularly when it is compared with the first draft of the EIA mentioned earlier. In the first

¹⁹ Ibid. section 22(3).

draft the emphasis was on the having the officials of the Agency and the ministry or corporation directly linked with the proposed project to carry out any reviews that were required.

8:2:3:2: Mandatory Study

The next type of assessment established by the EIA Decree is that of mandatory assessment. What it means in simple terms is that all projects concerning the items listed in the Schedule to the Decree as being 'mandatory' would automatically be subject to an EIA. Once the Agency is satisfied that a proposed project falls within the mandatory study list, it can take one of the two following options:

1. either to have a mandatory study conducted and a mandatory study report prepared and submitted to it; or
2. refer the project to the Council of the Agency for a referral to mediation or a review panel.

Once a mandatory study report has been forwarded to the Agency the Decree requires the Agency to publicise the report to the public and receive comments therein. But unlike the case of a screening report, where the Decree did not provide any guidelines as to how the public consultation may be effected by the Agency, in the case of a mandatory study report, the Decree clearly sets out the detail~~le~~ information which the Agency has to provide in its public consultation exercise. Section 25 states that:

25(1) After receiving a mandatory study report in respect of a project, the Agency shall, in any manner it considers appropriate, publish in a notice setting out the following information-

(a) the date on which the mandatory study report shall be available to the public;

(b) the place at which copies of the report may be obtained; and

(c) the deadline and address for filing comments on the conclusions and recommendations of the report.

(2) Prior to the deadline set out in the notice published by the Agency, any person may file comments with the Agency relating to the conclusions and recommendations of the mandatory study report.

The mandatory study report and any comments received would then be forwarded to the Council of the Agency. The Council would then consider the mandatory study report and the comments filed and take one of two courses of action.²⁰ Firstly, it can refer the project to mediation or review panel where it is of the opinion that the project is likely to cause significant adverse environmental effects which may not be mitigable or that public concerns as expressed in the comments warrant that course of action.²¹ Secondly, where the project has been adjudged as not being likely to cause significant adverse environmental effects or that such effects can be mitigated, then the Council has to refer the project back to the Agency for normal authorization of the project subject to any conditions that may be deemed necessary.²²

²⁰ Ibid. section 26 of the Decree.

²¹ Ibid. section 26 (a) (i) (ii) of the Decree

²² Ibid. section 26(b) (i) (ii)

8:2:3:3: Mediation

The process of mediation and review by a panel is a total innovation by the Federal Military Government of Nigeria in the field of environmental protection and sustainable development in general. It has to be said here that the use of mediation and review panel could a long way in uplifting the public participation principle in the environmental impact assessment process. It should also help promote the harmonious resolution of differences over the proposed development project. The question we shall address here is what is this mediation and how has it been designed to operate?

Where a project is to be referred to mediation pursuant to the provisions of the EIA Decree, it is the Council of the Agency which has the power to do that and the conditions which would warrant such a referral have been clearly stated in the Decree.²³ It states that a proposed project should be referred to mediation where the Council is satisfied that firstly, the parties who are directly affected by or have a direct interest in the project have been identified and are willing to participate in the mediation through representatives.²⁴ Secondly, the Council has to be satisfied also that the mediation is likely to produce a result that will be satisfactory to all of the

²³ See Section 31 of the Decree.

²⁴ Ibid. Section 31(a) (i)

parties.²⁵ It is worth pointing out here that where the Council does not feel satisfied that these conditions have been met, the alternative is to refer the project to a review panel.²⁶

If it decides to proceed with mediation, however, the Council has to appoint as a mediator, a person it believes has the required knowledge or experience to lead the mediation. The Council has to equally draw the terms of reference of the mediation.²⁷ A likely problem that could arise with the mediation team as a whole is a dispute concerning the persons or parties that could be eligible to participate in the mediation process. Where such a dispute arises however, the Decree expressly states how it is to be settled. It states that in the event of a dispute in respect of the participation of parties in a mediation, the Council should, on the request of the mediator, determine those parties who are directly affected by or have a direct interest in the project.²⁸

The mediation process is expected to lead to a consensus amongst the participants on the issues contained in the terms of reference. The Decree has also provided some guidance on the basic themes upon which the consensus

²⁵ Ibid. Section 31(a)(ii)

²⁶ Ibid. Section 26(b).

²⁷ See Section 32(a) and (b).

²⁸ See Section 33 of the EIA Decree.

should be formed. These are:

- (a) the environmental effects that are likely to result from the project;
- (b) any measures that would mitigate any significant adverse environmental effects; and
- (c) an appropriate follow-up programme.²⁹

At the end of its deliberations, the Mediation team is to prepare and submit a report to the Council and the Agency giving the conclusions and recommendations of the participants. Although it is expected that a mediation team would eventually execute its task and submit the report as required of it, such a successful conclusion might not be possible in some cases. Where, in the opinion of the Agency, a mediation does not have a satisfactory outcome, the next alternative is a much more emphatic way of resolving any outstanding disputes. This is the referral to a review panel in accordance with the provisions of the Decree.

8:2:3:4: Assessment by a Review Panel

Section 35 of the Decree provides that where at any time after a project has been referred to mediation, the Council is of the opinion that the mediation is not likely to produce a result that is satisfactory to all of the parties, the Council may terminate the mediation and refer the project to a review panel. The review panel is to

²⁹ Ibid. Section 34(2)(a)(i), (ii), and (iii).

consist of members and chairman, all to be appointed by the Council. Similarly, their terms of reference are to be fixed by the Council. The duty of the panel is to carry out an assessment of the project through the review of all the existing information relating to the project as well as public hearing of witnesses. In executing this responsibility the Decree says the panel has to:³⁰

- (a) ensure that the information required for an assessment is obtained and made available to the public;

- (b) hold hearing in a manner that offers the public an opportunity to participate in the assessment;

- (c) prepare a report setting out the conclusions and recommendations of the panel relating to the environmental effects of the project and any mitigation measures or follow-up program and a summary of any comments received from the public;

- (d) submit the report to the Council and the Agency.

It does seem as though the most radical aspect of the role of the review panel is the judicial-like powers it has been given in the course of taking its evidence from witnesses. The power is in respect of summoning witnesses to appear before the panel to give evidence and in the enforcement of those summons and orders. The Decree states That:

38(1) A review panel shall have the power of summoning any person to appear as witness before the panel and/or ordering the witness to-

- (a) give evidence, orally or in writing; and

- (b) produce such documents and things as the

³⁰ Ibid. Section 37 of the Decree.

panel considers necessary for conducting its assessment of the project.

(2) A review panel shall have the same power to enforce the attendance of witnesses and to compel them to give evidence and produce documents and other things as is vested in the **Federal High Court or a High Court of a State**. (Emphasis added)

(3)....

(4)....

(5) Any summons issued or order made by a review panel pursuant to subsection (1) of this section may, for the purposes of enforcement, be made a summons or order of the **Federal High Court by following the usual practice and procedure**. (Emphasis added)

The public consultation aspect of the assessment by the review panel is again echoed in the fact that the Decree requires the Agency to make any report submitted by a mediator or review panel available to the public in a manner which the Council considers appropriate, but the Agency has to advise the public that the report is available. An observation that should be made is that the Decree has not made provision for the receipt of any more comments and their consideration by the Agency before a decision is taken. All the same however, it is difficult to imagine that there would not any comments received from interested members of the public. Going by the current position, the Agency would not be obliged to pay any attention to them.

As far as the law stands now, once the mediator or review panel have submitted their reports, the Agency should proceed and deliver its verdict by either approving that the project be continued or stopped, depending upon the

opinion it forms on the basis of the content of the report. Where the Agency forms the opinion that the project is not likely to cause significant adverse environmental effects or that any such effects can be mitigated or justified in the circumstances, then it should permit the project to proceed subject to any conditions it deems fit to impose.³¹ Where the Agency so permits the project to go ahead, it has the responsibility for designing any follow-up programme to mitigate the identified possible effects that it considers appropriate and then feed members of the public with information on the following matters, namely:

- (1) the course of action taken in relation to the project;
- (2) any mitigation measure to be implemented with respect to the adverse environmental effects of the project;
- (3) the extent to which the recommendations set out in any report submitted by a mediator or a review panel have been adopted; and
- (4) any follow-up program designed for the proposed project.³²

On the other hand, where the Agency comes to the opinion that the project is likely to cause significant adverse environmental impact that cannot be mitigated and cannot be justified in the circumstances, then it should not authorise the implementation of the project.³³

³¹ Ibid. Section 40(1) (a) (i)(ii) of the Decree.

³² See Section 41 (1) (2) of the EIA Decree.

³³ See Section 40(1) (b) of the Decree.

8:2:3: 5: Assessment of projects with 'spill-over' impacts

The term spill-over has been adopted here to describe projects whose likely environmental impacts could extend or cross over to other states within the country or even to neighbouring countries. This is a very important creation of the Decree and we shall examine it here on its own because of the special treatment it has been given by the Decree. The special position to such projects can be seen from the fact that they all relate to the assessment of projects which were not even required to be assessed under Section 15³⁴ of the Decree. The projects which come under the ambit of this law have been divided into three categories. These are:

- (a) Projects with inter-state environmental effects.
- (b) Projects with international environmental effects.
- (c) Projects with effects on federal and other lands within the same state.

The procedure for conducting the assessment in all three categories is the same. The assessment is actually to be done by a review panel appointed by the Council at the instance of the President of Nigeria or at the request of the affected Local Government, State or foreign Country. The common pre-condition set before a review panel is set up is that ten days notice must be given by the Agency to

³⁴ Section 15 of the Decree provides for the exemption of certain projects from EIA where it is believed the environmental impact would be minimal or the project would be carried out during national emergency or that it is in the interest of public health or safety.

the proponent of the project and all other affected parties.³⁵ But there are slight differences in the appointment of the panel in each of the three situations stated above. In the case of inter-state environmental effects, where the President of Nigeria and all the affected states have agreed to set up a review panel, then the Council would not have to set up another review panel.³⁶ In the case of projects whose effects are likely to cause serious adverse environmental effects outside Nigeria, the Agency and the Minister of Foreign Affairs may establish a review panel to conduct an assessment of the international environmental effects of the project.³⁷ When it comes to projects which are likely to have effects on federal lands or on lands in respect of which a State or Local Government has interests, the Agency or the President may establish a review panel to conduct an assessment of the environmental effects of the project on those lands.³⁸

The interesting thing about this spill-over impact provision as a whole is the way it reflects an important principle of the Rio Declaration on Environment and Development.³⁹ In the Rio Declaration, the point was made

³⁵ See Section 49 for inter state environmental effects; section 50 for International environmental impacts; and section 51 for environmental effects on Federal and other lands.

³⁶ Ibid. Section 49(2) of the Decree.

³⁷ Ibid. Section 50(1) of the Decree.

³⁸ Ibid. Section 51(1) of the Decree.

³⁹ See Chapter Two, *supra*.

that it is an important component of the strategies for sustainable development that nations keep each other informed about any hazardous activities whose adverse ~~environmental~~ ^{environmental} effects could spill across the border. More specifically, if one country is undertaking a development activity which is likely to cause damage across the border, then such a state has an obligation to notify any likely victim-states in a timely manner. The significance of passing such an information could hardly be over-emphasised, considering the need that might arise for precautions to be taken in the likely victim-state. The rationale for such a measure will not be far fetched if we recall the devastating effects which certain industrial activities and accidents are capable of causing across the border.⁴⁰ In the case of the Rio Declaration, Principle 19 thereof has stipulated that countries have the "obligation to provide for prior and timely notification and information about harmful activities that might impact other states."

Clearly, it can be said that the EIA Decree has attempted to develop this principle by establishing a procedure for notifying countries which are likely to be adversely affected by the environmental effects of development projects as well as the appointment of a review panel to examine any such possible impacts prior to the approval of the projects. As with all other instances in which projects are to be assessed for their environmental impacts through

⁴⁰ The Chernobyl disaster of 1987 is good example here.

the use of a mediation or a review panel, it is the extent to which the result influences the decision of the Agency that actually matters. And this is the issue we shall next turn our attention to.

8:3:1: Final EIA report and decision making.

It will not be an understatement to say that any EIA conducted becomes useful only to the extent to which it is taken into account in the decision-making process of the Agency and other public body responsible for approving the proposed project . This is because little or no purpose will be served by undertaking an EIA study the results of which would just be brushed aside when it comes to the crunch, namely deciding that a project should or should not proceed as a result of the findings of the EIA exercise. Therefore, it is important that an EIA statute provides ways and means of ensuring that EIA findings are fully considered in decision making.

There is no doubt that the decision-making framework over a proposal as provided by the Decree puts the Agency in a situation whereby it has no option but to consider the environmental impact report submitted to it in relation to the proposal. This is quite an arrangement that could definitely help in forcing environmental consciousness in the decision making process for development projects. The problem which is foreseeable here though is that carrying out the function of reviewing the EIA report by the Agency

could be a complex exercise which would require highly competent persons, if all the issues about environmental protection are to be dispassionately evaluated. This obviously means that where this expertise is not available to any of the two bodies, it would be a serious drawback to the successful control of environmental impacts through the EIA process as a whole.

8:4: The EIA law and the sustainable development of water resources.

Our discussion so far has shown that through the EIA Decree the federal government has put into place a regime for the systematic control and monitoring of environmental consequences of development projects in the country. The most important issue here, however, is whether or not this EIA regime would make the desired impact towards eliminating or reducing the kinds of adverse environmental problems that are usually associated with water resources development projects, examples of which we saw in chapter Six, *supra*. It will be recalled that the shortage of water which flows downstream after the building of a dam, for instance, results in serious adverse consequences for the communities and the environment downstream. More specifically the cases of the Gashua communities in Yobe state and the Jairi rice farmers in Borno state and the environmental and socio-economic hardship they experienced as a result of water resources development projects upstream of their settlements easily come to mind. It is

arguable that an EIA process could have at least revealed the possibility of the occurrence of such consequences which could have prompted the taking of necessary remedial measures before the projects were executed thereby averting the disastrous consequences that accompanied them. But could the EIA Decree have engendered such a drastic action, in other words, has the Decree got the necessary power and steam to lead to the discovery and action of likely environmental impact of water resources development projects in the country? The answer here is not clear cut as we shall see in the following reasons.

First of all, the procedures under the Decree are to have universal application as far as the nature and kinds of development projects is concerned. This means that they will apply to water resources development projects and shall become the binding procedures which must necessarily be observed by both the proponent and the Agency. The significance of conducting an EIA for water resources projects has been further emphasised in the water resources law, but it would seem that the procedure enunciated in the Decree shall continue to be the guiding principle for action.

The most important aspect of the Decree which shall have serious and likely positive repercussions for communities that are likely to suffer from the impacts of proposed water resources development projects is the public

consultation requirement that has been built into the process. The members of an affected community are to be given the opportunity to make comments over the mandatory assessment report, through which they could articulate their views over what a proponent must do to protect them and their environment. This is quite important because whatever views the members of an affected community might have, be it objections to the proposal or that they want certain protective measures to enhance environmental conservation to be taken, would then be presented to the Agency which decides finally whether to approve or reject a development proposal. However as indicated earlier, the value of the EIA process itself rests to a large degree on the extent to which its content determines the environmental decision taken about the project and this must also be true for the views and aspirations of a community whose environment would be affected and might have even participated in providing certain information about its environmental and socio-economic concerns during the assessment. It is interesting to note here that the Decree has tried to ensure that the findings of an EIA report are taken into account.⁴¹ In this regard the Agency has been required to provide information to the members of the public concerning the measures it has taken based on the report of an assessment either by a mediator or by a review panel. In particular, the Agency has to provide information about the following matters:

⁴¹ Section 41 (2) (a), (b), (c), (d) of the EIA Decree.

- (1) its course of action in relation to the project;
- (2) any mitigation measures to be implemented with respect to the adverse environmental effects of the project;
- (3) the extent which the recommendations set out in any report submitted by a mediator or a review panel have been adopted; and
- (4) any follow-up program designed.

It now means that not only must the Agency state the extent to which it has adopted any EIA report submitted to it, but it must also provide information about the measures it has taken to address adverse environmental effects including any follow-up program that it deems necessary to establish for a project proponent.

Certainly any contribution from the public needs to be given as much consideration as possible by the Agency because it actually underlines the importance of the requirement for accountability of the Agency to the public. Also, it does seem that it is only such a rigorous approach to the utilisation of EIA reports that could force the recognition of the valuable information which they might possess, and therefore worth the while of the time, effort, and other vast resources that are expected to be expended on them. Furthermore, it must be recognised that this requirement of the law would particularly be a confidence booster for the members of a community that stand to be affected directly or indirectly by a proposed project, in

the sense that it obviously places a duty on the Agency to pay particular attention to and scrutinise the EIA report submitted to it.

Secondly, apart from the in-built mechanism for ensuring that the EIA report is taken into account in the decision making process, the only other avenue which the public or more specifically, the members of an affected community, could use is the judicial process. However, the right of action for such an enforcement has not been expressly provided for in the existing EIA Decree. In fact, the only mention of a direct right to a judicial action is contained in section 59 which says that "an application for judicial review in connection with any matter under this Decree shall be refused where the sole ground for relief established on the application is a defect in form or a technical irregularity." It is arguable that one implication of this provision is that the courts have not been prohibited from entertaining actions about matters under the Decree, but what seems worrying is the fact that many people wanting to challenge the action of the Agency could find themselves against this wall of "defect in form" or "technical irregularity". Furthermore, what is remarkable here is that the approach under the Decree is in stark contrast to the rather liberal approach adopted in respect of right of action in the earlier draft of the EIA law. In the said first draft it was provided that:

34 (1) Any person or group may bring an action in the

High Court to remedy or restrain a breach of this Act or the regulations, whether or not any right has been or may be infringed as a result of that breach.

(2) An action under this section may be brought by a person on his own behalf, or on behalf of other persons, with their consent, or by an association or company with the consent of the governing body of that association or company, having common or similar interests in the action.

It is difficult to predict what the attitude of the Nigerian courts will be in interpreting section 59 of the EIA Decree quoted above, which restricts the right to judicial review. It does seem though that courts in some other Commonwealth countries have set the pace for letting in actions which challenged the adequacy of EIA reports conducted in pursuance of an enacted EIA legislation. The case of the Australian State of New South Wales (NSW) is instructive here, but its piece of legislation was similar to Nigeria's first draft of the EIA law. Since a reasonable body of case law has developed in NSW as a result of the opening up to the judicial enforcement of the EIA process which its Environmental Planning and Assessment Act 1979⁴² has done, we shall examine a few of such cases. Section 123 of the said NSW statute provides that:

123. (1) Any person may bring proceedings in the court for an order to remedy or restrain a breach of this Act, whether or not any right of that person has been or may be infringed by or as a consequence of that breach.

(2) Proceedings under this section may be brought by a person on his own behalf or on behalf of himself and on behalf of other person(with their consent), or a body corporate or unincorporated (with the consent of its committee or other controlling or governing body),

⁴² Act no. 203 of 1979.

having like or common interests in the proceedings. We shall now examine the approach of the courts in NSW in handling attempts to achieve judicial enforcement of the provisions of the EIA requirement. First of all, it must be made clear that the basis on which the courts entertained challenges to the EIS decisions is section 123 of the EPA above⁴³, a situation which is entirely at variance with what obtains in Nigeria under the present EIA Decree.⁴⁴ The section clearly says that "any person" can bring legal proceedings for any alleged breach of the Act. The major issues which have been contested in the courts relate to the decision whether or not to require an environmental impact statement (EIS) under the NSW EPA Act and the adequacy of a statement prepared by a proponent, i.e. as to whether it has taken into account all the necessary factors and done all the required study to an acceptable depth. In NSW the process has been assisted by regulations, rather than by administrative procedures, and a list of matters which have to be addressed in an environmental impact statement. For example, the content of an EIS in relation to 'designated development' is governed by clause 34 of the Environmental Planning and Assessment Regulation 1980, while 'part v developments' are subject to clause 57. The developments under these headings require, *inter alia*, a

⁴³ See Bates, G. *Environmental Law in Australia* 3rd Butterworths. p.113

⁴⁴ Undoubtedly, it would have been much easier for litigating members of the public if such a clear basis, as contained in the NSW law and the previous EIA draft law of Nigeria, had been retained in the present the EIA Decree as well.

full description and justification of the proposed activity, and the environment likely to be affected; an analysis of environmental impacts; a statement of alternatives, and measures to be taken to mitigate environmental effects. Failure to comply with the regulations in the preparation of an EIS could lead to any subsequent decision based on a defective EIS being declared invalid and of no legal effect. This was the decision of the court in ***Guthega Development Property Ltd v Minister***⁴⁵ where the case involved clarifying the meaning of 'justification' of an activity as provided in clause 57(2)(f) of the Regulations. It requires a 'justification of the proposed activity in terms of environmental, economic and social considerations' and the court held that the EIA should in relation to each provide satisfactory reasons for undertaking the activity so that it might reasonably be inferred that the proposal was not only environmentally tolerable and socially desirable but was likely to survive. Furthermore, the basic test for legal adequacy of an EIS was outlined in the case of ***Prineas v Forestry Commission of New South Wales***⁴⁶, where the Supreme Court held that an EIS does not fail to comply with the regulations simply because the proposal could be seen as part of a wider activity which the EIS fails to consider, so long as the proposal is not thereby rendered a sham. In this case, therefore, the failure of an EIS to consider the

⁴⁵ (1986) 7 NSWLR 353.

⁴⁶ (1984) 53 LGRA 160.

effects of logging activities in an area was not a ground for rejecting an EIS based on a proposal to carry out road-making activities and associated works. Any proposal to log would itself be subject to the EIS at a later date. Further, in considering feasible alternatives to the project, a proponent is not required to indicate alternatives which are feasible in fact, but either not known to the proponent or which are *bona fide* regarded by the proponent as quite unfeasible. The wisdom for mentioning this being that if unfeasible alternatives are not mentioned in the report as being unfeasible, objectors will not know they have been considered or why they have been considered unfeasible, which will avoid any further legal action that could precipitate. It is for this reason that a proponent should mention what alternatives are not feasible, and why. Cripps J. laid down the principles for testing the legality of an EIS as follows:

In my opinion, there must be imported into the statutory obligation a concept of reasonableness. Clearly enough, the legislature wanted to eliminate the possibility of a superficial, subjective or noninformative environmental impact statement and any statement meeting that description would not comply with the provisions of the Act, with the result that any final decision would be a nullity.

He further added that:

But, in my opinion, provided an environmental impact statement is comprehensive in its treatment of the subject matter, objective in its approach and meets the requirement that it alerts the decision maker and members of the public and the Department of Environment and Planning to the effect of the activity on the environment and the consequences to the community inherent in the carrying out or not carrying out of the activity, it meets the standards imposed by

the regulations.⁴⁷

Cripps J here employs the test of reasonableness in the determination of the adequacy of an EIS, but the courts have again emphasised that the test cannot excuse any omission to consider the matters mandated in clauses 34 or 57 of the regulation.⁴⁸ There are two basic questions then that determine whether an EIS has fulfilled the adequacy test. First, does the EIS deal with the matters mandated by legislation or regulation? Second, if it does, has adequate consideration been given to those matters? The principle of whether a mandated provision in a regulation has been complied with was considered in the case of **Bonville Progress Association v Coffs Harbour**.⁴⁹ The facts of this case relate to a proposal to open up a quarry for the extraction of materials for road making. Quarrying is a designated development under schedule 3 of the EPA Regulations of 1980. In the instant case, the Department of Environment and Planning had advised of the necessity of conducting an EIS, and what that statement should contain. The court held that it was essential for an EIS to set out at the beginning a description of the existing environment likely to be affected by the proposal, not just in order to comply with regulation 34(c) but as 'a necessary starting

⁴⁷ Ibid at 417-418.

⁴⁸ In this regard no how reasonable the treatment of factors actually considered, an omission to deal with a statutorily mandated matter will invalidate the assessment. See **Bonville Progress Association v Coffs Harbour SC** (1984) 11 APAD 48.

⁴⁹ SC (1984) 11 APAD 48

point for evaluating the proposal on its merits'⁵⁰ which the purported EIS in this case failed to do. Consequently, the court said that 'the failure to comply with reg 34(c) is regarded as a serious non-compliance... as it fails to outline the environment which may or may not be detrimentally affected. It is difficult to evaluate an impact upon an environment if one does not have a clear picture of what the existing environment is.'⁵¹ The court also pointed out to the need for giving consideration to the views expressed by local objectors to a project proposal in the EIS. It says that:⁵²

[I]n assessing the environmental impact of a designated development one has to go a long way further than establishing its permissibility or otherwise within appropriate zoning tables. A thorough investigation of environmental impacts upon the particular character of an area, whatever its zone, has to be made, and the **views of local objectors have to be properly and objectively assessed and given appropriate weight.**⁵³

In this case the proposal had attracted almost hundred objections from local residents in respect of which the court observed that '..having regard to the sincerity and quality of the objections, the substantial magnitude of the number of local people against this proposal is not an irrelevant factor to consider.'⁵⁴ However, in the case of

⁵⁰ Ibid, p.64

⁵¹ Ibid at p.65

⁵² Ibid, at p.76

⁵³ Underline provided to show emphasis.

⁵⁴ **Bonville's case, supra**, p.77.

Capital Quarries Property Ltd v Gunning⁵⁵ where the EIS admittedly failed to reach the highest standards, it was held objectors or potential objectors could not be said to have been misled to any material extent. It was decided that majority of issues have been addressed, sufficiently to alert the reasonably intelligent and informed reader, and therefore applying the test in *Prineas*, the EIS passed the test for adequacy.

In a nutshell therefore, the approach of New South Wales courts is to first ensure that mandated matters are taken into account from where they broaden their focus to look at the statement as a whole in order to apply the test of adequacy. It has in this direction been argued by Preston⁵⁶ that the courts will not be excessively concerned with omissions of particular facts or details provided there is overall compliance with the various guidelines⁵⁷ which the courts have laid down in the cases. The courts therefore appear to be much more concerned with a reasonable evaluation of the matters that have been clearly stated in a regulation by the environmental impact statement. Where this is not done the courts will be quick to declare an EIS a nullity. Another Commonwealth jurisdiction in which the courts have used the concept of reasonableness to determine

⁵⁵ SC [1987] ELR 0152

⁵⁶ Preston, 'Adequacy of Environmental Impact Statements in New South Wales' (1986) 3 **Environment and Property Law Journal**, 194.

⁵⁷ Ibid., Preston has attempted a summary of what the courts may or may not regard as adequate in an EIS out of the existing case law.

whether an environmental impact statement is adequate or not is New Zealand. On this the New Zealand court was even prepared to determine the adequacy of an environmental impact report where there was no legislative direction as to its form and content. In *Environmental Defence Society v South Pacific Aluminium Ltd (No 4)*⁵⁸ the New Zealand Court of Appeal held that, with reference to a statutory direction to prepare an EIS for certain proposed developments, in the absence of any statutory provisions indicating what was meant by the term 'environmental impact report' (EIR), it was a matter of deciding in a realistic way what might be expected. The court then found that it must be the intention of the statute that the EIR would contain adequate and reliable references to every significant and relevant issue, and provide a coherent base for consideration of those issues by all parties involved. This intent would not be necessarily satisfied by concentrating only on site specific impacts, rather than the wider environment, and the applicant was not entitled to avoid awkward or significant environmental issues by simply failing to address them in the report.

It should be noted that members of the public can generally seek a legal review at two stages of the EIA process: first, to ascertain whether the decision by the public body to require, or more usually not to require, an EIS or other form of assessment, was reasonable; second, where an

⁵⁸ [1981] 1 NZLR 530

assessment has been prepared, to test whether it is adequate in terms of content. The general trend today though is that governments tend to refuse to open up environmental assessment to the judicial process which stems partly from the desire to protect administrative discretion and decision making from judicial scrutiny, and partly from the US experience with respect to legal challenges to the EIA process. Several means are normally adopted to make this possible such as drafting legislation which leaves wide discretion to ministers, assessing authorities and decision makers as to which projects should require EIA or by incorporating procedures into administrative guidelines which are not legally enforceable and by restricting in any case the categories of persons who are entitled to bring proceedings before tribunals or courts.⁵⁹ This is exactly what the Nigerian EIA Decree has done and it remains to be seen what the courts in Nigeria would do to help out people who would have to go to court to ensure a due compliance with the letter and spirit of the EIA Decree.

8:5: Conclusion

The discussion in this chapter focuses on the existing principal pieces of legislation which could be used to secure environmental impact assessment of projects relating to water resources development. The purpose has been to

⁵⁹ See Bates, G. M. (1992) *Environmental Law in Australia*. 3rd Edition. *supra*. p.112

examine the framework for environmental protection and achieve sustainable development that has been established in the laws; as well as seeing the extent to which the laws would enable Nigeria to be concerned with the principles of environmental protection and sustainable development in pursuing its water resources development projects. We have seen that the EIA Decree promulgated in 1993, but a rather watered down version of an earlier 1992 draft law, has particularly embraced the principle of public participation in the conduct of environmental impact assessment. Our conclusion here is that the promulgation of the laws has filled in the gap which had existed for sometime in the country concerning EIA for development projects. The EIA Decree has particularly fulfilled an important requirement for establishing the framework for EIA⁶⁰ as well as removing any uncertainty which existed over whether EIA should be undertaken as a matter of legal requirement or not. It has also ended the Government's procrastination with the law on environmental protection and making a solid foundation for the adoption of environmental consciousness and ethics in its development projects. On specific issues, an attempt has clearly been made in the EIA Decree to weave in public participation and accountability in the context of environmental impact assessment. However, it does seem that greater role could have been granted to members of the public over the determination of the kinds and scope of issues to be examined in an EIA, for as it stands now, the

⁶⁰ See chapter Nine, *infra*.

public have no say in determining those. But as would be expected, the most important issue about a legal framework is always the extent to which it is fully put into use and the results it helps in achieving. This is the issue which we shall be turning our attention to in the next chapter where we shall be looking at the experiences of other countries in respect of implementation of environmental impact assessment frameworks.

CHAPTER NINE

THE IMPLEMENTATIONAL PROBLEMS AND PROSPECTS OF THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

9:0: Introduction.

We have seen that the main thrust of the process of environmental impact assessment is to ensure that development projects are undertaken with as full consideration as possible of their environmental as well as socio-economic implications. Where it is established, the process effectively becomes an important environmental protection pressure-point within the development framework of the country. It is this opportunity for the consideration, in advance, of the likely environmental impacts of development projects that we consider to be the major strength of the EIA process as a tool for ensuring environmental protection and achieving sustainable development. The question which comes to mind here is how effective the EIA process has actually been in fulfilling that function.¹ As we have seen, Nigeria has established the legal framework for the conduct of EIA on development projects but there should be a concern about the likely effectiveness of such a framework when it comes to implementation. The experience of implementing the EIA process in several countries shows that, in most cases, the

¹ The emphasis on the developing world here is premised on the fact that Nigeria stands to gain more from the experiences of developing countries which might be in the same situation with it in terms of the availability of resources and manpower.

outcome achieved through the process does not usually tally with the objectives of the process itself. In other words, the performance outcome of the process in many countries that have adopted it leaves very much to be desired. We therefore consider it appropriate that this chapter examines the various kinds of problems that are generally associated with the implementation of the EIA process especially in the developing countries. The main aim here is to determine what implications there are for Nigeria as it sets out to get its own EIA framework into action.

The first point to make about the process itself though is the fact that until recently, the tendency in developing countries especially in Africa, has been not to undertake any EIA of proposed development projects at all. The process was essentially seen as yet another obstacle placed in the path to economic development which is badly needed especially in the developing countries. Other factors that are said to have contributed to this lagging attitude include the high cost involved in undertaking EIA, the lack of environmental expertise and the length of time needed for an EIA which usually delays project implementation.² It was only through the pressure which was brought to bear upon individual countries by International lending

² See Yap N.T. (1994) "Environmental Assessment: The Process in Thailand and Canada", in, R. Goodland and V. Edmundson (eds) **Environmental Assessment and Development**. The World Bank, Washington, D.C. pp.35-47. See also Biswas A.K. (1989) Recommendations on Environmental Impact Analysis for Developing Countries." **Environmental Conservation**. p.61

Organisations such as the World Bank,³ that the idea of environmental impact assessment started to take root in the developing world.⁴ But even then however, the initial response to the demand for environmental impact assessment of projects amongst the developing countries was to try as much as possible to fulfil the minimum conditions that might be needed to satisfy the external fender of the project. In other words, the EIA process was simply conducted without the necessary commitment for reflecting the findings of the process in the final outcome of the development project.

9:1: The Implementational problems

9:1:1: Legislation

What seems to be the major consensus amongst experts in the field nowadays is that for an EIA to make any realistic impact upon the sustainable development of a country, it needs to be firmly institutionalised and made part of the environmental management mechanism of a country. Flowing from this imperative is the necessity of a legislative framework that would clearly institutionalise the EIA process within the nation's development framework. The problem however, is that many countries especially in the

³ See for example, Yap, N.T., Ibid.p.35.

⁴ See Pescod, M. B. (1979) "Environmental Management in Rural Areas of Thailand" In C. MacAndrews and L.S. Chia (eds) *Developing Economies and the Environment: the Southeast Asian Experience*. MacGraw-Hill, Singapore.

African continent, have not been keen enough to enact the necessary national laws that would put this environmental protection measure firmly into existence.⁵ In fact, experience from many countries indicates that some of the existing environmental legislation dates back to the colonial period, which often makes it outdated and irrelevant to the present requirements for a legal framework that would provide for the undertaking of EIA in respect of development projects.⁶ The interesting point here though is that this contrasts sharply with the experience which comes from the Southeast Asian countries. For example, experience from Thailand, where EIA was adopted in 1978, shows that a strong, well-developed, and practical legislative basis is essential for the success of the EIA process.⁷

One important point that must not be overlooked however, is that it is one thing to have a legislative framework in place, and another to have the EIA process implemented accordingly. That is why one must quickly point out that although legislation does play a significant role in setting out the details of how the EIA process should be mandatorily administered, it does not automatically guarantee a sound environmental management in practice. In

⁵ See Kakonge, J.O. and Imevbore, A. M. (1993) "Constraints on Implementing Environmental Assessments in Africa". *Environmental Impact Assessment Review*. Volume 13, pp.299-308

⁶ Ibid.p.300

⁷ Ibid. p.301

fact, as McDonald⁸ has argued quite along the same line, in some cases countries clearly undermine any legislative provision in place to either compel the undertaking of the process or effect some specific action within it.⁹ Such an undermining takes various forms and include failure to apply the EIA law to Development plans and programmes, failure to offer procedural guidance to help tie EIA to the planning process, giving exemptions to controversial projects, or by simply allowing the relevant legislation to be ignored.¹⁰

Thus, the general lesson from some developing countries such as Thailand, Phillipines, and Colombia is that formal legislation can be very crucial for the success of EIA.¹¹ The main advantage here being that legislation is an important instrument by which the carrying out of the assessment could be made mandatory. A legal framework establishing a mandatory EIA framework for development projects stands a better chance of making a greater impact on the whole environmental management system. This is because an EIA system that is only embodied as a policy stipulation without any legal back-up could simply end up

⁸ MacDonald, M. (1994) "What's the Difference: A Comparison of EA in Industrial and Developing Countries", in R. Goodland and V. Edmundson (Eds) **Environmental Assessment and Development**. The World Bank, Washington D.C. pp. 29-34

⁹ Ibid.p.31

¹⁰ Ibid.

¹¹ See Kakonge, J.O. et al (1993) "Constraints on Implementing Environmental Impact Assessment in Africa", *supra*, p.301

losing its significant status in the eyes of project proponents or consultants engaged to assess the whole development project.¹²

9:1:2: Institutional Structure

The next most important element in the institutionalisation of an EIA is the establishment of a clear organisational framework for the administration of the process. Here, the first most important thing is the clarification, by statute, of the responsible ministry or other governmental agency which will be given the task of administering the process and also what the relationship between such a body and other participants of the process should be.¹³ The nature of the agency and the investment of EIA administrative powers are issues normally left to the peculiarities of each and every country. The functions may be concentrated in a single ministry or new governmental agency or decentralised among agencies at different levels of government.¹⁴ It does seem that the most commonly adopted model is that of centralisation by which a single

¹² In a country that relies only on policy provisions to administer EIA such an EIA is likely to be weakly administered. For example this was the case in Tonga, Vanuatu, and Solomon Islands as reported in A.L. Brown, R.A. Hindmarsh and G.T. McDonald (1991) "Environmental Assessment Procedures and Issues in the Pacific Basin-Southeast Asia Region" **Environmental Impact Assessment Review Volume 11**;143-156. The problem here ranged from total absence of legislation about EIA to instances where EIA requirement is incorporated in some sectors only. The main problem which is general is that it is difficult to enforce the EIA requirements without legislation.

¹³ Lim G. (1985) " Theory and Practice of EIA Implementation: A Comparative Study of Three Developing Countries." **Environmental Impact Assessment Review**: volume 5: 133-153

¹⁴ *ibid.*p. 137

agency is entrusted with all the necessary powers to administer the EIA process. There are, however, a number of problems relating to administering agencies which normally inhibit the successful implementation of the EIA.

The first thing that could prove to be an impediment to the success of such an agency is the authority that it carries vis-a-vis other participants in the EIA process. In his comparative study of EIA administrative agencies in the Phillipines, Korea and Brazil, Lim found that the relative lower status of the EIA review agencies was a contributory factor to their lack of success in the implementation of the process.¹⁵ In the three mentioned countries, the problem of lower status and lack of resources and technical competency combined to debilitate the legal and rational authority of the review agencies vis-a-vis other participants in the EIA implementation.

The next problem relates to the attitude of responsible agencies towards the EIA. In his study, Lim found that the agencies were not sufficiently conscious of the intention of the EIA process or even willing to incorporate EIA findings in their planning and decision-making processes.¹⁶ The third factor which affects the implementation of EIA in relation to the administrative institutions is the absence of clear specification of the roles which the various

¹⁵ Ibid. p. 150

¹⁶ Ibid.

participants should play. Lim came across this problem and observes that: "(p)rocedural rules without clear division of labor among different functional units seem to create considerable role ambiguity and decrease accountability."¹⁷ The failure to clearly assign the functions to be discharged by each and every participant in the process is a fundamental source of confusion and even friction amongst participants in some cases. This would undoubtedly impede the effective and successful implementation of the process as a whole.

We have so far looked at the problems of implementing EIA as it affects legislation and administrative structures. We shall now look at other problems which have seriously constrained the implementation of EIA. We shall next be concerned with those problems that relate to the conduct of the EIA itself.

9:1:3: Manpower constraint

The task of implementing EIA does require a certain degree of expertise. This requirement falls into two categories. Firstly, there is the need for well trained manpower to work in the administrative agencies which are given the responsibility of administering the process. Here there can hardly be any doubt about the need for personnel who are trained in environmental issues. Secondly, there needs to be a supply of experts in various environment-related

¹⁷ Ibid.

disciplines who could be engaged to act as consultants in the conduct and preparation of environmental impact statements. Any shortage of qualified and experienced personnel stands to significantly erode the quality of the environmental impact statements produced.¹⁸

Several studies so far carried out in many countries indicate that lack of manpower in the form of environmental expertise is generally a constraint to the effective implementation of the EIA process, most especially in developing countries.¹⁹ It is perhaps worth noting here that in the case of Nigeria, one author has indicated an optimistic view about the likely availability of the type of manpower we are talking about. Writing at a time when EIA was not introduced in Nigeria, Ayanda²⁰ argued that:

Manpower is not likely to constitute a problem to EIA implementation because there are qualified academics in Nigeria in almost all known disciplines ranging from ecology, physical science, geology, anthropology, social sciences, etc. to mathematics....If EIA is introduced, these academics, who have been passive in their contribution to development in Nigeria, could be effectively used to conduct EIA to help decide the siting of projects.²¹

¹⁸It does seem logical to assert, as Kakonge and Imevbore did, that lack of persons with sufficient expertise and experience in environmental disciplines will result in a poorly designed environmental impact statement. See Kakonge J.O. and Imevbore A.M. (1993) "Constraints on Implementing EIA in Africa...", *supra*, p.302.

¹⁹ See World Bank (1991) *The World Bank and the Environment-1991 progress report*. Washington D.C. See also, MacDonald, M. (1994) "What's the Difference: A Comparison of EA in Industrial and Developing Countries....", *supra*, p.30

²⁰ Ayanda, J.O. (1988) Incorporating environmental impact assessment in the Nigerian planning. *Third World Planning Review*. Volume 13 (1) pp 51-69.

²¹ Ibid. at p. 63-64

Let us make two points about this argument. Firstly, while Ayanda may be said to be right about the pool of academicians in various fields who could be engaged as EIA consultants to development, the environmental protection agencies would still require the services of experts and even experienced members of staff in order to carry out their part of the implementation responsibility. And there is so far nothing to suggest that the Environmental Protection agencies are actually getting the qualified and experienced staff that they would prefer to employ. Secondly, The situation in Nigeria, in terms of the availability of qualified staff, could hardly be generalised. Experience from some other African countries such as Zimbabwe, for instance, shows that expertise for the conduct of comprehensive EIA is lacking.²² Generally speaking therefore, lack of appropriate manpower is a great problem to the successful implementation of EIA.

We have so far looked at the kind of problems that are essentially related to the establishment of the EIA implementation structure. We shall now consider those problems which mainly concern the substantive execution of the EIA process itself. We shall look at the problems of option generation and public participation in EIA.

9: 1: 4: Alternatives Generation

²² MacDonald, M. "What's the Difference: A Comparison of EA in Industrial and Developing Countries.....", *supra*. p.30.

Alternatives or option generation is usually an integral part of any EIA for it provides a means of making decisions based on data that is available and judgements about impacts. The generation, analysis and consideration of options to a particular project under an EIA examination has always been a central part of the process. Paradoxically however, alternative generation and consideration has been one of the main problems of the EIA process in many developing countries. Let us take the case of Malaysia as an example. The Malaysian EIA regulations make it abundantly clear that an assessment of the options to a project under an EIA consideration is very important and that the implications of each option put forward should be considered at the very early stages of project planning. Notwithstanding this provision however, alternative generation has continued to be a major problem. Nor Y.M.²³ has given a number of examples to show how alternative generation is normally disregarded in the EIA process. The first example is that of failure to consider a whole alternative. Here, the Government of the State of Penang wanted to expand an existing Industrial Park by annexing an adjoining area containing a number of mudflats. The environmental impact statement produced about the project considered three alternatives, namely land reclamation, land acquisition and no-action alternative. The study discounted the issue of land acquisition on the basis of

²³ Nor Y.M. (1991) "Environmental Policy Making: Problems and Prospects in Malaysia". *Environmental Impact Assessment Review*. Volume 11: 129-142

economic viability and legal constraints very early in the process. Thus it addressed land reclamation and the no-action alternatives only. However, it failed to examine the option of having a new Industrial Estate on another site altogether.²⁴

The second case concerns a study which demonstrates the failure to undertake the EIA process itself early enough to provide an opportunity for the meaningful consideration of the alternatives that were available. It concerned a hydroelectric power generation project in which the EIA was only undertaken after the feasibility study had been conducted and therefore decision taken as to where the project should be sited. Apart from, the project initiator also felt that the money already spent on the feasibility study was high enough to negate the need to explore other designs and sites for the project. The environmental impact study consultants were left with the option of addressing a number of dam elevations only, since dam site had already been decided upon.²⁵ The usual approach to EIAs on proposed dams is to include a consideration of design options and alternative sites, as shown in the consultancy work done by Bechel²⁶ in evaluating the White Salmon River Project in Washington State of the United States of America. The study

²⁴ Ibid. p.135

²⁵ Ibid.

²⁶ Bechel Civil and Minerals Inc. (1981) *White Salmon River Project, Phase 1: Conceptual Planning Report. Public Utility District No. 1 of Klickitat County*. San Francisco, U.S.A., cited by Nor, Y.M. *ibid.* at p.130

proposed several alternatives for the hydroelectric project. For example, they presented two reservoir storage alternatives. In total the study indicated that a thorough evaluation of alternatives can be accomplished, and is in fact desirable considering the almost irreversible nature of the environmental and socio-economic impacts of dam construction, not only on the area actually impounded but on downstream localities as well.²⁷

Overall, an important consequence of the failure to reflect on all possible alternatives is that EIAs are simply conducted in order to accommodate projects rather than force any significant changes in the location, engineering, plans or designs of projects to accord with the discovered environmental realities.

9:1:5: Public Participation

It is quite clear that in many developing countries, particularly those of Africa, the initial implementation of EIA to development projects followed the intervention of international funding Organisations. It was these Organisations that demanded the conduct of EIA before projects could be given the go-ahead. One feature that marked that period was the absence of public consultation or any involvement of the members of the public in the way

²⁷ See Scott, M.J., Moe, R.J. LeBlanc, M.R. and Currie, J.W. (1987) Columbia River Salmon: benefit-cost analysis and mitigation. *Northwest Environmental Journal*. Volume 3:: pp.121-152. This study clearly confirmed that impoundment of Columbia River had resulted in considerable direct economic losses of fisheries resources.

the EIA process was executed.²⁸ The explanation for this attitude was that agencies funding EIA generally viewed such matters as the exclusive responsibility of the host governments.²⁹ They were thus not concerned with pressing host governments to involve members of the public as such.

However, as the idea of EIA became increasingly acceptable following the impact of international pressures such as those coming from the 1992 Rio Conference on Environment and development, the principle of public participation began to feature prominently as an important aspect of the EIA process even in the developing countries. This led to very noticeable shifts in the attitudes of both the developing countries and the international funding organisations to the way EIA was viewed and implemented. The World Bank, for instance, in strengthening its EIA policy has introduced EIA for the projects it funds in developing countries and such EIA expressly involves public participation which is normally translated into consultation with local groups and non-governmental organisations (NGOs).³⁰ It is important to note that many developing countries have now adopted the public

²⁸ See Kennedy, W.V. (1988) *Environmental Impact Assessment and bilateral development aid: An overview.* In P. Wathern (ed) *Environmental Impact Assessment: Theory and Practice*. Unwin Hyman Publishers, Ltd.

²⁹ Ibid.

³⁰ Cook, C.C. and Donnelly-Roark, P. (1994) "Public Participation in Environmental Assessments in Africa". In R. Goodland, V. Edmundson (eds.) *Environmental Assessment and Development*. The World Bank, Washington D.C. pp.84-100

participation principle and have incorporated it into their EIA systems. The experience so far, however, indicates that there are quite a number of problems with public participation as a component of the EIA process in the developing world. To start with, the nature and kinds of political systems in many countries does seem to be a crucial factor which impedes the successful implementation of the principle. The prominent kind of political systems one may refer to here are those which do not allow for a culture of genuine representation of diverse public views and opinions in matters of governance, such as in single party democracies or military governments. The explanation put forward by McDonald on the difficulty which is generally faced in many developing countries concerning public participation is quite instructive here. She says that:

The lack of true representation in many governments, in itself, poses an obstacle to citizens attempting to give input into environmental decision making. In some parts of the world, political situations such as single-party governments (or military dictatorships)³¹ may strongly discourage any public opposition to major development projects, making those who have concerns regarding a proposal afraid of the reprisals that may result from speaking out.³²

Undoubtedly, political systems which are based on one-party system or military dictatorships would hardly be expected to be conducive for the implementation of the public

³¹ Words in bracket added.

³² McDonald, M. "A Comparison of EA in Industrial and Developing Countries.....", *supra*, p.32

participation principle in many areas including environmental assessment of development projects. The voicing of any views which could be construed as being an opposition to a project, which the government is however determined to implement, would definitely be met with reprisals and further repression in the future.

In addition to political culture, there is also the problem of practical limitations which militate against the successful use of the public participation principle in EIA. This is in relation to the availability of tools and methods for initiating and publicising opportunities for public participation such as telephone, television, radio, newspapers and leaflets delivered door-to-door. Some of these mediums of communication would clearly not be suitable for areas where abject poverty prevents the ownership of or access to audio-visual equipment or where illiteracy prevents the use of printed material. It must be noted however, that in very poor regions, traditional methods of gathering and sharing information such as meeting with community leaders and spreading of information through the word of mouth could be employed. In fact such methods could be utilised quite effectively, even in industrial countries, to obtain information about local conditions such as location, type, and extent of flora and fauna or useful historical details such as flooding

patterns.³³ It is perhaps significant at this point to point to the fact that in many developing countries development projects tend to affect areas in which there are subsisting local or indigenous communities. The principle of public participation undoubtedly stands to benefit such a community by giving it the opportunity of being heard and its views playing a significant part in the final outcome of the project. It does therefore stand to reason that for indigenous communities to effectively benefit from development projects, the means of communication amongst such communities be adapted and usefully employed in the EIA process. It^{is} thus significant to point out that work on clarifying what amounts to sustainable development has begun to include looking at various forms of communication used in indigenous societies and attempting to understand how the values inherent in current forms of communication, particularly mass media, may either enhance or diminish positive interactions with environment.³⁴ The belief here is that increased involvement of the public in the EIA process in developing countries stands to increase knowledge for devising communication strategy for sustainable development.

Another problem which deals a blow to the utility of public

³³ See Yap, N.T. (1990) "Round the Peg or Square the Hole? populists, Technocrats and Environmental Assessment in Third World Countries." *Impact Assessment Bulletin*. Volume 8: pp.69-84.

³⁴ Hanson, J.A. and Regallet, G. (1992) "Communicating for Sustainable Development." *Nature and Resources*. Volume 28: pp. 35-43

participation in the EIA process is the way the information consequently gathered is subsequently handled by the relevant authority. It is quite a problem in both developed and developing countries incorporating the voiced concerns and information provided by the public during the EIA preparation. It is well and good to gather all the possible information from the public, but what actually matters for sustainable development is how much of it is taken into account during the decision making process. There could certainly be many reasons that may account for the reluctance to incorporate the information and perhaps no generalisations may be valid in all cases. However, there have been some explanations offered; and these relate to the way in which the personnel charged with the responsibility of conducting the exercise tend to easily reject views coming from people with less formal training and the difficulty of handling some of the concerns of local people which may be impossible to justify against the often technical and scientific focus of the EIA.³⁵

9:2: Conclusion

We have seen that EIA could be used as an effective weapon in the struggle for environmental protection and sustainable development, but the effectiveness very much depends on implementation. The experience of many developing countries has shown that, however, getting the legal framework in place, amongst other factors, is a very

³⁵ McDonald, M. (1994) "What's the Difference.....", *supra*. p.32

significant step in effective administration of the EIA process. Although Nigeria has somewhat cleared that hurdle through the promulgation of the 1993 EIA Decree, basically all the other problems that relate to the actual implementation of the process could still prove too much for an effective implementation of the law.

CHAPTER TEN

CONCLUSIONS AND RECOMMENDATIONS

This study has been undertaken in order to explore the concern shown by Nigerian Government about the issue of environmental protection and sustainable development, in the course of executing its development projects, particularly those relating to water resources. The central question examined is the extent to which the Government had concerned itself with the establishment of legal frameworks for ensuring environmental protection and the achievement of sustainable development and the difference which such a framework could have made in the past and what it stands to help achieve in the future. As far as the legal framework for environmental protection framework in general is concerned, we have seen that for almost three decades after independence from Britain in 1960, there virtually remained no specific legislative initiative, especially at the federal level, to improve or modify the old laws relating to environmental protection. This meant that concern for the protection of the environment and sustainable development was generally absent in the making and implementation of Government's development policies and programmes. Thus, the *most* that anyone could possibly have done in the face of environmental problems occasioned by water resources development projects and oil pollution, for instance, was to rely on laws that were totally obsolete and not useful at all. Furthermore, in the context of

the industries, we have seen that the activities of the oil companies were not adequately regulated as a result of which social and ecological problems mounted.

We have also seen that the most important theme that has consistently featured as one of the principles for ensuring environmental protection and achieving sustainable development is the need for environmental impact assessment of development projects before they are undertaken as well as an environmental impact monitoring of such projects during construction and after completion.

In a nutshell therefore, the conclusion which one finally arrives at is the fact that it was mainly the illegal dumping of toxic waste by an Italian company in 1988 which eventually spurred Nigeria to become more environmentally conscious and focus its attention towards definite and specific environmental protection-related policies and laws. Similarly, international events such as the Rio Conference on Environment and Development of 1992 has had immense influence on the Government's thinking, policies and programmes on environmental protection and sustainable development. This is clearly evident from the fact that a number of the principles drawn up and agreed upon at that Conference, including public participation in EIA process, were articulated into the 1993 EIA Decree, as we have seen in Chapter Eight, *supra*.

RECOMMENDATIONS

Although our final conclusion is essentially that the Nigerian Government has moved quite far in its attempt to become as environmentally ^{up}to date as it could be in the sense of the establishment of ^a legislative framework, there still remains a lot for it to take account of, if it is to secure environmental protection and sustainable development.

Firstly, at the Constitutional level, Nigeria should take the more innovative step of providing for a clear provision of the people's right to a healthy environment with the hope that it would reinforce the ^{environmental} consciousness required for good governance and sustainable development. There is also a need for further clarification in the Constitution of the powers and functions of environmental management between the various tiers of government in the federation. This is to reduce friction between the tiers of government as well as providing a basis for easy adoption of uniform policies and standards in certain aspects of environmental management.

Secondly, there are certain sectors of the economy whose environmental protection framework need to be made ^{up}to date. The principal sectors here are those concerning mining, quarrying and oil exploration, which we examined in chapter Five, *supra*.

Finally, in the context of EIAs, the Government has to ensure

that public participation is anchored fully well into the process by allowing members of a community likely to be adversely affected by a developemnt project to participate in determining the kinds of issues that should be studied in an EIA. Furthermore, it does seem that there is a similar case for reinforcing people's right to seek judicial intervention in determining how much compliance there has been with the provisions of ^{the} EIA Decree. This is to reverse the current position whereby such right to the members of the public is highly restricted.

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