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ENVIRONMENTAL EDUCATION: A COMMUNICATION IMPACT ANALYSIS

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ABSTRACT

The paper analysed the impact of communication in fostering environmental education. Efforts were made to identify some environmental problems in our contemporary society, highlight the common areas of concern, and analyse communication impacts in attaining environmental education objectives. Using the descriptive and analytical approaches, the paper notes that the current environmental challenges pose serious threat to the quality of life and health; and as such, calls for greater efforts towards making the environment safer and more habitable. In the process, the mass media have got a huge role to play as agenda setters and information purveyors. Governments at all levels too, should be at the vanguard of the campaign. The government at the federal must be seen as providing the leadership and technical and financial assistance to realize this goal. They should have the major role of setting the standards for environmental protection and pollution control. Enforcement must be carried out at all levels of government. Above all, the general public must see the efforts at preserving the environment as a collective responsibility because this is one issue that affects us all.

KEYWORDS: Environmental Pollution, Climate Change, Ozone Layer Depletion. Environmental Education, Communication Impact.

INTRODUCTION

Studies across the globe in recent time such as those of Awake (2002) [1], *Watch Tower* (2003) [2] and *Conserve Energy Future* (2011) [3], all point to the fact that our environment is constantly changing. From the Sahara to the Mediterranean, from the US to the UK, Canada to Cairo, Beijing to Berlin,

Lagos to Laos, New Dheli to New Zealand, Jerusalem to Jeddah, the story is alike. Humanity as a whole is faced with the general problems of air, land and water pollution, natural resource depletion, global warming, waste disposal, climate change, loss of biodiversity, deforestation, animal cruelty, ocean acidification, ozone layer depletion, acid rain, urban sprawl, and overpopulation and public health issues, among others [4].

Many studies have shown that the amount of greenhouse gas in the atmosphere in is already above the threshold that can potentially cause dangerous climate change. Today, climate disasters are already on the rise. Climatologists say that about 70% of disasters are now climate related, rising from about 50% in the last two decades ago. In the last decade alone, over 2.4 billion persons were estimated to be affected by climate change related disasters, compared to 1.7 billion in the previous decade. The cost of responding to disasters has also risen tremendously between 1992 and 2008. Within this period, we have witnessed destructive sudden heavy rains, intense tropical intense storms, repeated flooding and droughts.

Many of these environmental problems are man-made and they in turn take heavy human toll and come with a high price tag. By the year 2050, it is estimated that the global human population would grow by additional 2 billion persons, making the entire world population 9.6 billion [5]. The effect of continuous increase in human population without any increase in the planet size is already felt in many different ways. One is in the temperature rise. According to a report “Our Changing Climate”, the global warming that has been going on for the past fifty years is as a result of human activities [6]. According to him, since 1895, the U.S. average temperature has increased from 1.3 ˚F to 1.9 ˚F, with most the increase occurring from the 1970s [7].

Pieter Tans, a Climatologist of the National Oceanic and Atmospheric Administration, cited in Awake (August, 2013, p. 6) agrees that many of the

problems man is facing with the environment today is man-made. According to him, "if I had to put a figure on it, I would say that it is 60 percent our fault, the remaining 40 percent is due to natural causes". Similarly, the book *'5000 Days to Save the Planet'* cited in *Awake* of August, (2013, p. 8) reports that: "Modern man has lost respect for the earth in his greed for comfort and commercial gain and this conversely has damning consequences for us all". Anyaoku (2004, p. 473) explains it unambiguously in the following words:

> Global warming has become an undisputed fact about our current livelihoods; our planet is warming up and we are definitely part of the problem. However, this isn't the only environmental problem that we should be concerned about. All across the world, people are facing a wealth of new and challenging environmental problems every day. Some of them are small and only affect a few ecosystems, but others are drastically changing the landscape of what we already know. ... Our planet is poised at the brink of a severe environmental crisis. Current environmental problems make us vulnerable to disasters and tragedies, now and in the future. We are in a state of planetary emergency, with environmental problems piling up high around us. Unless we address the various issues prudently and seriously we are surely doomed for disaster because the current environmental problems require urgent attention.

Reasoning along this line, UNISCO (1977) [8] advices that the first approach towards tackling the problem is awareness of the dangers associated with the constant changes in the ecosystem. Accordingly, it is needful that as our environment changes, so does the need to become more increasingly aware of the problems that surround it. With the massive influx of natural disasters, massive warming and cooling periods, different types of weather patterns and much more, people need to be educated of what

types of environmental problems our planet is facing and expected individual contributions in environmental protection and preservation. This is to say that sustainability is now the key to prevent or reduce the effect of environmental challenges. There is now clear evidence that humanity is now living unsustainably, and an unprecedented collective effort is needed to return human use of natural resources to within sustainable limits. This implies that for humans to live sustainably, the earth's natural resources must be used at a rate at which they can be replenished.

In this regard, education is often said to be society-specific. This means that each society develops an educational system suitable for its purpose. It performs a unifying function within the society at one stage or the other. Education as a factor of social change refers to modifications, which occur in the life of a people over a period of time. Education is a process, its content is knowledge, the values and the methods must allow the learner to understand what he is being taught. Education in this context is expected to let people know about the causes, types, extent and the consequences of environmental degradation and, of course, its effective management in order to minimize environmental health hazards.

Furthermore, education will help the entire society, both the leaders and the led, to identify environmental problems as a felt need and, in turn, help all to work collectively towards a set goal of protecting the environment. For any educational Endeavour to succeed in this regard, there must be effective communication strategies needed for dealing with environmental problems. Efforts at providing this knowledge gap have prompted this study.

THE RESEARCH OBJECTIVES

The objectives were:

- To identify some environmental problems in our society that need fixing
- To highlight the major areas of environmental concern
- Analyse communication impact in attaining Environmental Education Objectives

METHOD OF ANALYSIS

This study is approached from the descriptive and analytical perspectives. [9], explains that descriptive studies as the name implies is aimed at describing or explaining a given phenomenon. [10], noted that the difference between descriptive and analytic approaches is that while descriptive studies attempt to describe, determine or identify what is, analytical research tries to establish why it is that way or how it came to be. This is in agreement with the submission of Wimmer and Dominick (2006, p. 179) that while descriptive research compares and describes what phenomena are, analytical research usually concerns itself with cause-effect relationships, and the result usually allows researchers to examine the interrelationship among variables and to develop explanatory inferences. This method is adopted to analyse the impact of communication on enviromental education in Nigeria.

THE REVIEW

The totality of human environment encompasses ecological, political, economic, technological, social, legislative, cultural and aesthetic aspects of life. Each of these aspects of the environment has at least one problem or

the other. The list of what constitute environmental problem is inexhaustible. Fort (2015) [9] and Energy Potential (2015) [7] are unanimous that the following issues constitute the most worrisome environmental challenges to humanity in our modern time.

- **Waste Disposal or Garbage Glut**: In developed countries, people generate excessive amount of waste or garbage. Most of them end up in the oceans and in the less developed countries. Some years ago, it was estimated that the residents of New York city alone produced enough garbage each year to bury the city's huge central park under four maters of refuse. In Germany, it was also estimated that the garbage annually produced by the people could easily fill the land space from capital, Berlin, to the coast of Mica, some 800 kilometers away. People have always had things to throw away. Because canned and packaged fools and goods are more widely available now than they were years ago. In Nigeria today, we are not an exception. Most of our cities are littered with garbage. The over consumption of resources and creation of plastics are creating a global crisis of waste disposal. This no doubt has tremendous health hazards. Plastic and nylon packed fast foods and overused and cheap electronic wastes threaten the well being of man.
- **Environmental Pollution:** In most parts of the world, pollution of air, water and land are taking serious toll on the environment and requires a thousand years ti recoup. Industries and motor vehicle exhaust constitute number one pollutants. Heavy metals, nylons, plastics and nitrates are all toxins that pollute the environment. Water too, is polluted by oil spill, acid rain, urban runoff, and such likes. The air is also polluted by various gasses and toxins released by industries and factories and burning of fossil fuels. The soil too, is majorly polluted by industrial wastes that deprive soil of essential nutrients.

- **Deforestation-** Millions of acres of forest are cut down for industrial benefit, such as large scale farming, oil mining, and the production of paper goods. Deforestation causes wildlife and biodiversity extinction. The International Union for Conservation of Nature (IUCN) has a Red List of environmentally threatened species with up-to-date information. Oftentimes, the cause for their threatened existence is listed as loss of habitat as it is for many Amazonian species.
- **Global Warming/Climate Change:** Climate changes leading to global warming is the result of human practices such as emission of Greenhouse gasses. This leads to a rise in the temperature of oceans and earth surface causing melting of polar ice caps, rise in sea levels and unnatural patterns of rainfall, flash floods, excessive snows and desertification.
- **Overpopulation:** Overpopulation is one of the crucial current environmental challenges of our modern world. Population explosion in less developed and developing nations is gradually pushing our planet to a level of acute shortage of essential resources such as water, fuel, food. Extensive agricultural and other tillage and mining to produce food to meet the demand of the ever growing population is straining the already scarce natural resources including damaging the environment through use of chemical fertilizer, herbicides, pesticides and insecticides.
- **Loss of Biodiversity:** human activities are leading to extinction of of species and habitats in the ecosystem. When a species is decimated, the ecosystem suffers. This calls for balancing of natural processes such as pollination to boost the survival of the ecosystem. In the same manner, there is also the problem of animal cruelty (indiscriminate anihiliation of animals, wild and domestic) and destruction of coral

reef in our oceans. These constitute loss of biodiversity, and it is a major environmental problem facing our planet.

- **Acidification of the Ocean:** This is another environmental problem caused by human. It is estimated that the ocean acid level has increased in the last 250 years and is likely going to shoot up by 150% in the year 2100. This is seriously affecting the aquaculture and in turn humanity.
- **Depletion of Ozone Layer:** This is another key environmental problem resulting from global warming. The ozone layer is an invisible layer protecting planet earth from the sun's harmful rays. This layer is said to be depleting resulting from effects of human activities, primarily, pollution caused by Chlorine and Bromide found in Chloro-Chloro carbons (CFC's). When these toxic gasses get to the upper atmosphere, they create a hole in the ozone layer, reducing the level of human shield from harmful radiations of the sun.
- **Acid Rain:** Acid rain is yet another environmental problem though not common in Nigeria but occurs due to the presence of certain pollutants in the atmosphere. It could result from the burning of fossil fuels or eruption of volcanoes or rotting vegetations which release sulphur dioxide and nitrogen oxide into the atmosphere. Acid rains have environmental problems that can have serious effects on human health, wildlife and aquatic species.
- **Urban Sprawl:** This refers to migration of of population from high density urban areas to low density rural areas which results in spreading of cities over more and more rural land. This results in land degradation, increased traffic and health issues.
- **Genetic Engineering:** This is modification of food using biotechnology. Genetic modification of food results in increased toxins and diseases as genes from an allergic plant can transfer to

another plant. Such plants or crops can cause serious environmental problems as an engineered gene may prove toxic to wildlife.

COMMON AREAS OF ENVIRONMENTAL CONCERN

School Environment

In the past, a clean well-ordered school environment in many countries helped students develop good habits of cleanliness. Today, some school grounds are so full of liter and debris that they resemble a garbage dump, rather a place of learning. Darren, in an Australian high school, observed; "now we see filth in the classroom as well", some students take the instruction "pick it up" or "clean it up" cleaning the surrounding as a means of punishment. This story is the same in our institutions of learning in Nigeria. In most of our tertiary institutions, the classroom are littered with orange and human pills, groundnut shells, and pieces of papers, among such other liters.

Home environment

Swell on Hoy, in her book chasing, asks are we as clean as we used to be? She answers; "probably not" She cites shifting social values as the main reason. As people spend less and less time at home, they simply pay someone else to do the cleaning for them. Some believe that if their homes are dirty and they are clean, it does not matter. There are many unnecessary things that are kept in some homes in the name of furnishing that could cause home accidents. Basic hygiene such as washing of hands after going to the toilet, washing plates, brushing the teeth, drinking clean water and washing of clothes are no longer taught in many homes.

The Society

Most adults are not always good examples of cleanliness, either in everyday life or in the business world. For example, many public places are

left messy and unsightly. Pollution of the environment is not done by faceless industries and businesses but by people.

ENVIRONMENTAL DEGRADATION

According to [10], "the global environment is witnessing systematic and steady degradation, which is reducing its capacity to support life" It is on record that 350,000 square km of Nigeria's land area has been affected by the desertification. Actually more than 11,000 species of animals and plants are threatened with extinction in the world and 484 plants with extinction in Nigeria alone. *Vanguard*, Monday, July 26, 2004, reports that erosion threatens to destroy structures worth over seventy million naira in Nnewi, Anambra State. The story is the same, the world over. Land, air, water are all affected.

Air is said to be life. This means that in the absence of air, there is no life. Polluted air on the other hand, results in respiratory problems such as asthma and other related diseases. If the source of drinking water is polluted, it results in water borne diseases such as cholera, typhoid, desentry, onchocerchiasis and death of aquatic animals like fish (in case of oil spillage. Chemicals from industries from, household's sewage system and erosion affect water sources.

Soil pollution includes poor soil nutrient and erosion. Additionally, noise can constitute serious health hazards such as the damaging of hearing organs, retardation of mental work and the aggravation of high blood pressure. Fragments from nuclear weapons of war are pollutants, which can cause cancer and certain lung diseases. Furthermore, in this era of "pure water" production, the empty pure water sachets constitute a nuisance to our environment. They block drainages and increase the chances of mosquito breeding. Empty pure water sachets affect the fertility of the soil

negatively because they do not decay and as such, do not allow to penetrate the soil.

In view of this situation, Okeke, (2001) [11], recommends environmental protection as the possible solution. According to him, environmental protection is "the method of organising and stabilising the environment to make it conducive for human habitation" (p.114). To protect the environment, various authorities and individuals have warned against earth's environmental disasters. An English librarian chained herself to a bulldozer to oppose the building of a road through a fragile ecological area. Two Aboriginal women in Australia led a campaign against mining uranium inside a national park, and the operations were suspended [12].

Some environmental activists use creative confrontation to expose global environmental problems. Thus, they use such tactics as chaining themselves to the gates of a saw-mill to protest the destruction of ancient forests. Another group of activists protested one country's breaking of whaling moratorium by appearing at its embassies wearing huge eyeballs to indicate that the country's activists were being watched.

The environmental activist organisation, Green-Peace, predicts that dangerous weather patterns, including more powerful hurricanes and heavy rains, will continue to wreak havoc across the planet; more severe droughts and floods will literally change the face of the earth, leading to the loss of coastal lands and the destruction of forests. In many other countries, there are environmental protection agencies and various organizations that fight against environmental degradation. Repeated warnings have come from such organizations yet, the situation looks very bleak. Millions of people die each year from water related to these most basic elements needed for life have worsened. To many, the situation is a paradox, because more information than ever before is available on environmental subjects.

More individuals and organization than ever are interested in seeing the environment cleaned up. Governments have established departments to help solve the problems. We have more technology than ever before to help deal with the problems. Yet, things do not seem to be getting better. Why? The implementation stage is faulty. For instance, various governments could agree on how to tackle environmental issues but find it difficult to enforce the agreement. The same problem confronts both individuals and organization.

Technological Development: One Step Forward, Two Steps Backward

Industrial progress was meant to make our lives easier. To an extent it has, and at the same time, the progress has aggravated the earth's environmental problems. A good example is the motor vehicle, which has made traveling quicker and easier. Nevertheless, modern transportation has been altering the chemical composition of the atmosphere by using inventions that spew out millions of tons of gases. These gases cause what is called the greenhouse effect, resulting in the warming of the atmosphere?

Antibiotics fall into a class of medicines called antimicrobials. These come under the general heading "chemotherapy," is often used in disease with treating while the term "chemotherapy", is often used in connection with treating cancer, it originally applied and still applies to the treatment of infectious disease, and in which case is called antimicrobial chemotherapy; [13]. The margin of safety between the dosage that will affect the germs and the dosage that will harm us called there therapeutic index. The larger the index, the safer the drug; the smaller, the more dangerous.

Furthermore, a chemical, "gamaline", is used for fishing, but such fishes are poisonous to the body. Also, insecticides are equally used to kill mosquitoes but they are dangerous to health. These are but a few examples.

ENVIRONMENTAL EDUCATION OBJECTIVES

It is often said that, "failure to plan is a plan to fail". As it applies to the issue addressed by this paper, realistic goals should be set in combating environmental problems. In the taxonomy of educational objectives, three domains have been identified, namely, cognitive domain (which emphasizes intellectual aspect}, affective domain (which covers the interest of the learner}, and psycho-motor domain (which is the practical demonstration of the acquired skills); in other words ACTION; these educational strategies can be applied to environmental education. The cognitive aspect include creating awareness, for instance, helping individuals and social groups to acquire basic understanding of the total environment, its associated problems and, of course, the management of environmental problems.

Affective domain emphasizes the interest of the learner and includes attitudes, values, feelings, emotions, dispositions and sentiments. This aspect of the objective will help individuals and social groups acquire social values strong feelings of concern for the environment so as to actively participate in its protection and improvement. The psycho-motor domain is the skill acquisition stage which seeks to help the individuals and social groups acquire the skills for solving environmental problems.

The important stage is "evaluation" which seeks to help individuals and social groups to evaluate environmental measures and education programmes in terms of ecological, political, economic, social, aesthetic and educational factors. Furthermore, individuals and groups should develop a sense of responsibility and urgency regarding environmental problems so as to devise appropriate action to solve those problems.

Educating the masses, using these educational strategies, will arouse their interest. In order to sees the need for environmental protection. The

masses should be taught the just as a clean home is the responsibility of everyone living in nit, so is a clean environment.

ENVIRONMENT AND EDUCATION

Environment is all the situations, events, people, among other things, but influence the way in which people live or work, and it includes air, water, and land. Nigerian environment, for instance, is the entire geographical area called Nigeria, the human beings therein, the rivers and the organism. Furthermore, environment includes the child's home, his parents, brothers and sisters, his peer group and the society in which he lives. "There are different types of environment namely: economic, social, religious and political environment" [14].

Many people confuse "schooling" with "education" and often use them interchangeably. Many authors refer to those who are incapable of reading and writing as "uneducated people". This is wrong because the ones so described are educated in their own way, only that the type of education they received is different from western education.

Etymologically, the word education is a process of leading or bringing up, when the outcome of the process is borne in mind, we speak of education as shaping, forming and molding to acceptable standard. Education is acquired within and outside formal schooling. For instance, local villagers in one community were educated that their water supply depends on the forest they were destroying. Shortly after this awareness, they became interested in preserving their forest. In summary, environmental education programmes seek to encourage people to look at their environment with a more critical eye, a more involved heart, and a more responsible mind.

To ensure success in environmental education, appropriate teaching methods should be used, such as, group method and lecture method, either

in a formal setting or in the village square, discussion method question and answer method, among other numerous methods. Environmental education objectives according to PACHAMA Alliance (2010) should include educating citizens that/to:

- Instead of driving to work or school, take a bus, walk, or ride on a bicycle to cut down on greenhouse gas emission.
- Consider investing in appropriate technologies like clean power (solar or wind energy). This would help reduce the problem of fossil fuels in the environment.
- Patronise more of reuseable products such as glass bottles, and cups than use and drop nylons, papers, plastic bottles and bags.
- Start combusting and recycling, to help cut down our waste production.
- Support local businesses and farmers by only buying organic foods from farmers and make sure the foods are pesticide free. Etc.

ACADA Model

ACADA stand for assessment, communication, analysis, design and action. This is a new paradigm in communication development which if properly applied will bring about environmental development.

ACADA model emphasizes the need to identify the felt need of the people before embarking on a developmental project. The most effective way is by assessing the situation on ground. Under assessment, three areas of behavior are considered namely: the ideal behaviour, current practices and priority behaviour. After assessment, the next step is the communication analysis to determine the appropriate channel through which people can be reached for a better result. The third step is the design, that ism mapping out strategies whereby the message will get to its audience, and finally, action is the implementation stage. This model also

emphasizes the need to monitor and evaluate the programme to know whether the stated objectives are achieved, and if not, why?

ACADA model fits appropriately in this paper because it will help educated people on the need for environmental production by first of all persuading them to see environmental degradation as a serious problem. It is only when the problem is identified that it becomes a felt need. Right now, so many people do not see environmental degradation as a serious issues and this is why many governments today concentrate on reviewing the economy only, while neglecting the environment.

The ACADA also emphasizes the need for advocacy. This implies that those in authority should be persuaded to embark on a developmental project such as, environmental protection, by providing facilities and enough funds, thereby creating an enabling environment for combating environmental problems.

The next step is communication analysis. The proper media in this context include interpersonal communication, traditional communication and the mass media. People can come together and share ideas and discuss the need to protect the environment.

The design stage is mapping out the strategies with which to attain the set goals. Such strategies in environmental protection include workshops, seminars, and conferences, among other fora.

The final stage of ACADA model is ACTION, that is, the implementation whereby the masses are expected to apply what they have learnt as regards environmental protection. The programme will be monitored and evaluated to ensure that the stated objectives are achieved. It not, the facilitator or researcher should review the entire stages to know which one is faulty and make amends.

COMMUNICATION MEDIA AND ENVIRONMENTAL PROTECTION

The mass media is generally believed to play the primary role of information, education, entertainment, mobilization, agenda setting, among others. With the ability to reach large, heterogeneous and amorphous audience simultaneously, the mass media can play pivotal role in public education for environmental protection and preservation. The education functions of the media as they affect the environment require that the media convey information on environmental topics and from such programmes, people learn such things like depletion, air pollution, global warning, oil spills, both burning, day-by-day quality of the air they breather. Greenhouse effect and a host of others. The media act as "gatekeepers" in selecting the type of stories that will affect the attitudes of the positively as regards environmental protection.

Broadcast media (television, ratio) are very effective in environmental education. In developing countries, transistor sets are now common, so the rural dwellers can be reached through these media. The media can persuade different organizations to fight environmental problems by educating the public through lectures, handbills, home video among other media.

In addition to the news sector, other forms of publishing and broadcast programming can be used to educate the masses on environmental issues prominent among them are specialized publications, documentary films, brief advertisements and public service announcements. Specialized magazines of environmental groups provide in depth articles on threats to wildlife, designed to arouse citizens interest in the problem.

Public service announcements and paid advertisements can exhort listeners to stop littering the environment with dirt. Documentary programmes can educate the masses on environmental issues, if they focus

on a particular point, such as "The impact of littering empty pure water sachets in our environment"

Most importantly, new media of communication, including the interactive social media platforms can also be employed in educating the mostly young persons users. This is important because several studies have shown that these new media of communication have become perhaps the most ubiquitous and effective in modern dissemination of information.

SUSTAINABLE MANAGEMENT OF THE ENVIRONMENT

One of the best ways of ensuring environmental sustainability is enactment of legislations to check air, water and other pollution at local national and international levels. Another is adequate parenting. A child trained from infancy to keep his environment clean would most likely grow up with it. Outside the home, say in the school, such a child is most likely not to litter the environment with empty sachets of water, groundnut shells, among other litters.

Safe disposal of excrement is very important because many germs are found in excrement. Human excrement should go into a latrine or toilet. Where a toilet is not available, excrement should be buried immediately. Toilets should be frequently cleaned and covered. Disposal of all household refuse should be given adequate attention because flies, cockroaches, rats and mice, all carry germs which thrive on garbage. If there is no garbage collection, household refuses should be thrown into a garbage pit where it can be buried or burnt each day. NAFDAC has a lot to do in connection with indiscriminate production of pure water. For example, the environmental condition of the products should be properly checked and monitored to ensure that pure water, as it is commonly known, is actually pure.

Environmental agencies should map out strategies and implement them to ensure that empty sachets of pure water are not dropped indiscriminately in the environment. Furthermore, any company producing pure water without expiry date and/or authentic NAFDAC number should be closed down. Nigeria should enact laws to limit environmental pollution, emission from cars and factories and other types of environmental problems.

CONCLUSION

The current environmental challenges pose a lot risks to humans and even animals. Dirty waters is the leading health risk of the world. It poses a serious threat to the quality of life and health. Run-off waters carry along toxins, chemicals and disease carrying organisms. Pollutants cause respiratory diseases like asthma and cardiac-vescular problems. High temperatures encourage the spread of infectious diseases like dengue. Depletion of the ozone layer causes exposure to toxic rays on humans. All these and other environmental health issues call for greater efforts and making the environment safer and more habitable.

In view of this, the war against environmental degradation should be seen as a collective responsibility; this is so because we are all involved. It should not be looked at as "their programmes but" our programme"; this is the only sure way a society that is interested in saving the environment and its associated problems will develop. Such a society is expected to manifest knowledge, skills, attitudes, motivations and commitment to work, individually and collectively, towards solutions to current environmental problems and the prevention of new ones.

RECOMMENDATIONS

Environmental education should be a life-long continuous process and through all age levels. So that environmental concepts can be presented in a logical sequence and at the time the learner is most receptive to the

materials presented. The programme should aim at increasing the leaner's interest in awareness of, and sensitivity towards the environment. The programme should emphasize local environmental problems so that individuals will have the incentive and tools to cope effectively with our current and future environmental problems. However, the programme should not neglect regional, national or international environmental problems. It should provide continuing opportunities for leadership training directed at helping people continually renew their understanding interests and awareness in environmental education.

Environmental education should be entrenched in school curricula from the primary level to tertiary institution. It could perhaps be made to go beyond the formal school setting. In doing so, the ACADA model of development communication could be effectively used to educate the government and the masses (both the rural and urban dwellers) on their respective roles in sanitising the environment. The society must be encouraged to shift to renewable sources of energy like solar, wind, biogas and geothermal. The cost of installing the infrastructure and maintaining these sources has plummeted in the recent years; governments must be seen making visible efforts in subsidizing these commodities.

Again, the task of environmental protection and pollution control should be seen as responsibilities shared by all levels of government; the federal government must be seen providing the leadership and technical and financial assistance. The governments too, should have the major role of setting the standards for environmental protection and pollution control. Enforcement must be carried out at all levels of government and standards must be enforcedin timely, consistent and equitable manner.

REFERENCES

1. Awake August 22, 2002. *The endangered species. Pp. 11-13.*
2. Watch Tower, February 1, 2002. *Why destroying our planet? Pp. 10-13.*

3. Conserve Energy Future (2011). *What is energy? Available* at: http://www.conserve-energy-future.com/ Accessed on 17/01/2017.

4. Adenrele, T, (1980). *Principles and practice of Education,* Ibadan, Ilesami press and Sons Nig. Ltd.

5. Awake, November 22, 2003. *Making the world a better place to live. Pp. 7&8*

6. Derck, B. (1981). *And so to teach, a general methods course*, Ibadan, Evans Publishers.

7. Energy Potential (2015). *A Guide for teaching energy in grades 3 to 8; environmental literacy teacher guide series.* Available at: *https://nationalgeographic.org/assets/file/energy- teacher-guide-ch6.pdf*.
8. UNISCO, (1977). *Trend in environmental education*, Belgium, 1, Duculot, 5800 Gemblou publishers.
9. Fort C. (2015). *2015 Climate action framework.* Available at: http://www.fcgov.com/environ- mentalservices/pdf/cap-framework-2015.pdf . Accessed on 17/01/2017

10. Okorie, John (1979). *Fundamentals of Teaching Practice,* Enugu, Fourth Dimension
    a. Publishing Co. Ltd.

11. Okeke et al (2001). *Citizenship Education – Concepts and Application, vol. 2*, Enugu, Academic Printing Press.

12. Oti, O. (1998). *Discourses in sociology*, Lagos, Solid Edge Associates.

13. Ojo, F.I. (1980). *A handbook on principles and practice of education*, Ondo, Omolayo Standard Press and bookshops co. (Nig) Ltd.}

14. PACHAMA Alliance (2010). *Environmental awareness.* Available at: https://www.pachamama. org/environmental-awareness. Accessed on 17/01/2017