ASSESSMENT OF ENVIRONMENTAL SANITATION PRACTICES IN IKEJA LOCAL GOVERNMENT - AREA OF LAGOS STATE - NIGERIA

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ASSESSMENT OF ENVIRONMENTAL SANITATION IN IKEJA LOCAL GOVERNMENT AREA OF LAGOS STATE - NIGERIA

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C E R T I F I C A T I O N

I, DR/MR/MRS (BIRONKE ABESOLA NORNOO ..... hereby recommend to the Board of Studies of the Institute of Public Administration and Extension Services, University of Benin, the acceptance as satisfactory in scope and quality of this thesis titled "ASSESSMENT OF ENVIRONMENTAL SANITATION PRACTICE" in Partial fulfilment of the requirements for the award of Diploma in Health Administration and Management of the University of Benin.

Dino Omuma
.....
D I R E C T O R

DATE ..23/9/85..

Ibironke Nornoo
.....
S U P E R V I S O R

DATE ..31/7/85.....

D E D I C A T I O N

This study is dedicated to my parents Mr. Yani T. Fada and Mrs. M. Yani, who worked so hard to see that I got all the privileges they never had

AND

Finally to my entire family and friends, for their encouragement and support during the period of this course.

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PREFACE

This project paper is developed from the one month's attachment to Lagos State, from the 22nd of April, 1985 - 17th May, 1983.

The attachment offered me the opportunity to observe and assess the effectiveness of environmental sanitation practice, as a measure of effective health care delivery, as applicable to Lagos State of Nigeria, (with special reference to Ikeja Local Government Area).

The aim of environmental sanitation over the decade, is the improvement of people's health. This cannot be automatically achieved merely by providing sanitary facilities, especially if these are provided to meet traditional economic and. financial constraints. The incidence of diseases associated with poor environmental health can be characterised by the level of diseases in many developing countries of the world. The best methods and ways of combating these diseases, in view of cost effectiveness should be the provision of safe drinking water, practice of food hygiene, proper removal and safe disposal of refuse, eliminating other sources and conditions that are conducive to the survival of diseases. Although the planning and practice of environmental health in the past, had received secondary attention with series of crisis and problems,

but with the present development on health programmes in the Nigerian society, its value to the promotion of good health has been recognised (especially in Lagos State where we have free health services). It has also been realised that curative medicine without preventive measures cannot solve our health care delivery problems, despite the huge amount of money being spent annually by Federal, State and Local Government authorities, on curative medicine.

As experience gained in modern Health management services increased, there is responding awareness that diseases and disability prevention through environmental health control practices can help in reducing the soaring costs of health care delivery services. Therefore, there is need for thorough inter-sectional planning, controlling and effective administration. These could be achieved through the functional guidelines within the frame work of the agreement reached at Alma-Ata, in Russia (USSR), declaration of 12th September, 1978. The conference was Jointly sponsored by the W.H.O. and the U.N.I.F.E.F., and the theme of the conference was "TITLED" - ACHIEVEMENT OF "HEALTH FOR ALL BY THE YEAR 2,000".

This project work provides a comprehensive knowledge of the roles, problems and effects of diseases associated with poor environmental sanitation. It highlighted measures that can be implemented with limited resources for the improvement and maintenance of good health.

The study also focuses on the general environmental sanitation as applicable to Ikeja Local Government Area of Lagos State. It also viewed and observed the constraints affecting Public Health Officers in the promotion of environmental sanitation services.

Attempts was also made to look into the validity of the Public Health Laws and Edicts, and how effective these laws are implemented.

Finally, a close look at the staff strength of Ikeja Local Government Health and Environmental Services, was noted.

ABSTRACT

This thesis is primarily intended to highlight and stimulate the increasing role of Environmental sanitation in relation to diseases.

In chapter one, the researcher took a close look into the perimeters of environmental sanitation, tracing specifically the historical background of environmental sanitation and the Community Health Development in Nigeria. A brief introduction into the practices of environmental sanitation in Ikeja Local Government area of Lagos State.

Chapter two, deals with Literature review of some written text-books, by reknown philosophers, on Environmental Sanitation, World Health Organization publications, including individuals bulletins and editorials on health.

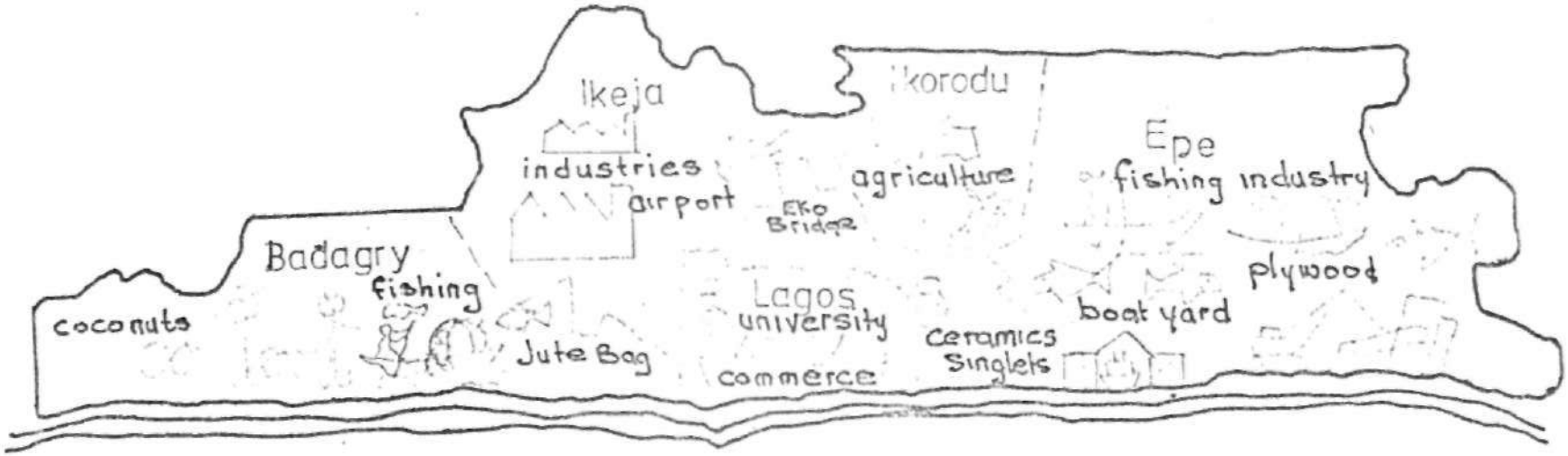
Personnel management, the roles and function of health personnel, Public Health Laws, the early concepts and systematic development of health services over the past years, are all highlighted in this chapter.

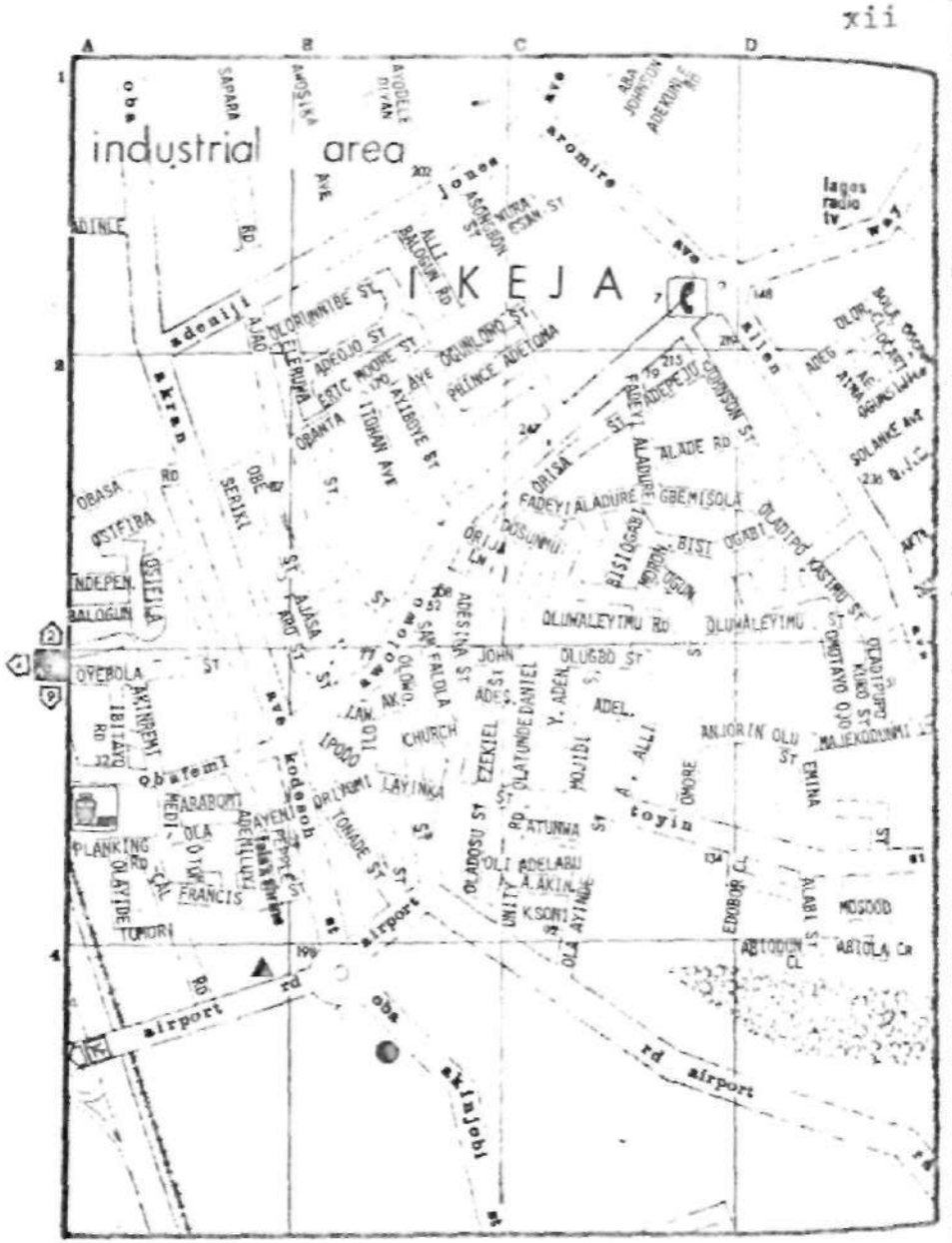
Chapter three feature the methods adopted in carrying out the research generally and some of the problems encountered during the exercise.

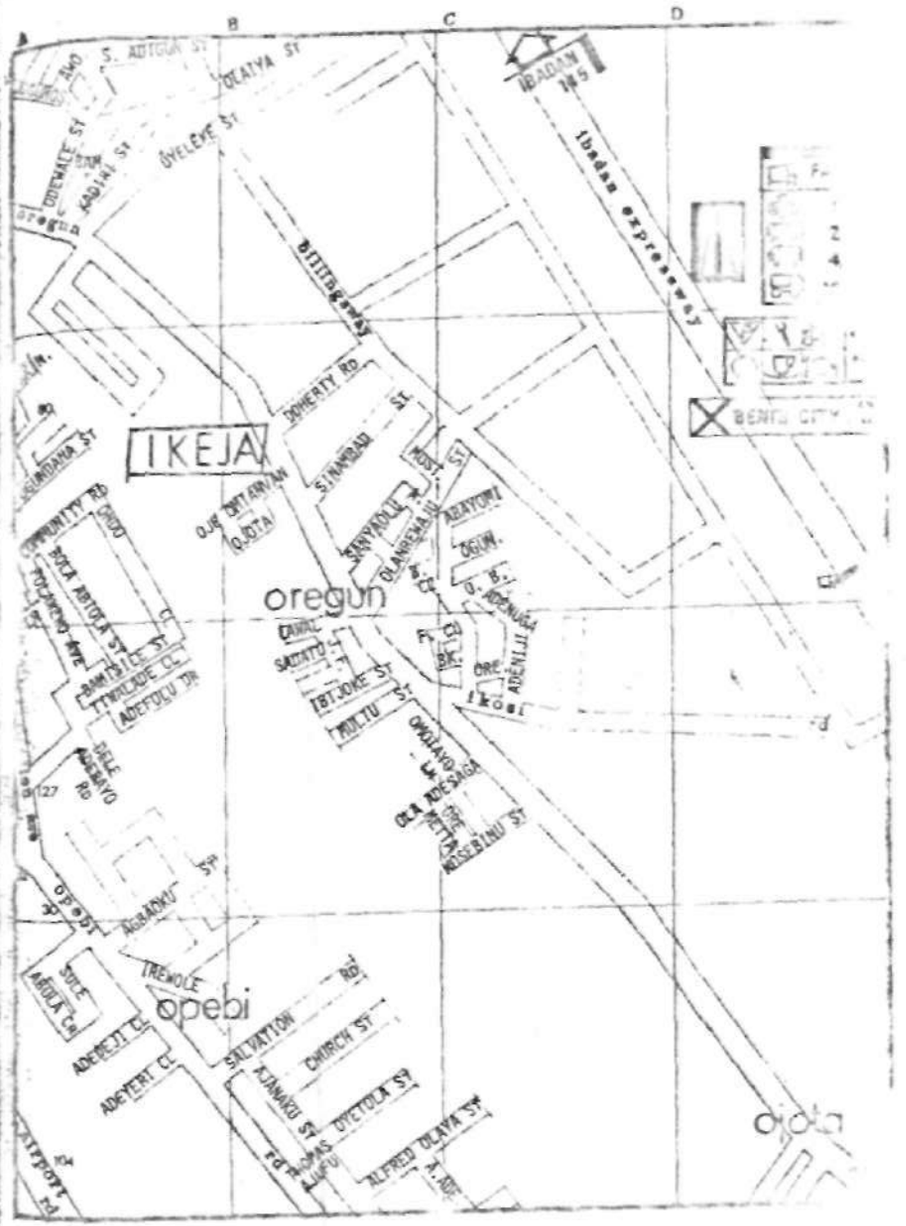
Chapter four, deals with reports, discussion and findings at Ikeja Local Government area in relation to environmental Health.

Chapter five - This chapter deals with general problems, summary and conclusions.

LAGOS STATE


Ikeja
industries
airport
Ikorodu
agriculture
Eko Bridge
Epe
fishing industry
plywood
Badagry
fishing
coconuts
Jute Bag
Lagos
university
commerce
boat yard
ceramics
singlets


industrial area
IKEJA
Lagos radio TV
OBASA RD
OSTEIBA
INDEPEN. BALOGUN
OYEBOLA ST
IBITAYO RD
PLANKING RD
OLAYIDE TUNDRI
airport rd
Ambassadeur


IKEJA
oregun
opebi
IBADAN
Ibadan expressway
DOHERTY RD
COMMUNITY RD
OJE INTARVAN
AGBAKU
TREMOLE
SALVATION CHURCH ST
AJANAKU ST
UYETOLA ST
ALFRED OLAYA ST
ADEJEJI CL
ADEYEMI CL

ASSESSMENT OF ENVIRONMENTAL SANITATION AT IKEJA LOCAL GOVERNMENT AREA OF LAGOS STATE

CHAPTER I

INTRODUCTION

A major reason for the social concern with environmental sanitation has been the presence of physical and biological threats and dangers associated with poor environmental sanitation, as it affects life and health. Until recently, most people considered their environment limited to some of the visible, tangible inanimate aspects of their surroundings, but when related to health, it is simply a state in which the individual happens transiently to be perfectly adapted to his environment. The environment technically includes all those external factors both living and non-living that affect an organism. Ecology, then, is the study of the interaction between organisms and their environment and the key word is "interaction". The scope of the community environmental health concerns expanded as chemical, mechanical and several types of radiation health hazards become more prevalent due to the relationship between environmental factors and diseases. Human environment in both its natural and man-made aspects is not only a source of threats to life; it is also a sheltering that relates positively to health as biological, psychological and social needs. It follows that both health promotion and protection value overlap with other social

values that have environmental implications. Human health and its general well-being has always depended on our relationship with environment.

The widening gap between technological developments and the ability of institutions to adapt, is at the root of the multiplication of environmental problems that confront us in our houses, at work or on the street. And all of these environmental and institutional problems in turn are intertwined with and form a part of the social problems of the day. So now our only recourse according to Hanlon (1979)[1] is to join the rest of the planet, to live on it with greater wisdom than before, and to anticipate and guard against those environmental forces, natural and man made, that may mitigate against our health. It must never be ignored in the final analysis that concern for the public's health is the paramount reason for environmental action.

The environmental problems of highly technologically advanced countries are quite different from problems of developing and pre-industrialized nations. While technology is solving some environmental problems, a lot of problems are being created as a result of the level in technology. Industrialization has provided humanity with many material and social benefits; at the same time, it has brought many material and social problems. One of these is environmental

1. John J. Hanlon & George E. Pickett - Public Health Adm. and Practice, Seventh Edition, 1979.

pollution which ecologists have recognised as a serious threat to the quality of life and possibly to its existence.

The table below is an Estimated service for sanitation in developing countries "1970-1980".[2]

1970		1975		1980	
Population served (in millions)	Percentage of total population	P. Served (in millions)	Percentage of total population	P. Served (in millions)	Percentage of total population
Urban 337	71	437	75	372	53
Rural 134	11	209	15	213	15
Total 471	27	646	33	585	25

Source of information, W.H.O. Estimated report on environmental sanitation, (United Nation DocumentA/35/150).

The table above shows that only about one in four has any kind of sanitary-facility including pit latrines. The urban areas are better served with about 53% having adequate sanitation while in the rural areas only 13% have access to sanitation.

The problems of government policies towards Environmental Sanitation had always been the methods of implementation. If the same standards of service and methods of implementation as have been used in the recent past are adopted, the target for

2. Geneva: WHO Drinking Water and Sanitation, 1981 - 1990 Document A/35/150.

3. Ibid - Page 6.

consumption.

(ii) Vector control and other Public Health insects

(iii) Environmental pollution control, including atmospheric pollution and the prevention of radiation hazards.

All these interactions with the environment, are involved in relationship with our total reactions to environmental hygiene. For those charged with the protection and enforcement of environmental health laws[4], they need to have a broad knowledge - and culture of the community they serve. The protection of public health from the heavier hazards must involve skills and knowledge for more extensive and complex measures than in the past. Although, there is growing public awareness of the need for environmental quality improvement. As people get to know the importance of environmental sanitation, the willingness and support has increased for its maintenance and preservation.

SETTING OF HEALTH INSTITUTIONS IN LAGOS STATE

Lagos State is one of the 19 States of the Federal Republic of Nigeria. It was carved out as a State in 1967, along with other States created by the military men by then. It covers an estimated area of about 3,577 square kilometers. Politically, it is made up of eight local government areas, each headed by a Sole Administrator with the Governor as the

Chief Executive of the state. The eight local Government areas are:- Ikeja, Lagos mainland, Lagos Island, Ikorodu, Epe, Mushin, Shomolu and Badagry Local Government areas. Population - There has been no official census since 1963, but the population was put at 4.6 million people by 1980 with natural increase of 3.2% annually.

ADMINISTRATION AND MANAGEMENT OF HEALTH SERVICES - LAGOS STATE

Lagos State Government is the only state through-out the Federation that provide health services free. It is responsible for the provision and maintenance of all secondary health services throughout the state "FREE MEDICAL AND HEALTH SERVICES" According to official information, 15% of the total budget goes to Health Services and during the current financial year, 1985, ₦65,000,000 was approved for health services alone. As a matter of fact, the management and organisation of health services in Lagos State cannot be compared with any State in the Federation. This is not a story, but it is a real fact finding research, carried out by the researcher himself, during the orientation exercise that took him to almost all the Hospitals in Lagos State. Credit must be given to that administration, especially the Commissioner for Health and his subordinates for a job well done.

Major health policies are stablished by Federal and State Ministries of Health. The states implement these policies and standards set for health personnel and services for the

country as a whole; however, the Local Government's autonomy in matters relating to health, gives them the freedom to adopt these standards if in their view it will benefit their health services locally. The State Government Hospitals has a management board known as "HEALTH MANAGEMENT BOARD" that manage and run all hospitals, and its membership consist of appointed members by the Governor of a State, under certain guidelines for the running of all hospitals. These members form the governing body. Some members are also appointed to serve on the board as ex-official members e.g. Permanent Secretary and Chief Medical Officer.

Source - Lagos State Ministry of Health.

IKEJA LOCAL GOVERNMENT AREA

The researcher did his research attachment at Ikeja Local Government Health Department. Ikeja Local Government is one of the eight Local Governments in Lagos State situated in the mainland of Lagos, with a population of about 600,000 people according to 1963 census. Its administration covers areas like Alimosho, Agege and Ikeja zonal administrative areas, with Ikeja as the administrative head-quarters.

The Health Department of Ikeja Local Government has three zonal health offices in all the three zonal administrative areas, managed by a medical officer of health each, under the general supervision of the Chief Medical Officer of Health, of the Local Government Dr. M.Y.I. Salami. The three offices in the zonal areas, render the following main services:-

1. Environmental sanitation
2. Food and Pest Control
3. Epidemiological Unit
4. Prosecution unit.

Environmental Sanitation: - Before 1977, the responsibilities of refuse collection was the duty of Local Governments, but when the government realised that the Local Governments could not cope up with the problems of refuse collection, it decided to establish a Waste Disposal Board in 1977, to deal with waste disposal. There are some legally provided refuse

depots where both the Local Government sanitarians and individuals dump their refuse, from where the waste disposal board collect to a place of final disposal which is by sanitary land filling. The local government collect refuse from places like - Feeder roads, Streets, markets and gutters to the legally provided refuse depots. Individual house-holds are responsible for the collection of refuse from their residentials to these refuse depots. The Waste Disposal Board and the Local Government operate independently and this seems to have created a big problem on refuse collection of the area.

Equipment for environmental sanitation

The local Government has the following equipments -

1. 8 refuse vehicles
2. 3 mechanical shovels
3. 3 dislodging vans.

From observation the number of equipments here is inadequate, and the division of labour between the Local Government and the Waste Disposal Board seems to overlap.

Food control - The objective of this unit is to see that all food establishments are carried out in accordance with the Public Health Laws and regulation - to ensure that food sold for human consumption is wholesome and fit.

Epidemiological Unit:- This unit is responsible for the following services:-

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Source of Information: Health Dpartment, Ikeja Local Government

1. All immunizations
2. Birth and death registration
3. Maintaining all statistics of communicable diseases.

Prosecution Unit - This unit is responsible for the prosecution of all sanitation offenders, after several verbal warnings. Such offenders are taken to court and prosecuted in accordance with the Lagos State Edict 1983, on Environmental Sanitation.

Markets Sanitation - In all the markets the researcher visited, the market communities are responsible for refuse collection and general sanitation of their various markets. This development is likely to constitute a health hazard, since this people are not aware of the dangers associated with poor sanitation. It was also observed that toilets are not provided in most of the markets visited, except the new markets under construction. The new markets are properly planned but the old ones were not.

ORGANISATION AND MANAGEMENT OF THE HEALTH DEPARTMENT OF IKEJA LOCAL GOVERNMENT.

The management of any organisation is aimed at achieving some set goals or objectives, and this will depend on how the resources are managed. The purpose of the Ikeja Health Department is to ensure the effective protection of environmental health and the promotion of good health for the people. Under the department, we have all categories of Health Staff

who are trained professionally as health personnel to enforce an maintain public Health Laws for the achievement of good health and to prevent diseases within the locality.

The health department also participate in the following activities:-

IKEJA LOCAL GOVERNMENT

PUBLIC HEALTH DEPARTMENT

Activities of Health Department

1. House to house inspection
2. Investigation of Sanitary complaints
3. Vaccination against communicable diseases - Tuberculosis, Tetanus, Measles, Cholera etc.
4. International Vaccination for Travellers and issue of Health Certificate.
5. Registration of Births.
6. Registration of Deaths.
7. Transportation of Corpses.
8. Inspection of animals slaughtered in private premises for social ceremonies.
9. Inspection and Registration of Food Premises
10. Control of Communicable diseases.
11. Disinfection and disinfestation of food premises, blocks of office and stores.
12. Deratisation and control of vectors, destruction of rats cockroaches, mosquitoes etc. in premises. (Pest Control)

13. Control of Street Trading.

14. Dislodging of Septic Tanks.

15. Maternity Service.

16. Child Welfare Service

17. School Health Service.

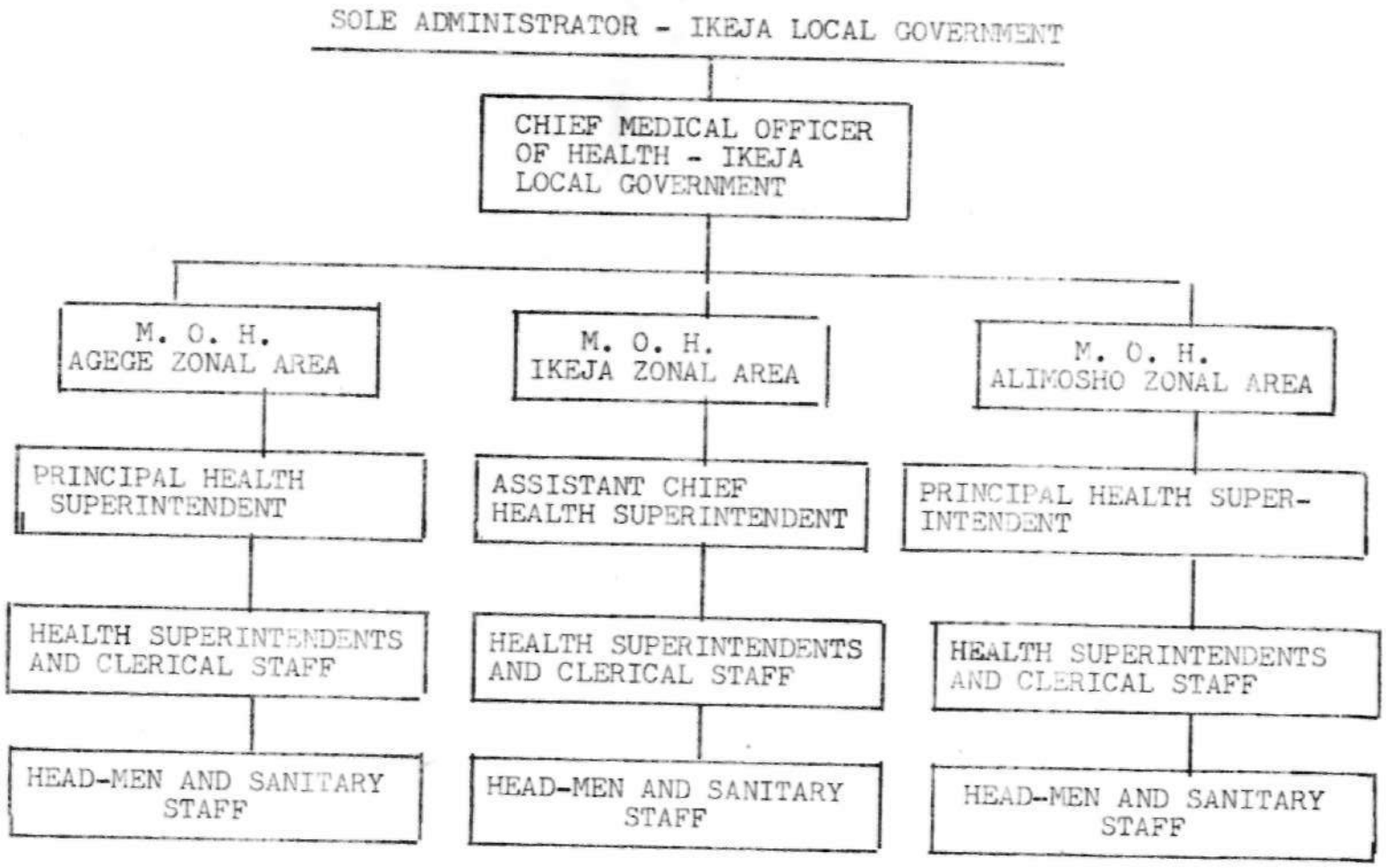
The above services are available for public use.

Enquiries can be made at:-

PUBLIC HEALTH DEPARTMENT,
Ikeja Local Government,
Obafemi Awolowo Way,
Ikeja.

DR. J. O. ADEBIYI
Medical Officer of Health.

ORGANIZATIONAL CHART OF IKEJA HEALTH DEPARTMENT - LAGOS STATE



STAFF STRENGTH OF THE IKEJA LOCAL GOVERNMENT

1.	Chief Medical Officer of Health	1
2.	Medical Officers of Health	3
3.	Assistant Chief Health Superintendent	1
4.	Principal Health Superintendent	3
5.	Senior Health Superintendent	4
6.	Higher Health Superintendent	6
7.	Health Superintendent	8
8.	Clerical Officers	4
9.	Messengers	3
10.	Sanitary Labourers	50

EQUIPMENTS

1.	Refuse vehicles	8
2.	Mechanical shovels	3
3.	Dislodging vans	3
4.	Plus other sanitary equipments like wheel barrows, shovels, rakes etc.	

This chapter is intended to clarify the importance of preventing diseases and the need to maintain good health, through the full participation of the people and the Government.

Sources - Ikeja Local Government Health Department.

CHAPTER TWO

LITERATURE REVIEW

The history of preventive medicine, which we are familiar with today can be traced back to epidemics and other diseases which are associated with poor environmental sanitation, and this and other related issues are of great concern to Governments of developing countries - including Nigeria. Therefore the science of preventive medicine must now be directed more and more for programmes towards eliminating sources of diseases. According to Davey and Wilson[1] - this will depend largely on an adjustment of man towards modifying his environment to suit his way of living by creating conditions of living in which diseases cannot survive - These conditions can be achieved by progress in economic, cultural and social interest leading to a better living, since physical environment and in particular "Poor environmental sanitation" has long been recognised as having influence on diseases to man.

The same philosophers, T.H. Davey and T. Wilson made their opinion known that the maintenance of good health of a community should be prominently a basic factor which must include having sufficient food of good quality as well as social security and domestic stability. These and other needs

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1. Davey & Wilson - Control of Diseases in the Tropic 3rd Edition 1965.

must be provided by means of social economic politics.

A programme for any community development designed for the people to help themselves is one of the most successful ways of raising the health standard of the people. Such schemes should involve the full participation of the community concern, because they have important cultural influence, co-operation and sense of responsibility in those who participated in them; specially programmes connected with Primary Health Care Delivery and sanitation.

The decline of communicable diseases in more advanced countries followed among other things, the advance in culture, as people demanding for sanitary amenities, such as pure water supply, safe disposal of animal and human waste, adequate housing, good nutritional food, and could afford to live in conditions which reduces the degree of contact between members of the public and diseases producing agents. Communicable diseases due to general poor environmental sanitation certainly contribute to the high rate of morbidity and mortality. In many developing countries including Nigeria, the infant mortality ranges from 100 or more per 1000 live births. Reference "World Health Organization Report on birth and deaths, 1976.[2]

Poor environmental sanitation habits are key factors that perpetuate the spread of diseases in a community.

2. W.H.O. - Report on Birth & Deaths, 1976 Publication.

A system of disposal of human excreta, no matter how well planned it is, will not succeed, so long as the community or individuals do not realise the dangers associated with indiscriminate defaecation and poor environmental sanitation around their dwellings. Therefore, it is important that all health schemes should go along with Health Education, to convince the people and make them co-operate actively in improving their environments. When this stage has been reached, it is assumed that an advancement has been made - T.H. Davey and T. Wilson concluded that this is extremely important for the control of diseases in the tropics.[3]

Some communities still hold the beliefs that communicable diseases are caused by bad spirits, magic and other agencies They have to be convinced that the real agents of diseases are physical things although invisible to the naked eyes, which spread from one man to another through specific routes. Therefore, health education particularly on proper environmental sanitation, qualitative food and water supplies, good housing and equal distribution of health institutions and facilities should be encouraged in order to achieve the objectives and goals of the Primary Health Care Delivery programme and health for all by the year 2,000.[4]

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3. Davey & Wilson - Control of Diseases in the Tropics, 1965

4. W.H.O. Programme on Health for all 1980

According to Davies, diseases associated with poor environmental sanitation could be classified as follows:-

GROUP A NAMES	EXCREMENTAL DISEASE INCUBATION PERIOD
Cholera	2 - 5 Days
Dysentry	2 - 7 Days
Entric Fever	7 - 21 Days
Diarrhoea	2 - 3 Days
Undulent Fever	14 days
Tape Worm	Indefinite
Hook Worm	"
Ascaris	"
Bilharzia	"

GROUP B NAMES:	INSECT OR ANIMAL BORNE DISEASES VECTOR	 INCUBATION PERIOD
Malaria	Anopheles Mosquitoes	12 - 14 Days
Yellow Fever	Aedes	6 Days
Dengue	Culex	3 - 6 Days
Filariasis	Culioine	Indefinite
Sand Fly Fever	Sand Fly	7 Days
Tyhus Fever	Lice	5 - 20 Days
Relapsing Fever	Lice & Ticks	7 - 9 Days
Rabies	Dogs	10 - 15 Days
Plaque	Rat Fleas	2 - 6 Days
Sleeping Sickness	Testse Fly	Indefinite

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5. Davies, Briam M.: Community Health Preventive Medicine and Social Services, London, Fourth Edition P. 171

Many governmental authorities tend to neglect the interactions among environmental forces and hence among programmes designed for their control, there are always some defficiences in planning and execution. According to Morris Schaefer[6], "Environmental health is outlined as separate topics as follows:-

Water sanitation

Food sanitation

Air sanitation

Shelter and domestic security.

Solid Waste Disposal.

Water Sanitation - This includes the sources of water supplies, quantity and quality, treatment, storage and distribution of qualitative safe water to the consumers for various uses.

Food Sanitation - Food sanitation involves the hygienic method of production and preparation of all kinds of food intended for human consumption - This includes its handling, storage and transportation to the consumers in accordance with the Public Health Ordinance 1946.

Air Pollution - Pollutants can exist in solid matter, liquid droplets or gas and even forest fires, agriculture burning and coal waste fires. Liquid particles and solid matter are

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6. Morris Schaefer: Administration of Environmental Health Programme, Geneva: W.H.O. Publication 1979, No. 59

called particulates and this affect the lungs.

Shelter and Domestic Security - This refers to good housing of good standard, also the personal security and protection from emotional harm.

Solid Waste Disposal - Waste increases in volume with modernization. Refuse disposal becomes a problem in urban areas, especially when garbage collection cannot cope with the bulk of wastes that accumulate. If not collected, transported and disposed of properly, they provide for the spread of many diseases by harbouring rodents, flies and other vermins breeding.

The Lagos State Government having realised this problem has now established a board knows as "Waste Disposal Board" to deal with refuse collection and disposal of refuse. The problems facing the board are personnel, tools and equipments to handle refuse collection more properly, a second and a major problem there is the co-operation between the board and the Local Government authorities. There is no co-ordination between the two bodies and this seems to have created a big problem on refuse collection in Lagos State. Lagos State Edict on Environmental Sanitation 1977.

ASPECTS OF PROBLEMS ON SANITATION

The Nigerian environmental sanitation problem can be looked from some general perspective. The first aspect of the problem is that there is no specific body concerned solely

with environmental protection, such as the Environmental Protection Agency (EPA) or Pollution Control Board of the United States. The Chief Health Officer who is also a Public Health Personnel is directly responsible for the policy interpretation and supervision of public Health and Sanitary workers in the State.[7] The laws of Lagos State on Public Health (revised in 1970) contain public education, ordinance and regulation, laboratory control and monitoring, inspection, licensure, enforcement and review of Plans. Environmental services under his jurisdiction include water supply and waste disposal, air pollution control, food sanitation, animal to plant hazards control sanitation of institutions, hygiene of housing, recreational sanitation. The Health Office works with the World Health Organization and other international organisations as regards setting standards to meet the environmental needs.

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7. John J. Hanlon & George E. Pickett) - Public Health Administration and Practice, Seventh Edition, U.S.A. 1979.

PERSONNEL MANAGEMENT

According to Ubeku, Personnel administration is a basic function of management. Unless it is effectively carried out by all concerned managers, technical efficiency to achieve organizational goals may never be materialised. Problems of personnel department of an organisation are not separate from those arising from technical departments, because all departments jointly formed the organisation under a Chief Executive.

Koontz in his contributions said that - manpower or human resources is one of the basic factors in an organisation, others being land and capital.[9] Personnel management functions include - recruitment of the right staff and their development in order to have good productivity. The prosperity of any organisation depends largely on the management of human resources. If there is a low production due to poor management in an organisation, the health of the staff is indirectly affected.

FUNDAMENTAL AIMS OF ENVIRONMENTAL HEALTH CARE:

1. to prevent diseases,
2. to promote health
3. to provide safety and comfort
4. to provide elements of survival and prolong life.

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8. A. K. Ubeku - Personnel Management in Nigeria, P. 11.
9. Koontz O'Donnell: Management, Seventh Edition

ROLES OF SANITARIAN IN PROMOTING ENVIRONMENTAL HEALTH:

1. The duty of the sanitarian in health promotion is the maintenance and improvement of sanitary conditions for the prevention of the chains and agents of diseases transmission to man.

2. He applies control measures to protect health against the ill- effect of various environmental factors. It is also his responsibility to eliminate physical nuisances from human environment to enhance physical, mental and social well-being of man.

3. His work is indispensable foundation upon which the success of all preventive health activities are based. The importance of the activities of the health personnels also lies in the fact that the transmission of the prevalent communicable diseases (e.g. typhoid, dysentry, guineanism, malaria and schistomiasis) are all related to the physical environment food, air, water, human and animal waste, heat radiation and animal vectors.

4. The Public Health Worker must employ Health Education in his approaches to the community he is working, so as to understand the society better.

5. He must try to understand the cultural heritage of the community.

OTHER FUNCTIONS OF THE HEALTH DEPARTMENT.

1. Housing - The health personnel sees that all provision on building bye laws or regulations related to housing are maintained.
2. Food - The examination of all food and other items intended for human consumption including meat, and food preparing premises are inspected and approved before operation is allowed.
3. Air Pollution - Smoke control for domestic premises and prevention of industrial pollution.
4. Vector and Pest Control - Destruction of vectors and pests and measures aim at controlling Public Health insects with insecticides.
5. Refuse Collection and Disposal - Arrangement for the safe collection of refuse and final disposal, either dry or wet refuse.
6. Working Conditions - Enforcement of standard health rules, for the welfare and safety of all persons in their places of work.
7. Water - Bacteriological examination of water before and after treatment, and inspection of all sources of water supplies.
8. Noise Control - The prevention and control of noise and vibration.

9. Public and Entertainment Places - Control of all Public places, entertainment and other related institutions.
10. Control of communicable diseases - Immunization, disinfection and disinfestation, notification, isolation and treatment of all communicable diseases as a first measure for the control of diseases.
11. Personal/Health Services - Maternal Health, School health and child health services.
12. Health Education - Giving Health education at market places, schools, at village level and through posters and visual aids.
13. Statistics and records - This helps in future planning for personal and social establishment of Health Services in a community.
14. Births and Deaths - This is in order to know the population and the mortality rate of a community in relation to health promotion.
15. To advise Local Government on matters related to Health Care Delivery.
16. Training of Health Personnel and other Health subordinates.
17. Maintenance and supervision of cemetries, burials especially during epidemics of diseases.
18. Enforcement of all international health regulations.

CONCEPT OF HEALTH/ILLNESS AND THE ENVIRONMENT CULTURAL CONSIDERATIONS.

The intergration of preventive and curative service calls for re-organization of the process of providing health services for which there already exist some prototypes. The National Council of Health has set up a number of task force on e.g., environmental health, mental health, maternal and child health. Using a multi disciplinary approach, their fucntion is to propose recommendations for policies to be adapted in special areas of health care. Apart from the inadequate infrastructure and paucity of man-power as well as the rapidly growing population which consumes the slender (limited) financial resources, there are socio-cultural practices within the traditional setting which impede progress in any undertaking to improve health mortality and morbidity in developing countries are still un-acceptably high, with the life expectancy of many barely 40 years of age. Perinatal mortality in developing countries range from 60 - 80 per 1,000 live births as compared with 14.1 in Japan, 19.9 in Sweden, and 18.3 in Bulgaria. Contributing to perinatal mortality are such factors as poor antenatal and post partum care, birth injuries and aspiration pneumonia.[10]

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10. John J. Hanlon & George R. Pickett) Public Health Administration and Practice. The C.V. Mosby Co., St. Louis, 1979.

ENVIRONMENTAL FACTORS

Great emphasis has been placed on poor environmental quality as a cause of mortality and morbidity in many communities. The situation is worsened by poor personal and domestic hygiene. Contributing to mortality and morbidity in a population are environmental factors, such as poor disposal of solid waste and faeces, the unavailability and/or contamination of water and the unhygienic handling and preparation of food.

In getting the people to understand how some environmental factors contribute to disease, there is a need to understand common hygiene practices and an interest in taking corrective measures. Community interest in part depends on whether the people

- Belief that disease can in fact be prevented;
- View the adverse environmental factors as real problems;
- Think that the improvement of the environment can be effective in preventing disease.

Strategies for improving environmental factors can be determined only after a detailed study of the health and hygiene practices of members of the community; their method of generating and disposing of solid waste; collection and use of water and their perception on the relationship of poor environmental factors to disease.

According to Ransome-Kuti (1981)[11], a large sector of the African population both in urban and ru al areas does not have access to a safe water supply. Of the total 40 million urban dwellers in 1975, 13% lived in dwellings connected to public sewers and 67% were served by household systems. However, only 21% of the rural dwellers had adequate disposal facilities in 1975. At present, the majority of the population in developing countries relies on untreated ground and surface water for drinking and other purposes. This situation is exacerbated by high population growth rates, which result in rapidly increasing demands for water supplies and accelerated generation of waste and waste waters.

The contamination of water by viruses, pathogenic bacteria and parasites can occur either at the water source itself or during conveyance of the water from source to consumer. In many cases, contamination occurs during storage. This contamination occurs during storage. This contamination is the main source of disease.

Traditional practices and belief systems exert an important influence on the African concept of health and illness. Ademuwagun[12] (1978) in his study of health education components in the city of Ibadan, Nigeria found that the mass of Yoruba illiterates and semi-illiterates (c.90%) do not recognize or

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11. Ransome Kuti: Impact of Health services on medical Education: A Global view Josiah Macy, Jr. Foundation. New York 11050, 1978 P. 187.

12. Ademuwagun Z.A. Health Education with special reference Primary Health Care Approach. International Journal of Health Edu., Vol. XXI. 1978/2

believe that certain diseases are associated with poor environmental sanitation. Until very recently, and this was achieved through health education, they did not believe that dirty water can kill; this claim is supported by an adage which says that "Dirty water does not kill. Simultaneously, they neither associated malaria and yellow fever with mosquitoes nor mosquitoes with poor environmental sanitation such as stagnant waters and bushy surroundings.

However, they believe largely for aesthetic reasons and for safety from snakes and poisonous insects, that the surroundings of human habitates should be "clean". To this end, the homes and surroundings are usually swept first thing in the morning and bushy surroundings regularly cleared. The often poor environmental situation such as heaps of refuse and poor toilets habits, found in the major towns and cities in Nigeria, is more an outgrowth of the urban phenomenon than a characteristic of the Nigerian society's attitudes towards environmental sanitation. Even in the cities and towns, the dwellings are kept in sanitary conditions inside and the immediate surroundings even though the government or community maintained streets or roads in front of the houses may be a heap of garbage.

The concept on health in the Nigerian context (traditional concept) must be explored if meaningful and acceptable health services has to be rendered to the members of the various

communities in Nigeria. The theory of germs is not meaningful to the Nigerian villager, and therefore cannot relate the existence of germs as a resultant in ill-health. They relate the causes of diseases to their beliefs as been caused by witches and wizards, evil spirits, causes and breaking of traditional taboos, sin committed by parents or even members of the family and other customary obligations.

They should be made to understand the real factors and agents of diseases which are man and animal made.

OBJECTIVES OF THE PUBLIC HEALTH LAWS

The objectives as it effects environmental health are mainly promotional. They include:

(a) To change the behaviour of the people

(b) To maintain and protect the standard of Public Health regulations.

(c) To define the status and duties of the health personnels, which involve the promotion of environmental health.

The Public Health Personnel are charged with the responsibilities of enforcing the public health laws for the promotion of health care and the prevention of diseases. These laws have not been reviewed, for the past 50 years and this has brought a lot of problems in view of new developments, both in social economic and technology of the country.

The technological developments of the country seems to have rendered some of these laws invalid, as such there is

urgent need to review the Public Health Laws to meet the present challenge. Man made environment in urban and industrialised nations, including Nigeria, producing new technological interventions in country and town planning, housing and health developments calls for social change in this direction.

Presently, only Lagos and Bendel States have attempted to review the Public Health Laws, and even where such reviews have been made, the realities of the present environmental health problems are not taken into consideration. Credit must be given to Lagos State, because it is the only State that has created a unit under the Health Department known as (prosecuting unit)" This unit deals with all aspects of sanitary offenders which includes: food, residential and industrial premises, light and ventilation, howkers, refuse and all other sanitary nuisances. The unit is charged with the presecution of all sanitary offenders as provided in an Edict promulgated by Lagos State 1983[13]. This edict has helped in maintaining general awareness and sanitation in Lagos State. For example, the Nigerian Guinness Limited at Ikeja Local Government area, was charged to court for discharging sewage from their premises into a public gutter, and were find about ₦2,000,00, for that offence and similar measures are being taken on individual offenders and this depend on the gravity of the offence.

13. Lagos State Edict on Sanitation: Revised 1983.

In Public Health Laws, the use of private property is not restricted, provided that it does not injure or likely to injure another person or property. When it injures a person or property, a nuisance is said to have occurred and the person so affected can seek remedy in a Court of Law. Legal procedures help the public health personnel in performing and enforcement of public health laws, but this should apply only as a last resort with limitations.

There are many things or uses that do not intrinically constitute a nuisance, but may be wrongly placed or located. An example could be cited in the case of Mr. Benton et al V. Pittard, Vs Health Commissioner et al[14], in which the plaintiff, protested over the establishment and operation by a health department, a veneral diseases clinic in a residential area.

Another factor tending to limit the value of the Law of nuisances is that a great section of the Legal doctrines dealing with nuisances and their abatement were provided in the Penal Code before the theories on germs and diseases became established scientifically. During most of its provision, no obvious factual or scientific data existed on which to base conclusions, therefore those appearing in courts in such cases, go to such proceedings putting merely their opinions against others.

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14. U.S.A. Public Health Service: Environmental Health Planning Guide, PHS Publication No. 823, Washington D.C., 1967.

A Another difficulty is the fact that recourse to the law of nuisances does not change the rules of law. Decisions by a court, that a nuisance exists may be as a result of damages paid to the plaintiff, but that does not necessarilly affect the abatement of such a nuisance. Here one can clearly see that the orders of the court does not physically change the situation.

The position of the Public Health Personnel, as related to nuisances and abatements, will continue to suffer, unless the public health laws are reviewed, and the health officers conferred with more positive powers to deal with environmental sanitation offenders appropriately.

Another area of control method of public places like Beer parlours and clubs, was the practice, whereby licences are not issued to such public places, unless a report is received from the Health Department. Today, the position has changed in some states of the federation including Lagos State. The administrative organs of the administration has taken over this function from the Health Department. Licences are issued out without consideration to the laid down requirements of sanitary facilities for hotels and clubs. This has left the health authorities in a state of confusion and the whole exercise in a mess. As a measure of control, all public places like hotels, restaurants, bakeries and all other food prepara-

tion centres, should be inspected before such licences are issued by the administration.

The whole idea of the health services is to promote and bring health services nearer to the people and the public health personnels cannot effectively carry this out without the knowledge of management. It is therefore important that health administrators should have some form of training process. This will help the health officer in planning, communication, development and general awareness of what to do in his organisation.

AREAS OF NECESSITY WHICH MAY REQUIRE FUNDAMENTAL LEGISLATION IN PUBLIC HEALTH ACTIVITY

Areas that may be considered as necessary in public health activities are:-

1. Concern the registration of birth and deaths.
2. Notification and the control of communicable diseases.
3. The control of food and food handlers including premises where these are produced.
4. Sanitation of housing and industries.
5. Disposal of both wet and dry refuse.
6. Perhaps the most fundamental of all such legislation should be the establishment and development of local public health programmes by means of edicts.

However, most achievements in the public health programmes have had the support of the laws and ordinances. Without this support, the extension and executive of Public Health institution would have evolve more slowly.

The integration of Edicts and laws must therefore, be considered as a powerful factor in the development and effective maintenance of public health work and management.

CHAPTER THREE

METHODOLOGY

The methods adopted in carrying out the research were as follows:-

1. Face to Face Interview

The researcher interviewed different categories of people on the roles bsic and qualitative environmental sanitation can play for the prevention and control of communicable dieases in a community. Those interviewed include:-

1. Land-lords
2. Market Communities
3. Community leaders
4. Health Staff of Ikeja Local Government.

COMMUNICATION

I had no problem with communication, since all the people I interviewed have basic knowledge of Fnglish language, and responded to my questions without any difficulties.

PARTICIPANT OBSERVATION

The researcher participated fully in the daily routine activities of the health services which included

1. Refuse collection
2. House to house inspection
3. Market supervision
4. Food and restaurant inspection

5. Ispection and supervision of refuse depots, all within Ikeja Local Government area of Lagos State. Oral and verbal warnings were given and abatement notices served on major sanitary offences.

RECORDS This include materials and information data of weekly monthly and yearly routine records of the Health Services of the Local Government.

NUMBER OF PEOPLE INTERVIEWED

60 people were interviewed, and 80% of this number showed their concern and willingness to co-operate with Government Agencies tc ensure good environmental sanitation. 15% of the persons interviewed want the Government to do everything for them including free dust-bins to individual residential houses, if the Government really wanted proper sanitation to prevail in the area, while 5% do not seem to understand the importance of good sanitation.

HOUSE TO HOUSE INSPECTION. A total number of 70 houses were inspected, 25 houses situated at Ikeja, 30 houses at Agege and 15 houses at Alimosho areas. The houses in Ikeja area, are made up of concrete buildings with few mud buildings at Agege and Alimosho areas respectively. Most houses inspected have water closet system with a few having Pit latrines especially in Agege and Alimosho areas. A major problem that faced many residential areas, is the question of pipe borne

water, it is a big problem that has resulted in people having bore holes for their water supplies. In short, they all agree that prevention is not only better than cure, but is much cheaper.

HYPOTHESIS

1. That proper environmental sanitation is a basic factor towards the prevention of diseases.
2. That proper planning and management of Health services by the Government can lead to effective promotion of good health.

PROBLEM STATEMENT

Common types of environmental sanitation problems are associated with cultural behaviours, inadequate health education programmes, population growth, poor management and technological developments, and since the relationship between sanitation and health has been established, the government should now direct its programmes towards eliminating all possible sources that can endanger health. If strict measures are taken with full participation of the community the most prevalent communicable diseases in Nigeria will gradually be eradicated, as most of these diseases are directly or indirectly related to our environment. Question required:- since the relationship between sanitation and health has been established, what type of programme can individual, community or government initiate to eliminate all possible sources that are hazardous to life?

ASSUMPTIONS

That lack of trained manpower is responsible for the poor development of health services in Nigeria.

2. That financial constraint is a basic factor in the control of communicable diseases in the society.
3. That proper sanitation attitudes can promote good standard of living and good health.

LIMITATIONS

The two weeks allocated for the project after our orientation exercise, was rather too small to accomplished a research in places like Lagos with heave traffic all over the place.

DEFINITION OF TERMS - For the purpose of this study the following words were being defined.

1. Communicable diseases - Are those diseases that can be transferred or transmitted from one person to another either directly or indirectly.
2. Environmental sanitation - The art of keeping our surrounding clean and control of all sources and factors that can aid the spread of diseases.
3. Health - Is a state of complete physical mental and social well being, not merely the absence of disease or infirmity.
4. Management - May be defined as the creation and maintenance of an environment in which individuals working together as a group can accomplished the pre-set goals within the limited resources available.

5. Pollution - Means to destroy the purity, sanity or the quality of water.
6. Participant - Involvement or taking part in a decision making.
7. Prevention - Precautionary act of preventing diseases from spreading.
8. Public Health Law - These are laid down rules and regulations relating to the protection and promotion of good health standard.
9. Nuisance - Anything that is likely to injure health either directly or indirectly is a nuisance.
10. Science - Knowledge obtained by observation and testing of facts.
11. Technology - Systematic application of knowledge and skill to practical performance or tasks in production.
12. Hygiene - Is the scientific knowledge and application of healthy living.

PURPOSE OF STUDY

1. To assess and evaluate environmental sanitation practices.
2. To examine the dangers associated with poor envieonmental sanitation.
3. To highlight the constraints and problems of health authorities over environmental sanitation.
4. To make recommendations for improvement and promotion of environmental sanitation.

CHAPTER FOUR

REPORT AND DISCUSSION OF FINDINGS

The health department, Ikeja Local Government has a total number of 523 staff strength including those stationed at Agege and Alimosho Branch Zonal Health Office areas. This number also included the medical officers of Health incharge of the area offices. And out of this staff strength, only about 83 staff are for preventive services including general labour; the remaining balance of staff are for curative services.

The Chief Medical Officer of Health is the Chief Executive of the health department and his functions among others include the following:-

- Policy and decision making;
- Recruitment and Training of Staff;
- Remuneration and discipline of staff;
- General welfare and promotion of staff.

1. Policy and decision making:- The Chief Medical Officer implements policies and decisions reached at the state level and relay the same to his area of jurisdiction for implementation, and is a member of the State Health Management Board representing his area on health matters.

2. Recruitment and training of Health Staff

The Chief Medical Officer is responsible for recruitment and training of staff under his department, in accordance with the government policy governing recruitment of Local Government

Staff in collaboration with the state Ministry of Health. The recruitment is done by a standing committee of the Local Government on recruitment and training and final selection is done on the advice of the Chief Medical Officer.

(a) Staff training - This covers the training and development of all categories of Health Personnel to ensure qualititative staff leading to improvement in its field of specialization and productivity. Selection is done by a committee on the recommendation of the Chief Medical Officer of Health concerned.

(b) Postings - This is done by the Chief Medical Officer of Health of the Local Government to areas of priority, since the number of qualified health personnel is quite inadequate to the need of the Local Government. The researcher was informed that efforts are been intensified towards recruitment and training of health personnels to meet the need of the Local Government.

3. Remuneration and Promotions - The public health personnel is required to have G.C.E. in four papers with credit in English Language including one Science Subject, subject to a three years training to become Public Health Superintendents. After training they are placed on salary Grade Level 07 for a period of six months after which they should move to 08 as higher Health Superintendents. Their promotions should be every

three years, depending on their output and the recommendation of the Chief Medical Officer of Health of the Local Government, purely on merit and hard work.

4. General Welfare and Disciplinary Action

(a) They have free medical treatment, since Health services in Lagos State is free to all persons.

(b) The working conditions are similar to those obtainable in the government service except in some cases where by staff are stagnated for a long period without promotion and this id due to the nature and set up of Local Governments all over the country. And on discipline of staff, this is done through a committee on the recommendation of the head of department concerned

(c) Ikeja Local Government has the best canteen services for its staff, although these are managed by private owners, but the standard is properly maintained.

(d) Fringe benefits - Leave grants and housing allowances are paid to employees who are eligible like other civil servants.

Scale of Punishment - Disciplinary measures are aimed at effective management of every organisation, and are spelt out in the following manners:-

(a) Verbal warning;

(b) Written warnings - (may be 3 times)

(c) Suspension;

(d) Deferment of incremental credits;

(e) Surcharge;

(f) Loss of Seniority;

(g) Termination or dismissal of appointment.

HUMAN ENVIRONMENT AND DISEASES

The relationship between inadequate environmental sanitation and the health status of individuals and the community has been shown in some instances to be direct, but in other cases to be indirect association with diseases. The basic environmental health problems that developing countries face include:

Water Supplies - Still inadequate both in quantity and in quality, especially in rural areas. The sources of water are usually surface water, shallow ground water, roof water (rains) and wells. In urban settings including Lagos the National Headquarters, only a small percentage of the population are supplied with pipe borne water in their homes, the rest either have no access to pipe water or obtain their drinking water from public pipes or from polluted sources.

Housing Environment - Housing includes the living unit for man and his family, the immediate surroundings, and the related community services and facilities. These are referred to as residential environment and includes facilities for sanitary disposal of waste food, storage of refuse and sanitary maintenance of premises to reduce the hazard of vermin and nuisances.

Sanitary waste disposal - The people in many rural areas and smaller villages have inadequate and contaminated water supplies and practice indiscriminate fouling of their surroundings with human excrement. The relationship between the provision of adequately acquired or transmitted excreta, are conveyed to man by contaminated water supplies, or transmitted by living vectors of diseases. The low standard of sanitation exists in many developing cities and towns because apart from other problems, they have little appreciation of the association between indiscriminate disposal of human excreta and disease. Rural people coming to the urban areas continue their unhealthy habits adding to the already unhygienic condition in the crowded towns. As a result, children and youth suffer from a high incidence of enteric diseases, including typhoid, cholera, dysentery, diarrhoea disease, intestinal parasitism, and other diseases transmitted through excreta and contaminated water supply.

Food Sanitation - In Nigeria and other developing countries, food preparation and handling, food storage, food marketing and food delivery are such that foods are frequently exposed to contamination thereby causing adverse effects on health. The victims are usually children, school-age children and youth.

Water Pollution - This is usually as a result of indiscriminate disposal of human waste. Apart from biological and physical pollutants however, which are controlled by available

technologies, the problem has become more common in urban and industrialised areas like Ikeja in Lagos State, through chemical contamination from industrial waste.

Solid Waste and Soil Pollution

Solid waste increases in volume with modernization. Garbage collection and disposal become a problem in urban areas, especially when garbage collection cannot cope with the bulk of solid wastes that accumulate. And if not collected, transported and disposed of properly, they provide for the spread of many diseases.

The "Waste Disposal Board" established in 1977, by the Lagos State Government is responsible for the collection and disposal of waste in the State, while the Local government authorities are responsible for clearing feeder roads, gutters, market places and streets to refuse depots, from where the "Waste Disposal Board" will remove to final place of disposal. The problem here has been the excuse of lack of adequate staff or the vehicles are broken down.

In the rural areas, through health education, people have been taught by health personnels, how to dispose of their solid waste by digging trenches far away from residential areas and once it is full, should be covered firmly with soil to avoid nuisance.

Soil Pollution - This may occur as a result of the indiscriminate use of insecticides or theough see-page of chemicals including oil. A good example of this is the massive

crude oil see-page in drilling rigs Southeast to Southwestern Nigeria in 1980, when thousands of people were rendered homeless with no source of food or water. It was a national disaster.

Food Pollution - Another concern is food pollution resulting from physical, chemical and biological contamination of food. This may be brought about by new food processing methods or by chemicals to preserve foodstuffs and to control diseases. In Nigeria, a system of displaying food items for sale in a wide open market has been a source of great concern as regards the spread of disease. More efforts should be encouraged in building modern enclosed markets, which will conform to the art of displaying food and other goods but in an enclosed and well-kept environment.

Air Pollution - The atmosphere is polluted through many ways and sources. Smoke as a result of fuel and other industrial materials that are burnt. Sources are commercial, domestic heating, incinerators, bush burning and automobile motors. Others are agricultural sprays toxic and dust, and the complexity of technological industrial development are all sources of air pollution which is harmful to health.

The processes of air pollution fall into three categories:

(i) Attrition - wearing of grinding down by friction. Soles of your shoes or tyres of your cars, brake bands - asbestos, particulate release into environment, and things like rubber.

(ii) Vaporization - change of substance from liquid to gas. Forced vaporization under heat or pressure or natural evaporation of volatile materials, gasoline is volatile.

(iii) Combustion - Process of burning, furnace, internal combustion engine incinerator.

Air pollution effect on health appears to be thr result of irritant materials acting on the respiratory tract. The dusty atmosphere in Ikeja area of Lagos State, which is the centre of industries, is in itself a big nuisance as it could contribute to air-borne infections detrimental to health. Pollution of atmosphere may indirectly result in economic losses to individuals and the society in general.

METHODS OF REFUSE DISPOSAL:

The final method of refuse disposal in Lagos State in general is by landfilling. There is no scientific method yet, but plans are under way to establish new modern methods. Disposal sites are located along the highways, these are mainly natural galley found around the various Local Government areas. These sites however are not properly maintained as you can notice refuse littered all over the place, because they do not employ control method system which, if properly adopted could reduce offensive odour and flies breeding.

WORK ENVIRONMENT: There are many deaths in Nigeria today, due to industrial accidents annually and occupational diseases. These occupational hazards are encountered in industries, agriculture and other work environments. Major categories of environmental stress for the worker are: chemical agents, physical agents and conditions and psycho-socio factors. Occupational accidents occur from the joint action of both environmental and human factors. The interaction between man and his environment may lead to betterment of health, when work is fully adapted to human needs and factors, or to ill-health, if work stresses are beyond human tolerance. Occupational diseases result from specific exposures at work. In addition, work exposures may aggregate certain ill-nesses or be a factor of varying importance in causing diseases of multiple etiology. The degree of exposure and inhalation of toxic gases and chemicals gives rise to a number of complications

INSTITUTIONAL ENVIRONMENT

Certain industrial products have far-reaching potential consequences for the buying public. The production, handling, processing and circumstances of sale of large number of food products are well established as big businesses. The paths of public health workers have long since crossed in relation to the supervision of sanitary aspects of these products. Workers are exposed to serious physical, chemical, biological and emotional risks.

CHAPTER FIVE

GENERAL PROBLEMS

The common types of environmental sanitation problems, are associated with population growth, rapid urbabisation, migration and technological developments. The problem of basic sanitation still persists in developing countries; the relationship between sanitation and health has long been established.

SANITATION AND PORTABLE WATER SUPPLIES DEVELOPMENT

Improvement in community water supply have to be closely co-ordinated with sanitation, sanitary disposal of wastes (including excreta) and health education if they are to have a significant impact on health conditions. And if hygiene and sanitation are below a certain level, improvements in the quality and possibly even the quantity of drinking water are unlikely to improve health status, but combined water supply and sanitation, together with health education are commendable weapons in the fight to achieve good health in a community.

The problem of primary health care in Nigeria is how to cater for the disadvantaged groups throughout the country, which have no access to any permanent form of health care and are living mainly in the rural and semi-urban areas. Each country has its own characteristics, but the underserved populations are mainly found in the rural areas, and in poor sanitary environments, without any good source of water supply.

In the urban centres only a small percentage of the population are supplied with pipe borne water in their residential homes, the rest either have no access to tap water or have to obtain or buy locally for their domestic use.

Apart from inadequate infranstructure and manpower as well as the rapidly growing population which consumes the lion share of our resources, there are other factors and socio-cultural practices within our traditional set up which has stagnated our progress towards achieving government objectives in providing health services. Traditional concepts and practices and also beliefs systems have important influence on diseases and ill-health in our society. They neither associated malaria and yellow-fever with mosquitoes nor poor environmental sanitation with the breeding of mosquitoes.

Great emphasis has been placed on poor environmental quality as a cause of mortality and morbidity in many communities. The situation is worsened by poor personal and domestic hygiene. Contributing to mortality and morbidity in a population are environmental factors such as poor disposal of solid waste and faeces, the unavailability and/or contamination of water and the unhygienic handling and preparation of food.

STRUCTURE AND PROBLEMS OF HEALTH SERVICES

In Nigeria and other developing countries, many health Institutions are without competent planners. The plans formulated are usually unrealistic and are frequently directed

towards intermediate objectives, some of which - prestige hospitals, training centers are substantial and tangible but fail to achieve a change in the community's health status.

2. No clear policy on health services in Nigeria and poor linkage of health practices systems with other components of national development. In many developing countries, the approach of getting the co-ordinated effort of other health sectors in defining goals, policies and plans for health development are not followed.

3. In Nigeria, scant attention is given to the balance between curative, preventive and promotional activities, curative services are usually given more attention, and this absorb a disproportionate share of the yearly budget on health services to the detriment of preventive health services.

4. Inadequate community involvement in planning and implementation of health care could lead to a total failure of any health programme meant for the people. Therefore community participation in all health programmes and evaluation is essential.

5. Concentration of health institutions in the urban areas to the detriment of rural areas.

6. Lack of communication and co-ordination of health services.

7. Inadequate health statistics to have relevant data for proper planning of health services.

8. The curriculum for the training of health personnels has no relevance to the health need of the nation.

9. Improper utilization of health personnel e.g. the training of the Chief Health Officer could not be fitted into any of the health cadres.

10. The developing world lacks human, materials and financial resources to meet its health needs. The shortage of financial resources affects the implementation of health programmes especially those situated in the rural areas.

NEED TO REVIEW PUBLIC HEALTH LAW

Most of the public health laws are outdated and need urgent review to ensure effectiveness and enforcement of sanitary regulations. This is necessary particularly nowadays that the advancement in technology has brought about social problems to human health. The effectiveness of these laws, if reviewed will require the co-operation of the judiciary to ensure quick dispensation of sanitary cases before their courts.

The first problem here is that apart from Lagos and Bendel States that have established environmental task force in 1970 and 1976 respectively, (seperate body dealing with "environmental sanitation"), all other states are yet to establish such bodies and are completely in confusion with regards to refuse collection in their various states. A uniform system and method of approach to environmental

sanitation is necessary all over the country in order to eliminate factors that influence the spread of diseases in our environment.

In setting up Boards on Sanitation, the government should specify the roles of the local government authorities and the boards, because it seems in my observation that there is no defined role of the Waste Disposal Board and that of the Local Government Authorities, who are closer to the people. (Lagos State).

Inadequate community participation is another area that should be looked into with a view to mobilizing all able persons to participate in environmental sanitation programmes, and this could be achieved through community leaders, market leaders, elders and other religious bodies through Edicts and Policy of Government Agencies.

Provision of Environmental Health Facilities

The government should provide basic sanitary facilities in all public places and to ensure proper maintenance. As mentioned and discussed in my statement of problem "Titled (Market Sanitation in Ikeja Local Government Area of Lagos State). The researcher mentioned how there are no toilets facilities in most of the markets visited in Ikeja Local Government area, and the market communities are responsible for maintaining sanitation in these markets. There is a big

danger in the whole exercise, since this people have no knowledge on the dangers associated with poor sanitation. It is a serious situation that needs urgent rectification.

There are no sanitary streets dust-bins all over Ikeja Local Government - these if provided will certainly help to maintain and control indiscriminate littering of refuse any how along the streets. These are in form of small bins posted to trees or even pole wires, public buildings and other strategies areas along streets to facilitate dropping of litters

The problems of environmental sanitation are further compounded and coupled with community poor attitudes towards sanitation and culture including traditional beliefs, inadequate health education with complex ideas and aspirations must be approached with care and sincereity, threough health education and persuasion.

RECOMMENDATION ON GENERAL ENVIRONMENTAL SANITATION - IKEJA LOCAL GOVERNMENT AREA.

In view of the population of Ikeja Local Government area and being the centre sit of most of industries, it is important that more attention is given to the area by the State Government in collaboration with the Local Government to provide more highly technological approach to environmental sanitation, considering the technological development level of the area.

The environmental sanitation unit of the Ikeja Local Government and the "Waste Disposal Board" should have some

mutual co-operation at the local government level to ensure more efficiency, and to avoid duplication of work. The Chief Medical Officer of Health of each Local Government should have the final saying on refuse collection within his area of jurisdiction. Here the researcher is not saying that the board should be marched with the Local Governments but rather, the board should operate under the supervision of the medical officer of health of each local government.

There is urgent need to recruit more trained health staff to monitor Environmental Sanitation more positively. One can see clearly that the number of trained health staff in view of the population of Ikeja Local Government and the need to extend health services to the people is quite inadequate.

The Local Government should as a matter of urgency, provide sanitation services to all public places like the markets, where the community have to arrange for refuse collection on their own, and the non provision of toilet facilities in these markets is another area of health concern.

The number of refuse vehicles should be doubled from eight to sixteen or even twenty to facilitate proper sanitation of the area.

No further approval of Liquor Licences should be entertained without the approval of the health authorities. This approach will ensure the provision of sanitary facilities to all hotels and other liquor premises, for the welfare of the people.

Some of the liquor houses visited during this research, showed that communication between the health department and the administration, who are responsible for the issuing of liquor licences has completely broken down, and such premises are issued with rights to operate without the normal procedure of inspection.

The health department should be actively involved in all inspection and supervision of building plans to make sure that sanitary amenities are included in all building plans and to avoid over building of plots as provided in the Public Health Laws.

Hardly, can any authority achieve its set goals on health without health education of the community. Health education should be intensified to the disadvantaged areas of the Local Government, to make people realise the importance of good health and their full participation in such activities. The methods should be in simple way that will be acceptable to the people of the locality.

The State Government should provide enough fund to assist the Local Governments in its efforts to provide health services to its people, so as to achieve the objectives and aims of the primary health programme health for all by the year 2,000, as estimated by the World Health Organisation.

Routine House to house inspection is another weapon of enforcing land-lords and tenants to provide basic sanitary

conveniences to their houses, this should be made compulsory that health personnel carry out house to house inspection and this can only be achieved with adequate number of trained staff to handle the situation. Land-lords who fail to comply with sanitary requirement should be presecuted in accordance with the provisions and laid down rules of the Public Health Laws.

GENERAL RECOMMENDATIONS

Remedies for many shortcomings of health services are known and available but some cannot be usefully applied unless the overall concept of health care is appropriately modified to meet the country's needs. For a number of problems, a new approach cannot in itself be considered a remedy, but rather as a pre-requisite to the successful application of largely known remedial action. The main need today is to develop systems through which effective health care can be made both accessible and acceptable to the people.

In Nigeria the main problems affecting health programmes may include the following:-

1. The nation is yet to have a clear and defined health policy for the country. This is necessary in order to ensure a unitary policy on health services all over the country.
2. Health has been placed very low on the priority list of the nation. The Federal Government should now place health services on the priority list in order to achieve the objectives of the Primary Health Care delivery programme.
3. In Nigeria, the approach of getting the co-ordinated effort of other health sectors in defining goals, policies and plans for health development is not followed. This is another area of deficiency that need to be corrected.

immediately for the betterment of the nation.

4. There should be a specific body, right from the National Headquarters, the State Government and local authorities, that will be solely responsible with problems of environmental sanitation all over the country.

5. Basic sanitation should aim at safe water, safe environment, uncontaminated food and a decent environment to live. This demands good and sufficient water supply, the sanitary collection and disposal of human and animal wastes, the planning and control of urbanization hazards, attention to proper housing, the control of all types of pollution food hygiene, vector control and health education.

   The Ministries of Health have limited scope for action in the field of sanitation alone, it should include other government agencies. In order to achieve good health for all, the participation of other Ministries like Agriculture, Works, Water Resources, Town Planning, Housing and Education should never be ignored. These government agencies should be integrated into all health planning and project programming of health services. No amount of medicine consumed without proper food can cure a patient, agriculture here comes in as a potential contributor to the health of man.

6. Attention should now be directed more on preventive medicine, as against the practices where by huge sum of

money have been spent on curative without any remedy to the wide spread of communicable diseases all over the country.

7. The provision of sanitary equipments is a necessity to all health establishments. The various governments should make sure that sanitary equipments for the execution of health services should be given top priority as it is a well known fact that prevention is better and cheaper than cure. At Ikeja Local Government, one can clearly see the poor situation of sanitary equipments available compared with the population of that Local Government. Sanitary equipments necessary for health services should be provided and maintained in adequate number.

8. Health education should never be ignored in the promotion of health services. The method and approach must be relevant to the socio-cultural beliefs of the learner and be meaningful that can be acceptable to the community. This could be achieved easily through community leaders, religious leaders, films, various mass media houses, markets and other public places can be of help in this direction. It is encouraging to note that some media houses have started doing something in this regard, but the question is how many people can afford to buy radio or television sets. The government should make proper planning to extend health education to school children, villages and other disadvantage areas.

9. It has become necessary than ever before that the Public Health Laws be reviewed to conform with the challenges brought about by industries and other technological developments. These laws were provided over 50 years and with the advancement in technology, it has become very necessary to review these laws to be up-to-date in line with the development of the nation.

10. Inadequate resources and distribution of both human and financial resources is another factor that effects the administration of health services. No project can be viable without resources to execute it. The developing countries including Nigeria lacks human, material and financial resources to meet its health requirements. This can be illustrated by the Federal Government Estimated Population per hospital bed by 1981. The idea was that by 1981, there should have been provision for less than 1,000 population per hospital bed all over the country, but this target has never been reached as the population stood at over 1,800 persons per hospital bed in 1981. The shortage of financial resources affects the larger, needier rural population more than the urban dwellers, while the shortage and mal-distribution of human resources are just as striking.

SUMMARY AND CONCLUSION - The Federal government of Nigeria like other developing nations of the world, suffer from a number of "primary, secondary and even tertiary" stages of

environmental sanitation and other health services. These problems are been generated in the process of accelerated industrialization and other technological areas of developments. Consequently, national co-ordinating committees on human environment were set up by the Federal and State government to advice the government on measures of prevention and protection of health. These committees like other previous ones only exists in name, for they are yet to come up with anything new that are equal to the task of the already poor state of our environmental sanitation. One other problem is how these committees are constituted, many committees in Nigeria are always formed on political basis and bias motivation. This should not be so on health issues becuase health is wealth.

Our town planning should involve professionals on that field with specialist public health engineers and environmental health experts in planning and designing of our towns and cities. This will ensure proper planning of our towns and cities with adequate provision of health amenities and facilities consideration.

The state governments should be involved directly on environmental sanitation or provide adequate fund to that effect, since many local governments cannot cope with the collection and disposal of its waste properly dueto manpower and financial constraints. This of course should be followed with a well planned environmental health education for all

the communities with emphasis on environmental sanitation. Comprehensive edicts by individual state and local governments may help to enforce sanitation bye-laws. The Lagos State government in 1983, established some Edicts knows as "ENVIRONMENTAL SANITATION EDICTS 1983 of Lagos State of Nigeria. These edicts are enforced all over the eight local government areas of the State. These Edicts have made or forced people to keep their surroundings tidy, as failure to comply with these provisions will lead the offenders to court action, and it appears there is full co-operation from the public. These and other measures adopted by the State government has placed Lagos State on top of other states of the Federation with regard to cleanliness and general sanitation as a whole.

Generally, the basic sanitation approach in Nigeria is well below the level that can be considered necessary for the prevention and control of communicable diseases and the promotion and maintenance of physical, mental and social well-being. Basic sanitation as already discussed in chapter four of this thesis, should aim at safe water, safe environment, uncontaminated food and a decent place to live. This demands good and sufficient safe water supply, the sanitary collection and disposal of human wastes, the planning and control of urbanization, attention to proper housing, the control of pollution, food hygiene, vector control and health education. Ministries of health have limited scope for action in the

field of sanitation which is usually the domain of other government agencies. Many of the projects undertaken by water resources, housing and town planning agencies, Ministries of agriculture and education have considerable potential for improving health at a little additional cost if the health component is integrated into the project at the planning stage.

Many world Health Organization studies have reported the success of local community organizations planning and carrying out rural projects of water, sewage and other sanitary engineering schemes. In conclusion, the subject of environmental sanitation and health concerns everyone.

In the words of K.E. de Graft-Johnson: Thus, "All human societies have developed systems for safeguarding their health and have sought to preserve these systems with all the traditional mechanisms of social control - customs, taboos, religious prohibitions, injuctions, laws, public opinion and even superstition. These traditional mechanisms of control by their very nature have a tendency to preserve existing systems and their underlying beliefs and values and to undermine the countervening forces of change and progress. From time to time, therefore, conscious attempts must be made to modify existing values and beliefs, to develop new ideas and rationals and to create new structures for the advancement of human progress and well-being".

DeGraft - Johnson, K.E. The Non-Physician and Family Health in sub-sahara Africa. The Path-finder fund foundation, 1981

APPENDIX I

DISEASES ASSOCIATED WITH LOW STANDARD OF ENVIRONMENTAL SANITATION AND PERSONAL HYGIENE

Poor and low standards of hygiene, both personal and public are responsible for a vast number of diseases everywhere in the world and particularly in the tropics, where primitive living conditions are so common. In the diseases considered here, man is either the sole or principal host of the parasities, and transmission results from contamination of the environment by his excretions or body discharges. These diseases include such important infections as cholera, ancylostomiasis, schisto somiasis, the enteric fevers and dysentery, and also many other less striking infections which are responsible for a great deal of ill-health, disability and even mortality, especially among children. In some diseases unhygienic food habits play as great or even a greater part in transmission than insanitary disposal of sanitary wastes.

These infections present a particularly different problem of control. They cannot be banished form a community solely by the use of obvious and apparently simple public health methods but demand the active co-operation of the people themselves. The participation of the community can be brought about only by a process of health education over a long period of time, and the elimination of all sources and factors of these diseases, and this will finally depend on raising economic

and social standards of living. In order to simplify the description of control measures, these infections can be divided up into four groups:-

1. Viral, bacterial and protozoal diseases resulting from ingestion of water or food which has been contaminated directly or indirectly with infected human faeces or urine.
2. Worm infections in which transmission follows ingestion of either the egg or larval forms of the parasite.
3. Worm infections resulting from penetration of the skin by immature stages of the parasites.
4. Bacteria diseases due to the consumption of food stuffs infected from human or animal sources and are commonly referred to as food poisoning.

The diseases included in this discussion are confined to man and are maintained in the human community by poor environmental sanitation or insanitary living habits. The most common vehicles of transmission being contaminated hands, food and water.

The exposure to atmospheric pollution, hazards of radiation from industries, occupations and the increasing speed and complexity of modern development in technology are among other factors of ill-health. The subject of environment and health concerns not only the Government, but require the full participation of the community.

APPENDIX II

PHILOSOPHY OF HEALTH AND ENVIRONMENTAL SANITATION

The philosophy of health and environmental sanitation is derived from the present concept of health and environmental sanitation. Environmental health could be defined as the practical measures and control of all physical factors of our environment, and not only for the prevention of diseases, but aldo for the enhancement of physical, mental and social well being of the individual or community.

Environmental health programmes must aim at the continuous improvement of good quality of health, therefore, the scientific knowledge of public health, health education, management, and all skills and techniques of community mobilization must be directed towards achieving good health for the society.

Individuals within the society must be well informed about matters relating to their health and be encouraged to put into practice, such health concepts that will bring and create a healthy environment for the community. Information and techniques of use in the application of the control measures so recommended must be simple and acceptable to the community. This cannot be achieved without trained health personnels, who are professionally trained in the related fields and must understand the local problems of the people, taking into consideration their culture, customs and religious beliefs and other factors that can help to achieve the objectives of the primary health programmes.

APPENDIX III

PUBLIC HEALTH LAWS

The primary aim and objectives of the public health laws, as it affects environmental health and sanitation are mainly to prevent diseases and health promotion. The objectives are mentioned here briefly as follows:-

1. To try and change the behaviour of people from insanitary habits.
2. The maintenance of good standard of living to achieve good health.
3. To define the status, duties and functions of health personnels involved in the delivery and promotion of environmental health.

The Public Health Laws are arranged into parts and subdivided into seven section as follows:-

PART I - This section deals mostly with definitions of titles, powers conferred on medical officers of health and other health personnels, the Court of Law, Competent Councils and the general application of these provisions (Laws).

PART 2 - Nuisances: This section classified the different acts that may constitute a nuisance and the specific measures to be taken when a nuisance exist and the hours approved for any inspection to be carried out. It further explains the powers of health officer to enter any premises for the purpose of inspection, within the stipulated hours of 6 a.m. - t p.m.

PART 3. Notificable diseases: This section deals with the powers conferred on public Health Officers with regard to all communicable and infectious diseases. The section also specify the normal procedure of notification and isolation of all disease and the legal implications of hiding any infectious diseases by any person or group of persons.

PART 4. Sales of food

A Health Officer may at all reasonale times examine any food intended for human consumption. He is empowered to inspect and seize any food items that is intended for human consumption, which in his opinion is diseased, unwholesome and unfit for human consumption and order that such items to be destroyed as may be directed by him in the presence of the owner of the items concerned.

PART 5 Innoculations and vaccinations:

It deals with matters related to all innoculations and vaccinations of children and adults for both domestic and international requirements, and this should be carried out in all health centres under the supervision of a medical officer of health.

PART 6. Sanitation and Housing:

This part deals with the following:-

a. Sanitation bye-laws

b. Building bye-laws

c. Approval to building plans

d. Sewage water.

PART 7 - General Provision

The provision in this part 7 deals with legal procedures in areas where nuisance exist and are not abated. The Medical Officer of Health or any person so delegated with such powers may seek the co-operation of legal procedure to make sure that such nuisances are abated, and these may include the following -

a. An intention to prevent the application of any part of these laws by any person or group of persons.

b. Failure to comply with any section of these provision e..g ("failure to abate a nuisance served on a land-lord")

c. Obstruction to serve an abatement notice.

d. Failure to give information required by any Health Officer.

e. Powers conferred on Public Health Officers.

f. A medical officer of Health or his representative shall not be liable to any court action in the cause of performing his duties.

Sources of Information -

Public Health Laws,

Federal Ministry of Health - Lagos.

APPENDIX IV

SAMPLE OF INTERVIEW QUESTIONS

1. Status - Male ☐ Female ☐

2. Age between 18 - 26 years ☐ 27 years and above ☐

3. Educational background:

   Primary level ☐

   Secondary ☐

   Degree ☐

   None at all ☐

4. Housing - Personal House ☐

   Rented house ☐

   Family house ☐

5. What are the sources of your water supplies

   - Stream, spring or river ☐
   - Well or bore-hole ☐
   - Pipe Borne Water ☐

6a. Sanitary facilities - Toilet - How many toilets do you have in your compound - One Toilets ☐

   - Two Toilets ☐
   - None ☐

6b. Type of toilets - Pit latrines ☐

   Bucket system ☐

   Water System ☐

(d) How often do you wash your toilet -

- Once a day ☐

Twice a day ☐

Weekly ☐

7. Refuse collection - Who is responsible for your refuse collection -

a. On individual basis ☐

b. Local Government ☐

c. State Government ☐

7b. How often is refuse been removed from your house -

a. Daily ☐

b. Once a week ☐

c. None at all ☐

8. Sanitary Gutters: Who is responsible for cleaning the sanitary gutters infront and behind your premises -

a. Individuals ☐

b. Local and State Government ☐

c. No body is responsible ☐

8b. Do these gutters retain water -

Yes ☐ No ☐

9. Vector Control - Have you ever noticed Health Staff spraying your gutters? - Yes ☐ No ☐

9b. How many times have you been treated for malaria or any of your family - A. Several times ☐

B. Non ☐

10. Compound Inspection - How often do health personnels visit your house for inspection -

a. Weekly 

b. Monthly 

c. None at all 

10b. How many times have you been served with abatement notice -

a. Once 

b. Twice 

c. Thrice 

d. None at al 

BIBLIOGRAPHY

1. Ademuwagun, Z. A. - Health Education with Special reference to the Primary Health Care Approach. Internal Journal of Health Education, Vol. XXI, 1978/2.

2. Davey & Wilson - Control of Disease in the Tropics Third Edition, 1965.

3. Davies, Briam M. - Community Health Preventive Medicine and Social Services, London: Fourth Edition, 1979, P. 171.

4. Lagos State Laws on Sanitation: Lagos State Edicts on Environmental Sanitation - Revised 1983

5. Hanlon, John J. and Pickett, George E: - Public Health: Administration and Practice. The C.V. Mosby Co., St. Louis, 1979.

6. O'Donnel, Koontz - Management: International Student Editior Seventh Edition, 1981.

7. Ranson-Kuti, K. - Impact of Health Services on Medical Education: A Global view. Josiah Macy, Jr. Foundation. New York 11050, 1978, P. 187.

8. Ubeku, A. K. - Personnel Management in Nigeria, P. 11

9. U.S.A. Public Health Service: Environmental Health Planning Guide, PHS Publication No. 823, Washington D.C., 1967.

10. W.H.O. Publication: Report on Birth and Death, 1976 Geneva:.

11. Ibid. A way to Health: Drinking - Water and Sanitation, 1981 - 1990.

12. Schaefer, Morris: - Administration of Environmental Health Programme: Geneva: No. 59, 1979

13. DeGraft - Johnson, K.E. The Non-Physician and Family Health in Sub-Sahara Africa. The Path-finder fund foundation, 1981.

IKEJA LOCAL GOVERNMENT,
PUBLIC HEALTH DEPARTMENT
ROUTINE AND REPORT INSPECTION
OF FOOD PREMISES.

(A) PARTICULARS OF OWNERSHIP AND PREMISES

DATE .....

1. Address of Food Premises .....
2. Ward ..... Sub Ward .....
3. Type of Food Premises .....
4. Premises with Plan Approved (YES) .....(NO) .....
5. Name of owner or proprietor .....

(B) SANITARY INSPECTION

ITEMS OF SANITATION

7. Kitchen .....
8. Toilet and washing facilities (Water closet, wash-hand basins, toilet papers, soaps, and towels) .....
9. Water supply .....
10. Floors .....
11. Walls and ceilings .....
12. Doors and Windows .....
13. Lighting and ventilation .....
14. Utensils and equipment (show and display cases or windown, counters, shelves, tables, refrigerating equipments, sinks etc.) .....
15. Cleansing and bactericidal treatment of utensils and equipment .....
16. Storage facilities (raw food) .....
17. Disposal of liquid wastes .....
18. Disposal of dry refuse ..... any sanitary dustbin provided? Yes/NO .....
19. Evident of rodent infestation .....
20. Evidence of rearing of animals and birds .....
21. Refrigeration .....
22. Any unsound food detected? ..... Yes .....NO .....
23. Service of food .....
24. Provision of Clockroom ..... Yes ..... No .....
25. Personal oleanliness of employees .....
26. General Health conditions of employees .....
27. Remarks: .....

.....

.....

.....
INSPECTION OFFICER

CTION TAKEN

.....
HEALTH SUPERINTENDENT, CONTROLLING FOOD.

PUBLIC HEALTH DEPARTMENT
IKEJA LOCAL GOVERNMENT
AGEGE AREA OFFICE

Our Ref. No._____ Date ..... 19 ...

.....
.....
.....

Sir/Madam,

W A R N I N G N O T I C E

LICENCING OF FOOD PREMISES AT NO: .....

You have been operating your ..... premises without the current year licence, contrary to Section 5(1) of the Agege Foodstuffs and Regulated Premises Bye-Laws Order 1957.

You are therefore warned to stop operating forthwith and do not resume until your premises has been duly licenced.

MEDICAL OFFICER OF HEALTH
IKEJA LOCAL GOVERNMENT
AGEGE AREA OFFICE