

NATIONAL ENVIRONMENTAL SANITATION POLICY 2005

DEVELOPED BY
FEDERAL MINISTRY OF ENVIRONMENT
ABUJA
JULY 2005

ACRONYMS

CBO Community Based Organisation
CSO Civil Society Organisation
EHO Environmental Health Officer
EIA Environmental Impact Assessment
ESA External Support Agency
ESC Environmental Sanitation Committee
FCT Federal Capital Territory
FEPA Federal Environmental Protection Agency
FMA&RD Federal Ministry of Agriculture and Rural Development
FMC&T Federal Ministry of Culture and Tourism
FMENV Federal Ministry of Environment
FMH Federal Ministry of Health
FMWA Federal Ministry of Women Affairs
FMWR Federal Ministry of Water Resources
GRA Government Reservation Area
HIV/AIDS Human Immunodeficiency Virus/Acquired Immune Deficiency Syndrome
IEC Information, Education and Communication
LGA Local Government Area
MDG Millennium Development Goal
NEEDS National Economic Empowerment and Development Strategy
NDHS Nigeria Demographic and Health Survey
NEPAD New Partnership for African Development
NGO Non-Governmental Organisation
NPC National Planning Commission
SEEDS State Economic Empowerment and Development Strategy
WSSD World Summit on Sustainable Development

POLICY DECLARATION

Nigeria, endowed with abundant and diverse resources, is committed to protecting its environment. However, the country's climatic and ecological diversity has implications on the intensity of human activities, nature and character of waste generated, and environmental sanitation. It has, therefore, become imperative that the settlement environment and its resources should be managed judiciously to enhance sustainable national socio-economic development. A National Environmental Sanitation Policy is therefore, being put in place, to serve as a veritable instrument for securing quality environment for good health and social well being of present and future generations.

National Council on Environment
Nigeria.
15th July 2004.

FOREWORD

The Federal government being aware of the important role Environmental Sanitation Plays in the maintenance of sound public health agrees that a specific policy is required to address it. The National Environmental Sanitation Policy shall therefore, have deriving from it, relevant

Legislation, National Policy Guidelines, National Environmental Sanitation Action Plan, Official Statements and Decisions, which shall establish specific or general limits to which various Environmental Sanitation activities must comply to assure safety of the populace. The National Environmental Sanitation Policy as an integral part of the overall National Development Strategy shall therefore, seek to stimulate, promote and strengthen all Government regulations concerned with:

- Housing and Urban Development
- Food Security
- Water Supply
- Sanitation related endemic diseases and illnesses
- Flood and Erosion Control
- Drought Control
- School Health Services
- Environmental Education

The National Policy recognises the roles and contributions of the Federal Ministries of Health, Housing and Urban Development, Water Resources, Information, Agriculture and Rural Development, Culture and Tourism; as well as External Support Agencies; the Academia; Organised Private Sector; Civil Society Organisations and the Communities, in the nation's drive towards achieving sound Environmental Sanitation for sustainable development. The National Policy also recognises the need to harmonise all efforts and functions of these Stakeholders, so as to avoid duplication and waste of meager resources. It is against the background of these that, the development of the National Policy was collaboratively done by all Stakeholders in order to promote an accelerated sound Environmental Sanitation in the country. While the National Policy recognises the need to provide technical support and infrastructure necessary to all tiers of Government, it enjoins all Stakeholders to make annual budgetary provisions for implementing relevant programmes on Environmental Sanitation and to disseminate the contents of the National Policy to ensure sustainable environment and poverty reduction.

I, therefore, commend the National Environmental Sanitation Policy to all Stakeholders, and seek cooperation and unflinching support in its effective implementation, so that it can be translated into practical, useful and measurable benefits to our teeming population.

Chief Olusegun Obasanjo, GCFR
President, Federal Republic of Nigeria
2004.

ACKNOWLEDGEMENTS

The National Environmental Sanitation Policy is the product of an extensive and comprehensive participatory process, which was undertaken as follows:

- Appraisal of a Working Document by a Technical Committee of Experts
- Identification of key Stakeholders
- Evaluation of current role and determination of expected functions in programme implementation
- Critique of documents by two Technical Committee of Experts on different occasions
- Conduct of National Stakeholders' Forum
- Harmonisation and consensus of views on Policy goals, objectives and strategies
- Preparation of final draft National Policy for ratification by the National Council on Environment
- Ratified National Policy endorsed by the Federal Executive Council

This process presented opportunities for meaningful participation of a large number of Stakeholders and has resulted in the production of a National Policy with widespread ownership. The participants in this large collaborative effort were drawn from Federal and State Government line Ministries and Agencies, the Local Government, External Support

Agencies, the Academia, the Organised Private Sector and Civil Society Organisations. Thus, it is truly a product of wide consultation as all key Stakeholders participated actively in the evolution of the final Policy document.

In this regard, I wish to extend a special gratitude to all our Stakeholders, whose invaluable contributions greatly enriched the quality of the National Policy. The Rivers State Government and the United Nations Development Programme (UNDP) deserve special commendation for facilitating the development and refining stages of the Policy through its financial support.

Finally, I wish to thank also, my officers who produced the working document, which served as a major building block in the Policy development process.

This National Environmental Sanitation Policy represents Nigeria's commitment and determination to provide an acceptable level of Environmental Sanitation, thereby enabling her citizens to achieve socially and economically productive lives. It is hoped that this National Policy shall engender greater commitment from all Stakeholders, provide clear guidance and serve as the catalyst for a more vigorous, coordinated and sustained action to promote sound Environmental Sanitation.

Col. Bala Mande, rtd.

Honourable Minister of Environment

July 2004

1.0 INTRODUCTION

1.1 BACKGROUND

1.1.1 Nigeria lies on the west coast of Africa between 4 and 14 degrees north latitude and between 2 and 15 degrees east longitude. It occupies approximately 923,768 square kilometres of land stretching from the Gulf of Guinea on the Atlantic coast in the south, to the fringes of the Sahara Desert in the north. The territorial boundaries are defined by the Republic of Niger and Chad in the north, the Cameroon Republic in the east, and the Republic of Benin in the west. The Gulf of Guinea delimits the southern boundary. By virtue of its regional extent, Nigeria encompasses multiple climatic regimes and various ecological zones that influence the intensity of human activities and this has implications on waste generation patterns, environmental degradation and pollution.

1.1.2 With an estimated population of about 120 million people, Nigeria has had a great leap in human population that has virtually doubled within 40 years. This rapid population growth without commensurate provision of infrastructure and services has led to poor Environmental Sanitation characterised by increased urban slums, overstretched sanitary facilities, the generation of enormous waste, and general reduction in the quality of life of the people.

1.1.3 Over the years, the poor Environmental Sanitation condition has contributed significantly to the high prevalence of communicable diseases in the country. Most of these diseases, which include, malaria, cholera, typhoid, diarrhoea, acute respiratory infections, tuberculosis and helminthic infections account for a significant percentage of morbidity and mortality. Consequently, despite increased efforts by various successive Governments at improving public health and quality of life, basic health indicators have remained poor since these sanitation related diseases still play a large role in creating ill health and poverty.

1.1.4 Nigeria is committed to protecting and ensuring quality environment that is adequate for good health and well being for present and future generations. The Nigerian environment is richly endowed with abundant and diverse resources that are vital for the survival, health and quality of life of the populace. However, the efforts of past governments have achieved minimal success because of absence of an appropriate policy instrument to provide focus and direction for the planning and implementation of Environmental Sanitation programmes in the country. This and other gaps have necessitated the call for a National Environmental Sanitation Policy that will adequately address the sanitation problems of the Nation.

1.2 HISTORICAL PERSPECTIVES

1.2.1 Environmental Sanitation has remained consistently poor in Nigeria for a long time.

Consequently, there is high morbidity and mortality from sanitation related diseases. This scenario, which is associated with impoverishment and poor standard of living among the populace, has been of great concern to successive Governments and efforts albeit piecemeal and uncoordinated, have been made at various times/levels to complement the socio-cultural norms of sanitation practices in the communities.

1.2.2 Culturally, certain norms guide the maintenance of adequate sanitation in the communities. For instance, women and children, particularly the girls, sweep the homes/surroundings and empty refuse bins. There are also cultural festivals that emphasize cleanliness in various communities and many such festivals still persist till today.

1.2.3 During the pre-independence era (1900 – 1960), several legislative controls were put in place to address the problem of Environmental Sanitation. Among these were:

- i) Cantonment Proclamation of 1904 on the Layout and Sanitation of GRA;
- ii) Public Health Act of 1909 on Environmental Sanitation;
- iii) Township Ordinance No. 29 of 1917 on Sanitation and Environmental Management;
- iv) Lagos Colony Ordinance of 1928 – Outbreak of Bubonic Plague;
- v) Mineral Act of 1945 – Trench and Drainage Pollution, etc;
- vi) Town and Country Planning Ordinance of 1946 – cap 123 (West), cap 130 (North) and cap 155 (East);
- vii) Building Lines Regulation of 1948;
- viii) Local Government Ordinance 1950/54-58;
- ix) Public Health Laws of 1957 – to Combat Overcrowding, Diseases and Squalor.

During this era, adequate sanitation was maintained by enforcement of Public Health Laws through routine house to house inspection. The benefits of the legislative and other measures at this time were however not universal because they were restricted to privileged areas.

1.2.4 In the immediate post-independence era (1961 – 1980), legislation and authority on Environmental Sanitation were derived from the Nigerian Constitution as stated in the concurrent, exclusive and residual lists. Nonetheless, routine house to house inspection was still effective in the maintenance of Environmental Sanitation. However, political interference with the statutory role of Sanitary Inspectors led to the collapse of the house to house inspection programme and contributed to the poor sanitary conditions in the country.

1.2.5 In the current dispensation (1981 – date), all tiers of Government have developed legislative/regulatory instruments to further address the issue of sanitation. These include:

- i) Harmful (Toxic) Waste Criminal Provision Decree 42 of 1988;
- ii) Federal Environmental Protection Agency (FEPA) Decree No. 58 of 1988 and No. 59 of 1992 as amended;
- iii) National Policy on Environment (1989) & 1999 as amended;
- iv) National Environmental Protection (Effluent Limitations) Regulations S.1.8 of 1991 – mandatory for industries to install anti-pollution equipment and for effluent treatment;
- v) National Environmental Protection (Pollution Abatement in Industries and Facilities Generating Wastes) Regulations S.1.9 of 1991;
- vi) National Environmental Protection (Management of Solid and Hazardous Wastes) Regulations S.1.15 of 1991;
- vii) Environmental Impact Assessment (EIA) Decree No. 86 of 1992;
- viii) Nigerian Urban and Regional Planning Decree No. 88 of 1992;
- ix) National Urban Development Policy, 1992;
- x) Guidelines on Hazardous Chemical Management 2001;
- xi) Guidelines on Pesticides Management and Handbook on Safe and Effective Use of Pesticides 2001;
- xii) Blueprint on Municipal Solid Waste Management in Nigeria 2001;
- xiii) The Blueprint on Handbook on Waste Management 2001;
- xiv) The Blueprint on Environmental Enforcement 2001;
- xv) Promulgation of State Edicts/Laws and Local Government Bye-laws.

1.2.6 Further efforts include the creation at various times of several State and Local Government Agencies responsible for sanitation and lately, the creation of the Federal Ministry of Environment in 1999.

1.2.7 Despite all these efforts, Infant Mortality and Child Mortality Rates have remained high at one hundred (100) and two hundred and one (201) per thousand (1,000) live births respectively, mainly due to diseases such as malaria, diarrhoea and acute respiratory infections. In addition, about 50% of Nigerians suffer at least one acute episode of malaria every year with grave socio-economic implications in terms of productivity and cost of medications.

1.3 DEFINITION

1.3.1 For the purpose of this Policy document, Environmental Sanitation is defined as the principles and practice of effecting healthful and hygienic conditions in the environment to promote public health and welfare, improve quality of life and ensure a sustainable environment.

1.3.2 The essential components of Environmental Sanitation include:

- i) Solid waste management;
- ii) Medical waste management;
- iii) Excreta and sewage management;
- iv) Food sanitation;
- v) Sanitary inspection of premises;
- vi) Market and abattoir sanitation;
- vii) Adequate potable water supply;
- viii) School sanitation;
- ix) Pest and vector control;
- x) Management of urban drainage;
- xi) Control of reared and stray animals;
- xii) Disposal of the dead (man and animals);
- xiii) Weed and Vegetation Control;
- xiv) Hygiene education and promotion.

1.4 JUSTIFICATION 1.4.1 A pleasant environment, which is hazard free and promotes healthful living, is a fundamental right of all Nigerians. There is an increasing national consciousness on the need for judicious management of the Nigerian environment in a sustainable manner.

Therefore, ensuring improved Environmental Sanitation standards has become high on the political agenda of Government in the current democratic dispensation. This is demonstrated in the creation of the Federal Ministry of Environment to address amongst other things, the problems of poor Environmental Sanitation and is expected to engender improved productivity and foster equitable share of the job and joy of national economic development.

1.4.2 There cannot be a healthy nation without a healthy environment. Scientists have warned over the years that an unhealthy population and a degraded environment will hinder progress towards development goals. In Nigeria, there is now a greater understanding of the principal threats to the environment and public health. These are associated with a variety of factors, including those related to poor Environmental Sanitation.

1.4.3 The Environmental Sanitation related diseases exacerbate poverty by diminishing productivity and household income. In addition, the national cost of lost productivity, reduced educational potential and huge curative health costs constitute a major drain on the local and national economy. Besides, a dirty environment with its attendant health consequences, prevailing in most of our cities, can discourage tourists/investors and undermine the economic benefit of tourism to the country. Consequently, wide-ranging actions are required to solve Environmental Sanitation problems in order to reduce and avert their adverse health, economic and developmental effects.

1.4.4 The National Council on Environment reiterated at its meetings in Kano and Ilorin in years 2000 and 2003 respectively, that the House to House Sanitary Inspection should be

re-introduced to detect nuisances and proffer solutions for their abatement. The House to House Sanitary Inspection (Sanitary Inspection of Premises) is the bedrock of Environmental Sanitation as it covers most of its facets.

1.4.5 This National Environmental Sanitation Policy is developed in accordance with the National Policy on Environment (1989), Millennium Development Goals (MDG), World Summit on Sustainable Development (WSSD) targets and the aims of the New Partnership for African Development (NEPAD) initiatives. The Policy is also in line with the goals of the National Economic Empowerment and Development Strategy (NEEDS) in the creation of wealth, employment and poverty alleviation. The National Policy aims at providing sound Environmental Sanitation, which shall assure sustainable environment and protection of human health. The consequent programmes shall improve public health and optimise the impacts of the huge investments in the health sector.

2.0 ENVIRONMENTAL SANITATION AND PUBLIC HEALTH ISSUES

The failure of the numerous efforts to address the problem of Environmental Sanitation has been attributed to various factors. Prominent among these are: unhealthy socio-cultural practices; poor Environmental Sanitation education and awareness; low literacy level; bad governance over the years; disregard for the rule of law and other forms of indiscipline.

2.1. SOLID WASTE MANAGEMENT

2.1.1. Waste management is at the lowest ebb in most towns and communities. Most parts of the city centres do not benefit from public waste disposal services and therefore, have to bury or burn their waste or dispose it haphazardly. In most cities and peri-urban centres, refuse heaps are left unattended and where the Local Government Authorities do the collection, it is often irregular and sporadic. The recycling of waste is negligible while methods of storage, collection, transportation, compaction and final disposal are very unsatisfactory.

2.1.2. The alarming rate at which heaps of solid waste continue to occupy our cities, coupled with the fact that 87% of Nigerians use disposal methods adjudged as insanitary, has not only constituted visual blight and odour nuisance, but also encouraged the breeding of rodents, mosquitoes and other pests of public health importance, with attendant disease outbreaks.

2.1.3. Furthermore, some of the waste materials are toxic; others are either non-biodegradable or not readily degradable such as "pure water" sachets and polythene shopping bags. Also included are various types of industrial/chemical waste that can contaminate soil and ground water sources if not properly disposed. Other major concern is the generation of waste from health care institutions/facilities, which contain infectious/hazardous materials that pose potential hazards to human and environmental health when improperly disposed. The improper handling and disposal of medical waste is a major threat to refuse collectors and scavengers and can result in infections such as HIV/AIDS, hepatitis, tetanus, etc.

2.2. EXCRETA AND SEWAGE MANAGEMENT

Access to basic sanitary facilities is particularly poor. It has been observed that, in urban centres, some households with water carriage system, pipe the raw sewage and sullage into the public drains. According to the 2003 Nigeria

Demographic and Health Survey (NDHS), 10.1% of the urban population have no toilet facilities of any kind whilst 61.1% use pit latrines and 28.7% use flush toilets. Rural areas are even less served. The 2003 NDHS also indicated that 34.1% of rural households have no toilet facilities at all and as a result, make use of bushes and rivers. Open defecation and urination are common practices everywhere. In the periurban centres, children as well as adults defecate indiscriminately at dumpsites, gutters or any available open space in the late hours of the night and early hours of the morning. These insanitary methods of excreta and sewage management have tremendous untoward effects on the health of the public and the environment.

2.3. FOOD SANITATION

2.3.1. It is sad to note that a large percentage of the poor go hungry and for the percentage of those that have food, its wholesomeness is questionable. Oftentimes, food meant for sale and human consumption are displayed in open containers, thereby exposing the food to the ever-ready opportunity of contamination by dust, flies, bacteria, viruses and other microorganisms.

2.3.2. Most food handlers are not aware of the sound public health advice of routinely washing their hands before handling food and after using the toilet. Most are also not routinely screened for certain serious communicable infections, which can be easily transmitted through contamination of the food they prepare for sale and human consumption. The public is totally unaware of the risks that the consumption of contaminated food poses to their health and well-being. The activities of the municipal food vendors contribute significantly to the filthy environment as they discard wastes indiscriminately.

2.3.3. The poor state of food sanitation in the country has been shown to play a significant role in the aetiology of food borne diseases. Records from the Federal Ministry of Health shows that every year, about six hundred thousand (600,000) episodes of diarrhoea occur in children under the age of five. Similarly, there have been increasing numbers of cases of food borne diseases over the years. In 1994, there were 3,173; 12,716; and 22,525 cases of Cholera; Food Poisoning and Typhoid/Paratyphoid fevers respectively. In 1998, the cases were 9,254; 32,411 and 68,846 respectively and by 2001, Cholera and Typhoid cases have further increased to 10,294 and 73,949 cases respectively.

2.4. MARKET AND ABATTOIR SANITATION

Markets and abattoirs are built without proper layouts, and where such layouts exist, they have been distorted. Besides, provision of adequate water supply, proper drainage, and waste disposal facilities are lacking. Transportation of animal meat from the abattoirs in passenger vehicles or motorcycles is a common practice in most towns and cities. Contamination can occur during transportation especially while using passenger vehicles. It is also a common practice to see animal meat hawked on the streets. These practices expose the animal meat to contaminants such as dust, flies and other pathogens in the environment.

2.5. HOUSING AND URBANIZATION

2.5.1. The Environmental Sanitation problems are made more acute by rapid urbanization and uncontrolled population growth, without commensurate expansion in sanitary facilities. Consequently, slums/shanties have emerged in city fringes where the water and sanitation problems are more pressing. These slums with poor housing are prominent features in our environment, particularly in cities and large towns due to poor implementation of town planning laws, poor land use control, rapid spatial expansion of settlements and inadequate provision of infrastructure and services. For example, our inability to adhere to the Federal Capital Territory (FCT) development plan has created the upsurge of slums and shantytowns in the immediate environs of the city. Spontaneous squatter settlement continues to provide shelter for immigrants in an environment of great overcrowding and appalling squalor. The characteristics of life in these slums/squatter areas make the provision of sanitary services particularly difficult. In many cases, the poor live in neighbourhoods without legal tenure of land or in areas that authorities have deemed unfit for habitation. These peri-urban neighbourhoods often remain officially invisible. Their illegal status means that they are often not taken into account in municipal programmes to improve or extend services such as water supply, basic sanitation, garbage collection, flood protection, health care, etc.

2.5.2. This scenario results in poor housing sanitation characterized by overcrowding, poor ventilation and indoor air pollution, thereby increasing the disease burden within the population. This also affects productivity, thus perpetuating the cycle of poverty. Children under the age of five living in poorly ventilated houses have been shown to suffer more from upper respiratory problems than those from well ventilated houses. These children are also more likely to underachieve in school when compared with those from improved areas and this often limits their ability and character in life.

2.6. MANAGEMENT OF THE URBAN DRAINAGE SYSTEM

The poor surface drainage in urban areas leads to stagnant pools where mosquitoes and other disease carrying vectors breed. The high prevalence of diseases such as malaria in many towns and cities partly results from the poor drainage maintenance system. Often in towns and cities, public drains are used as substitutes for toilets and waste disposal facilities. This causes blockage of the drains and is usually responsible for environmental problems such as flooding, erosion and landslide, which destroy homes built on marginal land, and causes major damage to public infrastructure and private property. Pollution of underground water sources may also occur thus posing technical difficulty and increasing the cost of providing potable water supplies.

2.7. SCHOOL SANITATION

2.7.1. The standard of school sanitation is very poor. Most schools are overcrowded with dirty environment. Majority of public schools lack toilet facilities. Toilets when available in schools are not functional due to lack of water to flush and this often leads to defecation in classroom corners by pupils. In other instances, where sanitary facilities are provided, pupils sometimes vandalize them.

2.7.2. Oftentimes, the poor design and material used for building schools sometimes renders the environment un conducive for learning especially during extreme weather conditions. These factors have serious health implications with attendant social and economic consequences including school absenteeism.

2.8. PEST AND VECTOR CONTROL

2.8.1. Vector-borne diseases constitute major health problems in Nigeria. Malaria, a highly endemic vector borne disease, remains one of the five leading causes of morbidity and mortality among children below the age of five years and pregnant women. It also accounts for remarkable economic loss thus contributing significantly to poverty and underdevelopment. An estimated 50% of the 120million population experience at least one acute episode each year (FMOH, 2003).

2.8.2. Malaria along with other important endemic vector-borne diseases such as Onchocerciasis (River Blindness) and other Filariasis, Schistosomiasis, Yellow Fever and Trypanosomiasis have remarkable social, economic and political implications. While their spread is often enhanced by factors such as population growth, urbanization, the opening up of previously sparsely inhabited areas for development projects, migrations, refugees, and conflicts; previous efforts to control them with massive and

widespread use of chemicals (pesticides) have had serious consequences on the quality of the environment.

2.8.3. Annually, agricultural pests destroy up to 50% of crops especially grains and cereals, vegetables, fruits, and livestock before and after harvest. This massive destruction contributes to poverty, poor nutrition, starvation and food insecurity.

2.8.4. Other pests, such as venomous snakes- *Echis carinatus ocellatus*, contribute to significant morbidity and mortality in the Niger-Benue valley of Nigeria. At the peak of the farming and harvesting seasons, it is not uncommon to find beds in hospitals almost completely taken over by snakebite victims in these areas. The multi-mammate rat transmits Lassa fever, a fatal epidemic prone disease.

2.9. ADEQUATE POTABLE WATER SUPPLY

2.9.1. Water is an essential ingredient for the sustenance of life. Water in poor quality and inadequate quantity continues to pose a major threat to human health. Conversely, human development and population growth exert many and diverse pressures on the quality and quantity of water resources and on access to it. Nowhere are the pressures felt so strongly as at the interface of water and human health, especially with indiscriminate dumping of sewage sludge into rivers, non-treatment of effluents from industries and paving of surfaces thus preventing recharge of underground water.

2.9.2. The coverage of water supply facilities to the populace is still inadequate. It is a common phenomenon to see long queues of jerry cans and buckets in the cities especially

during the dry season. According to the 2003 Nigeria Demographic and Health Survey (NDHS), 65% of the urban population have access to safe sources of drinking water while about 70% of the rural population depend mainly on unsafe sources such as open wells, rivers, streams, etc., for drinking. In areas, which are served by public water supply, the wholesomeness of the water is sometimes not guaranteed because of poor maintenance of pipes, which are prone to constant leakages, with sippage of contaminants. Unwholesome water plays a significant role in the aetiology of water borne diseases such as cholera, typhoid and paratyphoid fevers.

2.9.3. An inverse relationship has been observed to exist between hand washing and diarrhoea. Increased frequency of hand washing after using the toilet and before handling food, substantially decreases the occurrence of diarrhoea especially in young children. The proximity of water also plays an important role in maintaining good personal hygiene and reducing the incidence of diarrhoea and skin diseases.

2.9.4 In the words of Kofi Annan, United Nations Secretary-General, "Access to safe water is a fundamental human need and, therefore, a basic human right. Contaminated water jeopardizes both the physical and social health of all people. It is an affront to human dignity".

2.10. CONTROL OF REARED AND STRAY ANIMALS

2.10.1. Animals are part of man's biological environment. A variety of animals are raised in agricultural, domestic, commercial and other settings with little or no Government regulation. In most urban centres, occupants in multi-flat apartments rear all sorts of animals in violation of Public Health Laws. In most rural areas, animals are common-place, where they stroll in and out of dwelling homes, resulting in an immense interaction between man and animals.

2.10.2. Most of the animals are reared in filthy, unhygienic conditions. Some of these animals are reservoir hosts to a number of zoonotic diseases and aid the transmission of anthrax, brucellosis, rabies, leptosporosis, hydatid disease, bovine tuberculosis, etc.

2.10.3. Most animals seen around are supposedly reared however, there is no proper supervision so they roam about littering the environment with their faecal matter and causing visual blight as well as being involved in massive destruction of farm lands/produce.

2.11 DISPOSAL OF THE DEAD

2.11.1. This is a very important aspect of sanitation as it could be worrisome if not properly done. The disposal of the dead is usually hinged on a number of beliefs including religious and cultural. Improper disposal of the dead could portend serious health implications if the dead are left unattended. It is not uncommon to see animal carcasses and remains of destitute and accident victims left unattended on the streets for days and even weeks. Very often, delay in disposal of bodies has to do with role conflict between the Police and the Health Authorities. These animal carcasses and bodies when left unattended, often decompose and create odour nuisances, encourage the spread of diseases through vectors and other vermin and could also contaminate under ground water.

2.11.2. The human dead are usually taken care of by loved ones however, in times of disasters/crises, there may be a lot of the dead to be buried and this requires special care by the Sanitation Authority to avert untoward consequences. The burial of the dead in approved cemeteries should be encouraged while burial within human habitation should be discouraged, giving due respect to cultural and religious beliefs.

2.12. WEED AND VEGETATION CONTROL

2.12.1. Weeds usually grow in unattended places especially in the surroundings of homes, public places, vacant plots and major highways. Their uncontrolled presence around homes provides harbourage for dangerous reptiles which may be harmful to man.

2.12.2. On the highways, overgrown weeds have been known to provide cover for armed robbers and this puts the life of the unsuspecting road users at risk. The weeds also reduce the width of the roads and often obstruct the vision of motorists, thus contributing to the high rate of motor accidents.

2.12.3. The menace of overgrown weeds and wild vegetation needs the collective efforts of

the Government especially the Federal Ministry of Works (Federal Road Maintenance Agency), State and LGA as well as the community to regularly control their growth and spread.

2.13. HYGIENE EDUCATION AND PROMOTION

2.13.1. Hygiene education and promotion was well practiced in the past. But over the years, promotion of hygiene declined such that it is no longer given the attention it deserves. This has culminated in erosion of the past gains and an emergence of unhygienic practices.

2.13.2. Hygiene education and promotion early in life remains pivotal to the success of sound Environmental Sanitation as it entrenches the doctrine of optimum hygienic practices from childhood, which can be sustained through life. Positive behavioural and attitudinal changes are the pillars on which sanitation practices can be built and the framework for this can only be achieved through sound hygiene education and promotion.

3.0 CONSTRAINTS

Many constraints and problems, ranging from socio-cultural, economic and management problems hinder effective Environmental Sanitation practices in Nigeria. Some of these constraints include:

3.1. Lack of clear policy assigning responsibilities for Environmental Sanitation within the levels of Government;

3.2. Poor perception of Environmental Sanitation as an essential service and a major determinant of health and good standard of living;

3.3. Inappropriate institutional framework;

3.4. Duplication of responsibility by many Stakeholders in the sector;

3.5. Weak and poorly enforced Public Health Laws, State Laws and Bye-laws;

3.6. Lack of adequate professional manpower especially at the State and LGA levels;

3.7. Inadequate research activities;

3.8. Inadequate Environmental Sanitation education and awareness;

3.9. Inadequate allocation of resources for Environmental Sanitation services;

3.10. Inadequate sensitisation and mobilisation of communities in planning, designing and decision-making on Environmental Sanitation matters;

3.11. Inadequate sensitisation and mobilisation of the private sector in the delivery of Environmental Sanitation services;

3.12. Inadequate participation of Stakeholders in project planning and implementation;

3.13. Low literacy level.

4.0 STRATEGIC CHALLENGES

4.1 CRITICAL FACTORS

In ensuring the National Policy, cognisance shall be taken of the essential critical factors which are expedient in the identification and implementation of the strategies for the attainment of sound Environmental Sanitation. Some of these factors include:

4.1.1 Political will (commitment, programme continuity, proactive management);

4.1.2 Appropriate Institutional Arrangement (well defined roles among Ministries and Agencies at the three tiers of Government and adequate staffing);

4.1.3 Increased Stakeholders' participation (External Support Agencies, Civil Society Organisations, Private Sector, etc);

4.1.4 Policy enactment and enabling environment (legal backing, enforcement mechanisms, good governance, political stability, incentives);

4.1.5 Increasing private sector participation (commercialisation and privatisation);

4.1.6 Environmental Sanitation education and awareness;

4.1.7. Adequate, sustainable and timely funding for programme implementation;

4.1.8. Accountability to stem corruption;

4.1.9. Use of appropriate, adaptable, local environment friendly technologies;

4.1.10. Socio-cultural practices of the Nigerian populace;

3.1.11. Role of women, youth and children in Environmental Sanitation;

3.1.12. Special considerations to be given to the underserved urban poor, residents of small

towns and rural population.

4.2. GOAL

The goal of the National Environmental Sanitation Policy is to ensure a clean and healthy environment by adopting efficient, sustainable and cost-effective strategies, so as to safeguard public health and wellbeing in line with the national development objectives.

4.3. OBJECTIVES

4.3.1. Specific Objectives

- i) To coordinate the activities of all Stakeholders involved in Environmental Sanitation and streamline their roles;
- ii) To strengthen the capacity of all institutions and Agencies involved in Environmental Sanitation programmes;
- iii) To develop healthy human habitation and reduce the incidence of Environmental Sanitation related diseases;
- iv) To achieve positive attitudinal changes in people towards sound Environmental Sanitation;
- v) To encourage research and development, define local standards and establish database on Environmental Sanitation;
- vi) To identify local funding mechanisms for Environmental Sanitation in Nigeria.

4.3.2 Management Objectives

- i) Identify key Stakeholders, assess existing operations and define expected roles in policy implementation;
- ii) Define manpower requirements and training needs, implement training programmes and strengthen existing institutions;
- iii) Assess human habitation based on set criteria;
- iv) Detect nuisance and proffer methods of abatement;

- v) Develop and implement a Master Plan for Solid Waste Management in Nigeria;
- vi) Define the required attitudinal changes and create an enabling environment for their realisation;
- vii) Promote public education and enlightenment on Environmental Sanitation;
- viii) Establish appropriate sanctions and enforcement mechanisms;
- ix) Establish indicators and assess performance and service standards in sanitation related public and private institutions/organisations;
- x) Determine funding requirements and identify sources of fund for sustainable Environmental Sanitation programmes.

4.4. TARGETS

In order to monitor and evaluate the progress and implementation of the policy over time, it is imperative to set targets which will guide programme planning and implementation. These targets with short and long term components are given as follows:

- 4.4.1. Produce Guidelines on key components of Environmental Sanitation by 2004;
- 4.4.2. Enact all relevant legislation required for policy implementation by 2005;
- 4.4.3. Institute Sanitary Inspection of Premises in 25% of LGAs by 2006 and in all LGAs by 2010;
- 4.4.4. Increase access to toilet facilities by 25% in public places and 50% in households by 2006; and 75% and 100% respectively by 2010;
- 4.4.5. Increase Sanitary Management of sewage and excreta by 25% in 2006 and 75% in 2010;
- 4.4.6. Increase the number of markets and abattoir with improved sanitary standards by 25% in 2006 and 75% in 2010;
- 4.4.7. Establish Pest and Vector Control units in 25% of the States/LGAs of the Federation by 2006 and in all States/LGAs by 2010;
- 4.4.8. Institute School Sanitation Programmes in 50% of Schools by 2006 and 100% by 2010;

- 4.4.9. Reduce the menace of animal rearing/grazing in urban centres by 25% in 2006 and

75% in 2010;

4.4.10. Extend present water supply and waste water services coverage to 80% of the population by 2007, 100% by 2011 and to sustain full coverage beyond 2011;

4.4.11. Build capacity of 25% of food handlers on sound food sanitation practices by 2006 and 75% in 2010;

4.4.12. Improve the knowledge, attitude, behaviour and practice of the general population to sound Environmental Sanitation by 25% in 2006 and 75% by 2010;

4.4.13. Reduce the incidence of sanitation related illnesses and death by 25% in 2006 and 75% by 2010;

4.4.14. Increase private sector participation in Environmental Sanitation services delivery by 20% in 2006 and 75% by 2010;

4.4.15. Empower 25% of women and youths on income generating Environmental Sanitation activities by 2006 and 75% by 2010;

5.0. IMPLEMENTATION STRATEGIES

5.1. SET PROCEDURES FOR POLICY IMPLEMENTATION

5.1.1. Produce and circulate approved Policy and Guidelines;

5.1.2. Advocacy through a formal launch of the policy documents;

5.1.3. Implement Approved Policy and Guidelines;

5.1.4. Print and distribute relevant forms;

5.1.5. Produce IEC materials for community education and awareness;

5.1.6. Mobilise and empower all Stakeholders for effective Policy takeoff;

5.2. DEVELOP ADMINISTRATIVE AND LEGAL FRAMEWORK

5.2.1. Implement the provisions of the Policy on institutional arrangements;

5.2.2. Encourage adherence to the provisions of the Policy Guidelines on programme coordination and inter-agency cooperation;

5.2.3. Establish Technical Committees on Environmental Sanitation at all tiers of Government in programme implementation;

5.2.4. Develop Procedural Guidelines on Environmental Sanitation Service Delivery;

5.2.5. Establish a Data Bank on Environmental Sanitation;

5.2.6. Review and harmonise existing Environmental Sanitation Legislation, State laws, Bye-laws, etc.;

5.2.7. Enact relevant legislation at all tiers of Government to give legal backing to Policy implementation;

5.2.8. Establish appropriate legal institutions and mechanisms, including Mobile Courts, for enforcement of Environmental Sanitation laws.

5.3. DEVELOP HUMAN RESOURCE

5.3.1. Embark on recruitment, training and retraining of Environmental Health Officers (EHOs);

5.3.2. Enforce the provisions of the Policy Guidelines on the employment of Environmental Health Practitioners for professional Environmental Sanitation Services, by the private sector;

5.3.3. Organize public and private sector collaborative research, technical training seminars and exchange programmes on Environmental Sanitation;

5.3.4. Seek technical support and assistance from bilateral and multilateral Agencies for Environmental Sanitation.

5.4. SET CRITERIA FOR PARTNERSHIP AND STAKEHOLDERS' PARTICIPATION

5.4.1. Promote partnership amongst Stakeholders through dialogue and organisation of periodic Stakeholders' Forum;

5.4.2. Involve the private sector progressively in Environmental Sanitation service delivery through creation of enabling environment and incentives;

5.4.3. Set criteria for private sector participation at all tiers of Government;

5.4.4. Provide technical assistance packages to promote Stakeholders' participation;

5.4.5. Develop and implement the provisions of the Policy Guidelines on equipment and material supplies and maintenance.

5.5. PROMOTE SOCIO-CULTURAL AND BEHAVIOURAL CHANGES

5.5.1. Advocacy through sensitisation and mobilisation of all Stakeholders at all tiers of Government;

5.5.2. Declare annual National Environmental Sanitation Day;

5.5.3. Review school curricula on hygiene education to include Environmental Sanitation;

5.5.4. Introduce and enforce the use of environment friendly packaging material;

5.5.5. Encourage establishment of neighbourhood Environmental Sanitation Committees;

5.5.6. Develop appropriate Information, Education and Communication (IEC) packages for target groups;

5.5.7. Institutionalise sound Environmental Sanitation consciousness as a life style;

5.5.8. Strict enforcement of Environmental Sanitation laws and penalise defaulters so as to deter other citizens;

5.5.9. Create enabling environment to facilitate behavioural change;

5.6. SET CRITERIA FOR NUISANCE DETECTION AND ABATEMENT IN HABITATION AND OTHER PREMISES

5.6.1. Comply with Policy Guidelines on Sanitary Inspection of Premises;

5.6.2. Control reared and stray animal;

5.6.3. Comply with Policy Guidelines on Excreta and Sewage Management;

5.6.4. Ensure the free flow and adequacy of the drainage system;

5.6.5. Comply with Policy Guidelines on Solid Waste Management;

5.6.6. Ensure sanitary disposal of the dead;

5.6.7. Comply with Policy Guidelines on Pest and Vector Control;

5.6.8. Comply with Policy Guidelines on Market and Abattoir Sanitation;

5.6.9. Comply with Policy Guidelines on Food Sanitation;

5.6.10. Comply with Policy Guidelines on School Sanitation;

5.6.11. Review and evaluate performance of set criteria.

5.7. EVOLVE SUSTAINABLE FUNDING MECHANISMS

5.7.1. Advocate for increased budgetary allocation in favour of Environmental Sanitation at all tiers of Government;

5.7.2. Compile a compendium of potential sources of funding and seek assistance for programme implementation;

5.7.3. Organise Donors' Forum to provide opportunities for ESAs and Philanthropists to support programme implementation.

5.8. MONITOR AND EVALUATE

5.8.1. Assess performance based on set indicators and criteria for each activity and task;

5.8.2. Set standards for delivery of Environmental Sanitation services based on local conditions, customs and practices;

5.8.3. Set standards for equipment and material procurement and maintenance in Environmental Sanitation;

5.8.4. Evolve criteria for programme performance and evaluation;

5.8.5. Collate, analyse and review M & E reports;

5.8.6. Institute annual summit on Environmental Sanitation.

6.0. POLICY THRUST

6.1. The major thrust of the National Environmental Sanitation Policy is to ensure sound Environmental Sanitation practices that shall promote sustainable development, public health and good quality of life.

6.2. The implementation of the policy shall focus on the following key areas of Environmental Sanitation:

- Sanitary Inspection of Premises;
- Solid Waste Management;

- Excreta and Sewage Management;
- Market and Abattoir Sanitation;
- Pest and Vector Control;
- School Sanitation;
- Food Sanitation;
- Adequate Potable Water Supply.

6.2.1. Sanitary Inspection of Premises

6.2.1.1 AIM:

To improve the quality of life of Nigerians through sustained sound sanitation practices in homes and communities.

6.2.1.2 OBJECTIVES

- i. To reintroduce and strengthen Sanitary Inspection of Premises (House to House Sanitary Inspection) for detection and abatement of nuisances;
- ii. To promote clean and healthy environment for the populace;
- iii. To prevent sanitation related diseases, illnesses and injuries thus reduce poverty and increase life expectancy.

6.2.1.3 STRATEGIES

- i. Advocacy at all levels;
- ii. Ensure availability of relevant forms and other logistics for Sanitary Inspection of Premises;
- iii. Recruit, train and retrain Environmental Health professionals;
- iv. Enlighten and sensitize the public on the reintroduction of Sanitary Inspection of Premises (House to House Sanitary Inspection);
- v. Organize zonal seminars and community fora on the implementation of the Policy Guidelines on Sanitary Inspection of Premises.

6.2.2. Solid Waste Management

6.2.2.1 AIM:

To improve and safeguard public health and welfare through efficient sanitary Solid Waste Management methods that will be economical, sustainable and guarantee sound environmental quality.

6.2.2.2 OBJECTIVES:

- i. To develop Policy Guidelines for efficient and sustainable Solid Waste Management in Nigeria;
- ii. To promote a healthy environment by ensuring sanitary Solid Waste Management;
- iii. To minimize waste generation and promote sorting at source, reuse, recycling, and energy recovery;
- iv. To ensure safe and nuisance-free disposal of (urban and rural) domestic, medical, and industrial wastes in order to adequately protect public health during and after collection, transportation, treatment and final disposal;
- v. To promote effective Stakeholders participation in Solid Waste Management;
- vi. To generate employment opportunities, improve the standard of living and thus reduce poverty;
- vii. To optimize labour and equipment in waste management to enhance increased productivity;
- viii. To facilitate cost recovery in waste management investment to ensure project replication and sustainability;
- ix. To build an institutional framework capable of ensuring an efficient waste management system;
- x. To evolve and maintain an indigenous waste management system based on the physical and socio-cultural characteristics of communities;
- xi. To maintain adequate and regular waste management services at affordable cost.

6.2.2.3 STRATEGIES

- i. Promote waste minimization at household and community levels, through reduction at source, reuse and recycling and resource recovery;
- ii. Evolve and promote appropriate technologies for recycling of waste components such as bottles, glass, metals, paper, plastic and organic matter;
- iii. Foster the establishment of small-scale waste recycling plants at household and community levels, to source for and convert recyclable waste;
- iv. Develop technical capacity of public and private sector agencies in Solid Waste Management;
- v. Conduct research to determine per capita waste generation and build a database on Solid Waste Management;
- vi. Establish regulations, sanctions and enforcement mechanisms for Solid Waste Management from its source of generation to the point of disposal;
- vii. Develop a Solid Waste Master Plan as a national blue print for effective Solid Waste Management;
- viii. Evolve realistic and sustainable funding mechanisms;
- ix. Create public awareness and sensitisation on efficient municipal Solid Waste Management practices;
- x. Ensure effective monitoring and evaluation of municipal Solid Waste Management system;
- xi. Set health criteria for manual sorting of wastes at household and community levels.

6.2.3. Excreta and Sewage Management

6.2.3.1 AIM

To ensure countrywide access to sanitary Excreta and Sewage Management methods and obviate associated public health hazards.

6.2.3.2 OBJECTIVES

- i. To create awareness on the effects of insanitary Excreta and Sewage Management on the quality of the environment and public health;
- ii. To promote the adoption, construction, use and maintenance of culturally acceptable sanitary Excreta and Sewage Management systems;
- iii. To ensure safe and nuisance-free management of excreta and sewage during collection, transportation, treatment and final disposal, in a manner that protects public health;
- iv. To promote environmental aesthetics;
- v. To prevent the contamination of environmental media (soil, water, food etc);
- vi. To promote the adaptation of by-products of sewage treatment to productive purposes;

6.2.3.3 STRATEGIES

- i. Develop Policy Guidelines for sustainable Excreta and Sewage Management in line with National Development Objectives;
- ii. Promote countrywide adoption of the Policy Guidelines on Excreta and Sewage Management;
- iii. Undertake research, develop and promote culturally acceptable and affordable Excreta and Sewage Management technology options;
- iv. Facilitate the construction and maintenance of adequate sanitary facilities in public places including the high ways;
- v. Establish mechanisms for sanctioning insanitary management of excreta and sewage;
- vi. Promote Stakeholders participation in Excreta and Sewage Management;
- vii. Foster and promote private sector participation in the maintenance and operation of Excreta and Sewage Management facilities.

6.2.4. Market and Abattoir Sanitation

6.2.4.1 AIM

To promote and protect the health of all Nigerians by ensuring the highest standards of sanitation within and in the surrounding of all markets and abattoirs throughout the country.

6.2.4.2 OBJECTIVES

- i. To create, maintain and enforce adequate standards of sound sanitation in all markets and abattoirs;

- ii. To ensure provision of adequate and sustainable sanitary facilities in and around markets and abattoirs;
- iii. To promote the use of sanitary facilities provided in markets and abattoirs.

6.2.4.3 STRATEGIES

- i. Develop Policy Guidelines for Market and Abattoir Sanitation that is feasible and sustainable within the context of Nigeria's economic, social, cultural and political situation;
- ii. Produce and circulate the Policy Guidelines on Market and Abattoir Sanitation throughout the country to ensure implementation;
- iii. Sensitise and mobilize Stakeholders to ensure commitment to, and compliance with the Policy Guidelines;
- iv. Define minimum standards of sanitary facilities requirement in markets and abattoirs;
- v. Ensure that the siting of new markets and abattoirs are subject to Environmental Impact Assessment (EIA) certification;
- vi. Recruit, train and retrain adequate numbers of Environmental Health Officers and Veterinary Practitioners to cover the entire country;
- vii. Conduct research into the various aspects of Market and Abattoir Sanitation.

6.2.5. Pest and Vector Control

6.2.5.1 AIM

To control pests and vectors in the environment that constitutes threats to public health and property.

6.2.5.2 OBJECTIVES

- i. To establish and strengthen Pest and Vector Control Units at the three tiers of Government;
- ii. To control pests and vectors in households, offices, food premises, industries, offices, agricultural farms and the environment in general;
- iii. To evolve self-sustainable Pest and Vector Control systems;
- iv. To regulate the activities of Pest and Vector Control operators;
- v. To establish surveillance mechanisms for monitoring toxic effects of pesticides on the ecosystem and public health;
- vi. To establish and strengthen surveillance mechanisms for monitoring pests and vectors in the environment;

6.2.5.3 STRATEGIES

- i. Develop Policy Guidelines for sustainable Pest and Vector Control activities in line with the National Development Objectives;
- ii. Foster collaboration among key Stakeholders (Ministries of Health, Agriculture, Science and Technology, Water Resources, Academic and Research Institutions, Industries, end users, etc.) on issues of Pest and Vector Control;
- iii. Support research into environment friendly means of Pest and Vector Control;
- iv. Sensitize and mobilize communities on the significance of pest and vectors as well as the environment friendly methods for their control;
- v. Facilitate the establishment/strengthening of Pest and Vector Control Units in relevant Ministries, Agencies and all tiers of Government;
- vi. Foster private sector participation in Pest and Vector Control;
- vii. Establish a comprehensive inventory of vectors of public health importance and their bionomics in the different ecological zones of Nigeria;
- viii. Develop Code of Practice for Operators of Pest and Vector Control Outfits.

6.2.6. School Sanitation

6.2.6.1 AIM

To provide an optimal sanitary environment which is safe and conducive for physical, mental and emotional health of the school community in order for the child to achieve maximum benefits from educational programmes.

6.2.6.2 OBJECTIVES

- i. To promote conditions at schools as well as the practices of school staff and children, that

- will prevent sanitation related diseases;
- ii. To bring about positive changes in hygiene behaviour of school children and through these children, in the community at large;
- iii. To protect school children from insanitary surroundings and hazards;
- iv. To encourage the provision of sanitary facilities in schools;
- v. To encourage provision of safe recreational facilities in schools;
- vi. To encourage compliance with stipulated sanitary standards for schools.

6.2.6.3 STRATEGIES

- i. Advocate for routine sanitary inspection of schools;
- ii. Revise and update school curricula to include sanitation and hygiene education;
- iii. Orientate all teachers and students on the significance of sound School Sanitation and hygiene education;
- iv. Educate school food vendors on sound hygiene behaviour;
- v. Examine and medically certify school food vendors/handlers routinely;
- vi. Establish Environmental Sanitation Committees made up of all Stakeholders (pupils/students, parents, teachers, Government representatives), which shall meet regularly to develop activities aimed at promoting sound School Sanitation. This Committee shall also implement, monitor, evaluate and make the necessary adjustments for positive changes;
- vii. Organise school competitions and reward winners;
- viii. Develop appropriate IEC materials on sound School Sanitation;
- ix. Foster the establishment of Environmental Sanitation Clubs in schools;
- x. Conduct research into the various factors affecting sound School Sanitation.

6.2.7. Food Sanitation

6.2.7.1 AIM

To enhance food security, public health and quality of life through the promotion of sound Food Sanitation practices in all food premises in the country.

6.2.7.2 OBJECTIVES

- i. To develop Policy Guidelines on sound Food Sanitation practices in Nigeria;
- ii. To ensure consumption of safe and wholesome food thereby promote food security and improve the nutritional status of Nigerians;
- iii. To prevent food borne diseases, illnesses and deaths;
- iv. To reduce disease burden and thus alleviate poverty;
- v. To create public awareness on the effects of poor Food Sanitation practices on health;

6.2.7.3 STRATEGIES

- i. Promote countrywide adoption of National Policy Guidelines on Food Sanitation;
- ii. Set operational standards for the personnel, facilities and equipment type in food businesses/ventures;
- iii. Build capacity of food handlers including municipal/street food handlers on sound Food Sanitation practices;
- iv. Train and retrain Environmental Health Practitioners (EHPs), on sound Food Sanitation;
- v. Enlighten and sensitize the public on sound Food Sanitation practices;
- vi. Enact and enforce Legislation on Food Sanitation;
- vii. Ensure effective monitoring and evaluation of Food Sanitation Practices.

6.2.8 Adequate Potable water Supply

6.2.8.1 AIM:

To provide sufficient potable water to all, in an affordable and sustainable way, through the participatory investment of all Stakeholders.

6.2.8.2 OBJECTIVES

- i. To increase service coverage for potable water supply nationwide;
- ii. To ensure that good water quality standards are maintained by water supply undertakings;
- iii. To ensure affordable potable water supply for all including guaranteeing access for the poor to basic human need level of water supply;
- iv. To privatise potable water supply services where feasible with adequate protection for the

poor;

v. To enhance national capacity in the operation and management of potable water supply.

6.2.8.3 STRATEGIES

i. Undertake potable water supply feasibility survey for all the States and the FCT to acquire baseline data for proper investment planning;

ii. Rehabilitate and modernize existing potable water supply works to restore them to their optimum operational capacity;

iii. Expand existing urban potable water supply works to enhance capacities to meet over grown demand;

iv. Construct new potable water supply schemes to serve the segments of the population that is not served;

v. Promote private sector participation in the potable water supply industry to attract resources for sustainability;

vi. Regulate the activities of the private operators in potable water supply and services;

vii. Promote improvement of traditional sources of community potable water supply (protected spring orifices, protected hand dug well, rain water harvest, etc.);

viii. Monitor the output of potable water supply undertakings for conformity with drinking water quality standards.

7.0 INSTITUTIONAL ARRANGEMENT

Environmental Sanitation is a public good and the responsibility of all. Therefore, all actors shall be involved in programme management to achieve the creation of a healthy living environment. This will require a multi-sectoral and multidisciplinary approach involving the private and public sectors. The thrust of the institutional arrangements of this Policy is based on creating both horizontal and vertical interactions amongst all tiers of Government and public Agencies through the establishment of technical committees. It shall involve the experts and professionals of the organized private sector, ESAs and NGOs in effective system management, with a view to promoting effective Stakeholders' participation in Policy implementation. Government shall ensure adequate funding through relevant Ministries/Agencies for effective operations of the technical committee at the various levels. Against this background, the following institutional arrangements shall be undertaken:

7.1 ESTABLISHMENT OF TECHNICAL COMMITTEES

For the purpose of implementing this Policy, the following Committees shall be established:

7.1.1 National Technical Committee on Environmental Sanitation (NTCES) at the National level.

7.1.2 State Technical Committee on Environmental Sanitation (STCES) at the State level.

7.1.3 Local Government Technical Committee on Environmental Sanitation (LTCES) at the Local Government level.

7.2 COMPOSITION OF TECHNICAL COMMITTEES

7.2.1 National Technical Committee on Environmental Sanitation

i. Federal Director of Environmental Sanitation as chairman;

ii. Representative of Federal Ministry of Health;

iii. Representative of Federal Ministry of Housing and Urban Development;

iv. Representative of Federal Ministry of Water Resources;

v. Representative of Federal Ministry of Agriculture and Rural Development;

vi. Representative of Federal Ministry of Culture and Tourism;

vii. Representative of Federal Ministry of Women Affairs;

viii. Representative of Ministry of Intergovernmental Affairs Youth Development and Special Duties (Youth Development);

ix. Representative of Federal Ministry of Information and National Orientation (National Orientation Agency);

x. Representative of Federal Ministry of Education;

xi. Representative of Federal Ministry of Industries;

xii. Representative of Federal Ministry of Science and Technology;

xiii. Representative of Federal Ministry of Transport;

- xiv. National Planning Commission (NPC);
- xv. Representative of the Office of the Vice President (Local Government Affairs);
- xvi. Chairmen of State Technical Committees;
- xvii. Representative of Association of Community Health Physicians;
- xviii. Representative of Environmental Health Officers' Registration Council of Nigeria.

7.2.2 State Technical Committee on Environmental Sanitation

- i. State Director of Environmental Sanitation or Officer in charge of Environmental Sanitation matters in the State as Chairman;
- ii. Representatives of relevant State Ministries and Parastatals in charge of Environmental Sanitation related services such as Health, Agriculture, Water, Physical Planning, Education, Women Affairs, Youth Development as well as the Ministry/Department responsible for LGA matters in the State, etc;
- iii. Chairmen of Local Government Technical Committees;
- iv. State Director of National Orientation Agency;
- v. Representative of sub-regional Federal bodies such as NDDC, etc;
- vi. Representative of Faith-based Organisations (one Christian and one Muslim) (2);
- vii. Representative of Coalition of Non-Governmental Organisations (NGOs) (1);
- viii. Representative of the Coalition of the Police, Military and Paramilitary (1).

7.2.3 Local Government Technical Committee on Environmental Sanitation

- i. Local Government Officer in charge of Environmental Sanitation as Chairman;
- ii. Representative of Ward Environmental Sanitation Committees;
- iii. Representative of the Council of Traditional Rulers (1);
- iv. Representative of Market Association (1);
- v. Representative of Coalition of Youth groups (1);
- vi. Representative of Coalition of Women's Group (1);
- vii. Representative of Faith-based Organisations (2).
- viii. Representative of Coalition of Non-Governmental Organisations (NGOs) (1);
- ix. Representative of Road Transport Workers' Union (1).

7.3 FUNCTIONS OF TECHNICAL COMMITTEES

7.3.1. National Technical Committee on Environmental Sanitation shall:

- i. Coordinate the implementation strategies of the National Policy;
- ii. Monitor and evaluate Environmental Sanitation activities nationally;
- iii. Undertake periodic review of the National Environmental Sanitation Policy and Guidelines;
- iv. Submit annual report on Environmental Sanitation to the National Council on Environment.

7.3.2. State Technical Committee on Environmental Sanitation shall:

- i. Coordinate the implementation strategies of the National Policy at State and Local Government Levels;
- ii. Monitor and evaluate Environmental Sanitation activities within the State and Local Governments;
- iii. Undertake periodic review of Environmental Sanitation activities as it relates to the National Environmental Sanitation Policy and Guidelines at the State and LGA levels;
- iv. Submit biannual report on Environmental Sanitation to the National Technical Committee on Environmental Sanitation.

7.3.3. Local Government Technical Committee on Environmental Sanitation shall:

- i. Coordinate the implementation strategies of the National Policy at the Local Government level;
- ii. Monitor programme implementation within the Local Government;
- iii. Undertake periodic review of Environmental Sanitation activities as they relate to the National Policy and Guidelines at the Local Government;
- iv. Submit quarterly report on Environmental Sanitation to the State Technical Committee on Environmental Sanitation.

8.0 INSTITUTIONAL ROLES AND RESPONSIBILITIES

These have been clearly delineated as follows:

8.1 FEDERAL

8.1.1 Federal Ministry of Environment (FMENV) shall:

- i. Formulate, review and produce the National Environmental Sanitation Policy and Guidelines;
- ii. Enact, review and harmonise existing Legislation on Environmental Sanitation;
- iii. Develop and ensure the implementation of the National Environmental Sanitation Action Plan;
- iv. Develop a master plan for urban solid waste management in Nigeria, and ensure its implementation;
- v. Develop master plan for biomedical waste and ensure its implementation;
- vi. Collaborate with the Academia, Research Institutions, other relevant Ministries, Agencies, ESAs, NGOs and the private sector;
- vii. Embark on capacity building and human resource development for managing Environmental Sanitation;
- viii. Develop and strengthen institutional structures for compliance monitoring and enforcement of Environmental Sanitation laws;
- ix. Mobilise resources both internally and externally for Environmental Sanitation programmes;
- x. Establish a National Data Bank on Environmental Sanitation for the purpose of planning and development;
- xi. Conduct, promote and coordinate research on Environmental Sanitation technologies;
- xii. Identify and disseminate cost effective, appropriate, affordable and environment friendly technologies;
- xiii. Provide technical assistance to State/LGA personnel to address current Environmental Sanitation challenges;
- xiv. Coordinate the annual National Environmental Sanitation Day exercise;
- xv. Monitor and evaluate Environmental Sanitation activities/services;
- xvi. Submit annual report on Environmental Sanitation to the National Council on Environment.

8.1.2 Federal Ministry of Health (FMH) shall:

- i. Generate and disseminate data on Environmental Sanitation related diseases;
- ii. Collaborate with Federal Ministry of Environment on vector borne disease control, especially in the environmental management control strategies for malaria, schistosomiasis, guinea worm, etc;
- iii. Collaborate with Federal Ministry of Environment in the promotion of sound food sanitation;
- iv. Collaborate with the Federal Ministry of Environment on capacity building of Environmental Health Practitioners in sound environmental sanitation practices.

8.1.3 Federal Ministry of Housing and Urban Development shall:

- i. Review and ensure compliance with existing housing standards on sanitation;
- ii. Collaborate with Federal Ministry of Environment in the enforcement of Environmental Sanitation standards in urban development;
- iii. Collaborate with Federal Ministry of Environment in the implementation of realistic Urban Land Management.

8.1.4 Federal Ministry of Water Resources (FMWR) shall:

- i. Collaborate with Federal Ministry of Environment on water sanitation activities including sewerage, storm water control and quality control of water supply sources;
- ii. Ensure access to adequate potable water supply for all Nigerian.

8.1.5 Federal Ministry of Agriculture and Rural Development (FMA&RD) shall:

- i. Collaborate with Federal Ministry of Environment on the promotion of sound food and abattoir sanitation;

ii. Collaborate with Federal Ministry of Environment on pest and vector control issues.

8.1.6. Federal Ministry of Culture and Tourism (FMC&T) shall:

i. Collaborate with the Federal Ministry of Environment in establishing Environmental Sanitation standards for the tourism sector;

ii. Ensure compliance with Environmental Sanitation standards in hotels, games reserves and other tourist centres;

iii. Collaborate with Federal Ministry of Environment in identifying and promoting sound traditional sanitation practices.

8.1.7 Federal Ministry of Information and National Orientation (National Orientation Agency) shall:

i. Collaborate with Federal Ministry of Environment on information dissemination on Environmental Sanitation;

ii. Pursue vigorous re-orientation of the citizenry towards sound Environmental Sanitation consciousness;

iii. Actively participate in the annual Environmental Sanitation Day.

8.1.8 Federal Ministry of Education shall:

i. Collaborate with Federal Ministry of Environment on matters of school sanitation and hygiene education;

ii. Revise primary and secondary school curricula to include Environmental Sanitation issues.

8.1.9 Federal Ministry of Industries shall:

i. Encourage Manufacturers to invest in Environmental Sanitation equipment and machinery;

ii. Encourage Investors and Entrepreneurs to invest in Environmental Sanitation ventures.

8.1.10 Federal Ministry of Science and Technology shall:

Collaborate with Federal Ministry of Environment in accessing funds and aids to undertake research and development on environment friendly technologies.

8.1.11 Federal Ministry of Women Affairs shall:

i. Sensitize and motivate women participation in Environmental Sanitation activities;

ii. Collaborate with Federal Ministry of Environment in information dissemination, awareness creation and positive behavioural changes on Environmental Sanitation among women.

iii. Collaborate with Federal Ministry of Environment in women empowerment through training and retraining on the delivery of Environmental Sanitation services.

8.1.12 Federal Ministry of Intergovernmental Affairs, Youth Development and Special Duties (Youth Development) shall:

i. Sensitize and motivate youth participation in Environmental Sanitation activities;

ii. Collaborate with Federal Ministry of Environment in information dissemination, awareness creation and positive behavioural changes among youths;

iii. Collaborate with Federal Ministry of Environment in youth empowerment through training and retraining on the delivery of Environmental Sanitation services.

8.1.13 Federal Ministry of Transport shall:

i. Collaborate with Federal Ministry of Environment in sensitising Road Transport Workers on Environmental Sanitation issues;

ii. Ensure that long distance vehicles have facilities for waste disposal;

iii. Ensure that motor parks observe sound Environmental Sanitation practices.

8.1.14 Federal Ministry of Works (Federal Road Maintenance Agency)

Ensure that weeds and vegetation on the highways and major roads are not overgrown and are regularly trimmed and maintained.

8.1.15 National Planning Commission (NPC) shall:

i. Collaborate with Federal Ministry of Environment in accessing bilateral and multilateral funds;

ii. Assist in human resource development.

8.2. STATE shall: (Ministry of Environment or any other organ that has responsibility for Environmental Sanitation matters).

- 8.2.1. Provide technical assistance and logistic support to LGA on the implementation of the National Environmental Sanitation Policy and Guidelines;
- 8.2.2. Encourage and support private sector participation in Environmental Sanitation service delivery, through Legislation and provision of financial instruments;
- 8.2.3. Support the implementation of the National Environmental Sanitation Action Plan;
- 8.2.4. Adopt the master plan on waste management for implementation at the State level;
- 8.2.5 Ensure implementation of the master plan on biomedical wastes;
- 8.2.6 Ensure and coordinate the storage, regular collection, transportation and disposal of solid waste in the urban areas;
- 8.2.7 Ensure proper siting of final disposal sites for waste management;

- 8.2.8 Ensure adequate management of the sewerage system;
- 8.2.9 Ensure the regular cleaning of streets and drainages in the State;
- 8.2.10 Ensure compliance with Environmental Sanitation standards;
- 8.2.11 Monitor and evaluate Environmental Sanitation activities;
- 8.2.12 Coordinate the National Environmental Sanitation Day and provide health education to the public through enlightenment campaigns;
- 8.2.13 Conduct research on Environmental Sanitation technologies in line with local customs and practices;
- 8.2.14 Provide funds to support Environmental Sanitation programmes;
- 8.2.15 Forward biannual reports on Environmental Sanitation activities to the National Technical Committee.

8.3 LGA shall:

- 8.3.1 Enact and enforce appropriate Legislation on Environmental Sanitation;
- 8.3.2 Recruit adequate manpower for programme implementation;
- 8.3.3 Conduct sanitary inspection of premises;
- 8.3.4 Implement the National Environmental Sanitation Action Plan;
- 8.3.5 Implement the master plan on solid waste management;
- 8.3.6 Implement the master plan on biomedical waste management;
- 8.3.7 Provide equitable Environmental Sanitation services in all settlements within its jurisdiction;
- 8.3.8 Establish and strengthen local planning authority to prepare an appropriate local development plan on Environmental Sanitation;
- 8.3.9 Mobilise and empower the community in the planning and implementation of Environmental Sanitation programmes;
- 8.3.10 Inspect and register bakery, food and liquor premises and other regulated premises including milling machines;
- 8.3.11 Ensure the cleaning of streets and drainages;
- 8.3.12 Ensure provision of adequate functional public toilets and solid waste management facilities in strategic areas, public assemblies, parks and gardens, refugee camps and other notable places for transient populations within the LGA;
- 8.3.13 Encourage and monitor private sector participation in the provision of sanitary facilities and delivery of Environmental Sanitation services;
- 8.3.14 Ensure prompt disposal of the dead found on the streets;
- 8.3.15 Coordinate, support and supervise all Environmental Sanitation activities within the LGA;
- 8.3.16 Create Environmental Sanitation awareness through education and public enlightenment campaigns and ensure effective community mobilization and participation;
- 8.3.17 Sensitise and mobilise community members to participate in the National Environmental Sanitation Day exercises;
- 8.3.18 Sanction community members who fail to participate in the National Environmental Sanitation Day exercise;
- 8.3.19 Control the rearing of animals and impound stray animals;
- 8.3.20 Enforce compliance with Environmental Sanitation laws and standards;

8.3.21 Collaborate with Road Transport Workers' Union to ensure adequate Environmental Sanitation in commercial vehicles and motor parks;

8.3.22 Monitor and evaluate Environmental Sanitation activities;

8.3.23 Provide funds for the sustenance of Environmental Sanitation programmes at ward levels;

8.3.24 Forward quarterly reports on Environmental Sanitation to the State Technical committee;

8.4 EXTERNAL SUPPORT AGENCIES (ESAs) shall:

8.4.1 Support the implementation of National Environmental Sanitation activities within the context of the National Environmental Sanitation Action Plan;

8.4.2 Collaborate with the Environment Sector at all tiers of Government on Environmental Sanitation matters.

8.4.3 Provide assistance in the implementation of Environmental Sanitation Programmes within the context of the National Environmental Sanitation Action Plan;

8.5 CIVIL SOCIETY ORGANISATIONS (NGOs/CBOs) shall:

8.5.1 Support the implementation of National Environmental Sanitation activities within the context of the National Environmental Sanitation Action Plan;

8.5.2 Collaborate with the Environment Sector at all tiers of Government on Environmental Sanitation matters;

8.5.3 Mobilise communities through awareness campaigns to maintain a clean and healthy environment;

8.5.4 Provide support in the development of IEC packages on Environmental Sanitation;

8.5.5 Monitor and evaluate Environmental Sanitation programmes at the grass root;

8.5.6 Establish Environmental Sanitation Committees (ESC) to ensure active participation of the community on Environmental Sanitation issues;

8.5.7 Support the control of reared animals and impound stray animals;

8.5.8 Report unattended corpses and animal carcasses for prompt removal and disposal;

8.5.9 Develop and promote appropriate Environmental Sanitation infrastructure such as public toilets and waste disposal sites;

8.5.10 Mobilise community members to participate in the National Environmental Sanitation Day exercises;

8.5.11 Sanction community members who fail to participate in the National Environmental Sanitation Day exercises;

8.5.12 Develop community programmes that will support programme sustainability;

8.5.13 Educate communities on the need to pay for Environmental Sanitation services.

8.6 ORGANISED PRIVATE SECTOR shall:

8.6.1 Support the implementation of National Environmental Sanitation activities within the context of the National Environmental Sanitation Action Plan;

8.6.2 Collaborate with the Environment Sector at all tiers of Government on Environmental Sanitation activities;

8.6.3 Participate in the provision of Environmental Sanitation facilities and services;

8.6.4 Support research in Environmental Sanitation technologies.

8.7 ACADEMIA AND RESEARCH INSTITUTIONS shall:

8.7.1 Revise curricula to reflect Environmental Sanitation issues;

8.7.2 Refocus on researches that address locally relevant Environmental Sanitation technologies and activities;

8.7.3 Conduct training and manpower development of personnel involved in Environmental Sanitation;

8.7.4 Provide technical assistance to all tiers of Government, the CSOs and the organised private sector;

8.7.5 Collaborate with Federal Ministry of Environment in dissemination of research findings on Environmental Sanitation.

8.8 INDIVIDUAL shall:

8.8.1 Clean within and immediate environs of the house including drains and access ways;

8.8.2 Take measures to prevent the breeding of disease vectors within and in the immediate environs of the premises occupied;

8.8.3 Ensure hygienic collection, source separation and segregation, storage and disposal of waste generated within the household;

8.8.4 Report to the appropriate authorities unattended corpses and animal carcasses for prompt removal and disposal;

8.8.5 Control reared animals;

8.8.6 Participate in all communal Environmental Sanitation Day exercises including the National Environmental Sanitation Day;

8.8.7 Support sustainability of programme by paying for Environmental Sanitation services.

9.0 FUNDING MECHANISMS

9.1 Sound Environmental Sanitation is an essential factor contributing to the quality of the environment as well as the protection and promotion of public health. Investment in Environmental Sanitation is therefore, expected to benefit all through the promotion of a good quality of life, economic productivity and a break in the poverty cycle. In order to attain the lofty goal of the National Environmental Sanitation Policy, substantial financial and logistic resources are required. It is, therefore, imperative that planning for funding must be well thought out and shall take into consideration a number of issues that are critical for ensuring programme sustainability. These include:

9.1.1 Democracy, good governance, fiscal discipline, transparency and accountability;

9.1.2 Sustained Hygiene education to stimulate a change in community behaviour towards adoption of better Environmental Sanitation practices;

9.1.3 Change in community perception of Environmental Sanitation as a free service. For sustainability, individuals and corporate bodies must be willing to pay for Environmental Sanitation services;

9.1.4 Community participation in planning, implementation and evaluation of Environmental Sanitation facilities and services;

9.1.5 Creation of a conducive environment for private sector participation;

9.1.6 Increasing private sector participation with reduced Governmental involvement;

9.1.7 Promotion of partnership among Stakeholders;

9.1.8 Introduction of cost and resource recovery mechanisms;

9.1.9 Obtaining a correct mix of public/private involvement in provision of Environmental Sanitation facilities and services to secure a balance between technology and job creation.

9.2 The ultimate aim of the National Environmental Sanitation Policy is to obtain self-sustaining Environmental Sanitation facilities and services at all tiers of Government. In order for its realisation, emphasis shall be on sustainable fund generating mechanisms. In this regard, financial and other resources for implementing the policy shall be obtained from:

9.2.1 All tiers of Government through yearly budgetary allocations;

9.2.2 Ecological funds allocated to all tiers of Government;

9.2.3 External Support Agencies;

9.2.4 Organised private sector;

9.2.5 User charges;

9.2.6 Capital market;

9.2.7 Philanthropic Organisations;

9.2.8 Fines and levies.

10.0 MONITORING AND EVALUATION

The monitoring and evaluation activity is essentially an information exchange process to verify that field activities are performed in accordance to the set implementation strategies. All tiers of Government including the CSOs shall have major roles to play.

10.1 FEDERAL

At the Federal level, the Federal Ministry of Environment shall have the overall responsibility for compiling reports of all activities carried out in the implementation of the National Environmental Sanitation Policy. In this regard, the Ministry shall canvass relevant

information from State and Local Governments, ESAs, the Organised Private Sector, and other Stakeholders.

10.1.1 The Federal Ministry of Environment shall build capacity of all lower levels to participate actively and meaningfully in monitoring and evaluation of Environmental Sanitation programmes;

10.1.2 The Ministry in collaboration with other stakeholders shall develop performance indicators for monitoring and evaluation of all Environmental Sanitation related activities;

10.1.3 The Ministry shall develop and circulate annual national reports of Environmental Sanitation activities to stakeholders;

10.1.4 The Ministry shall reward and promote replication of best practices on Environmental Sanitation.

10.2 STATE

The Ministry/Agency responsible for Environmental Sanitation at the State level shall monitor and evaluate all Environmental Sanitation related activities at the State Level. In this regard, it shall canvass relevant information from all relevant State Ministries/Agencies, LGAs, CSOs, Organised Private Sector and other Stakeholders at the State level.

10.2.1 The State shall collaborate with the Federal Ministry of Environment to develop relevant performance indicators for monitoring and evaluation of Environmental Sanitation activities at the State level;

10.2.2 The State shall compile and forward quarterly reports of all Environmental Sanitation activities at the State to the Federal Ministry of Environment, and feedback the constituent LGAs;

10.2.3 The State shall reward and promote replication of best practices on Environmental Sanitation.

10.3 LOCAL GOVERNMENT

The relevant Local Government Department shall have the responsibility for monitoring and evaluation of all Environmental Sanitation related activities at the Local Government. In this regard, the Department shall canvass relevant information from all relevant LG departments, CSOs, Organised Private Sector and other Stakeholders on Environmental Sanitation activities.

10.3.1 The LG shall collaborate with the Ministry/Agency responsible for Environmental Sanitation at the State level to develop relevant performance indicators for monitoring and evaluation of Environmental Sanitation activities within the LGA.

10.3.2 The LG shall compile and forward monthly reports of all Environmental Sanitation activities to the State Ministry/Agency responsible for Environmental Sanitation and feedback the constituent wards;

10.3.3 The Local Government shall reward and promote replication of best practices on Environmental Sanitation.

10.4 COMMUNITY LEVEL

10.4.1 An important principle of the National Environmental Sanitation Policy is its emphasis on the community participatory approach and private sector

participation. This principle opens opportunities for the community to be actively involved in all phases of the development and implementation of the Policy including data collection, selection of available appropriate technology options, service planning and management.

10.4.2 In this regard, the CSOs shall actively participate in the development of appropriate performance indicators for monitoring and evaluation of Environmental Sanitation activities at the community level;

10.4.3 The community shall use the findings of monitoring and evaluation to decide on corrective measures so as to ultimately meet the community's set targets on Environmental Sanitation.