

# **Reduse Disposal and Management: An Approach in Reducing Health Problem Occasioned Be Indiscriminate Disposal of Wastes in Geidam Town.**

**Gambomi Goni Musa**

Department of General Studies Mai Idris Aloomaa Polytechnic Geidam

**Sanda Grema**

Fane Fane Library Mai Idris Aloomaa Polytechnic Geidam

Supported by Tertiary Education Trust Fund (TETFund)

## **BACKGROUND OF THE STUDY**

The successful existence of any living thing on earth largely depends on its immediate environment to Man external environment contains element which are essential for life and for the maintenance of good health, the environment also contains potential hazards in various forms, some natural and other from the activities of man resultant negative impact on the environment Which can be put as the abuse of the environment. Man as a higher animal therefore exist to face a lot of element in his total environment that theaters his life. Refuse generation as part of man's activity and proper disposal is essential for the maintenance of environment sanitation. The method of refuse disposal depends upon quality of daily refuse production in die community. Generally, we face a great problem of how refuse from home are being disposal un hygienically. The management and disposal of refuse problem also extends to the negative attitudes shown be individual, government at all levels and the community at large, towards the management of refuse. Government for instance on tier side have-not get programs concerning the disposal of refuse, inadequate facilities, improper mobilization of the community or health education pertaining the health risk of improper refuse disposal and unqualified personnel to oversee the affairs of how refuse are disposal and managed. Refuse management and disposal could also be seen as a programme that is designed to serve many purposes eg. The reclamation of land, this means sanitary laud fills or dumping grounds should be located in lower areas in order to reclaim the land so that it can be used for another purpose.

## **STATEMENT OF THE PROBLEM**

It's important that all who are concern about human health learn to access refuse disposal and management techniques in their special areas of interest from an overall who listed view. It will no longer do for the refuse problem of one area e.g. Lagos to be considered as some to the refuse disposal and management problem in Gaidam. The process of sanitation should provide the techniques of clearing the environment so that refuse no longer constitute health hazards to making. This man's that refuse should be properly disposed through some various methods eg. Composing recycling and pulverization etc. However, the observed condition is Gaidam town has shown an increasing refuse disposal problem which has affected, more and more people within the town and has become a threat to the people in that locality. Without attention to management system in Gaidam town, increase in decrease rates and grater expenditure for available treatment are inevitable. It's against this background, that this research project was conducted. To examine the various methods of management and disposal of refuse system in Gaidam and to determine its adequacy so that recommendation could be drawn appropriately.

### **OBJECTIVES OF THE STUDY**

The objectives of this study were to refuse disposal and management system in Gaidam town that can be referred to in public health studies, practices and policies in Nigeria. To this end, the following were identified as the objectives of the research; determine the various methods of refuse disposal system practiced by the inhabitant of Gaidam town examine the methods refuse collection in Gaidam

### **RESEARCH QUESTION**

To meet the objectives outline for the research work, the research questions that this work seeks to satisfy was structured in the following ways. What are the methods of refuse disposal in Gaidam town? What are methods of refuse available in Gaidam Town?

### **SIGNIFICANCE OF THE STUDY**

Refuse disposal and management system in Gaidam town is important from various points. Given the population density variables of the township, this study become necessary for the following reasons. The result for this study will be beneficial to the health department and the sanitary inspections in Gaidam Local Government, to identify the need for proper refuse disposal. This study will provide useful information to the government health workers to enhance sanitation exercise to the conduct on a regular basis. This will no doubt pave refuse disposal and management in the town for the health theoreticians and academicians. The study intends to educate the public and would therefore serve as an enlightenment in educating the community about the method of refuse disposal and ways to manage them. Lastly from the economic points of view, She study in signification in that, its coined towards the control of menace of poor refuse disposal and manage thereby the government and the general public from expenditure, emergencies and man hour wastage associated with combating increase in decrease rate, their treatment and cures. Consequently the study may feature prominently in colleges Universities and house law makers, deliberations and feature environment sanitation policies in states

### **SCOPE OF THE STUDY**

The study will be carried out within the ambience of Gaidam town; the Local Government headquarters being the most densely populated town in the western pan; of the State (Yobe). The study will only concern Hausari, Kolori, Balle and Kelluri ward

### **REVIEW OF RELATED LITERATURE**

The various literature review for this study were discussed under the following sub-headings Concept of refuse management and disposal, Categories of refuse (waste) Methods of refuse management collection and disposal, Recycling Pulverization, Incineration, Landfill , Open dumping and Source reduction

#### **Concept of Refuse Management and Disposal**

Some authors have shown much interest in identifying the term refuse management and disposal system. Brooks and Brooks (1998) defined refuse as that Which include all the solid waste materials from Iranian habitations, except sewage, ashes rubbish and garbage and also refuse which many accumulate from industrial establishment. Aibor and Olunmda (2006) in their contribution defined solid waste as unwanted or any discarded materials arising from human activities and which are not free flowing. They further classify domestic and solid waste as that waste generated in large quantities and are mostly from industrial establishment, hospital waste, munal waste and site demolition construction activities.

While domestics solid waste they said, include garbage, establish, also hospitals sweepings and other bulky waste.

Another critical analysis by (WAHEB) ie. West African Health Examinations Board (1991) reveals that waste are produced and discharged into the human, environment as a result of human activity. This waste may be solid, liquid and gas. The solid waste, in public health parlance is often referred to as refuse while the liquid waste includes human excreta in referred to as sewage. The gaseous waste is the air pollutant They added that the solid waste (refuse) harbours pathogens and more especially its on important breeding ground for many disease vectors like rats, flies, mosquitoes and cockroaches it also create naissance and causes flooding by blocking of rivers and drainage channels.

In summary one will understand that, the importance of refuse management and, disposal cannot be over emphasized for the simple fact that any environment that is free from germ, and have vectors or insect vectors will be like healthy life. So it is importance for this system in Geidam is conducted to find out what methods they used in disposing of their refuse in order to proffer a suitable method for them.

### **CATEGORIES OF REFUSE (WASTE)**

Jackson (1989) stated that refuse waste in general should be categorized into different terms depending on where it is produced. ie basically classified waste into three main parts.

Domestic waste, which is generated from house hold or from surrounding environment it many result from animal or vegetable matter, ashes pieces of papers, floor dust, broken bottles or tins etc. Industrial waste from industries, Excretory waste, such as urine and savage. In addition to these wastes are commercial institutions and liquids waste from kitchens and laundry rooms. Whiles the collection of all waste has been termed "private sector operation" contrary to Jackson idea, Festus E Debbie (2001) classic: waste into four major with some specific example are:

#### **Domestic waste eg.**

Garbage, Ashes, Rubbish and Sweeping

#### **Industrial waste eg,**

Product of the earth, generated by extractive industries, From the basis industries eg. Mental scraps, plastics materials, From the fabricating industries eg. Broken glass, mental trimming

#### **Agriculture waste eg.**

Crops residues, Animal manures, Harvesting residences, Slaughter house residues

#### **Municipal waste eg.**

Construction, Hospital waste, Hazardous waste

### **METHODS OF REFUSE MANAGEMENT, COLLECTION AND DISPOSAL**

Festus E Devia (2001), Aidor Olurunda (2006). Where of the view that the final disposal of solid waste in any society an important factor. It entails the use of the proper system that will not further lead to the deterioration of the environment. A number of disposal method for solid waste "have been suggested by these authors they are, open dumping, into the sea or river, recycling source reduction, incineration, hog feeding sanitary land fillimo and pulverization.

Geidam and Anne, (2003) describe some methods that could be adopted in order avoid the spread of Pathogenic organism resulting from dirty environment as: -

#### **RECYCLING**

This involves the conversion of reusable solid waste methods such as plastics, paper and scraps of iron garbage etc. To economic use. Recycling is of incinerates benefit because it reduces environmental impact and improves tine cost effectiveness of waste handling and disposal.

## RECYCLABEL AND THEIR USE FROM SOLID WASTE

Waste	Recyclables value or solid
Hair Bristles	Brushes, lanol, fertilizer, idigs, blanket, carpets
Wool, feather	Falbrics etc
Hoofs horns	Buttons, combs, hair pin, novel tiles wastners, glue, gelatin
Hides skin	Horse miips, seats belts, handbags, book bridging
Feet	Shoes etc.
Intestines	Stock feed, surgiel ligatives, musical (gaiter) strining tenins
Blood Febrin foams, purified bouvine laburnum, dried blood and blood	Aluminium soft drink and beer cans cuttery
Paper	Newspaper, packing materials various types of recycles
Plastics (various types)	Bottles, milk jugs, pipes tin film packaging battery
Glass	Various glass product decorative pieces
Yard waste	Compost
Tires	Road paving building, shoes soles etc.
Batteries	Recycling for lead and reuse

### PULVERIZATION

Is another method of treating refuse, it refers to the mechanical treatment of solid waste to break: down die larger materials to reduce the average particles size This method have been in use for long in the developed countries and not in Geidam.

### INCINERATION

Is the term given to the private Of burning refuse under controlled conditions, this method offers the opportunity of significant weight reduction of the organic content of waste. This combination process requires careful control particularly in respect to temperature. If die temperature in the incinerator falls 75% the volatile materials are not completely burnt and noxiousadour may result which may again be injurious to health.

### LANDFILL

This method involves depositing solid waste on land Festus, (2001). Observes that landfill is a community used method of solid Waste disposal in most of the urban cities of developing countries of the world is the landfill. It involves the disposal of solid waste on land in such manner that will not pose nuisance or risk to public health as district from open dumping or indiscriminate practices; it implies the disposal of solid waste under strict supervision and regular checking.

### OPEN DUMPING

Open dumping of refuse has been an old age crude way of dumping refuse. The system is bat and should be discourage because it serves as possible source of both surface and underground water pollution. It also provide harborage for insect varim in the communities where this practices abound, nuisance odours, accident due to broken bottles or nails and discriminate burning of the heap are often frequent which lead to air pollution,

## SOURCE REDUCTION

This also involves the management of materials before end disposal to reduce the volume or toxicity of materials source reduction extends the useful life stream that is land filled or incinerated (Nwankwo, 1091).

Similarly Barry and Barton (2000) iii their own contribution to method of refuse disposal identified the following open dumping sanitary land filled control incineration, composting on the side disposal of refuse.

**Refuse generation:** a during life activities refuse are generated, such activities can be domestic, industrial, agriculture and aborting when refuse in generated, if should be subsequently handled, and not just thrown away.

**Refuse storage;** the mast satisfactory method is to require each household to provide a covered mental or plastic dustbin or any acceptable receptacle into which all. House hold refuses in placed. Its important things during the period of storage, refuse should be kept dry. In some communities they adopt the method of burying the refuse in the underground e g. Broken glasses, metals etc. while other on the sea, river or streams with the hope that if would be taken away by the following water. The presence of refuse in our immediate surrounding had the greatest effect on the entire health of the people living around. Falarim, (1991) stated that clear environment that is carefully planned and maintained does not only enhances the quality of live of its citizen but also help to promote and maintain physical health and that such clean environment will decrease the like hood infections the accumulation of sewage arid refuse in the surrounding would constitute nuisance solid eg Flies mosquitoes cockroaches etc. that can cause disease. He suggested that to avoid hazards, a provision should be made for dustbins incinerators, dumping grounds and other items for collection arid disposal of waste. West African Examinations Board (1991) are the view that sewage is capable of harboring at one time or the other, any type of pathogen, adding that human beings are fortunate that not all, the pathogens -which have access to the sewage can spread through sewage because they do not persist in sewage.

They added that waste also harbors pathogens and more especially it is an important breeding grounded for many disease vectors like rats causes flooding by blocking of river and drainage channels. The ideas of improper refuse disposal has taken revealed by the writers in the preceding review, has a great effect on the health of (lie individual as well as the people of Gaidam town and entire societies of the world at large. Getting rid of refuse in the surrounding especially near our dwelling is important to our health. Clean environment has a treatment value which guarantees joyful living. Tacking refuse disposal for granted, may likely generate several health hazards to the people in the area under study (Gaidam town/ inhabitant). Some of the current outbreaks of dream full disease eg. Cholera can be attributed to the attitude of the people in are: Therefore, taking proper measures on how to dispose refuse adequately and regularly should be a matter of great concern to both the public and private sector within die community. Some disease germs are largely attributed to harbour in the dirty collected which are left to decompose in our immediate verity. Poor sanitary condition has some lasting effect on man physical and social environment. Dirt and rubbish are the greatest agent of infections since accumulation of refuse is detriment as many health then proper disposal method should be adopted to ensure cleanness. However, the choice of disposal methods depends on it effectiveness and convenience. The responsibility for maintaining clean environment should



primarily be the dudes of every members group; organization, community as well as health authorities concern.

**METHODOLOGY**

This research is intended to examine how refuse are managed and disposal off in Gaidam town. The chapter highlight on the following: Population and sample, Research instruction, Procedure for date collection. Method of data analysis, Research Design

The survey method was used in this study. It is a research method Which is applied Which the unit of analysis in individual, either alone or as members of a group (Fajoayami and Fajonmi 2003) furthermore the survey method is intended to extract information from die respondent on his/her opinion, belief or attitude towards a particular things. This means that the individual 80 used for the research are only a fraction of the larger group as being a representative of the Whole/entire group (Njodi and David, 2004)

The population for this study comprises of both youth and adults in Hausari, Kolori, Balle and Kelluri ward in Geidam Local Government are Yobe State. The researcher knowledge the fact that it is impossible to investigate a(l other wards in Geidam town within the limit given for this research work, however, the ward were selected carefully with the view that findings from the selected wards could be easily generated to oilier wards with similar environmental or refuse disposal problems. Simple random sample method was used to select one hundred and forty (140) respondent from the population. The respondent also includes both the males, and females. The research instrument for this work was questionnaire, it contained 22 items section A-D "A" deals with deinographic information and has six '6' items section B was on refuse disposal and Has five items while section C was on refuse collection center Which also has five items and lastly section D which was on refuse management with 6 items. The method of respond was Yes or No and ten multiple choice answers.

A total number of one hundred and forty (140) questionnaires was distributed evenly t0 the four wards. The questionnaires require the respondents to choose from the alternative given, the distribution and collection was carried out by the researcher himself and two trained research assistant. Completed forms were collected back from the respondents after two (2) days of distribution.

**DATA ANALYSIS, RESULT AND DISCUSSIONS**

The methodological approach adopted for this research work yielded a lot of response. By the time the lest usable materials was extracted from the heap of questionnaires, the researcher was buried in an avalanche of papers mars of 250 pages which if presented without being analyzed, would carry no wearing to the reader in short data collected are useless if not analyzed (N jodi and David, 2004). Data analysis allows for easy understanding of the findings. These chapters therefore present analysis, result and discussions.

**DATA ANALYSIS AND RESULT**

A total of one hundred and forty questionnaires were distributed, only one hundred and twenty eight were retimed among which eight were not suitable due to non-clarity or improper completion, therefore only one hundred and. twenty were used.

Table 4.1.1 Demographic information of the respondents (N = 120)

Item	Responses	Respondent	%
Sex	Male	88	73.3

	Female	32	26.7
Age	Bellow 20 years	20	16.7
	20-35 years	48	40
	36-50years	32	26.6
	57 and above	20	16.7
Marital Status	Married	75	62.5
	Single	45	37.5
Area of residence	Kolori	31	25.8
	Hausari	29	24.2
	Balle	33	22.5
	Kelluri	27	27.5
Educational	Non formal education	30	25
	Primary Education	35	29.2
	Others Bsc,	55	45.8
Occupation	Farmer	15	12.5
	Business	30	25
	Public Servant	60	50
	Applicant	15	12.5

Result on 4.1.1 above shows that of the one hundred and twenty (120) respondent (93.3%) were males, and only (26.70 0) were female. (40%) of the respondent were of 20 35 years of age, (26.7%) were between the age of 36 50 years, others are (16.7%) each 1'.e. below 20 years and above 50 years of age respectively in all (62.5%) were married, Educational, majority or greatest percent of the respondents (45.8) has attended high institution most of which are Bsc. Holder HND, NCE or their equivalent. (29.2%) had primary education or less whereas (25%) education. On economic factor (50%) of the respondents are employed (25%) engaged in business while those that engaged in farming and that which were unemployed carried (12.5 each)

Table 4.1.2 Method of refuse disposal in Gaidam (N = 120)

Item	Responses	Respondent	%
Available of dustbin	Yes	105	87.5
	No	15	12.5
Method practice in the area	Burning	70	58.3
	Composing	30	25
	Recycling	8	6.7
	Others	12	10
Best Method	Comporting	12	10
	Recycling	8	6.7
	Burning	100	83.3
	Others	0	0
Site of refuse disposal	Along road	49	40.8
	In the stream		
	A refuse collection	59	49.2
	Center other	12	10

Refuse disposal responsibility	Local government	99	82.5
	Community	18	15
	Others	3	2.5

Result on 4.1.2 above shows the response on the method of refuse disposal system of the inhabitant in Geidam town. Majority of them (87.5%) has dustbin house (12.5%) has hob. Generally the result signify knowledge of refuse disposal methods, such as composting, burning, recycling and others, (58.3%] of the responded prefer burning as a way of disposing off refused (25%) by composting, others by dumping it b y the hill side and live it to decompose, the least among the practices is recycling (6.7%). when put to the respondent which of these method is- the best? Majority of them (83.3%) prefer burning as a method for getting the consequence of air pollution (10%) prefer composting and recycling (6.7%) still on the refuse disposal (492%) empty their dustbin to the collection center, (40.8%) disposed of)'' the street, while others take it to their farms or to bill side (10%). As to the question, who is responsible for collection an disposed of refuse in their community? Those that said and believe its the government responsible were (82.5%), those that are of others that believe, it is the individual responsible were (2.5%).

Table 4.1.3 Refuse collection centers in Geidam town (N = 120)

Item	Responses	Respondent	%
Any refuse collection centers	Yes	50	41.7
	No	39	32.5
Was the center provide by government	Yes	15	12.5
	No	105	87.5
Are the center big to cater for the refuse	Yes	30	25
	No	90	75
Improper disposal attract vectors	Yes	108	90
	No	12	10
Are there enough disposal centers	Yes	9	7.5
	No	111	92.5

The result in table 4.1.3 above indicates the availability of refuse collection center in the area and its proximity to the users. This can contribute to the health practices of disposal of the inhabitant in the area. The respondents were whether or not they have a refuse collection center in their area of residences? The greater percentage said yes, those that have no option as there was no any refuse center anywhere closely carried (32.5%) while those that claimed the refuse center close to their area is too far carried (25.8%) still on this question, the respondent were asked the collection center was provided by die government? (87.5%) disagree to the question (no) and (12.5%) agree to it (yes). Another questions related to this put to the respondent if they have enough refuse disposal center in the ward? No carried (92.5%) and yes had only (7.5%) similarly the respondents was ask to answer question as to how big the center were, if at all. there is to 'cater for their refuse? (75%) had chose No and (25%) said Yes. The level of awareness to the danger of improper refuse disposal is high as the greater percentage of the respondent were aware that improper disposal attract vectors and rodents which may consequently became a good source, of transmission of diseases, eg. Malaria, typhoid fever etc.



Table 4.1.4 Refuse management system in Geidam town (N = 120)

Item	Responses	Respondent	%
How do you treat your refuse	Burning	81	67.5
	Composting	30	25
	Recycling	9	7.5
Local government concern in management/treatment of refuse	Yes	27	22.5
	No	93	77.5
Local government assist in the collection disposal and evacuation	Yes	19	15.8
	No	101	84.2
Frequency of evacuation by government	Yes	17	14.2
	No	103	85.8
Whether or not being charged by sanitation court	Yes	0	0
	No	120	100

Table 4.1.4 above represents respondent view on refuse management system in Gaidam Local Government respondents were asked how do they treat or manage their refuse? 67.5% prepared to burn their refuse others by composting showing 25% and recycling 7.5% with regards to whether the government showing concern in how the community treats refuse? About 77.5% disagree to the question While 22.5% agree to it and on the local government assistance to the collection, disposal and evacuation of refuse? A go number of the inhabitant 84.2% claimed that no such assistance has been rendered to them and 15.8% respondent positively. Those that have dumping center in their area were asked, how often was the collection center evacuated Respondents that claim that it was evaluated on a regular basis were the least as they carry only 14.2% those that answered No were 85.8%. Lastly a question was put to the respondents whether or not ever being charged or fined by the sanitation court for discriminate disposal of refuse in their environment? All respondents answered No (100%) this clearly shows that government attitude and control measures on sanitation has n Ot been encouraging. Finally, a general question was thrown to the respondents on their advice to the general public on refuse disposal? They commented mostly on the general improvement of personal hygiene environment sanitation, and. proper disposal, of refuse while others were calling object they gave to provide more disposal centers.

#### **SUMMARY OF MAJOR FINDING**

1. Majority of the people managed or treats their refuse by burning
2. There were no adequate refuse collection/disposal centers where the research was conducted. '
3. The local government health department does not give much priority to refuse collection and disposal centers talk less of how the communities treat/dispose their refuse.

## **Discussion**

One of the factor that propelled the research work is to contribute to the study of management of refuse and disposal system in Gaidam town and to investigate whether current trend in the Management and disposal of refuse in Gaidam town have witnesses a significant change and to determine the availability of collection, center in. Geidam town, the study revealed that 87.5% of the respondents have dustbin in their house.

The study also revealed that, respondents are of the view that Dumping the best method for disposing or treating their refuse. This is uprising because burning cannot be the best method I can. rather say in. the easiest cost if we look at it the otherwise can lead to environment pollution specifically air pollution, which also have a negative effect on human health, refuse management and disposal system has become a necessary aspect of any society once such community want to have a good and healthful life, refuse of any Icing should effectively disposed oil" in a hygienic method for the simple fact that any attitudes of indiscriminate throwing of the refuse anywhere become a risk to the health of masking (Davey and Wilson, 1996). To alignment die government effort and cover their economic deficiencies 10% prefer composting, their decision were supported by Taylor, (2004) he explains that composting involved the decomposition of refuse through bacterial action into the humans like materials, This appear to be desirable solution which serve asked traditional fertilizer. The study also indicates that, there is awareness on the side of inhabitant that discriminate dumping of refuse disposal attracts vectors and rodents. According to Taylor (2004) Vectors and rodents can cause water born disease, such as cholera, typhoid fever, malaria fever are frequent in many of the town due to poor sanitation and safe water supply. Without and healthy environment free from abuses, the attainment of health for all will remain a farce community effort to provide their own refuse disposal collection center, drainage and sewage system should be encourage whereas over dependence on government should be discourage.

## **SUMMARY, CONCLUSION AND RECOMMENDATION**

The chapter deals with the summary, conclusion and recommendation made by the researcher based on the Ending of the study.

In the course of this research on the refuse disposal and management system in Gaidam Local Government, received from questionnaires distributed regarding the refuse disposal and management system in the town. The research was an explanatory one, it was aimed and disposal system in Gaidam town. To achieve the purpose of the study, three objectives and research questions were formulated to give study, relevant literature were also review.

The study adopted the survey method design and used a systematic simple random Sampling procedures to select a sample of 140 youth and adults in the wards of the to the selection of Sample also cut across the civil servant, businessmen and formers in to town. Age, sex and educational level of respondents were not Pre determined. For the purpose of reaching valid conclusion, only data from 120 respondents who duely complete the questionnaire were analyzed qualitatively using frequency distributed and percentage scores to answer the research question. From this process, the following major finding was made.

1. Burning or incineration was found to be the major method of refuse disposal
2. There was also over dependence on government for the collection, disposal and evacuation of their refuse.
3. The government on the other hand does not make provision for more collection centers for final disposal.

4. There was high level of awareness on the consequence of improper waste disposal as the inhabitant agrees to improper refuse disposal attracts vectors and rodents.
5. And lastly still on government, the Ending also indicates that it has not show concern on gives less assistance to the management and treatment of refuse in the community.

## CONCLUSION

Based on the finding of the study the following conclusions were drawn:

- It can be concluded that there was no proper refused management and disposal system in the area studied and hence can as well be generalized to be the same to the area not studied.
- Majority of the people managed or treat their refuse by burning.
- There were no adequate refuse collection/disposal center where the research was
- The local government health department does not give much priority to refuse collection and disposal center tall less of how the community treat/disposal their refuse.

## RECOMMENDATION

Man has become so knowledgeable that he cannot destroy himself in several ways. For example, he can destroy himself with Pollution. But he can preserve his life by using all knowledge to Prevented the accumulation of solid waste; In open dumps such are more than aesthetic disasters. If they are burnt they contribute air pollution and if they left water which parade through them pollutes ground water suppliers in view of this the following recommendation were drawn below:

1. Household other establishment should be compelled to private refuse contain with lids in their premises which all refuse collected must be dumped. Such refuse should be collected and or disposed off on a regular basis,
2. Refuse collection center should be provided and should be better organized. The use of enclosed compacting vehicles for removal is ideal and offender indiscriminate dumping of solid waste in an open dump should be stoned and brought to book.
3. Regulation and laws forbid the accumulation of solid waste in public places should cover everybody and not just class of mass. Laws could be made to impose heavy taxes on the makers of goods which will be discarded alter use e g. Table water, polyether bags etc. and heavy deposited for the return of used containers, such as table, rubber slippers, rubber backed for reuse might be encourage rather than abandoned them by the street at the mercy of environment elements. The problem of refuse disposal and. management may not be solved in the next hundred step are riot taken to work out adequate preventive measure legislative control and planning regulation.

## REFERENCES

Using Apha style New Edition.

Afbor, M.S & Oluanuda, J.O (2006) A Technical Handbook of environmental Health in the 21<sup>st</sup> century. Review Ed. Lagos, devine favor publisher.

Aminu, A.A (1995). Statistic for social and management science (2<sup>nd</sup> ed.) Maiduguri; government printing press.

Berry, B.O & Horton O.E (2000). The practice of sanitation to the environment (4<sup>th</sup> ed.).

- Baltimore the William and Wikins Company.
- Brook, S.M & Brooks N.A (1998) Turners personal and communication Health London the CV mostly company.
- Daniel, A.I (1980). School health practice St Louis Davey, A.I & Wilson P.E (1996) Environment pollution control 4<sup>th</sup> Ed.
- Emeharole, D.V (1996) evolution of solid waste management options for Abuja Journal for Environment Health (I), 27-32
- Fajonyomi A.A & Fajonyimi, M.A (2003) Research process in Education and social science Lagos: Goldy publishing Company.
- Festus, E.D, (2010) Introduction to Environmental Health (2<sup>nd</sup> Ed), Port Harcourt pauli Matex publishers.
- Folorin F.O (1991) “the problems of Environmental sanitation in Nigeria school” Nigeria School Health Journal vol. No. 1
- Sodman, A.O & Anne, k.N (2003) personal and community Health (2<sup>nd</sup> Ed.) London Bailliere Tindall.
- Jackson, E. (1989) Health for Effective Living. New York MC grand Hill Book Company, incorporated.
- Lucas, A.O & Gilles, H.M (2003) A Short Textbook of Preventive Medicines,
- U & John W. (1998). Health Personal and Commercial Hygiene for Nurses, London feber and feber limited.
- Nankwo, B.A (1991). Imperative of Research and management new Nigeria.
- Njodi I.A & David W.B (2004) Skills & Techniques of Reporting Research out come in Health Education. Ibadan books publishers.
- Taylor, W.K 2004. Waste Management and Disposal in Nigeria cities. (3<sup>rd</sup> Ed.) Enugu: prime time publishers.
- Soda P.O & Oguntoyumbo, J.S (1979) urbanization process and problems in Nigeria Ibadan: Wisdom publishers.
- WAHEB (1991) Water and Building sanitation. West Africa health examination Board Lagos: 72 Cambell street

Alpha Style 7 Edition.

**Supported by Tertiary Education Trust Fund (TetFund)**