

Chapter Seventeen

Raising Awareness On The Need For Conservation Of Natural Resources

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ABSTRACT

The paper discussed the need for awareness creation on conservation of natural resources. It began by identifying some of the problems arising from environmental degradation/depletion. Meaning and classification of the natural resources were discussed. The major reasons for conservation of natural resources were highlighted particularly as it concerns future survival of living things and economic reasons. Awareness need and environmental education efforts by the international community through the hosting of conferences and symposia on natural resources, environmental issues and climate changes were briefly discussed. Efforts by the Nigerian government to protect her rich natural resources and environment through agencies that are empowered by government laws were mentioned

Key words: Conservation, Natural Resources, Depletion, Degradation, Environment, Protection, Awareness.

Introduction

Problems arising from environmental degradation are on the rise today and a source of concern to human society. In the past, more than 100 years ago, man lived in harmony with his environment. Then, fears and dangers lately associated with environmental depletion were not in existence nor envisaged. Recent activities of human beings and technological advancement in agriculture, industry, transportation and other areas have greatly brought easiness and comfort to the human society, but not without a price tag. Casual uses of these natural resources are leading to their depletion and leaving mankind stranded. The activities, processes and materials/ resources used in production of goods and services have resulted in the depletion, dilapidation, degradation and destruction of the environment (Nwankwo, Esemua & Orefor, 2015). Care need to be taken to ensure the survival of all forms of life in the near future. Sensitization and awareness creation among the populace on the relevance of environmental protection are on-going presently at global, international, national and local levels. The problem of illiteracy and poor perception of the concept of conservation of natural resources is an issue to tackle by Environmentalists and stakeholders. Bad habits and poor attitude towards the need to conserve natural resources is another problem to be contended with.

Of utmost importance, according to the Columbia Electronic Encyclopedia (2012) is the issue of non-renewable resources such as oil, coal and other minerals useful for everyday working of the society.

Present day efforts are amenable to the protection of entire ecological regions by the creation of 'biosphere reserves'. The Encyclopedia described biosphere as the complex interrelationships among humans, other animals, plants and the physical environment. The need to balance human use and conservation beyond the boundaries of parks has become very important.

Meaning of 'Conservation of Natural Resources'

Conservation of natural resources refers to the sustainable utilization of natural resources like soils, water, plants, animals, minerals, timber/ forestry, fish, game, wild-life etc. Conservation of natural resources, as posited by Asim (2012) means the preservation of natural resources from lost, waste or harm. A lot of natural resources have been endangered through depletion and degradation. For example, water is being wasted and usage abused in some communities where pipe borne water or water bore-hole facilities have been installed. Conservation of natural resources is now conceived as a means of conserving the earth itself by protecting its capacity for self-renewal. Conservation of natural resources, as defined by the authors of Class work Series and Exercises, Biology SS1, Toscany (2014) is the planned or controlled exploitation or judicious use of natural resources to ensure their continuous availability and to preserve the quality or original nature of the environment.

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International Conference on Resource Sustainability (ICRS, 2018) defines resources broadly to include physical resources, biological resources and negative resources. Physical resources include metals, non-metallic minerals, energy, water etc. Biological resources include food, forestry, land, ecological systems etc. Misplaced resources, according to ICRS are air emissions, water pollutants and solid waste. Natural resources are those essentials which are needed for living yet available free of cost, for example fresh water, air, soil, forest, rivers and lakes, oceans, petroleum, coal, minerals, biodiversity etc

Classifying Conservation of Natural Resources

Conservation of natural resources can be classified in two ways according to Asim (2012). Conservation of natural resources can be classified into

1. (a) Living resources and
(b) Non-living resources
2. (a) Renewable resources and
(b) Non-renewable resources

Renewable resources can be replaced or are renewable. For instance, plants and animals keep producing new ones; and, they can be replaced. Other examples of renewable resources include rain, water, air, food, forest, soil etc, and they are threatened. These renewable resources have to be managed to ensure optimal use to the benefit of the

citizenry and for future purposes (Fetters, 2004). Non-renewable resources cannot be replaced; are fixed and can easily be depleted. Examples are crude oil, coal, tin, copper etc. These non-renewable resources need to be utilized for the longest time possible. Sustainability is the essence of natural resources conservation.

How to Conserve Natural Resources

Genuine efforts need to be put in place by humans to keep the environment alive and thriving for future survival. There are up to 50 ways to conserve natural resources depending on the perception. Ways to conserve as identified by Asim (2012) include (a) By protection. For example, Government should strictly prohibit illegal hunting of game reserves (wildlife) and prevent cutting of trees in the forests; and also maintain forest officers to safeguard natural resources from fires and other hazards which can decline the resources (b) By recycling. For example, old products containing minerals can be recycled. Tins, plastics, aluminum and paper packaging can be recycled. (c) By Species substitution. For example, mahogany tree can be substituted for 'Ogbeche' tree. Etc (d) By allocation. For example, the scarce commodities can be put on high price tag so that people go for the alternative (e) By Maximization. A product is maximized to prevent wastage

Important Reasons for Conservation of Natural Resources

There is need to ensure a balance in nature. Saving or protecting the constant loss of these invaluable resources, according to Lalwani (2019) is essential for survival of mankind and living things generally. Another reason and main purpose of the call for the management of the earth's resources, according to Columbia Encyclopedia (2012) is mainly for economic reasons. Valuable natural resources that need management for economic reasons include timber, fish, game, topsoil, pasture land, minerals, and also to the preservation of forests, wildlife etc.

These wonderful natural resources that GOD has endowed mankind with can be saved for future generation. These natural resources essential for the survival of life; and which the earth was blessed with include water, food, air, land, greenery (plants and trees). Other natural resources useful to mankind and later discovered by man include oil and gas. If the depleting and degradation of these natural resources (such as oil and gas) continues at the present rate without check, a major shortage and even extinction will be experienced. Animals that are under threat of extinction include lion, leopard, grass-cutter, elephant etc. Among trees of the forest, the popular Iroko tree is *under threat* of extinction. This development is already being predicted by Scientists, Environmentalists and Researchers. The world risks being trapped in a vicious circle. Serious imbalance manifests in form of deforestation, shortage of water, depletion of oil, power problem and soil erosion. The immediate imbalances can result in dire consequences

such as lack of agricultural growth, global warming and environmental pollution.

Another important reason for the conservation of natural resources, according to Asim (2012) is mainly to prevent or reduce wastage. When trees and timbers are cut down indiscriminately, for instance, wastage is the resultant consequences. This in turn leads to scarcity and high costs of papers and furniture, which are the end products of wood.

Awareness Need by the Society to Conserve Natural Resources

The attention of scholars/ researchers, scientists, environmentalists, government of nations, non-governmental agencies and world bodies such as the United Nations and the World Meteorological Organization are presently being directed on the need to manage, protect and preserve the global environment. Brief spotlight is shed on different conferences being held for the purposes of creating awareness on conservation of natural resources and dealing with the problems of environmental degradation/ depletion. Several conferences have been held on annual basis to tackle the problem of environmental degradation under different international and national umbrella bodies. Such conferences on environment include the International Conference on Resource Sustainability (icRS), the United Nations Conference on Environment and Development (UNCED), the International Conference on Sustainable Natural Resources Management under Global Change,

the United Nations Climate Change Conference etc. The agenda of these conferences on environment aimed to arouse people's awareness and instill positive attitude, values and skills that promote effective management of the environment (UNESCO, 2018). The conferences also laid emphasis on the need for environmental education by nations of the world (Nwankwo, Esemua & Orefor, 2015).

Since 1992, the international community has convened more than 12 major conferences which have committed Government of nations to address urgently some of the most pressing problems facing the world today (UNCED, 2019). These high profile meetings have achieved a global consensus on the priorities for a new development agenda for the new millennium. The conference process, according to the Earth Summit report has enabled international community to come together to agree on shared values, goals and strategies to achieve them (Encyclopaedia Britannica, 2019).

The United Nations Organization (UNO) is helping nations of the world to progress for consciousness-raising to agenda-setting on environmental protection. As posited by UNCED (2019), agreements have been reached on actions to follow-up on conference commitments regarding protection of natural resources. UN experts and non-governmental representatives have demonstrated the universality of concern regarding the issue of conservation of natural resources.

Highlights of Some International Conferences on Conserving Natural resources.

- i. **International Conference on Sustainable Natural Resources Management under Global Change:** This conference is an avenue to bring to the focus of international audience scientific contributions of member states on sustainable management of natural resources. It also provides platform for exchange of experiences about conservation of natural resources as a way to reconcile the objectives of economic development, social equity and environmental protection. The main topics of this conference according to Incredible Innovation Network (2018) are:
 - Ecology and management of forests, eco-systems and rangelands
 - Watershed management, soils conservation and agricultural practices
 - Water resources management and economics of the environment and the natural resources use.
- ii. **International Conference on Resource Sustainability (icRS):** The 2018 edition was held at Beijing, China (icRS, 2018). The sustainable utilization of resources is critical to resolving many societal challenges faced by nations of the world. The International Conference on Resource

Sustainability (icRS) serves as an opportunity for researchers and practitioners the world over with diverse background and expertise to share the most recent ideas, findings and practices on resource sustainability.

- iii. International conference on Agriculture and Plant Science: The 13th edition comes up in 2019 at Osaka, Japan. The conference is on natural resources management; and deals with the sustainable management of major natural resources, such as land, water, air, minerals, forests, fisheries, flora and fauna present on the planet. These resources provide the ecosystem services that are useful for human life on this planet.
- iv. Third International Conference on Natural Resource Management for Food and Rural Livelihoods: The conference was held in 2015 at New Delhi, India (ICSCSI, 2015). Topics covered at the conference include assessment, development and management of natural and human resources for livelihood and food security. Also discussed are integrated management of water and land resources to prevent land degradation and salinity related desertification. Other issues covered by the conference, according to ICSCSI (2015) include conservation agriculture systems for dry lands; rain fed and irrigated areas and climate change.
- v. United Nations Climate Change Conference (UNCCC): The conference had the popular Paris Agreement in 2015 and

held at Paris, France. That of 2016 was held at Marrakesh, Morocco (Wikipedia, 2016). The conference, UNCCC negotiated a global agreement on the reduction of climate change. The commitments, according to Wikipedia (2016) were estimated to limit global warming to 27 degrees Celsius by 2100. For example, the European Union (EU) suggested a term known as 'Intended Nationally Determined Contributions (INDCs)'. The suggested INDC by the EU is a commitment to 40 percent reduction in emissions by 2030 compared to 1990. During the 2018 United nations Climate Change Conference held at Katowice, Poland, the World Meteorological Organization released a report stating that 2017 atmospheric carbon dioxide levels reached 405 parts per million (ppm), a level not seen in three to five million years (Wikipedia, 2019). On 3rd December, 2018, the renown British naturalist, Sir David Attenborough told delegates at the conference that "Right now, we are facing a man-made disaster of global scale, over greatest threat in thousands of years: climate change. If we don't take action, the collapse of our civilizations and the extinction of much of the natural world is on the horizon."

Another 15 year-old climate change activist, Greta Thunberg posited during the 2018 conference on 4th December "What I hope we achieve at this conference is that we realize that we are facing an existential threat. This is the biggest crisis

humanity has ever faced. First we have to realize this and then as fast as possible do something to stop the emissions and try to save what we can save.” Other Environmentalists that spoke to the 2018 conference participants include Dalai Lama, Al Gore, Antonio Guterres (the Secretary General of the United Nations) all told delegates that the world faced the single most important moral choice in history of humanity. The grave consequences of global warming beyond 1.5 degrees will mean disaster for billions of people around the world (Wikipedia, 2019).

A US energy expert and environment official, Presten Wells Griffith said on 10th December, 2018 that “Alarmism should not silence realism.” Nations of the world should stop concentrating efforts on economic prosperity and energy security, but should also give commensurate/ complementary practical attention to pursuit of environmental sustainability. The 2018 conference agreed on rules to implement the Paris Agreement of 2015 which centred on how governments of nations will measure and report on their emissions-cutting efforts and ways to provide financial help for poor countries.

Efforts to Implement Environmental Education and Regulation in Nigeria

The Nigeria government is very conscious of the need to conserve her natural resources. The Nigeria government, through the Federal Ministry of Environment and other relevant agencies has been making efforts to educate the public on environmental issues. The print and the electronic media are being harnessed in this effort. Environmental conservation clubs have been suggested for implementation in Secondary Schools by the then Federal Environment Protection Agency (FEPA). FEPA in collaboration with the Federal Ministry of Education have developed environmental Education master plan and curricula for formal and informal education systems in Nigeria (Nwankwo, Esemua & Orefor, 2015). Environmental reference library has been established in Abuja and in Lagos. However, the impact of Environmental education is yet to be felt in Nigeria. Conscious efforts need to be made to implement environmental education in Nigeria.

Since the 1970's, Nigeria has been a key player in global environmental initiatives (NESREA, 2018). This is so because Nigeria possesses a well endowed environment and natural resource base, both renewable and non-renewable natural resources. However, Nigeria became environmentally conscious nation from 1987, after the dumping of toxic waste in Koko village, Delta State. The promulgation of the Harmful Waste Decree 42 of 1988 facilitated the establishment of the Federal Environmental Protection Agency (FEPA) in 1988 and

amended in 1992. FEPA was in 1999 merged with other relevant Departments in other ministries to form the Ministry of Environment (FGN, 2005). But no appropriate enabling law on enforcement issues was provided, thereby making FEPA a toothless bull-dog. Efforts have been made to implement Environmental Education in Nigeria, but without any impact being felt as at 2004 (Agbo, 2004). No organized conscious and focused efforts in directing environmental education in Nigeria schools as at then.

The vacuum created by lack of enabling law on enforcement issues of FEPA led to the establishment of the National Environmental Standards and Regulations Enforcement Agency (NESREA) in 2007 as an agency of the Federal Ministry of Environment. NESREA has duty for the protection and development of the environment biodiversity conservation and sustainable development of Nigeria's natural resources in general and environmental technology. This includes coordination and liaison with relevant stake holders within and outside Nigeria on matters of enforcement of environmental standards, regulations, rules, laws, policies and guidelines (NESREA, 2018). Regulations and enforcement by NESREA in compliance with the provisions of international agreements cover also areas of desertification, forestry, oil and gas, chemicals, hazardous wastes, ozone layer depletion, marine and wild life, pollution and sanitation. The Nigerian Nuclear Regulatory Authority (NNRA) is another agency.

empowered by the government of Nigeria to ensure healthy environment.

Conclusion and Recommendations

The need for improved awareness creation and education of the citizenry on the issue of environmental protection and conservation of natural resources is becoming a subject of urgent importance considering the dangers and the problems posed by degradation/depletion of man's ecosystem. Sustainable and long-term agenda must be put in place by nations of the world to protect the human environment from denigration. Positive attitude and right knowledge must be imbibed and be inculcated into students and the society at large on conservation of natural resources and the environment. Individuals, corporate non-governmental bodies and government of nations must go beyond organizing seminars, workshops and conferences to more practical efforts in curbing the problems of environmental degradation and depletion of natural resources. Existence of life here on earth is being threatened everyday by the activities of man on land and the ecosystem through industrialization, mechanization and the emission of harmful substances into the atmosphere. Healthy efforts towards the restoration and maintenance of the environment, such as tree planting and diversification of energy sources apart from combustion of oil and gases must be encouraged. Already depleted natural reserves can be saved by some kind of efforts. Problem of Erosion menace, desertification, global warming and extinction of certain endangered

wild-life species can be curtailed if all hands are put on deck. This can be achieved through formal and informal education of the citizenry and embarking on effective enlightenment campaign by all stakeholders. The necessary political will must be mustered by government of nations to tackle the problem of environmental depletion.

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