CRIMINAL LIABILITY AND SANCTIONS ON PERPETRATORS OF POLLUTION ON WETLANDS IN CAMEROON: WHAT THE 1996 ENVIRONMENTAL MANAGEMENT LAW SAYS

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ABSTRACT

This article examines criminal responsibility and sanctions melted out on perpetrators of pollution on wetland ecosystems in Cameroon. It objective therefore, is to scrutinise the causes of pollution on wetlands and the contributions of the 1996 Environmental Management Law as far as criminal liability and sanctions are concern on the committers of pollution on wetland ecosystems in Cameroon. The paper argues that, though there exist criminal liability and sanctions on authors of pollution on wetlands in Cameroon, wetlands in Cameroon continue to face degradation and loss as a result of anthropogenic factors. This article which to know why there is continues pollution on wetlands in the face of criminal liability and sanctions in the Environmental Management Law of 1996? The research rest essentially on the analysis of primary and secondary data, as such, the empirical and intensive desk research techniques are used to collect relevant information from text book, articles and the internet. The paper concludes that criminal liability and punishment on agents of pollution on wetlands is very important and the provisions of the 1996 Environmental Management Law should be respected and effectively implemented. The article recommends environmental education and sensitisation of individuals, private and public establishments. The introduction of environmental education and awareness in primary, secondary and higher institutions, bringing on board Non-Governmental Organisation, traditional authorities in collaboration with the administration.

INTRODUCTION

Pollutants in ground water and fresh surface waters that flow into wetlands can be toxic to plants and animals, and they can accumulate in wetland sediments causing massive impact on the health of a wetland[i]. Once a wetland is polluted, it is very difficult to clean it up[ii]. The be0st way to keep wetlands clean is to protect them from pollution in the first place, by ensuring a contaminant free water supply via criminal liability and sanction[iii] mechanisms which can easily act as a deterrent to others. Wetlands are defined as areas of marsh, fen, peatland or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, brackish or salt, including areas of marine water the depth of which at low tide does not exceed six metres[iv]. The cleansing power of wetlands provides natural pollution control and they help to filter and collect sediment from runoff water which helps prevent mud from clogging lakes and reservoirs downstream[v]. In other to protect wetlands from hydrocarbons or chemicals, harmful and dangerous substances or any operator of a classified establishment who can caused damage to a wetland directly or the wetland species, the State of Cameroon took upon itself to enact the Environmental Management Code in 1996[vi] so as to protect wetland ecosystems from pollution in particular and the environment in general. In this paper we shall examine the causes of pollution on wetlands in Cameroon, the effects of pollution, criminal liability and sanctions and recommendations.

THE CAUSES OF POLLUTION ON WETLANDS IN CAMEROON

Pollution on wetlands can be caused by both anthropogenic and natural factors, below we shall examine some major causes of pollution on wetlands in Cameroon that must not go without criminal responsibility and sanctions as provided by the Environmental Management Code of 1996.

Pesticides

Agricultural herbicides, insecticides and other types of chemicals used to reduce seed damage or increase the effectiveness of pesticide applications, like fungicides, fumigants, surfactants, and drift retardants, can cause important damages to plants and animals in wetlands[vii]. These pesticides can reach wetlands via spray drift, aerial deposition, or most commonly through surface runoff or ground water flow[viii].

These substances may have a lethal effect for animals that are directly exposed to them by eating, drinking and skin contact, as well as to plants that take contaminated water through their roots or receive direct pesticide deposits on their surface. Aquatic plants and algae are more sensitive than fish or invertebrates to contaminants such as herbicides[ix]. Since they form the base of the aquatic food web, impacts on them can cause adverse effects on all higher animal levels in a wetland ecosystem. Pelagic and biofilm phytoplankton communities are also significantly affected by herbicides which produce stimulating hormonal effects and community structural changes on them[x].

For example, a waterfowl population structure may be altered by a lack of juveniles because they were more susceptible to pesticide poisoning or the population of a certain species may grow excessively due to the disappearance or decrease of its predator species. Article 27 of the Environmental Management Code of Cameroon provides that:

> Flood plains shall be specially protected. This protection shall take into consideration their role and importance in biodiversity conservation[xi].

Article 7(1) of the 2003 law to regulate activities of the fertilizer subsector in Cameroon states that:

> Any individual or corporate entity, whether public or private, which owns a farm and intensively uses fertilizers shall be bound to regularly conduct an impact assessment of such fertilizers on the environment.

Article 27 of the 1996 law above failed to put in place strategies on how this important ecosystem would be protected from agricultural herbicides, insecticides, and other types of chemicals used to reduce seed damage or increased the effectiveness of pesticides application closed to wetland ecosystems. Article 7(2) of the 2003 fertilizer law above on its part simply state that the modalities of such impact assessment shall be laid down by regulations. It is our opinion that instead of laying down impact assessment regulations in another document, the legislator should have put in place all the required modalities in the same document so as to facilitate access to information in the document and promote effective implementation of the law.

Industry

Industrial activities affect wetlands via Saline water discharges, hydrocarbon contamination,

and radionuclide accumulation from oil and gas production which can significantly degrade coastal wetlands[xii]. Plants suffocate when oil blocks their stomata[xiii]. Polynuclear Aromatic Hydrocarbons [PAHs] are dangerous compounds when they enter estuarine wetlands through industrial and natural activities such as atmospheric disposition[xiv]. Fish contaminated with this extremely dangerous toxic compound usually exhibit external abnormalities, such as fin loss and dermal lesions.

Article 47(3) of the Environmental Management Code provide that:

> Special industrial waste considered dangerous on account of their properties shall not be dumped in stock plants receiving other categories of waste"[xv]. Article 47(2) on its part states that "waste shall be discharged into dumps that are periodically inspected and which respect the minimum technical norms of dump management.

Industries in Cameroon continued to act with impunity because the law is not effectively implemented due to the almost lack of experts and regular control missions to ensure that dangerous industrial waste are not dumped in the same stock plant receiving other categories of waste.

Agriculture

Agriculture has been considered as the main source of pollution that affects wetlands[xvi]. The passage of the *swampbuster* legislation had prohibited the conversion of wetland ecosystems to agricultural production[xvii]. However, certain activities performed by man can degrade wetland ecosystems, for example, construction and maintenance of farm to market roads, maintenance of dams, and minor drainage[xviii]. These activities can alter the hydrology of a wetland ecosystem, thereby changing it composition.

In Cameroon, strictly speaking, no national standard exists for organic agriculture. The operators started from the opportunities offered by European markets to develop Cameroon's potential in organic agricultural production. Until now, the basis used has been European Economic Community (EEC) Regulation 2092/91[xix]. To remedy this situation, the Cameroonian legislator should enact laws on organic agricultural production so that she will be able to regulate standard organic agricultural activities in the country that may contaminate wetland ecosystems.

Urbanization

Urbanisation results to direct loss of wetland ecosystems around the world[xx]. Construction activities are a major source of suspended sediments which result to urban runoff that enters wetland ecosystems[xxi].

Article 40 (1) of the Environmental Management Code of 1996 states that:

> Urban development plans and public or private housing development plans shall take into consideration environmental protection while choosing locations for economic activity and residential and leisure zones. Prior to their implementation, these plans must record the obligatory opinion of the Administration in charge of the environment"[xxii].

Urban development and public or private housing construction projects continued to be implemented in Cameroon with almost no respect for the law. The effect of this is continues wetlands degradation and lost in Cameroon as many wetlands are polluted in especially the big cities and towns in the country where the degree of urbanization is very high[xxiii].

Toxic Compounds

Runoff that is not treated or properly treated can contaminate wetland Ecosystem species and led to mortality and deformities for example, in bird, amphibian, and fish embryos[xxiv]. Article 36 (1) of the Environmental Management Law of Cameroon stipulate that:

> The soil and sub-soil as well as the limited renewable or non-renewable resources contained therein, shall be protected against any forms of degradation and jointly managed rationally by the competent administration[xxv]

It is therefore the duty of the competent administrative sectors to regulate the use of pesticides by farmers, especially cocoa farmers closed to wetland ecosystems during spraying periods. Most of the cocoa formers lack the basic knowledge about the pesticides they used in their farms and their effects on wetland ecosystems. It is therefore in our opinion that the Ministry of Agriculture and Rural Development in partnership or collaboration with the Ministry of Environment, Nature protection and Sustainable Development should always through their decentralized units organize workshops and seminars to sensitize farmers on how to use pesticides closed to wetlands and on which type of pesticides are totally unacceptable for used by farmers.

CRIMINAL RESPONSIBILITY OF AUTHORS OF POLLUTION ON WETLANDS IN CAMEROON

The Environmental Management Law of Cameroon examine criminal liability of those responsible for pollution on wetland ecosystems in Cameroon, it provides that:

> Without any prejudice to the sanctions applicable within the framework of penal liability, any person transporting or using hydrocarbons or chemical, harmful and dangerous substances, or any operator of a classified establishment who has caused body or material damage directly or indirectly linked to the exercise of the above-mentioned activities shall be liable for damages without the need to prove his offence[xxvi]. The reparation of the damage mentioned in (1) of this article shall be jointly borne when the author of the damage proves that the body or material damage is the fault of the victim. It shall be exonerated in the event of a force majeur[xxvii]. When the constituent elements of the offence originate from an industrial, commercial, cottage industrial, or agricultural establishment, the owner, operator, director or manager as the case might be, may be liable to fines or legal fees owned by the authors of the offence, and to the rehabilitation of the sites[xxviii].

From the articles above, wetlands are not expressly mention. However, implicitly they are also covered/ protected by this portion of the law. Authors of pollution directly liable as well as victims and classified establishments that may have contributed in one way or another in polluting a wetland ecosystem are all criminally responsible.

SANCTIONS TO AUTHORS OF POLLUTION ON WETLANDS IN CAMEROON

The Environmental Management Law of Cameroon is very categorical as concern the pollution of wetland ecosystems in Cameroon. It provides that:

> Any person who dumps toxic and/or dangerous waste on Cameroonian territory shall be liable to a fine of 50.000.000(fifty million) to 5000.000.000 (five hundred million) CFA frs and life imprisonment. Any person having polluted, or degraded soils and sub-soils, altered the quality of air and waters in violation of the provisions of this law shall be liable to a fine of 1.000.000 (one million) to 5.000.000 (five million) CFA frs and a

> prison sentence of 6 (six) months to 1 (one) year or only one of these two. The sanctions provided for by this article shall apply without prejudice to the right to compensation of public or private establishments as well as of persons having suffered damages originating from pollution. It concludes that the sanction shall be doubled when the above-mentioned offences are committed by an official of the Administration in charge of environmental management, or with their complicity[xxix].

From the above articles of the law, it is very clear that the Cameroonian legislator understands the dangerous and negative impact of pollution on wetlands in particular and the environment in general. The legislation made provision for compensation to both public and private establishments as well as persons who have suffered damages originating from pollution. It however, doubled the sanctions if the offence is committed by an official of the Administration in charge of environmental management.

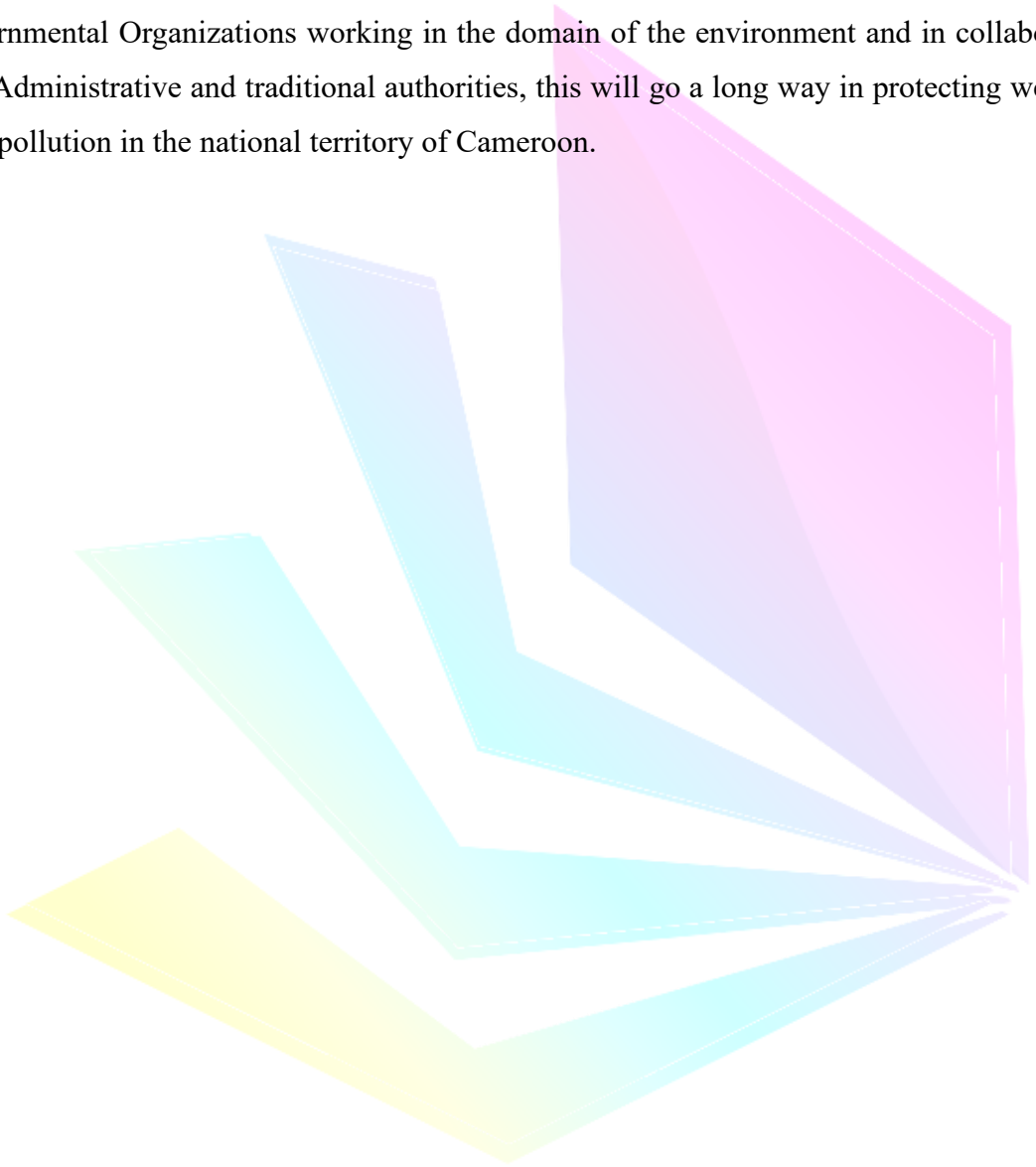
CONCLUSION AND RECOMMENDATIONS

The environmental management law of Cameroon provides for criminal liability and sanctions to authors of pollution on wetlands in Cameroon in particular and the environment in general[xxx]. The legislator went as far as sentencing perpetrators of pollution offences to a life imprisonment with a fine of up to 500.000.000 (five hundred million) CFA frs[xxxi]. This is to show how pollution on wetlands in particular and the environment in general can be very detrimental to man, aquatic life and the environment as a whole. Pollution on wetlands is however, caused by a number of factors[xxxii]. In other to protect wetlands from pollution, we recommend environmental education and sensitization of private and public establishments as well as persons on the negative effects of pollution on wetland ecosystems in Cameroon in particular and the world in general. It is for this reason the Environmental Management Code stipulates that:

> Environmental education should be introduced in primary and secondary school curriculums as well as in institutions of higher learning[xxxiii]. That in order to strengthen environmental awareness in the society and increase the sensitization on and participation of populations in environmental issues, the administration in charge of the environment and communication, as well as other administrative units and public bodies concerned shall launch information and sensitization campaigns using the media

> and other means of information. To this end they shall make use of the traditional means of communication as well as the traditional authorities and associations working in the field of the environment and development[xxxiv].

It is our humble opinion that if environmental education and awareness is encourage in primary, secondary and higher institutions, bringing on board national and international Non-Governmental Organizations working in the domain of the environment and in collaboration with Administrative and traditional authorities, this will go a long way in protecting wetlands from pollution in the national territory of Cameroon.



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[3] Available at https://www.reseachgate.net, last accessed on the 7th of May 2022 and https://www.ncbi.nlm.nih.gov, last accessed on the 7th of May 2022.

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[5] Available at https://forestinfo.ca, last accessed on the 8th of March 2022.

[6] Available at www.org.uk last accessed on the 7th of March 2022

ENDNOTES

1 Available at www.org.uk last accessed on the 7th of March 2022
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[3] Criminal liability in simplest terms means you may be held legally responsible for breaking the law. This can be potential or actual responsibility, meaning that you actually committed the crime, or that you are simply suspected of committing it,(see Marcia S in "What is Criminal Liability? 2015) on the other hand, Criminal sanctions are the penalties imposed on those who commit crimes. Whether a sanction is criminal or civil flows not from the nature of the penalty, but from the wrongdoing it punishes (or from the law that imposes the liability) (see Joseph J.B "*Criminal Sanctions*, *Global Dictionary* of *Competition Law"*, Concurrences, Art, N°88940, 1990).
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[23]For example, Douala, Yaounde, Bafoussam, Limbe and Bamenda
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[25] Law N° 96/12 of 5th August 1996 Relating to Environmental Management in Cameroon
[26] See Article 77(1) of Law N°. 96/12 of 5th August 1996 Relating to Environmental Management in Cameroon.
[27] See Article 77(2) ibid
[28] See Article 78 Ibid.
[29] Articles 80, 82(1), 83(4) and 86 of Law N° 96/12 of 5th August 1996 Relating to Environmental Management Law in Cameroon.
[30] Part VI of the Environmental Management Law.
[31] Article 80 Ibid.
[32] Such as pesticides, agriculture, urbanization, toxic compounds and industry.
[33] Article 73 of law N° 96/12 of 5th August 1996 Relating to Environmental Management in Cameroon.
[34] Article 74 Ibid.