Evaluating the Organizational Structure of Environmental Management Agencies in Addressing Urban Environmental Problems of Nigerian Cities: Towards Efficiency in Awka and Onitsha in Anambra State

Kingsley Efobi^{1*} Christopher Anierobi²

- 1. Department of Urban and Regional Planning, University of Nigeria, Enugu campus, PMB 01129,Nigeria
- 2. Department of Urban and Regional Planning, University of Nigeria, Enugu campus, PMB 01129,Nigeria

* E-mail of the corresponding author: <u>okey.efobi@unn.edu.ng</u>

ABSTRACT

Organizational structures of any agency determine the efficiency of that agency in the fulfillment of its mandate in service delivery since it galvanizes the operations therein. In an attempt to address the various environmental problems defacing the cities, the Nigerian government had set up environmental protection agencies with the sole mandate of protecting and developing the environment. This task seems so challenging to these agencies that despite what seem to be their spirited efforts over the years; the problems persist and even seems to be on the increase including erosion, flooding, traffic congestion, pollution and solid waste management problems among many others. Studies have established that factors such as manpower, funding, equipment, and even changes in administration among others do have significant influence on the performance of these agencies. It is evident that there had been an increment in government budgetary provisions for the services of these agencies to the tune of billions of naira and yet, there is little or nothing to show for it. This study therefore looks into the Organizational structure of the environmental management agency in the cities of Awka and Onitsha in Anambra State, Nigeria with a view to examining its composition and operations towards addressing the challenges of urban environmental problems of the cities. Findings show that the environmental management agency is engulfed in bureaucratic bottle neck and role conflict. The Anambra State Environmental Protection Agency (ANSEPA) edict of 1998 established this agency which is saddled with the responsibility of protection and development of the environment of the state and have functioned for over ten years without any restructuring. The study further revealed that ANSEPA's performance on its mandate delivery was poor as adjudged by a sample size of 20 respondents in the Hierarchy of ANSEPA officials at a mean score rating of 18%. Its operations and functions covers solid waste disposal, flood control, erosion control, pollution control and traffic decongestion and this formed the basis for this performance assessment on its service delivery. Her major preoccupation was on solid waste evacuation; even so without some modern disposal techniques and equipment. The devised intervention rate put solid waste disposal at 58.2%, 15.0% to flood control, 15.0% to erosion control, 7.2% to pollution control and 14.2% to traffic decongestion. The Hypothesis result at X^2 value = 0.595 and probability value = 0.898 showed that the rating of ANSEPA's performance in Awka and Onitsha by the Hierarchy of ANSEPA officials did not differ significantly. The study recommends a review of its edict so as to incorporate proper public sector reform that would foster effective partnership and holistic urban and rural environmental management mechanism. Also, the organizational structure should be made free of bureaucratic bottle neck and role conflict, adopt modern methods, techniques, equipment and properly streamlined enforcement and punitive measures for defaulters in the state.

Key Words: organizational structure, environmental management agencies, urban environmental problems

1.0 INTRODUCTION

In an attempt to combat the environmental problems of man, various agencies were set up by the government of different nations of the world such as Canada, Japan, U.K, U.S and France among others. The National Environmental Policy act (NEPA) was promulgated in 1969 by U.S.A government and an environmental protection agency (EPA) was set up to monitor the progress of the Act. In like manner, the Nigeria government had set up the Federal Environmental Protection Agency (FEPA), for protection and development of the Nigeria environment with their state counterparts to be known as the State Environmental Protection Agency (SEPA) (Umeh and Uchegbu, 1997). In 1990, the United Nations came up with the sustainable development policy which aims at meeting the needs of the present without compromising the ability of future generation to meet their own needs (UN, 1990). In the United Nations economic and social council report of 1997, it was revealed

that worldwide environmental problems especially pollution and degradation have increased three fold in the past twenty years and worse for the developing nations for which a fivefold increase was noted. (UNDP, 2001). This thus calls for an urgent action by the management agencies both governmental and non-governmental as well as individuals and groups in order to ensure a sustainable environment for all.

2.0 Structural Formation of Environmental Management Agencies and the challenges of Urban Environmental Management problems in Nigeria

The structural formation of environmental management agencies varies from country to country. Valeria et al, (2008) observed that the efficiency in service delivery is equally tied with this structural formation with the basis on the prevailing institutional framework of that country. In the Nigerian context; whereas the public agencies usually have their tiers from the federal level to the state level and down to the local government areas, the departments and sections therein are composed of different headships and functions which are mostly controlled by bureaucratic forces with the ministers, commissioners, directors and so on in charge of the service delivery. Funding is usually from the government budgetary allocations and sometimes from internally generated revenues in the form of levies and service charges by the agencies on consumers. (Federal Ministry of Housing and Urban Development, 2006).

The recent arrangement of partnership between the government agencies and the private formal sectors; which should enhance the organizational structure, had been as a result of the predominantly inefficiency and inadequacy in the environmental management service delivery of the public agencies as observed by Anold et al (1995). The most recent break through in environmental management has made waste reduction through re-use, recycling and restoration a modern technique that poised as a great anchorage to all environmental management efforts. This technique also reduces the incidence of deforestation and exploitation of the natural ecosystem, thereby preventing erosion, flooding and other menace. It prevents pollution and emission of green house gases that causes global warming hence reducing flooding, acid rains, deterioration of the built environment among others (Oepen, 1993 and Valeria et al, 2008). In the light of these, the partnership with the private formal sector has gained a new dimension by involving the informal sectors (Scavengers), donor agencies and community-based organizations (CBOs) thereby providing means of livelihood to many families (UNCH, 1996).

One can thus generalize that the structural frame work pursued by the present day environmental management agencies particularly in Nigeria is thus the federal, state, local government, private formal sector, informal sector, donor agencies and community based organizations (CBOs),(UNCH, 1996, Oepen,1993 and Valeria et al,2008).Though this is mostly obtained in developed and some developing countries, it is a new trend in majority of the developing countries like Nigeria where less attention is paid to the private informal sector (scavengers), NGOs and the CBOs hence a need for more collaborated effort so as to ensure a satisfactory service delivery.

In the management efforts of environmental management agencies many factors come into play. These factors when properly utilized would lead to efficiency in the management level of the environment while if misplaced, misused or abused would pose as a serious constraint to the efficient performance of environmental management agencies. Some of these factors among others as viewed by Anold et al (1995), Bartone et al (1991), Oepen (1993) and Umeakuka and Mba (1999) and Anierobi (2010): (a). Finance (b). General Institutional Framework and Organizational structure (c) Management Personnel (d) Legislation and Regulations (e) Attitude of the Masses (f) Attitude of Government (g) Technology. These factors which should form the focal points of the organizational structure of environmental management agencies if efficient service delivery is to be achieved seems to be receiving haphazard attention especially in Nigeria cities such as Awka and Onitsha; hence the desired efficiency eludes them. This study looks into the experiences of Awka and Onitsha cities of Anambra state, Nigeria.

3.0 The experience of Awka and Onitsha in Anambra State, Nigeria

Awka is the administrative headquarters of Anambra state and houses many universities and tertiary institutions of learning, industries, commercial centers among other land uses. Onitsha is the commercial heart, not just for Anambra but West Africa as a whole and possesses the largest market in West Africa, so many industries, commercial centers and higher institutions of learning as well as other land uses. The nature of the environmental problems such as flooding, erosion, waste management and others in these cities has grown with the growth of human activities (UN-Habitat, 2008). This has led to the emergence of a concerted effort in the form of institutional support and resource mobilization by both the federal and state government as well as donor agencies like the United Nations, USAID among others, though presently at a very low ebb. The state ministry of Environment has the Anambra State Environmental Protection Agency (ANSEPA) as the implementation body to which it gives general supervisory and policy guide on environmental management in the state. This agency is

saddled with the mandate of protection, management and development of the environment of the state. Its organizational structure shows the state ministry of Environment as the supervision/policy making, the board of directors for policy making, the managing director for policy implementation through the heads of departments and unit heads. Its operations cover solid waste management, ecological/erosion control, pollution control and environmental health. Hence, the health department, environmental pollution and control departments, ecological/erosion control department as well as horticulture and landscaping department that carries out these functions which are manned by departmental heads as stipulated by law. The equipment used by the agency includes pail loader, tippers, tractors, shovels, head pans, baskets, trash bags, etc while the dumping method at borrow or holes is used for the solid waste disposal without sorting, recycling nor other modern techniques. The sources of funding are government subventions, self-funding through environmental sanitation rates and levies via litigation and congestion levy. This fund is basically utilized in the management of the agency staff, equipment and logistics so as to ensure efficiency and functionality in services delivery to the people.

The mandate of the agency in accordance to the ANSEPA edict of 1998 is specified in sections 7, 8, 9, 13 and 47 of the edict as follows:

Section 7:

- 1. The Agency shall, subject to this Edict have responsibility for protection and development of the environment in the state.
- 2. Without prejudice to the generality of subsection (1) of this section, the agency shall: -

A, Subject to such guidelines as may be laid down by the federal agency in that behalf implement and enforce in the state the provision of the Act and the regulations made hereunder as respects environment protection and maintenance in the state of national environment standard.

B, Give effect to such report relating to the state of the environment as may be prepared from year to year by the federal or by it, with the approval of the federal agency.

C, in collaboration with the federal agency, conducts public investigation in any case of environmental pollution in the state.

D, Co-operate with federal and state ministries, local government, statutory bodies, research and educational institution on matters relating to environmental protection.

E, Organize and carry out the collection, removal and disposal of refuse in the towns and other places specified by this edict, or by notice in the state official gazette pursuant to subsection (4) of section (3) of this edict

F, Organize and carry out street cleaning

G, Promote encourage and foster the maintenance of clean and healthy environment in the towns and other places where it is empowered to operate by virtue of this edict and

H, Carry out such activities as is necessary or expedient for fully discharge of the functions of the agency under this edict.

Section 8: In carrying out the functions under this edict, it shall be lawful for the agency to: -

a) Make grant to suitable private organizations and bodies with similar functions for purposes of demonstrations and for such other purposes as may be determined appropriate to further the purposes of this edict.

b) Collect in cooperation with public or private organization and make available through publication and other appropriation means, basic, scientific data and other information pertaining to pollution and environmental matters in the state

c) Enter into contract with public or private organization and individuals for the purpose of executing and fulfilling its functions and responsibilities under this edict.

d) Establish, encourage and promote training program for its staff and for such other individual from public or private organization as may be appropriate

e) Enter into agreement with public or private organizations or individuals to develop, utilize, co-ordinate and share environmental monitoring programs, research basic data on channel, physical and biological effects of various activities on the environment and other environmental related activities as appropriate.

f) Establish advisory bodies composed of administratively technical or other experts in such environmental areas as the agency may consider useful and appropriate to assist it in carrying out the purposes of this edict

g) Advise the government on policies for the protection of the state's environment, subject to the federal agency's laid down criteria guideline and standard and

h) Make with the approval of commissioner, regulations and other subsidiary legislation for the purpose of this edict.

Section 9: without prejudice to the generality of paragraph (h) of section 8 above, the agency may by regulation: -

a) Prescribe the size shape and make of dustbin or refuse bin to be kept in residential buildings, hackney carriages and stage carriages

b) Provide necessary procedure to be follow in refuse disposal

- c) Provide subject to such conditions as it deemed fit, the location and use of private refuse disposal system.
- d) Prepare long time plan in relation to function and duties in consultation with the chairman e) Conduct research in relation to refuse collection and disposal system and
- f) Make engineering survey and plans.

Section 13: Without prejudice to the provisions of section 7 and notwithstanding the provisions of any other written law or Edict, the department shall in relation to the following towns: - (a) Awka (b) Onitsha (c) Nnewi and Any other town or places which may be specified by notice in the official gazette pursuant to section 3(4) of this law be responsible for:

- a) Impounding any vehicle that are improperly kept or packed along the highway.
- b) The carrying out of the Agency's function in paragraphs (e) (f) and (g) of section 7 of this law.
- c) The maintenance of clean and healthy environment in such towns and places
- d) The removal and disposal of any vehicles abandoned or cannibalized on any highway.
- e) Controlling and supervising night soil services in respect of places where bucket or pit latrine are in use
- f) The establishment, maintenance and cleaning of public convenience carrying out inspection of each building and premises for purposes of ensuring that sanitary conditions are maintained in such buildings and places.
- g) Apprehending any person selling goods or other articles of trade in places not authorized for that purpose and seizing all such goods or other article of trade for eventual disposal in such a manner the Agency deems fit
- h) Development and maintenance of open spaces
- i) Establishment and maintenance of a laboratory for the control and analysis of foods and other edible products sold or exhibited in a market or other public pace.
- $j) \quad \ The \ control \ of \ pest$
- k) Removal and burial of dead bodies left of abandoned in a highway or in any other public place
- 1) Control and removal of lunatics on the highway, drunks and beggars and other wandering persons on a highway or in any other public place.

Section 47: (1) Any person who: -

- a) Throws or deposits in any open drainage any rubbish or other substance that may obstruct or hinder a free or interrupted flow of such drain.
- b) Thrown refuse on the ground or in any place other than refuse bin
- c) Places or leaves any motor vehicle, bicycle, tramp, wheel barrow, wood, stone, brick, paper, leaf and any other thing on the street or highway in a manner capable of obstruction free low of traffic or in the opinion of an authorized officer of the agency capable constituting nuisance.
- d) Done anything which in the opinion of an authorized officer of the agency, constitutes nuisance in a street, highway and open space or in any place adjoining a dwelling house, factory, school, workshop or any public institution
- e) Fails to provide in his premises a refuse bin, which is fly proof wherein the household or office wastes maybe collected for disposal
- f) Allows dirt in the form of wastepaper, wood, metal or other matters to be left or littered within twenty meters of his place of abode, company, factory, office, school, or any public institutions.
- g) Discharges, deposits, or leaves urine, faeces, or other human waste or allow dirty water to stand in any place other than a well constructed toilet
- h) Allow weeds, uncared for shrubs and trees to grow in any living premises, factory or public building
- i) Plants, food crops, or any vegetation other than vegetation within twenty meters of any living premises, factory or public building.
- j) Allow any dilapidated building or structure to be put into use thereby constituting a danger to the life or property of the occupants or of other members of the public.
- k) Prevents an authorized officer from having access to any premises, factory site, or the site of a new building or structure for the purposes of carrying out any duty of the agency under this Edict.
- 1) Selling or offering for sale any goods at or in the vicinity of traffic light or in any other unauthorized place.
- m) Having charge of a hackney carriage or a stage carriage operating in any of the towns or place to which this law applies, fails, refuses or neglect to provide in the hackney carriage or stage carriage a refuse bin wherein passengers may dispose of any waste material.
- n) Fails or refuses to obey any directive issued, whether by means of a sound or television, broadcast or in any other manner, by the government of the federation or the state government or by the person or authority acting on behalf of either of the government, directing persons to observe, in accordance with

the tenor of such directive, such day or part thereof, which shall be employed for the cleaning up by person of their premises and surroundings or

o) Does any other thing, makes any omission or commits any nuisance which in the opinion of an authorized officer constitutes a breach of any provision of this Edict is guilty of an offence and liable, on conviction to a fine not less than five hundred naira (N5,000.00) but not more than two thousand naira (N2,000.00) for the first instance, and to a fine not less than two thousand naira (N2,000.00) but not more than five thousand naira for subsequent offences, and in default of payment of the fine to imprisonment for not more than three months in the case of first offender, and nor more than six months for each subsequent offence.

2) Any person being the head of a household who fails to provide such container for refuse disposal as may from time to time be prescribed by the agency, or who fails to pay, within three months of written demand thereof the approved tariff or fee for the services rendered by the agency in the town or place where he or his household is resident is guilty of offence, and liable on conviction to fine not more than five hundred naira (N500.00) or imprisonment for not more than six months and shall in addition pay the tariff or fee.

3) Anybody whether corporated or unincorporated, which fails to provide in its place of business such container for refuse disposal as may from time to time be prescribed by the agency or which fails to pay within three months of written months, of written demand thereof, the approved tariff or fee for the services rendered by the agency in the place of such body is guilt of an offence and liable on conviction to a fine not more than five thousand naira (N5,000.00) the tariff or fees demanded and shall in addition pay.

4) Any person who contravenes any provision of this Edict commits an offence and shall on conviction, where no specific penalty is prescribed thereof, be liable to a fine not exceeding five thousand naira (N5,000.00) or to imprisonment not exceeding two years or both such fine and imprisonment.

4.0 DISCUSSION

The study revealed that the organizational structure of the agency is characterized by bureaucracy, inflexibility, administrative bottlenecks and role conflicts. It failed to articulate the incorporation of private formal sector, the informal sectors and community based organizations (CBO) in its environmental management service delivery and this impede its performance. The Hierarchy of ANSEPA Organizational Structure's mean rating of ANSEPA performance in table 1 showed that out of the five Hierarchy of ANSEPA officials that rated the Organizational Structure, Directors gave the highest score though at 50% for Awka and 65% for Onitsha. Managing Directors scored 40% performance rating for Awka and 35% for Onitsha respectively, While Heads of Departments rated 40% for Awka and 30% Onitsha respectively; Operation managers scored 30% for Awka and 25% for Onitsha; this was followed by Field Officers who rated 20% for Awka and 25% for Onitsha respectively. These gave a total mean score of 18% out of the total obtainable mean score of hundred percent (100%). From this result, ANSEPA performance is poor. Also, at X^2 value = 0.595 and probability value = 0.898; the rating of ANSEPA's performance in Awka and Onitsha by the Hierarchy of ANSEPA officials did not differ significantly. The study further revealed that ANSEPA's major preoccupation is on solid waste management and without some modern disposal techniques. The devised intervention rate put solid waste disposal at 58.2%, 15.0% to flood control, 7.2% to erosion control, 14.2% to pollution control and 5.4% to the removal of damaged vehicles from the roads to avoid traffic congestion; thereby leaving much room for improvement. The agency should therefore adopt modern techniques of environmental management in order to boost its operations. Hierarchy of ANSEPA Organizational Structures' mean rating of ANSEPA's performance in service delivery to Anambra state was observed. Two Hierarchy of ANSEPA Organizational Structure and the recorded mean scores declined in descending order.

Table 1: HIERARCHY OF ANSEPA ORGANIZATIONAL STRUCTURE'S MEAN RATING OFANSEPA'S PERFORMANCE IN SERVICE DELIVERY TO ANAMBRA STATE.(2 Officials per Hierarchy of ANSEPA Organizational Structure)

s/n	Hierarchy of ANSEPA Officials	Awka mean rating score (%)	Onitsha mean rating score (%)
1	Directors	50	65
2	Managing Directors	40	35
3	Heads of Departments	40	30
4	Operation managers	30	25
5	Field Officers	20	25
6	TOTAL Mean score	18%	18%

SOURCE: RESEARCH SURVEY, 2010.

5.0 RECOMMENDATION AND CONCLUTION

The study recommends a review of the ANSEPA edict of 1998 so as to foster a proper public sector reform that would incorporate effective partnership and holistic urban and rural environmental management mechanism while introducing unbureaucratic and enhanced operational organizational structure that will bring about the involvement of the private formal, informal sectors (scavengers), NGOs and community based organizations whose operations are much more cost effective and efficient hence creating employment and reducing poverty. The use of appropriate environmental management technology such as compactors and others as well as reuse, recycle and reduction techniques should be fostered. Measurement tools and proper record keeping as well as data bank should be devised for determining prevalence rate of environmental problems in the state.

REFERENCE

Anambra State Environmental Protection Edict, 1998.

- Anambra State Environmental Protection Organizational Structure, official gazette, 1999.
- Anambra State Ministry of Environment (ANSME), official gazette, 2009.
- Anierobi .C.M. (2010): "An Assessment of Anambra State Environmental Protection Agency (ANSEPA) In Urban Environmental Management of Anambra State, Nigeria ". An unpublished Dissertation for the Award of Master of Urban and Regional Planning Degree, University of Nigeria, Enugu Campus.
- Anold V.K and Inge L. (1995) "Community and Private (Formal and Informal) Sector Involvement in Municipal Solid Waste Management in Developing Countries". Waste, Netherlands: A Paper for the UMP Workshop, Ittingen.

Bartone. C.R.L, Leite .T. Triche and R. Schertenleib (1991):"Private Sector Participation in Municipal Solid Waste Service: Experiences in Latin America". Waste Management & Research, No. 9.

- Oepen .M. (1993): Scavengers and Recycling in Indonessia. Gate No.1.
- Umeh. L.C. and Uchegbu S.N. (1997): Principles and Procedures of Environmental Impact Assessment. Computer Edge Publishers, Lagos (Nig).
- United Nations (1997): Economic and social council report, New York; Oxford University Press
- United Nations (1990): "Sustainable Development Policy", New York; Oxford University Press.
- UNDP (2001): "Global Report on Human Settlement", New York; Oxford University Press.
- UN Habitat (2008). "Draft Report on Anambra state structural plan," official gazette.
- Umeakuka J.M and Mba H.C (1999): "Solid waste management practices, a case study of Anambra state". Journal of the Nigerian institute of town planners<u>vol</u>xii. Lagos.
- Valeria et al (2008): Current Urban Environmental Issues, Global press, Awka.

This academic article was published by The International Institute for Science, Technology and Education (IISTE). The IISTE is a pioneer in the Open Access Publishing service based in the U.S. and Europe. The aim of the institute is Accelerating Global Knowledge Sharing.

More information about the publisher can be found in the IISTE's homepage: <u>http://www.iiste.org</u>

CALL FOR JOURNAL PAPERS

The IISTE is currently hosting more than 30 peer-reviewed academic journals and collaborating with academic institutions around the world. There's no deadline for submission. **Prospective authors of IISTE journals can find the submission instruction on the following page:** <u>http://www.iiste.org/journals/</u> The IISTE editorial team promises to the review and publish all the qualified submissions in a **fast** manner. All the journals articles are available online to the readers all over the world without financial, legal, or technical barriers other than those inseparable from gaining access to the internet itself. Printed version of the journals is also available upon request of readers and authors.

MORE RESOURCES

Book publication information: <u>http://www.iiste.org/book/</u>

Recent conferences: <u>http://www.iiste.org/conference/</u>

IISTE Knowledge Sharing Partners

EBSCO, Index Copernicus, Ulrich's Periodicals Directory, JournalTOCS, PKP Open Archives Harvester, Bielefeld Academic Search Engine, Elektronische Zeitschriftenbibliothek EZB, Open J-Gate, OCLC WorldCat, Universe Digtial Library, NewJour, Google Scholar

