

Examining Environmental Sustainability and Conservation in Karu Local Government Area of Nasarawa State

¹Gadzama, Christopher Linus & ²Thankgod Okeokwo

^{1&2}Faculty of Law,
Federal University Wukari, Taraba State

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Abstract

Karu local government council is one of the Local Government Areas of Nasarawa State in the North Central Zone of Nigeria with lots of environmental sustainability and conservation issues ranging from erosion, flooding, tree felling, dumping of refuses on unauthorized sites, indiscriminate digging of roads and sewages for private uses. This paper focuses on appraising the Bye-Laws of Karu Local Government as it relates to environmental conservation and sustainability with a view to ascertaining whether such Bye-Laws, were they exist, are effective and efficient enough to meet the conservation and environmental sustainability issues affecting the Council Area. It was found that Karu Local Government have Bye-Laws which happened on the environment by failed to provide for conservation and sustainability in a manner befitting a legislature that knows through research the impact of obnoxious toxic poisonous waste drawn from the Koko Village incident of 1988. It was recommended that an interim measure of Regulations by the Agriculture Department or the Forestry Section be made to conserve and sustain the environment in the Local Council till the legislature does the needful in enacting for conservation and sustainability in the Council Area. In conclusion, the paper aligned with the view that conservation of the environment is the duty of individuals and government in times where industrialization is demanding much from the human environment.

Keywords: *Conservation, Sustainability, Environment and Karu-LGA.*

Corresponding Author: Gadzama, Christopher Linus

Background to the Study

Conservation is one of the ways to sustainability of the environment (McNeely, 1990). Conservation is the protection of the natural environment and official protection of buildings that have historical or aesthetic importance and the act of preventing something from being lost, wasted, damaged or destroyed (McNeely, 1990, 9-13). The management of human use of the biosphere so that may yield the greatest sustainable benefit while maintaining its potential to meet the needs and aspirations of future generation (de Groot, van der Perk, Chiesa & Marguliew, 2000). Conservation includes the sustainable use of the oceans, seas and marine resources for development and the protection, restoration and promotion of sustainable use of the terrestrial ecosystems, sustainably manage forests, combat desertification and halt and reserve land degradation and halt biodiversity loss. This paper discussed an appraisal of the Karu Local Government Area Laws that related to environmental sustainability and conservation in Nasarawa State. Alao (2009) explained that “Nasarawa State is situated in the North Central Nigeria between latitude 8°54' N and Longitude 8°39' E. it is in the guinea savanna eco-vegetation and has mean annual rainfall of 1550mm and annual temperature of 27°C” (14-20). Nasarawa State main economic activity is agriculture. The people also engage in production of minerals such as salt. The state plan lands and hills and has most beautiful sites and landscapes in the country (Known-Ndung, 2016). Karu is a local government area in Nasarawa State. The Karu Local Government Council Bye-Laws No.:1 of 2018 is cited in all its relevant provisions as it relate to environmental sustainability and conservation in the Council Area. Further reliance is had to Nasarawa State Environmental Law since Karu is an LGA of the State. It should be taken that the State law on the environment had covered the field for this purpose of discussing sustainable development and conservation in Karu LGA.

Environment is defined under section 37 of the National Environmental Standard and Regulations Enforcement Agency Act, to include; “water, air, land and all plants and human beings or animals living therein and the inter-relationships, which exist among these or any of them” (NESREA Act, 2010). Section 61 of the Environmental impact Assessment Act, defines “Environment” to means the components of the earth and includes-

- a) Land, water and air, including all layers of the atmosphere;
- b) All organic and inorganic matters and living organisms; and
- c) The interacting natural systems that include components referred to in paragraphs (a)and(b) (Environmental Impact Assessment Act, 2010).

Environmental Sustainability: environmental sustainability is the availability, equitable management and sustainable utilization of natural resources for the development of the people; the utilization should be such as will preserve, conserve and replicate nature for the present and future generation. Waste includes waste of all description of any substance which constitutes scraps materials, an effluent or other unwanted substances arising from the application of any process.

Refuse means garbage and other discarded solid material from agricultural operations and from community activities and it includes solid scrap building materials. Person means an individual and shall include a limited liability company or an organization duly registered

under the Companies and Allied Matters Act. Environmental Conservation involves the protection of natural environment and the official protection of buildings that have historical or aesthetic importance and the act of preventing something from being lost, wasted, damaged or destroyed.

Appraisal of Karu Local Government bye laws as it affects Environmental Sustainability and Conservation in Nasarawa State.

Karu Local Government Council Bye-Law (No.1) 2018 As It Affects Environmental Sustainability and Conservation in Nasarawa State

The part II of the Karu Local Government Council Bye-law No.1 of 2018 created Departments for the Council which included the Agriculture and Natural Resources Department (Karu Local Government Council, Environmental Sanitation and Prohibition of Indiscriminate Dumping of Refuse Silt and Other Environmental Health Offences Bye-Law (No.4) 2018). Section 4 of the law is designated functions for the Departments including the Agriculture and Natural Resources Department. Section 4 (a) established Sections in the Agriculture and Natural Resources Department to include among others, the Forestry Section (section 4(a)(b) Karu Local Government Council Bye-Law (No.1) 2018). Functions of the Forestry Section was not designated any number or alphabet to specifically identify it as a functional of the section of the law. The whole section, in my view, was inelegantly drafted. The draftsman consulted did not do a systematic job.

Functions of The Forestry Section

The functions of the Forestry Section include:

- a) Policing and patrolling forests to ensure compliance with the relevant forestry regulations.
- b) Measuring forest product for assessment of fees and royalties.
- c) Performing routine manual mechanical work in nursery shed, garden, plantation, forest or sanctuary.
- d) The forest Section shall perform any other functions in collaboration with and/or as directed by the Nasarawa State Ministry of Agriculture and Natural Resources (section 4(a)(b) Karu Local Government Council Bye-Law (No.1) 2018).

This research showed that the Department of Agriculture and Natural Resources had not been able to make regulations pursuant to the first function assigned to the Forestry Section. If the regulation is enacted, it would carter for the methods of conservation, consequences for deforestation and modes afforestation in the Council. Since environmental sustainability and conservation rest squarely on what is done on nursery sheds, gardens, plantations, forest and sanctuaries; the lack of regulations on this important duties/functions of the Department or Section shows lack of commitment on the part of leadership of the Council or a show of ignorance of the purposes for which the Department or Section was established. The consequences are the waste of conservable resources, damage and degradation of the environment resulting in flooding, destruction of building and loss of life as it occurred after a rainfall mid-July 2021 in Karu and Keffi respectively (Muhammad, 23 March 2023). The Section performs such other functions assigned to it by the State ministry of Agriculture and Natural Resources.

Environmental Sustainability in Karu Local Government Council.

The Karu Local Government Council Bye-Law (No.4) 2018, on page 205, set out to establish the environmental sanitation in the Council Area as well as the prohibition of indiscriminate dumping of refuse silts and other environmental health offences. This Bye-law intends to enable environmental sanitation in the Council Area, proscribe indiscriminate dumping of refuse silts and other matters which are considered to be health risk in the Council (section 1 Karu Local Government Council, Environmental Bye-Law (No.4)).

(a) Duties of Owners, Tenants and Occupiers

The page 205, Section 1 of Karu Local Government Council Bye-Law (No.4) 2018 outlined the duties of owners, tenants and occupiers to include: keeping clean the gutter area in the front and back sides of the building they inhabit or possess. Their duties extend to binding papers of all kinds and rubbish before putting them for collection. To put refuse into securely tied plastic bags or leak proof dustbins with tightly fitting lids; keep refuse dustbins within their premises until the time for collection; ensure that refuse dustbins are covered at all times with tight fitting cover; not to litter public places with rubbish or refuse. Section 2 of the Bye-law No.4 placed the responsibility on tenants and occupiers to ensure cleanliness of their premises particularly the backyard and the courtyard.

(b) Duties of Hotels, Restaurants, Clinics/Hospitals, Factory, Bakery, Night Club or School

Section 3 of the Bye-law provides for the duties of Hotels and Schools and the likes to ensure the cleanliness of their toilets and bathrooms within the premises; they are to ensure the immediate disinfection of the premises to prevent invasion of mosquitoes, rats, mice, larvae and other parasites which pose challenge to public health in the Council Area (sections 3&4 Karu Local Government Council, Environmental Bye-Law (No.4)).

(c) Duties of Pedestrian and Commercial Vehicle

We align the intention of the legislature to include any user of the road including private vehicle owners or users from littering the streets or road with what they have or consumed in their vehicles or as they moved along the road. The specific mention of pedestrian and commercial vehicle users will not exclude any other user of the environment in a manner that is inconsistent with the provisions of the extant Bye-laws of the Council (sections 5&6 Karu Local Government Council, Environmental Bye-Law (No.4)). Every person in the Council is bound to behave in an environmentally sustainable manner in line with the provisions of the environmental Bye-law operational in Karu Council Area. Everyone is to use the dustbins and not litter the environment with fruits peel, scrap of paper or other items. A driver who had not provided a litter bin is directly responsible for the littering of the environment done by his/her passenger. Waste disposal is required to be done at the designated sites whether it be industrial, commercial, discarded or domestic wastes.

(d) Permits For Posters, Billboards and Advertisements

Anyone who wants to advertise in the Council area is required to seek and obtain permit if it has to do with handbills, posters, notices, signs and other forms of adverts. The same applies to

persons who construct or put-up structures on roads, rails or sidewalks; for social gatherings and religious activities also required permits to hold (sections 8 & 9 Karu Local Government Council, Environmental Bye-Law (No.4). The fees payable is subject to review by the Council when it deems it necessary. Permits are required further before the burning or burying of refuse on any tenement or open place or the throwing or burying of industrial or commercial waste on such facilities (sections 11&15 Karu Local Government Council, Environmental Bye-Law (No.4).

(e) Obnoxious Toxic Poisonous Waste Disposal

The provision for obnoxious, toxic or poisonous waste disposal is dearth in my view. Section 17 of the Bye-law provided that “No obnoxious toxic or poisonous waste shall be deposited in a waste dustbin” It appears to this author that the Council Legislature did not quite understand the gravity of obnoxious or toxic or poisonous waste disposal, if it had the requisite understanding of the implication of not prohibiting with consequences the dump of obnoxious wastes and their likes, then, it could have done much better. Toxicity and poison affect all living object which are the primary occupants of the planet earth and Karu LGC in particular. The Koko incident could have served the purposes of drawing attentions of legislature to the peril the society could face if it did not perform its duties dedicatedly. There should have been elaborate legislation on what constitutes obnoxious or toxic or poisonous waste and the consequences or liability of offenders whether they be persons natural or corporate, whether the appropriate punishment could be imprisonment or fine or both or community service. The ancient principles of common law which says that a person cannot be said to have committed a crime if such act was not defined and punished by a law; have been enshrine in s.36 (12) of the Nigerian Constitution. The principle states *nullum crimen sine lege* which is interpreted to mean that a person under national or international law should not be punished for a crime that is not written in a law and its punishment clearly stated. Section 17 of the law did not provide for punishment in case of violation of the law by anybody or person. This has left that section of the law to the extent of obnoxious or toxic or poisonous waste disposal to be a toothless dog; although section 19 referred to the Second Schedule of the Law as housing the provisions for fine and extent of liability.

(f) Limitation to Action Against Persons Acting Under the Law

Section 20 of the Karu Bye-Law provides that “no civil proceedings of any kind whatsoever shall be brought against any person for damages or compensation in respect of any measures taken or to be taken under this Bye-law to promote environmental sanitation and/or prevention of outbreak epidemic without the written consent of the Attorney General of the state”(section 20 Karu LGA Bye-Law 2018). The implication is that permit had to be sought and granted to any aggrieved persons before he/she can institute action against Karu Local Government or its agent for acts or omissions done in the course of promoting environmental sanitation and/or prevention of outbreak of epidemic. To “promote environmental sanitation” was not defined by the law and leaves it to the discretion of the operators of the law to choose and pick what promotes environmental sanitation. Such important responsibility that should take away citizen's rights should not have been left to the subjective discretion of the operator. It is recommended that review or amendment be done on the law to reflect

specific punishment for specific acts and extensive definitions should be given to operator's responsibility to enable transparency in the dispensation and administration of the law.

(g) Other Laws: Pest Control and Tenement Rate

Karu Local Government Council Pest Control Bye-Law (No.15) 2018 deals on Pest Control in the council area with specificity of provisions for elimination of pest, insects, rodents, reptiles and any form of vermin by the operations of the health office or the health officer. Tenement Rate and Ground Rent Collection Bye-law (No.17) 2018 among other things gave the State Chief Judge to establish Assessment Appeal Tribunal (Lower Tribunal) to hear and determine whether assessment is reasonable and feasible; and to uphold the Valuation Office assessment.

Conservation

The core in the concept of conservation is the issues around sustainability of the environment (Scherrer, 2009). Conservation is the protection of the natural environment and official protection of buildings that have historical or aesthetic importance and the act of preventing something from being lost, wasted, damaged or destroyed. The prevention of natural species from extinction, exhaustion and depletion; and, the management, restoration and protection of endangered species are all encompassed in the conservation mix. What it means is that certain plants and animals are nearly wasted, destroyed or damaged by the use of resources by human in their anthropogenic characteristics (Chu and Karr, 2017). Joshi (2022) contends that conservation consist in the maintenance of essential ecological processes and life support systems for conservable plants and animals' specie in their natural habitat; preservation of genetic diversity and the guarantee of the sustainable use of species and ecosystems (Joshi, Palande, Gore, Oke, Manjunath, Naidu & Joshi, 2022, 8-14). Humans may use natural resources for industrial and technological advancement and agricultural/trade purposes. The concerns of environmentalist anchors on the sustainability of the use of such natural resources to prevent their being damaged or wasted or destroyed completely from the surface of the earth because there could arise a need in the future which only these species of plants or animals could resolve. According to Kwon-Ndung, Conservation is the planned management of natural resources, to retain the natural balance, diversity and evolutionary change in the environment. It is a protective measure taken; to prevent the loss of genetic diversity of a species; to save a species from becoming extinct and to protect an ecosystem from damage so as to promote its sustained utilization. For these authors, conservation does not happen at the instance of nobody. Someone has to plan and manage the natural resources of a state or people for sustained utilization of the natural resources. The management had to do with methods of retaining the natural balance of the object of conservation, its diversity in character and gene as well as its evolutionary changes in the environment.

Modes of Conservation

Modes of conservation includes: pre-history restrictions, earmarking of forest or maintenance of forest or observing land Sabbath or shifting cultivation and the creation of modern parks and games reserve are all methods for conservation of the environment in Karu and Nasarawa State. Conservation has numerous advantages which includes aesthetic and recreational value on the one hand and, scientific value as well as historical/cultural values.

The term conservation implies wise use of resources for the sustainable management at present and supporting availability in the future generations to come. It follows that conservation entails maintenance of essential ecological processes and life supporting systems upon which human survival and development depend; it includes the preservation of genetic diversity on which depend the breeding programmes necessary for the protection and improvement of cultivated plants, innovations and security of many industries utilizing these living resources; and, to ensure sustainable utilization of species and ecosystem, which support millions of rural communities as well as major industries like medicine, food and tourism. Alao said “A cursory look at the Nigerian biodiversity, Nasarawa State inclusive shows that a vast array of food, drugs, timber, building materials, fuel, fiber, ornamental, spices, resins, gums and other cash crops that provide significant support to the nation's economy is obtained from the wild.” It is argued here that the wild provide a lot for the welfare of humans in Karu LGA and Nasarawa State in general as pertaining to food, drugs, timber, building materials, wood for fuels, fiber, ornamental, spices, resins, gums and other cash crop hence the need for conservation laws for Karu as an LGA in particular and Nasarawa State in general. The reasons we need to conserve plants and animals' species are no long to be said to have been over emphasized in the wake of food security issues following lack of conservation law in Karu LGA. what it means is that the area is not covered for the future generation as far as conservation is concerned.

The Reasons There Should Be Conservation Law Karu L.G.A.

There are several reasons why a local government like Karu Local Government Area should have Conservation Bye-Law in place for the Local Government. The reasons are: Habitat alteration; Increase in human population; Climate change; Chemical pollution; non-viable population of species; Over-harvesting; and, Communal land use practices. The natural habitat for various kinds of animal and plant species which hitherto existed in the local government area has been observed to gradually being altered to fit modernization and development attracted to the area because of its proximity to the Nigerian Federal Capital Territory. Forest that was preserved for gaming, farm lands kept for shifting cultivation as well as animal reserves are all altered. The challenge is that there are no laws in the local government area intended to conserve or manage the habitat alteration. Similarly, Karu Local Government Area (LGA) is a safe housing and marketing points for Nigerian who finds unaccommodating the housing and marketing conditions of the Abuja – Nigeria's Federal Capital Territory. Demographic and commercial activities have shifted to Karu LGA placing the extant legal regime on environmental conservation and sustainability under urgent need for re-enactment.

The growth of demography and development/industrialization of Karu LGA has its bit contributed to the Climate Change challenges faced world over. There had been reported cases of flooding which caused loss of lives and properties in the local government. There are reports of rising heat in the day and torrents of winds threatening structures and government facilities within the area. Chemical pollution is another factor not covered in the environmental regime in the local government area which needs urgent inclusion in the subsequent amendment to the Karu Local Government Area (Environmental Sustainability

and Conservation) Law. Chemical pollutions have capabilities to contaminate both physical environment and underground water bodies endangering lives of humans, animals and aqua-existence.

Kwon-Ndung, *et al.*, in their work 'Diversity complex of plant species spread in Nasarawa State, Nigeria' said *inter alia* 'The massive rate of deforestation is a direct cause of biodiversity loss and Nigeria has been declared to have the highest rate of deforestation of primary forests in the world...the rapid reducing rate of Africa's forests and bioresources is linked with civil war, conversion of land for agriculture, wild fires, poor management of available land, uncontrolled search for food, fuel wood, medicine, construction timber, over-grazing by cattle, displacement and loss of landraces, lower yielding varieties, pests and diseases, pollution...' The authors are of the view that conservation in Nasarawa State should be taken seriously as its consequences are with us in the State following dearth laws on conservation and the resultant deforestation, erosion and bush burning as well as the destruction of bioresources in the State and Karu in particular. They furthered that the impact of deforestation on the socio-economic activities of Akwanga, Nasarawa State that the area has been seriously affected negatively by erosion, bush-burning and fire-wood fetching activities. They quoted other sources to the effect that there has to be a balance between the uses of bioresources and their conservation thereby preserving an ecosystem, which although altered would still be rich in bioresources and at the same time would provide food and other needs as well as perform vital environmental functions on a long-term basis. If the use to which natural resources are utilized are not put to conservation, then the sustainability of such environmental resources may not be guaranteed. There are therefore, consensus that the sustainability of environmental resources depends greatly on the conservation of those identified environmental resources particularly as it has to do with Nasarawa State in general and Karu local government in particular. Emphasis had been laid on habitat infractions, chemical pollution, over-harvesting or over-grazing and communal land use practices.

Methods of Conservation

The methods for conservation may include the following:

- a) **Traditional Methods:** traditional method of conservation may include using animals or plants or trees as religious object or place of worship or declaring a particular area of land sacred and not permissible for use at the time.
- b) **Ex-Situ Conservation:** this method involves maintaining organisms outside their original or normal habitats in facilities such as botanical gardens, seed gene banks, in vitro gene banks and field gene banks. The method is deployed for the preservation of rear endangered species with the aim of releasing them to their natural habitats when their population and environments are stable.
- c) **In-Situ Conservation:** this method ensures protective measures against poachers, controlled exploitation of forest reserves, controlled burning practices, and reduced intensity of cattle grazing.

Conclusion

Mankind is a part of nature and life depends on the uninterrupted functioning of natural system. Living in harmony with nature gives man the best opportunities for the development of his creativity, and for rest and recreation. Every form of life is unique including those of species that make biodiversity possible, warranting respect regardless of its worth to man, and, to accord other organisms such recognition, man must be guided by a moral code of conduct like the recommended Bye-law. Man can alter nature and exhaust natural resources by his action or its consequences and, therefore, must fully recognize the urgency of maintaining the stability and quality of nature and of conserving natural environmental resources.¹

Recommendations

The paper recommended the under-listed based on the analysis of the available environmental laws of Karu Local Government Council (Nos.1&4) 2018:

- 1) There should be specific Bye-law of the Council on conservation since there appear to be a skeletal provision for environmental cleanliness in the Council. The said Bye-law should cover chemical pollution, protection of water bodies and waste management.
- 2) Species endangered by unfriendly environmental practices in the Council should be identified and conserved for scientific, aesthetic and natural/historical conservation.
- 3) There should be regulations made for conservation pursuant to the Forestry powers of the Agriculture and Natural Resources Department of the Council.
- 4) Laws and Regulations should be drafted in a chronological manner as to create definite identity to definite issues addressed in the Bye-law.
- 5) Experts should be consulted in each field of law for a robust legislation.

¹Preamble 22, World Charter for Nature.

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