

**ENHANCING THE ENABLING ENVIRONMENT FOR  
ILLEGAL BUSHMEAT EXPLOITATION IN CAMEROON'S  
WETLANDS FOR CONSUMPTION AND  
COMMERCIALISATION: CAUSES, SHORTCOMINGS OF THE  
LAW AND EFFECTS TO MAN AND THE ENVIRONMENT**

*Written by Dr. Tanjong Napoleon Tabe*

*Assistant Lecturer, Faculty of Law and Political Science, Department of English Law,  
University of Yaounde II Soa, Cameroon*

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**ABSTRACT**

*This paper examines factors that are responsible for facilitating/promoting the illegal exploitation of bushmeat from Cameroon's wetland ecosystems for the purpose of consumption and commercialisation. The paper argues that the illegal Exploitation of this wildlife species for consumption and commercialisation is cause by the weaknesses of the law and this has contributed to negative impact to man and the environment; threats of diseases such as Ebola, HIV, SARS and currently the deadly Covid-19 pandemic believed to have been transmitted from pangolins to humans in the Wuhan City of China are all detrimental to the existence of man and the environment. It concludes that in order to fight this phenomenon and protect wildlife species on wetland ecosystems in Cameroon from illegal exploitation for bushmeat consumption and commercialisation, there should be an effective implementation and enforcement of laws and policies protecting wetlands ecosystems and their species as well as educating the populations on consumption and belief attitudes towards nature.*

## 1. INTRODUCTION

Bushmeat management can contribute enormously to the conservation of wildlife in Cameroon's wetland ecosystems. It is however, an open secret that the timber sector is given much more attention than wildlife management especially on wetland ecosystems due to the fact that huge amount of money are involved. Bushmeat is commonly known as meat of terrestrial wild or feral mammals, killed for sustenance or commercial purposes throughout the humid tropics of Americas, Asia and Africa. As part of bushmeat business, Achatina Achatina, a giant snail in Africa is also gathered, sold, eaten and monitored as part of trade in bushmeat<sup>i</sup>. Articles 1(1) of the Ramsar Convention define wetlands as:

*Wetlands are areas of marsh, fen, peat land or water, whether natural or artificial, permanent or temporary, with water that is static or flowing, fresh, blackish or salt, including areas of marine water the depth of which at low tide does not exceed six meters<sup>ii</sup>*

In many parts of Africa, especially in West and Central Africa unsustainable hunting usually leads to endangered wildlife species<sup>iii</sup> on wetland ecosystems, it is believed that, fresh water lakes and rivers contain just 0.008% of world's available water but are of great importance for biological diversity as they contain 12% of animal species and 41% of all known fish<sup>iv</sup>.

By the 21<sup>st</sup> Century, the degree of hunting in Africa called for international, regional and national concern<sup>v</sup>, after it was notice that an estimated 1-5 million tonnes per year of bushmeat tread was illegally carried out around the globe<sup>vi</sup>.

The Republic of Cameroon located in Central and West Africa, and highly affected by the tread in bushmeat that had automatically let to the over exploitation of the country's wild life for sustenance and commercial purposes could not continue keeping a blind eye to the atrocities committed by hunting predators, she therefore, decided to put in place regulations so as to help curb the continues illegal hunting of its wildlife for bushmeat consumption and commercialisation<sup>vii</sup>.

So the problem is, is the law protecting wildlife enhancing an enabling environment for the exploitation of bushmeat on wetland ecosystem in Cameroon for consumption and

commercialisation? A typical analysis of the law prove to an extend that, the law is lacking in its mission due to the fact that it missed the opportunity of involving local communities in wildlife management on wetland ecosystems, and as a result, the five years classification of species obliged by the law is mostly base on scientific data, if the local communities were more closely involved in wildlife management on wetland ecosystems, they could help the wildlife personnel to update its classification by collecting data on the presence of animal species in the forests<sup>viii</sup> and wetland ecosystems.

## **2. CAUSES OF ILLEGAL EXPLOITATION OF WILDLIFE SPECIES ON WETLAND ECOSYSTEMS FOR BUSHMEAT CONSUMPTION AND COMMERCIALISATION IN CAMEROON**

Illegal exploitation of wildlife species on wetland ecosystems for bushmeat consumption and commercialisation is influence by a number of factors which comprised of demography, corruption, poverty and many others.

### **2.1 Demography**

Increase in population in west and Central Africa in particular and other parts of the world in general is a major cause for the illegal exploitation of wildlife species on wetland ecosystems for bushmeat consumption and commercialisation<sup>ix</sup>. An increase in child birth automatically implies an increased in many more mouths to eat and survive, as a result of this, since bushmeat represents a primary source of animal protein in the growing population's diet, and a significant commercial industry nationally and internationally, these wildlife are harvested with impunity to satisfy the growing populations and the very huge demand in the national and international markets<sup>x</sup>.

A 1994 study in Gabon place annual sales at an estimated US \$50 million<sup>xi</sup>. The study to note found that bushmeat accounted for more than half of meat sold in local markets, with primates representing 20% of the total bushmeat<sup>xii</sup> and it is important to note that freshwater wetland is estimated to hold more than 40% of the entire world's species and 12% of all animal species<sup>xiii</sup> which in most cases are over exploited for bushmeat commercialisation and domestic consumption in Cameroon in other to feed the fast growing population.

Article 10 (1) of the 1995 decree states that in order to promote forest regeneration and/or restore the fertility of degraded land, certain areas may be closed to human activity or declared fragile ecology areas<sup>xiv</sup>. We think that if this portion of the law is effectively implemented on wetland ecosystems, this will go a long way in protecting its species from illegal hunting, but it is unfortunate that the decree in question did not mention anything concerning wetland ecosystems and it is important to understand that mangrove forest should be considered and accorded the same importance like any other forest in the country because the over exploitation of their resources may lead to devastating consequences to man and the environment especially with dangers attached to climate change<sup>xv</sup>.

## 2.2 Science and Technology

New technology including information and communication technology had also contributed enormously in the illegal exploitation of wildlife species on wetland ecosystems in Cameroon and other parts of the world<sup>xvi</sup>. The advent of new technology had facilitated the easy allocation of wildlife species in the wetland ecosystems as well as helped poachers to identify interested partners (buyers) of the game<sup>xvii</sup>. Many transactions can easily be concluded via new information and communication technology for the purchase of bushmeat for commercialisation and domestic consumption. The Cameroon Cyber Security law provides that:

*In case of any cyber offence, Criminal Investigation Officers with general jurisdiction and authorized officials of the Agency shall carry out investigations, in accordance with the provisions of the Criminal Procedure Code<sup>xviii</sup>.*

From the above section of the law, it is clear that cybercrimes involving wildlife exploitation from wetlands are implicitly inclusive. What is to be noted is that in the hold piece of legislation nothing was mention about cyber offences committed on wildlife species living on wetland ecosystems. I opine that taking into consideration the very important part play by new information and communication technology in illegal wildlife exploitation on wetlands for bushmeat consumption and commercialisation, the Cameroonian law marker should in clear teams provide provisions in the law specifically for the protection of wildlife species on wetland ecosystems. Secondly, the criminal investigation officers with general jurisdiction and the authorized officials of the Agency

cited above, in my opinion should be able to undergo special training on wetland conservation so as to be able to carry out the task accorded to them with professionalism.

### **2.3 Corruption**

The high level of corruption in Cameroon is another cause for illegal exploitation of wildlife species on wetland ecosystems for bushmeat consumption and commercialisation<sup>xxix</sup>. State officials, who are to implement the law, are instead responsible for promoting impunity in the exploitation of wildlife species, reports sometimes show that government officials are serve dishes composed of meat from protected animals at their table<sup>xxx</sup>, a practice that is supposed to be regulated by them according to the Cameroonian wildlife law<sup>xxxi</sup>. The Environmental Management Code of Cameroon provides that the sanctions 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<sup>xxxii</sup>.

### **2.4 Socio-political Crisis**

The socio-political crisis in Cameroon is another major cause of illegal exploitation of wildlife species on wetland ecosystems in the country for bushmeat consumption and commercialisation<sup>xxxiii</sup>. in Mozambique, for example, wildlife populations were decimated through unregulated hunting during and after the civil war<sup>xxxiv</sup> and in Zimbabwe, wildlife populations on many wildlife ranges were decimated following settlement during land reform and the associated breakdown in wildlife law enforcement<sup>xxxv</sup>.

These crisis are usually poorly managed in the primary stage by public officials and the resultant effects is always the outbreak of arm violence, which encouraged the proliferation of weapons in the country leading to confrontation between regular soldiers of the state and armed civilians, loss of life and population displacement into the bushes<sup>xxxvi</sup>. While in the bushes, pressure is automatically mounted on the wildlife by those that have pick up weapons to defend themselves and the unarmed civilians<sup>xxxvii</sup>.

In Garamba National Park (NP) in the Democratic Republic of Congo for example, bushmeat hunting increased fivefold during periods of armed conflict<sup>xxxviii</sup>. Usually, the armed civilians and

those supporting them lack the necessary financial means to sponsor the socio-political crisis, for them to keep the war going; they embark on illegal hunting of wildlife protected species highly demanded overseas and are surrounded with huge financial gains<sup>xxix</sup>. The unarmed civilians on the other hand need to eat with their families and the only major source of protein at the time in the bushes is the hunting of wildlife especially on wetland ecosystems with impunity for the above purpose. Wetland ecosystems to note, are a home to many special plants, birds and frogs, they provide essential habitat for rare or important species such as endangered Southern bell frog and the murray cod, the hippopotamus, crocodiles and many other endangered species found in category “A” protected species in Cameroon’s Wildlife Law<sup>xxx</sup> all have wetlands as their major habitat.

## 2.5 Poverty

Cameroon is a developing country with a greater part of the population that cannot easily afford for a balance square meal a day or medication due to lack of finances especially caused by unemployment rate in the country<sup>xxxii</sup>. An analysis carried out shows that bushmeat hunting for mostly food and medicinal products is driving a global crisis whereby 301 terrestrial mammal species are threatened with extinction<sup>xxxiii</sup>. Nearly all of these threatened species occur in developing counties where major coexisting threats include deforestation, agricultural expansion, human encroachment and competition with livestock<sup>xxxiii</sup>.

The lack of financial means to purchase readymade protein and modern medication from the market and pharmacy respectively, push particularly the local communities to embark on illegal exploitation of wildlife especially on wetland ecosystems for sustenance and commercialisation so as to meet up with their basic needs<sup>xxxiv</sup>. It should be noted that the right to food, shelter and welfare is a second generation human right and is as important as first generation human rights<sup>xxxv</sup>.

To protect wildlife from being hunted on wetlands, the local population has to be trained to engage in other alternative means of livelihood<sup>xxxvi</sup>. Providing alternative foods or income for communities who depend unsustainably on wildlife hunting is of key importance as research shows that subsistence hunting is a “poor person’s game”, often conducted when the hunter has no viable alternatives<sup>xxxvii</sup>. In rural Zambia, for example, some hunters are able to earn nearly US\$ 100 from



a single expedition, which approaches the local per capital annual income of US\$120, and hunters are among the wealthiest community members<sup>xxxviii</sup>. So therefore, to convince them drop this practice, the state and its partners, must put in place lucrative alternative activities for these hunters.

## **2.6 Lapses of the 1994 Wildlife Law<sup>xxxix</sup>**

The 1994 wildlife law enacted for the management of forest and wildlife in the country, had also contributed in one way or the other for the promotion of illegal exploitation of wildlife species on wetland ecosystems for bushmeat consumption and commercialisation in Cameroon. Below we shall examine the various loopholes in the law:

### **2.6.1 Taxation**

The law provides that hunting activities should be taxed<sup>xl</sup>, and this is seen or considered now as a means of feeding the public treasury with cash. Hunting permits and hunting guides are reserved under the approval of the Ministry of Forestry and Wildlife<sup>xli</sup>. This taxation policy promulgated by the law is seen as bias to the local communities because they are usually unable or lack the necessary means to pay for these taxes and so therefore, they are automatically excluded from the legal hunting of animals for bushmeat.

This phenomenon create a sense of frustration in the local communities because to them they are prevented by the law to carry out hunting activities in a forest/wetland their ancestors live in and which they are still living in but due to their economic situation they are refused access into it meanwhile foreign western hunters with strong financial standing are allowed to carry out the same activities in a forest they know nothing about its existence. Usually, the resultant effects of the frustration and poor morals experience by the poor local communities is the reason for their illegal involvement in the hunting of wildlife species on wetland ecosystems for bushmeat consumption and commercialisation in Cameroon. A practice that threatened the existence of wildlife protected species, which most of them has as habitant wetland ecosystems<sup>xlii</sup>.

### **2.6.2 Legal Barking to Auction Confiscated Game**

According to the law on Forestry and Wildlife, agents of wildlife service have the right to auction animal carcasses confiscated and deposit the money into the State treasury<sup>xliii</sup>. This provision of the law to our opinion may seem to legalize the fruits of poaching on wetlands and to suggest that the government's only argument with local hunting activities is that they do not bring income to the coffers<sup>xliv</sup>. This wrong conception may push local hunters to look for other means to influence wildlife officials with money from illegal hunting, thereby encouraging wildlife exploitation on wetland ecosystems for bushmeat consumption and commercialisation.

## **2.7. Weaknesses of the Environmental Management Code of 1996**

This is the first comprehensive law on environmental management in Cameroon; it addresses divers' aspects of the environment. The Code has created a wide range of environmental offences and some with very severe penalties ranging up to felonies punishable with life imprisonment and a fine of up to half a billion francs CFA<sup>xlv</sup>. The law has further accorded special status to the staff of the Ministry of Environment, nature protection and sustainable Development, Mines and other services to identify, investigate and prosecute these offences. The 1996 Environmental Management Code protects wetlands ecosystems in its Section 27 and 94 respectively<sup>xlvi</sup> because of their role in biodiversity conservation.

It is of our opinion that the two sections of the law stated above are almost vague this is because they have all failed to put into place mechanisms for the effective protection of illegal exploitation of wildlife species from wetland ecosystems for bushmeat consumption and commercialisation in Cameroon, it should be noted that Section 94 of the law is found in the miscellaneous part of the law, this shows how less important the legislator is treating the protection of wetland ecosystems which are describe as "biological super markets" because of the extensive food webs and rich biodiversity they support and as "kidneys of the landscape" because of the functions they perform in the hydrological and chemical cycles<sup>xlvii</sup>.



### **3. EFFECTS OF ILLEGAL WILDLIFE EXPLOITATION FOR BUSHMEAT CONSUMPTION AND COMMERCIALISATION**

Wildlife exploitation for bushmeat consumption and commercialisation can contribute to a number of negative effects to public health, the economy, diplomacy and the environment of the state as a whole.

#### **3.1 Public Health**

The exploitation of bushmeat on wetlands for consumption and commercialisation can facilitate the transmission of diseases from the animals<sup>xlviii</sup> to humans<sup>xlix</sup>. Bushmeat is an important source of protein and income for many African people, but bushmeat-related activities have been linked to numerous emerging infectious diseases (EIDs) outbreaks, such as Ebola, HIV, and SARS<sup>l</sup>. According to Karesh, bushmeat provides a route for a number of serious tropical diseases spread to humans from animals, the host, such as HIV/AIDs, Ebola<sup>li</sup> and currently the most deadly Corona virus pandemic<sup>lii</sup>. These diseases usually developed into a serious public health problem, taking away the life of many citizens<sup>liii</sup>. For example, in the Democratic Republic of Congo, the consumption of a dead monkey by villagers leads to the outbreak of Ebola disease in the country, causing many loss of life and threatening the public health situation of many other neighbouring distance countries. A medical report shows that the Ebola virus is predominant in Monkeys and bats<sup>liv</sup>, and Cameroon as we know is a home to these wildlife species<sup>lv</sup>. Corona virus is largely believed to have been transmitted from pangolins to humans in China, Wuhan City<sup>lvi</sup>.

#### **3.2 The Economy**

The exploitation of bushmeat from wetlands for consumption and commercialisation can affect the economy of countries negatively<sup>lvii</sup>. In the event of the outbreak of diseases from bushmeat consumption, for example Ebola and Corona virus, States spend a lot of resources both human and financial in other to contain the situation<sup>lviii</sup>. The labour force of the country is seriously affected and consequently leads to a negative performance of the economy<sup>lix</sup>. Money that should have been used for other developmental projects will be diverted to solve the public health problems that were not prepared for and the resultant effect is poor performance of the economy<sup>lx</sup>.

The tourism sector will suffer enormously, and this will have a direct effect on the country's economy<sup>lx</sup>. Tourist in visiting a country, come along with hard currency and create employment during their stay in the country<sup>lxii</sup>. In a situation where the wildlife they are interested in are no more in existence due to illegal hunting for bushmeat consumption and commercialisation, and also, when the consumption cause the outbreak of a deadly disease, tourist will be scared or have no interest visiting the area and the resultant effect is a very negative economic growth and increased of unemployment which if not properly managed will provoke political uprising in the affected countries<sup>lxiii</sup>.

Illegal hunting for bushmeat and ivory for example, is having a serious impact on tourism-based revenues from wildlife and undermining scope for wildlife-based land uses outside of protected areas<sup>lxiv</sup>

### **3.3 State Diplomacy**

The illegal exploitation of wildlife for bushmeat consumption and commercialisation can affect the relationship of Cameroon with other states.

Cameroon is a signatory state to the convention on the protection of endangered species of wildlife and the Ramsar convention on Wetlands of International Importance. The wildlife involved under the protection of these conventions is usually or always constantly crossing the borders from one country's wetland to another<sup>lxv</sup>. If Cameroon fails to respect her own part of the engagement, this will negatively affect her relationship with other state parties. She will also be working against its own constitution of 1996<sup>lxvi</sup>.

It is an open secret that the current ditolariating diplomatic relationship between China and the United States of America is as a result of the Corona virus pandemic where the US accused China of attempting to steal vaccine data through its agents and decided to closed the Chines Consulate in Huston, China in retaliation also order the closure of the US Consulate in Chendju. Shared conservation projects, especially those involving water, can help build trust and confidence between bordering countries to build or maintain peace<sup>lxvii</sup>. The Ramsar Convention is an international environmental agreement addressing wetland conservation with a key provision that

acknowledges wetlands may transcend political boundaries<sup>lxviii</sup>. The essential nature of water has brought countries such as Pakistan and India together to develop the Indus Water Treaty, a shared management plan<sup>lxix</sup>.

#### **4. EFFECTS CAUSED BY THE NEGATIVE INFLUENCE OF DRIVERS INVOLVED ON THE EXPLOITATION OF WILDLIFE FROM WETLANDS FOR BUSHMEAT CONSUMPTION AND COMMERCIALISATION**

A driver is defined as a factor, force or condition and a fundamental process in society that leads to a direct impact on the environment through a change in either the state of the biodiversity and/or the human foot print<sup>lxx</sup>. Drivers of biodiversity loss and ecological footprint however, are complex, interrelated and constantly changing<sup>lxxi</sup>. Although the drivers are interlinked, several of them are in clusters, these global drivers that affect wildlife are:

##### **4.1 Public Sector finance**

The flow of funding to environmental and development issues, for example cash flow from government budgets, multilateral banks, national and regional development banks, international aid, and subsidy can easily contribute to wildlife loss on wetlands for the purpose of bushmeat consumption and commercialisation if not well managed by the powers that be. For the assistance flowing from the above mentioned sources to be effective and achieved the purpose for which it is intended, there should be a bottom-up assessment of each programme for which this money or aid is destined for, key actors must be identified to be engaged in strategically managing the assistance from the above drivers. If this is not done, the resultant effect will be negative impacts on wetland wildlife which is intended to be protected from illegal exploitation for consumption and commercialisation by the 1994 Law<sup>lxxii</sup>. This is so because with money in the hands of already corrupt officials, it will go a long way in promoting illegal exploitation of wildlife on wetland ecosystems for sustenance and commercialisation. A practice contrary to the spirit behind the 1994 forestry law of Cameroon<sup>lxxiii</sup>.

## 4.2 Private sector finance

The flow of funding to environment and development issues from for example, private banks, insurance funds, investors in business and industries is a good thing that should be encouraged in Cameroon because it would lead to providing the needed fund for the conservation of wildlife found on wetlands in the country<sup>lxxiv</sup>. But this has to be done with caution if not, the very wildlife funds are intended to enhance an enabling environment for their management will be vulnerable in the hands of predators which sold gold is to make quick money from the funds available through any means possible.

To check excesses, new programmes or enhance co-ordination and collaboration between public officials and NGOS<sup>lxxv</sup> should be established and encouraged so as to create a check and balance mechanism between the main actors of the project and the donors. Non-Governmental Organisation (NGOS) who are advocating for the protection of wildlife should be especially involved in the management, by so doing; the earmarked amount of money would be effectively used for the purpose for which it was intended, thereby protecting wildlife conservation on wetland ecosystems from illegal exploitation for bushmeat consumption and commercialisation.

## 5. CONCLUSION AND RECOMMENDATIONS

### 5.1 Conclusion

Illegal exploitation of wildlife from wetland ecosystems for bushmeat consumption and commercialisation is totally unacceptable and punishable by the law in Cameroon<sup>lxxvi</sup>. For the law to be effectively implemented, the state of Cameroon needs to sensitise the populations on the importance of wildlife to the nation and their immediate communities, put into place mechanisms to fight against the major factors promoting this phenomenon, and educate the populations on the effects of bushmeat consumption and commercialisation on individuals and public health. To effectively achieve the goal of protecting wetlands from bushmeat exploitation, the poachers should be trained on alternative means of livelihood or offer them employment opportunities in order to alleviate them from the wicked hands of poverty.

## **5.2 Recommendations**

Below we shall discuss the recommended solutions for proper enhancement of the management of bushmeat exploitation for consumption and commercialisation from wetland ecosystems within the Cameroonian national territory.

### **5.2.1 Effective Implementation and Enforcement of National and International Laws and Policies**

National and international framework laws and policies affecting natural resource management, relating to for example wetlands, water, wildlife, forestry, fisheries, land, development and agriculture should be effectively implemented and enforced in Cameroon in order to enhance the enabling environment for the management of bushmeat exploitation from wetland ecosystems. National laws enacted for this purpose as well as international laws signed and rectified by Cameroon should be enforced by Cameroon so that wildlife will be protected from bushmeat exploitation<sup>lxxvii</sup>.

In a situation where these laws are not respected, it will lead to impunity and the resultant effect will be the killing of wildlife by predators on wetlands ecosystems. In order to achieve this, a monitoring system should be put in place to ensure that data collection and analysis are provided during seminars, presentation on the level of implementation of the law, lawyers and magistrate specialise in environmental issues should be properly train<sup>lxxviii</sup>.

### **5.2.2 Educate the Populations on Consumption and Belief Attitudes towards Nature**

Consumption choices, beliefs and attitudes towards nature, including lifestyle and value, relating to for example, sustainable source products, green energy, cultural food preferences, attitudes to human-wildlife conflict mitigation must be regulated so as to improve on the understanding of what wildlife are and their importance to man and the environment. The state should be able to improve on its sensitization strategies so as to encourage the populations to move away from the traditional ways of consumption attitude towards wildlife and their lifestyle relationship with wildlife species on wetland ecosystems<sup>lxxix</sup>.

### 5.3 Introduction of Alternative Measures

Alternative approaches should be introduced in the traditional societies<sup>lxxx</sup>, encouragement of the consumption of fish and domestic animals in the place of wildlife would go a long way to protect wildlife species from predators who usually used them for bushmeat consumption and commercialisation<sup>lxxxi</sup> thereby depriving man and the environment from its natural resources. The government of the Republic of Cameroon must encourage Non-Governmental Organizations that are interested in wetland management materially and financially so that they can be able to train the local populations on the domestication of cane rats and other domestic species that can easily be used as alternatives to protected wildlife on wetland ecosystems<sup>lxxxii</sup>.

### SELECTED BIBLIOGRAPHY

Wang Y et al (2014) "*Fishing down or Fishing up in Chinese Freshwater Lakes*". Wiley online Library. 1<sup>st</sup> Edition.

Hassan R M et al (2005) "*Ecosystems and Human well-being: current state and trends. Findings of the condition and trends working group*". Island Press.

Hogenboom M (2014) "*Ebola: is Bushmeat behind out break?*" BBC News. Retrieved October 21<sup>st</sup> 2014.

Nguiffo S and Talla M (2010) "*Cameroon's Wildlife Legislation: Local Customs Versus Legal Conception*". Unasyuva 236, volume 61.

Jean G C et al (2000) "*A first look at Logging in Gabon*". World Resources Institute, Washington DC.

Lee Richard B (2009) "*Eating Christmas in Kalahan*". In Annual Edition: Anthropology 10/11,33ed.

Stefano C and Caterina C (2005) "*Management of Wetlands for Biodiversity*". Allen Institute for Artificial Intelligence. Volume 4.



Tiffany G (2009) “*Camera Traps and Google Earth: The Role of Information and Communication Technologies in Cameroon*”. US Agency for International Development (USAID) Biodiversity Conservation Gateway.

Clive C (2009) “*Science v. Poachers: how tech is transforming wildlife conservation*”. Financial Times journal.

Mireille D (2006) *A census of the Commercial Bushmeat Market in Yaounde, Cameroon*”. ResearchGate.

Kaitlyn M et al (2006) “*War and Wildlife: Linking Armed Conflicts to Conservation*”. Wiley online Library.

Lindsey et al (2011) “*Dynamics and Underlying causes of illegal bushmeat trade in Zimbabwe*”.

De Merode et al (2007) “*The Impact of Armed Conflict on protected Areas Efficacy in Central Africa*”. The Royal Society, Biology Letters, Volume 3(3).

Willian J R et al (2016) “*Bushmeat Hunting and Extinction risk to the World’s Mammals*”. The Royal Society Open Science.

Lindsey et al (2012) “*Illegal Hunting and the Bushmeat trade in Savana Africa: Drivers, impacts and solutions to address the problem*”. Zimbabwe, Food and Agricultural Organization.

Coad L et al (2010) “*Distribution and use of income from bushmeat in rural Villages*”. Central Gabon, *Consev.Biol.*24,1510-1518 (doi:10.1126/science.1064397).

David B (2007) “*Bushmeat and Livelihood: Wildlife Management and poverty Reduction*”. Blackwell publishing.

Kathryn F (1996) “*Understanding Wetlands and Endangered Species: Definitions and Relationships*”. Alabama Cooperative extension, your Experts for life.

Clare S and Cyrille de K(1999) *Wetlands, Water and the Law*. IUCN Environmental Policy and Law Paper N° 38, IUCN, Gland, Switzerland and Cambridge, UK in Collaboration with IUCN Environmental Law Centre, Bonn, Germany.

Laura K et al (2016) “*Bushmeat and Emerging Infections Diseases: Lessons from Africa*”.

Ndiva K (1999) “*Investment Codes Instruments of Economic Policy: A Cameroon Case Study*”. The International Lawyer, Volume 25. N° 4, American Bar Association.

Pamela G (2012) “*Wetland Diplomacy: Transboundary Conservation and Ramsar*”. Our World brought to you by United Nations University.

Pamela J et al (2014) “*Managing Trans-boundary Wetlands: The Ramsar Convention as a means of Ecological Diplomacy*”. Journal of Environmental Studies and Science.

David C (2020) “*Did Pangolins Spread the China Coronavirus to People?*” Nature Journal Info.

Dave P (2018) *Transboundary Wetlands Management*. springerLink.

Lindsey P et al (2015) “*Bushmeat, Wildlife-Based Economies, Food Security and Conservation*”. Insights into the Ecological and Social impacts of the Bushmeat trade in African Savannah. Food and Agricultural Organization of the United Nations

New University of Southern California (USC) (2020) “*Impact of Coronavirus on U.S could be \$3-\$5 Trillion over 2 years*”. Insurance Journal.

Kumudumali SHT (2020) “*Impact of Covid -19 on Tourism Industry/ a Review*”. Department of Operations Management, faculty of Management, University of Peradeniya.

World Travel and Tourism Council (2018) “*Tourism Provide Jobs where they are needed most*”.

Karesh W B et al (2009) “*The Bushmeat Trade: Increased Opportunities for Transmission of Zoonotic Diseases*”. Mount Sinai Journal of Medicine. A journal of Translational and Personalised medicine.

Li Zhanag et al (2008) “*Wildlife Trade, Consumption and Conservation Awareness in South West China*”. Biodiversity Conservation 17 Link [springer.com](#)

Nathalie Van V (2021) “*Livelihood Alternative for the Unsustainable use of Bushmeat*”. Report prepared for the Convention on Biological Diversity (CBD) Bushmeat Liaison Group. CBD Technical Series N°.60.

Jean-Louis M et al (2016) “*The Need to Respect Nature and its Limits Challenges Society and Conservation Science*”. Proceedings of the National Academy of Sciences of the United States of America.

## ENDNOTES

<sup>i</sup> Forestry Department (2009) “*Wildlife Utilization and food Security in Africa*” [www.fao.org.FAO](http://www.fao.org.FAO), last accessed 4th May 2021.

<sup>ii</sup> The Ramsar Convention of Wetlands of International Importance. Article 1(1).

<sup>iii</sup> Primarily Ghana, Ivory Coast, Nigeria, Cameroon, Gabon and Congo

<sup>iv</sup> Wang Y et al (2014) “*Fishing down or fishing up in Chinese Freshwater Lakes*”. Wiley Online Library. 1<sup>st</sup> Edition. P.15. [onlinelibrary.wiley.com/doi/10](http://onlinelibrary.wiley.com/doi/10), lastly accessed on the 7<sup>th</sup> of May 2021.

<sup>v</sup> Hassan, R.M, et al (2005) “*Ecosystems and Human well-Being : Current State and Trends. Findings of the condition and trends working Group*”. Island Press.

<sup>vi</sup> Hogenboom, Melissa (2014) “*Ebola: Is Bushmeat behind outbreak?*” BBC News. Retrieved October 21<sup>st</sup>, 2014.

<sup>vii</sup> Decree N° 95 /466/PM of 20th July 1995 establishing the conditions for the implementation of Cameroon’s Wildlife regulations.

<sup>viii</sup> Nguiffo S and Talla M (2010) “*Cameroon’s Wildlife Legislation: Local Custom Versus Legal Conception*”. Unasylya 236, Volume 61, P. 16.

<sup>ix</sup> <https://link.springer.com>, last accessed on the 5<sup>th</sup> of May 2021

<sup>x</sup> <https://www.tandfonline.com>, last accessed on the 5<sup>th</sup> of May 2021.

<sup>xi</sup> Jean-Gael Collomb et al (2000) “*A First Look at Logging in Gabon*”. World Resources Institute, Washington, DC, [pdf.wri.org>gfw\\_gabon](http://pdf.wri.org>gfw_gabon), last accessed on the 5<sup>th</sup> of May 2021.

<sup>xii</sup> Lee, Richard B (2009) “*Eating Christmas in the Kalahari*” in Annual Editions : Anthropology 10/11, 33 ed, ed. Angeloni, Elvio. Dubuque, Iowa :mcgrow-hill/dushkin

<sup>xiii</sup> Stefano C and Caterina C (2005) “*Management of Wetlands for Biodiversity*”. Allen Institute for Artificial Intelligence. Volume 4.P.14. <https://www.ramsar.org>, last accessed on the 12<sup>th</sup> of May 2021.

<sup>xiv</sup> Decree N° 95/531/PM of 23<sup>rd</sup> of August 1995 laying down the procedure for implementing the forest system

<sup>xv</sup> See <https://www.worldwildlife.org> > effe... last accessed on the 28<sup>th</sup> of April 2021.

<sup>xvi</sup> Tiffany G (2019) “*Camera Traps and Google Earth: The Role of Information and Communication Technologies in Conservation*”. U.S Agency for International Development (USAID) Biodiversity Conservation Gateway, [rmpportal.net](http://rmpportal.net), last accessed on the 7<sup>th</sup> of February 2021.

<sup>xvii</sup> Clive C (2019) “*Science v. Poachers: how tech is Transforming Wildlife Conservation*”. Financial Times, [www.ft.com](http://www.ft.com), last accessed on the 7<sup>th</sup> of May 2021.

<sup>xviii</sup> Section 52 (1) of Law N° 2010/012 of 21<sup>st</sup> December 2010 on Cybersecurity and Cybercrime in Cameroon.

- <sup>xix</sup> GERDDES-Cameroon (1999) *Corruption in Cameroon*. Friedrich-Ebert-Stiftung, P.43
- <sup>xx</sup> Nguiffo S and Talla M . Op.cit
- <sup>xxi</sup> Article 11 of Law N<sup>o</sup>. 94/01 Of 20<sup>th</sup> January 1994 to lay down Forestry, Wildlife and Fisheries Regulations
- <sup>xxii</sup> Section 86 of Law N<sup>o</sup> 96/12 of 5<sup>th</sup> August 1996 relating to Environmental Management in Cameroon.
- <sup>xxiii</sup> Mireille D (2006) “A Census of the Commercial Bushmeat Market in Yaoundé, Cameroon”.researchGate, [www.researchgate.net](http://www.researchgate.net), last accessed on the 8<sup>th</sup> of May 2021, awsassets.panda.org, last accessed on the 8<sup>th</sup> of February 2021.
- <sup>xxiv</sup> Kaitlyn M et al (2001) “*War and Wildlife: Linking Armed Conflict to Conservation*”. Wiley Online Library. P. 10
- <sup>xxv</sup> Lindsey et al (2011) “*Dynamics and underlying causes of illegal bushmeat trade in Zimbabwe*”. <https://www.researchgate.net>, last accessed on the 2<sup>nd</sup> of May 2021. <https://africanwildlifeconservationfund.org>, last accessed on the 2<sup>nd</sup> of May 2021.
- <sup>xxvi</sup> See for example the Anglophone Crisis in the North West and South West Regions of Cameroon that escalated in 2016 after so many years of mismanagement of the crises by the regime.
- <sup>xxvii</sup> For example the Anglophone crisis that escalated in 2016 and the socio-political crisis in Central Africa Republic
- <sup>xxviii</sup> de Merode et al (2007) “*The Impact of Armed Conflict on Protected- Area Efficacy in Central Africa*”. Volume 3(3), The Royal Society, Biology Letters. <https://www.ncbi.nlm.nih.gov>, last accessed on the 2<sup>nd</sup> of May 2021.
- <sup>xxix</sup> For example, elephants, hippopotamus, cross river gorilla and pangolins
- <sup>xxx</sup> Law N<sup>o</sup> 94/01 of January 20<sup>th</sup> 1994 Laying down Forestry, Wildlife and Fisheries Regulations in Cameroon.
- <sup>xxxi</sup> <https://www.aph.gov.au>, last accessed on the 20<sup>th</sup> of April 2021.
- <sup>xxxii</sup> [www.ncbi.nlm.nih.gov](http://www.ncbi.nlm.nih.gov), last accessed on the 9<sup>th</sup> of May 2021.
- <sup>xxxiii</sup> William J. R et al (2016) “*Bushmeat hunting and extinction risk to the world’s mammals*” The Royal Society Open Science. P. 1
- <sup>xxxiv</sup> Lindsey P (2012) “*Illegal Hunting and the Bush-Meat trade in Savanna Africa: Drivers, Impacts and Solutions to address the Problem*”. Zimbabwe, Food and Agricultural Organisation. P. 36. <https://www.nationalgeographic.com>, last accessed on the 21<sup>st</sup> of April 2021.
- <sup>xxxv</sup> For example the right to life, the right not to be subjected to cruel treatment, the right to liberty, freedom of speech, assembly, and worship.
- <sup>xxxvi</sup> For example cane rat domestication
- <sup>xxxvii</sup> Coad L et al (2010) « Distribution and use of income from bushmeat in a rural village. Central Gabon, *Consev.Bio*.24, 1510-1518 (doi:10.1126/science.1064397) (Pubmed) (Google Scholar)
- <sup>xxxviii</sup> David B (2007) “*Bushmeat and Livelihoods: Wildlife Management and Poverty Reduction*” Blackwell Publishing. P. 5.
- <sup>xxxix</sup> Law N<sup>o</sup> 94/01 of 20<sup>th</sup> January 1994 to lay down forestry, wildlife and fisheries regulations in Cameroon.
- <sup>xl</sup> See [forestlegality.org](http://forestlegality.org), last accessed on the 10<sup>th</sup> of January 2021.
- <sup>xli</sup> Article 87(1) (2) of the 1994 Wildlife Law.
- <sup>xlii</sup> Kathryn F (1996) “*Understanding Wetlands and Endangered Species: Definitions and Relationships*”. Alabama Cooperative Extension System, Your Experts for Life, [www.nrc.gov](http://www.nrc.gov), last accessed on the 10<sup>th</sup> of May 2021. See also [www.wwt.org.uk](http://www.wwt.org.uk), last accessed on the 10<sup>th</sup> of May 2021.
- <sup>xliii</sup> Article 167 of the 1994 Forestry Law of Cameroon
- <sup>xliv</sup> *Ibib*
- <sup>xlv</sup> For instance, Section 80 of this law punishes any person who dumps dangerous waste on Cameroonian Territory with life imprisonment and fine of from 50 million to 500 million FCFA.
- <sup>xlvi</sup> Section 27 provides that Flood plains shall be especially protected. This protection shall take into consideration their role and importance in biodiversity conservation and Section 94 on the other hand states that mangrove ecosystems shall be specially protected, taking into account their role and importance in marine biodiversity conservation and the maintenance of coastal ecological balances.
- <sup>xlvii</sup> Clare S and Cyrille de K (1999) *Wetlands, water and the law*. UCN Environmental Policy and Law Paper N<sup>o</sup>. 38, IUCN? Gland? Switzerland and Cambridge, UK in Collaboration with IUCN Environmental Law Centre, Bonn, Germany. P. 7.
- <sup>xlviii</sup> Which is the host

- <sup>xlix</sup> Laura K et al (2016) “*Bushmeat and Emerging Infectious Diseases : Lessons from Africa*”. Springer International Publishing, Abstract.
- <sup>l</sup> Ibib
- <sup>li</sup> Karesh, W.B, Noble. E (2009) “*The Bushmeat Trade: Increased Opportunities for Transmission of Zoonotic Disease* “. Mount Sinai Journal of Medicine: A Journal of Translational and personalised medicine.74 (5) : 429-444. PMID 19787649.
- <sup>lii</sup> Commonly known as Covid-19, which current death toll is 2.278.533 worldwide as on 24<sup>th</sup> January 2021, see [www.worldometers.info](http://www.worldometers.info)> coronavirus, last accessed on the 4<sup>th</sup> of May 2021.
- <sup>liii</sup> See [covid19.who.int](https://covid19.who.int), last accessed on the 4<sup>th</sup> of May 2021.
- <sup>liv</sup> See [www.who.int](http://www.who.int), last accessed on the 24<sup>th</sup> of May 2021.
- <sup>lv</sup> See [en.m.wikipedia.org > wiki > list of...](https://en.m.wikipedia.org/wiki/list_of...), last accessed on the 4<sup>th</sup> of January 2021. Jason Bittel (2020) “*These Apes and Monkeys Escaped Poaching and Trafficking. Now they must Battle a Pandemic*”. The Washington Post, Democracy Dies in Darkness.
- <sup>lvi</sup> David C (2020) “*Did Pangolins Spread the China Coronavirus to People?*”. Nature, Journal Info, [www.nature.com](http://www.nature.com) news, last accessed on the 4<sup>th</sup> of May 2021. Graham Readfearn (2020) “How did Coronavirus Start and where did it come from? Was it really Wuhan’s Animal Market?”. The Guardian, [www.theguardian.com](http://www.theguardian.com), last accessed on the 4<sup>th</sup> of June 2021.
- <sup>lvii</sup> Lindsey, P et al (2015) “*Bushmeat, Wildlife-Based Economies, Food Security and Conservation*”. Insights into the Ecological and Social Impacts of the Bushmeat Trade in African Savannahs. Food and Agricultural Organization of the United Nations. P.4,
- <sup>lviii</sup> According to the World Bank’s updated 2016 report, the overall impact of the Ebola epidemic on Liberia, Guinea and Sierra Leone was estimated at 2.8 billion dollars, [www.mercycorps.org](http://www.mercycorps.org), last accessed on the 10<sup>th</sup> of May 2021.
- <sup>lix</sup> New University of Southern California (USC) (2020) “*Impact of Coronavirus on U.S. Economy could be \$3-\$5 Trillion over 2 Years*”. Insurance Journal.
- <sup>lx</sup> Lora Jones et al (2021) “*Coronavirus: How the Pandemic has Changed the World Economy*”. BBC News.
- <sup>lxi</sup> S H T, Kumudumali (2020) “*Impact of COVID-19 on Tourism Industry: A Review*”. Department of Operations Management, Faculty of Management, University of Peradeniya. Mpra , [mpra.ub.uni-muenchen.de](https://mpra.ub.uni-muenchen.de), last accessed on the 10<sup>th</sup> of January 2021. See also [www.emerald.com](http://www.emerald.com), last accessed on the 10<sup>th</sup> of April 2021.
- <sup>lxii</sup> World Travel and Tourism Council (2018) “*Tourism Provides Jobs where they are Needed Most*”. See [worldtraveltourismcouncil.medium.com](https://worldtraveltourismcouncil.medium.com), last accessed on the 12<sup>th</sup> of January 2021.
- <sup>lxiii</sup> A good example is the current situation of the corona virus, where states around the globe had lockdown their borders and other economic activities as a measure to curtail the spread of the pandemic.
- <sup>lxiv</sup> See [www.fao.org](http://www.fao.org), last accessed on the 10<sup>th</sup> of January 2021.
- <sup>lxv</sup> Pamela G (2012) “*Wetland Diplomacy: Transboundary Conservation and Ramsar*”. Our World, Brought to you by United Nations University. [Ourworld.unu.edu](http://Ourworld.unu.edu), last accessed on the 13<sup>th</sup> of January 2021.
- <sup>lxvi</sup> Article 44 of Law N° 96/01 of 6th of January 1996 as amended in 2008.
- <sup>lxvii</sup> Pamela J et al (2014) “*Managing Transboundary Wetlands : The Ramsar Convention as a means of Ecological Diplomacy*”. Journal of Environmental Studies and Science. Dave P(2018) Trans-boundary Wetland Management. SpringerLink, [link.springer.com](http://link.springer.com), last accessed on the 12<sup>th</sup> of June 2021.
- <sup>lxviii</sup> Article 5 of the Ramsar Convention which provide that : “The Contracting Parties shall consult with each other about implementing obligations arising from the Convention especially in the case of a wetland extending over the territories of more than one Contracting Party or where a water system is shared by Contracting Parties. They shall at the same time endeavour to co-ordinate and support present and future policies and regulations concerning the conservation of wetlands and their flora and fauna.
- <sup>lxix</sup> Pamela Jayne Griffin and Saleem Ali, op.cit, [researchgate.net](https://researchgate.net), last accessed on the 10th of January 2021.
- <sup>lxx</sup> [Ipbes.net](http://Ipbes.net) > models-drivers-biodiversity, last accessed on the 11<sup>th</sup> of January 2021.
- <sup>lxxi</sup> Dr Richard Burkmar and Dr Charlie Bell(2015) “*Drivers of Biodiversity Loss, A research Synthesis for the Tomorrow’s Biodiversity Project. Field Studies Council*”, [www.fscbiodiversity.uk](http://www.fscbiodiversity.uk), last accessed on the 12<sup>th</sup> of January 2021.
- <sup>lxxii</sup> Law N°.94/O1 of 20th January 1994 to lay down Forestry, Wildlife and Fisheries Regulations in Cameroon
- <sup>lxxiii</sup> ibib



<sup>lxxiv</sup> Ndiva K-K (1991) “*Investment Codes as Instruments of Economic policy : A Cameroon Case Study*” the International Lawyer, Volume 25, NO. 4, American Bar Association, [www.jstor.org](http://www.jstor.org), last accessed on the 12<sup>th</sup> of January 2021., [www.hg.org](http://www.hg.org), last accessed on the 12<sup>th</sup> of January 2021.

<sup>lxxv</sup> International or local Non-Governmental Organisations

<sup>lxxvi</sup> Article 150 of The 1994 Forestry and Wildlife Law of Cameroon.

<sup>lxxvii</sup> For example Law No. 94/01 of 20<sup>th</sup> January 1994 to lay down forestry, Wildlife and Fisheries Regulations in Cameroon and its tests of Application, Decree No. 95/531/PM of August 1995 laying down the procedure for implementing the forest system, United Nations Chronicle: The Illegal Commercial Bushmeat Trade in Central and West Africa, the Ramsar Convention on Wetlands of International Importance, the Convention on Endangered Species of Wildlife.

<sup>lxxviii</sup> For example, the state of Cameroon should promote the specialisation of magistrates in National School of Magistracy and Administration (ENAM )on environmental litigations.

<sup>lxxix</sup> Jean-Louis Martin et al (2016) “*The Need to Respect Nature and its Limits Challenges Society and Conservation Science*”. Proceedings of the National Academy of Sciences of the United States of America (PNAS), [www.pnas.org](http://www.pnas.org), last accessed on the 9<sup>th</sup> of January 2021.

<sup>lxxx</sup> Nathalie Van V (2011) “*Livelihood Alternatives for the Unsustainable use of Bushmeat*” , Report prepared for the Convention on Biological Diversity (CBD) Bushmeat Liaison Group. CBD Technical Series No. 60, P. 17. [www.cbd.int](http://www.cbd.int), last accessed on the 9<sup>th</sup> of January 2021.

<sup>lxxxii</sup> Li Zhang et al ( 2008) “*Wildlife Trade, Consumption and Conservation Awareness in Southwest China*”.

Biodiversity Conservation 17, link. Springer.com, last accessed on the 9<sup>th</sup> of January 2020.

<sup>lxxxii</sup> <https://www.fao.org>, <https://www.cbd.int> > financial last accessed on the 12<sup>th</sup> of April 2021.



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