

**CLIMATE CHANGE, FOOD SECURITY, NATIONAL SECURITY and  
ENVIRONMENTAL RESOURCES**

**GLOBAL ISSUES & LOCAL PERSPECTIVES**

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## **Preface**

This book adopts an exegetical approach as well as a pedagogic model, making it attractive agriculture and environmental economics teachers, professional practitioners and scholars. It eschews pedantry and lays bare the issues in such clarity that conduces to learning. The book elaborates on contemporaneous climate change, food security, national security and environmental resources issues of global significance and at the same time, is mindful of local or national perspectives making it appealing both to international and national interests. The book explores the ways in which climate change, food security, national security and environmental resources issues are and should be presented to increase the public's stock of knowledge, increase awareness about burning issues and empower the scholars and public to engage in the participatory dialogue climate change, food security, national security and environmental resources necessary in policy making process that will stimulate increase in food production and environmental sustainability.

*Climate Change, Food Security, National Security and Environmental resources: Global issues and Local Perspectives* is organized in four parts. Part One deals with Climate Change with Six Chapters, Part Two is concerned with Food Security with Nine chapters, Part Three deals with National Security with Five Chapters, while Part Four pertains Environmental Resources, has Five Chapters.

**Ahmed Makarfi / Eteyen Nyong**

**April 2024**

## Chapter 18

### Poaching and Trade in Wildlife Products: A Global

#### Perspective

Okonkwo, H. O, Nsien, I. B., and Akomolede, L. A.

#### Abstract

Illegal wildlife taking otherwise known as poaching is fuelled variously by trade bans, poverty and at the heart of it injustice to the real resource owners (the indigenous forest people). However with the likelihood of growing world population and subsequently wildlife/wildlife product demand, global extinction scenarios and threat, and the fact that biodiversity is the life support system of human beings it is time to move away from finding excuses for unsustainable wildlife harvesting behaviours to dealing with the root cause of the problem. We must accept the fact that wildlife utilization and demand are part and parcel of sustainable wildlife management otherwise a greater demand storm is created that underpins poaching and other related activities. To sustainably produce and manage wildlife first the inherent injustices in protected area establishment that strips indigenous and forest people of their basic livelihood capital or asset and leaves them worse off must be addressed, second biodiversity hotspot countries must rise up to the challenge and opportunities of growing wildlife demand to improve their lot. The review highlights first the historical basis of poaching, its extent and ubiquitous character, assesses the plight of the forest people vis-à-vis the prevalent definition of poaching, and argues that the incorporation of environmental justice principles is crucial to curb poaching and improve wildlife conservation.

#### Introduction

Poaching is simply defined as illegal hunting of wildlife (Bennett, 2015). It is a legal term that gained popularity when previously free hunting grounds became protected areas. Hence for the average local bush meat hunter it is a strange language but one that has come to stay and that he must learn to live with. So when community forest is suddenly pronounced protected area by the government hunting within the area becomes illegal in the eyes of the law ( Bortolamiol *et al.*,

2023). It is a sad development that we already lost many species due to uncontrolled harvesting of wildlife ( Bortolamiol, *et al.*, 2018). For example in the last century three sub-species of Tiger are reported to have gone extinct (Ayling, 2013) and more than 30 000 species are presently threatened with extinction covering 41% of amphibians, 25% of mammals, 14% birds, 30% sharks and rays, and 27% crustaceans(IUCN, 2019). Biodiversity remains the lifeblood of human existence on planet earth. Hence life without biodiversity is better imagined than experienced. At this juncture in the history of humanity therefore I do not think anyone should still have doubts as to why we need to regulate wildlife harvesting or the use of any other biological resource for that matter. Poaching in itself is wrong. That is, it is wrong to illegally hunt wildlife where there is a legitimate and clear governance of the area. However, what is wrong with poaching, is who determines who the poacher is. It is wrong for government or anyone for that matter to unilaterally declare a community land a protected area and make the original land owners poachers for trying to use their property. At that particular instance the government is the poacher: the one who dispossess a people their legitimate livelihood assets unwillingly.

Forests and the constituent fauna normally are the livelihood assets of the local people (Okonkwo, 2015). They have occupied the land long before there was a formally constituted government authority over the area. If we go the way of ethnobotany which deals with the historically standing relationships between people and environment (Caruso *et al.*, 2015), then the one who has the right to declare an area a reserve are the indigenous people of the area who first occupied the land or forest. Most African communities and people elsewhere who were previously colonized by the west were never consulted before incorporation into the geographical coverage and control of the government of the country. They just woke up one day to find that they were no longer in control of their lives anymore just similar to the sudden occupation by the whites of the colonized nations of the world.

The people have always had their perceptions of wildlife and the regulation of hunting. It has not always been with them about decimating wildlife in the wild. Many of them were hunters whose livelihood depended solely upon the continued existence of animals to hunt in the wild and had social and cultural structures that regulate hunting. But in taking over the forest the government cares less about the people's interests (livelihood, culture, and traditions) and management

practices (Bergseth *et al.*, 2018). For example in south Africa the Massai indigenous tribe have a culture of initiating young males into adulthood and the warrior cult by sending them to kill a lion with nothing but a spear: the government presently is trying to kill this tradition by educating the people about the importance of conserving lions ( Kirkpatrick, 2014). In my opinion that is wrong and here is my reason. In the same country lions are raised in captivity for the trophy/sport hunting market (Bergseth, *et al.*, 2018): on the one hand government is aiding the extinction of a peoples culture and tradition to save lions only to give permit to foreigners to come in and kill the same lions for sport or trophy purposes on the other hand. So it is a case of selling the peoples culture for money while simultaneously maintaining other peoples' tradition and culture elsewhere. It is a case of robbing Peter to pay Paul. I do not think this is fair. It all boils down to the matter of treating fellow human beings as ordinary objects similar to the way the colonialists treated the colonized simply because they had power and technology on their side. This is injustice. From the environmental justice perspective therefore poaching is only a form of agitation by the people for recognition (Martin *et al.*, 2019). Hardly will anyone fight a system that takes care of his interests and this is purely the truth of political economy which touches every aspect of life. Therefore the bottom line of the cause of poaching is injustice. Wherever and at any sphere (be it political, economic, environment or social) people are treated unequally and without equity there is bound to be problem.

Wildlife trade is the exchange of money for animals or animal product (de Matos Dias, *et al.*, 2020). It is a long standing tradition among hunting households and communities ( Barboza *et al.*, 2016) for whom the wild animal is a production asset. Historically therefore those people who took to hunting as a profession are known to trade wild animals and animal products for money (Luiselli, 2015). For example Esau the son of Isaac was described in the bible as a skilful hunter while his brother Jacob was a livestock farmer with a specialization in sheep ranching. Wildlife trade is one of the key economic activities of rural economies (Okiwelu *et al.*, 2009); a source of protein and livelihood diversification. Locally there are hunters who hunt for subsistence and those who hunt for commercial purposes. Therefore locally forest communities are choice places for sourcing of wildlife meat. Wildlife products are also traded locally for trado-medical purposes. Hardly is there any society that does not have a history and/or currently thriving wildlife trade

locally. For example in Nigeria reports of local wildlife trade and hunting abound (Luiselli, 2015), in the remote areas of the US such as Alaska wildlife trade has been a concern (Ferreguetti *et al.*, 2018) etc. The value chain of wildlife trade in urban centres and cities is a source of employment for many rural/urban folks. In Nigeria for example *bush meat* is a highly valued delicacy that generates huge amount of money even though this goes on unreported (Caruso *et al.*, 2015; Kahler *et al.*, 2012).

Transnational wildlife trade which mostly go on in the grey market i.e. unofficially, is a historical activity ( Ferreguetti *et al.*, 2018). A lot of wildlife trade goes on across the borders of many African countries. Many countries in the tropics generate huge amounts of foreign exchange from international wildlife trade (Massé *et al.*, 2017; Niraj, 2009; Warchol, 2004).

As pointed out earlier wildlife trade is as old as human history and of local and international economic and cultural importance. Globally a whole range of issues abound with wildlife trade. The sustainability of wildlife taking is a growing global concern vis-à-vis the decimation of wildlife species, biodiversity depletion, new diseases introduction, ecosystem destruction, competition with local species, poaching. All of these issues threaten the sustainability of wildlife trade. Addressing these problems is important to sustaining the many benefits of legitimate wildlife trade. Therefore to sustainably produce and manage wildlife, issues of injustice as it relates to protected area establishment must be addressed; a holistic approach that situates the local forest user realities and livelihood need within the framework of wildlife management must be adopted.

### **Local wildlife product trade: How much is the local wildlife product trade?**

While a lot of interest abound in cross border wildlife trade, local studies on wildlife trade value and extent within countries show that domestic wildlife trade within countries is worth millions of dollar(Nasi *et al.*, 2011). Average earnings of a commercial hunter in Africa is around USD 300-1000 per annum (Okiwelu *et al.*, 2009). About 1 million tonnes of total wildlife taking is reported for central African region alone while the combined value of wildlife trade in west and central Africa put together is put at around USD 42-205 million annually: In Ghana annual domestic wildlife taking resulting from bush meat hunting is around 380 000 tonnes per annum while in Cote d'ivoire it is 118 000 tonnes annually (Enuoh and Bisong, 2014)

### **What drives the local wildlife product trade?**

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Drivers of local wildlife trade are diverse but depend majorly on culture and tradition of the people. For example in West Africa the major drivers are demand of wildlife meat that is so much cherished by majority of the people (Luiselli, 2015; Odonkor *et al.*, 2007; Okiwelu *et al.*, 2009) and the other is trade-medical use. However in East African countries the local trade is also partly fuelled by the local black market demand for onward export (Duffy and St. John, 2013; Duffy *et al.*, 2015), while in China it is driven by trade-medical purposes mostly (Yi-Ming *et al.*, 2000). There is a high local demand for wildlife and wildlife products in many countries of the world which threatens the domestic wildlife biodiversity in many ways. Local wildlife trade is also driven by subsistence and poverty in the developing world while in the deep Amazon forests wildlife hunting is a livelihood strategy (Kahler and Gore, 2012; Wright *et al.*, 2001). Domestic wildlife trade is also a threat to local wildlife species as much as international trade. There is clearly however a rise in demand and increase in sophistication of hunting methods when international dimensions come into the equation of wildlife trade in almost any part of the world (Duffy *et al.*, 2015). Although growing local demand for wildlife meat is also causing many local hunters to devise sophisticated means of wildlife taking as well (Okiwelu *et al.*, 2009).

**Can we do more with local wildlife trade?:** Legitimate local wildlife trade is actually a potential employment generator, and rural wealth creator (Enuoh and Bisong, 2014). Similar to international wildlife trade what we lack is a way of sustaining sustainable wildlife taking and management. Major culprits in unsustainable wildlife harvesting are poaching and illegal wildlife taking and unmonitored/unsupervised wildlife harvesting. Local wildlife trade is a multi-million dollar business especially in countries of wildlife biodiversity hotspots such as the tropics. For example in Zimbabwe wildlife is seen as an instrument of development by way of commercialization

**Global wildlife product trade: What is the extent of the trade?:** When we talk of the worth of global wildlife trade it must be noted the account is usually not taken of the unofficial or unrecorded grey market trade that happens usually between the borders of neighbour countries (Conrad, 2012; Macmillan and Challender 2014; McCallister *et al.*, 2009). If these were to be included in the picture it is going to be alarming the magnitude of global wildlife trade. Global illegal wildlife trade is said to be worth about USD 5-20 billion annually while legal wildlife trade is so large that the US wildlife import alone is worth USD 1.2 – 2.8 billion annually (Wyler and

Sheikh, 2008). Wildlife products usually traded illegally are tiger (*Pantheratigris*) parts (Bennett, 2015), Rhino (*Ceratotheriumsimum*) horn, African elephant (*Loxodontaaficana*) (Sills, 2013), ivory, birds and reptiles (Pires and Clarke, 2012; Wyler and Sheikh 2008). Countries with highest legal international wildlife demand include China, USA, and European union while Asia, US and Europe are illegal wildlife product destinations(Wyler and Sheikh, 2008).

Together both legal and illegal wildlife trade make a multi-billion dollar international trade and are sourced usually from the biodiversity hotspot developing countries. Whereas what drives cross border wildlife trade in Africa is bush meat, in Asia it is medicinal uses, while in America and Europe the demand is aesthetics driven.

**Is global wildlife trade likely to grow?:** In recent times global demand for wildlife and related products has been on the rise. While the primary cause of global demand rise is a growing world population (Nasi *et al.*, 2011) there are some peculiarities to the demand in different regions of the world. In Asia for example the increased demand is linked to the economic growth of countries in those areas which has increased the number of wealthy individuals who are financially capable of buying even from the expensive black market (Wyler and Sheikh, 2008). Therefore as more and more people become wealthy and populations continue to grow the most obvious likelihood is that demand for wildlife and wildlife product in the Asian region is going to move up more and more. In the African region bush meat demand can only grow simply because there is a cultural ‘tinge’ in the attraction to wildlife meat which more often than not is handed down the generations. With a projected 100% population rise for Africa by 2050 (Worldpopulationreview, 2020) the prospects of an abatement in wildlife meat demand in the region is very near impossible. Africa’s bush meat demand is therefore projected to grow in direct proportion to the population growth. In Europe and America aesthetic attraction to nature is a currently trending factor that can only grow with the growing economic power of the region. Medicinal demand for wildlife in Asia is also a cause for concern vis-à-vis the rise and cultural attachment to native medicine in the region. Hence overall wildlife and wildlife product demand is only going to grow and there is only one option which is to find a way to incorporate the reality into world and local wildlife conservation and management policies and governance.



**Are there opportunities in growing global wildlife product demand?:** A growing global wildlife and related product demand means opportunities for local livelihood improvement, job creation, and wildlife products development. Sustainable wildlife and related products production is going to be the way to meet that demand without destroying the resource base and reap the benefits. There is a much more pressure now to conserve and manage wildlife sustainably than it was in the beginning. Seeing therefore that past measures to curb demand for wildlife has failed it is time that human demand for wildlife and wildlife products are incorporated fully and as part and parcel of the whole wildlife conservation and management thought.

This is an opportunity developing and tropical countries who have or are potential wildlife biodiversity hotspots can tap into to make themselves wildlife and related product destination hotspots on the world map. Unfortunately some of these countries and regions have a poor attitude to this natural capital of wildlife resources. Wildlife conservation for business must become the new paradigm of countries rich in wildlife biodiversity. The technology, the management skills and knowledge should be generated in these areas. I wonder sometimes why it should be someone who is not of African descent that is raking in the millions of dollar in the wildlife documentary of the big cats of Africa, why should it be people from other regions who write the best-selling books on wildlife species of Africa, why are the most prominent wildlife based journals not founded by people from wildlife hotspot regions of the world, etc. This is appalling and unfortunate and need to be arrested. Africa for example need to rise up to champion wildlife conservation, countries holding the Amazon should be at the fore front of debate on the conservation of the great biodiversity resources etc. People of tropical origin have never dominated discussions on the conservation of the temperate wildlife for example why then should people of temperate origin dictate the tone of debates on tropical wildlife conservation. Bearing in mind that research direction is determined by the interest of the researcher and his funder, it cannot be therefore that wildlife research dominated by non-native people are able to proffer lasting solutions to indigenous wildlife problems. Therefore the first step to sustainable wildlife conservation that is business oriented is the rising of the real owners of the resources to the challenge of conserving it; this is going to be based on sincerity of purpose and a drive to champion sustainable wildlife production similar to the way the west has championed industrialization.

**Is there something we can learn from the legal wildlife product trade?:** Legal wildlife trade is the key to reducing illegal wildlife trade that fuels poaching (Ayling, 2013; Challender *et al.*, 2014; Conrad, 2012; Mcallister *et al.*, 2009). Legalized markets removes the demand pressure that builds up during trade bans and fuels trafficking. Legalized markets will prevent the hoarding of wildlife and related products. Legalized markets also provides opportunities for regulation and control of the trade. For example in Ghana logging companies get registered with the government and are allocated portions of forest to log per time based on already agreed tree sizes (Sanfilippo *et al.*, 2017) and this is used to prevent illegal logging activities.

Let wildlife and related product traders and hunters alike get registered and from time to time get them together to discuss the benefits of sustainable harvesting and also get them make commitments to protection in form of tax that is ploughed into scientific management of wildlife areas. The key is bringing all stakeholders local and international to the table. All illegal wildlife traders can be reached out to and invited for legal negotiations. Trade routes should be monitored and the value or trade chain followed up to identify key players and buying states and all of these must be involved in discussions to legalize trade. If possible the should be an international and local associations of legal wildlife traders who will meet from time to time to look at impact of their activities on wildlife resources. This may cost time, effort and money but will ensure that all possible stakeholders at all levels are brought to the table. There has been too much concentration on local poachers yet it has been reported that poachers sometimes are organized criminal groups with state of the art weapons when they operate (Ayling, 2013; Duffy *et al.*, 2015) and have international connections.

Moreover receiving countries must also be brought into the discussions if global wildlife illegal trade and poaching is going to stop. Often emphasis is on the countries where products are sourced. But until receiving countries are held accountable the solution is only going to be halved. Receiving countries must enter agreement with source countries to also trace the trade centres and stakeholders within them and get them registered and accountable too not first of with coercion but with dialogue and joint negotiations. They must get to know that if there is no control their trade and business is headed for the rocks sooner or later they will be out of business.

**Is there something we can learn from the illegal wildlife product trade?:** Something we can learn from illegal wildlife trade is that trade bans have always generated negative feedback of increased poaching, trafficking, and racketeering (Anderson *et al.*, 2014; Conrad, 2012). Wildlife trade ban and associated regulatory frameworks stifles availability of wildlife and the products and increases prices thereby providing a higher incentive for the illegal trade (Ayling, 2013). So also is the sudden creation of wildlife protection areas without fully engaging with local communities and villages.

Cultures and traditions dependent on wildlife are diehard; the people will rather pay more than stop patronizing wildlife traders. For example in Asia where so much of wildlife demand is for traditional medicine, and is responsible for legal and illegal Rhino horn trade (Biggs *et al.*, 2013; Zhang *et al.*, 2008), a trade ban cannot stop the demand. The same goes for bush meat consumption in Africa (Lameed *et al.*, 2015; Macdonald *et al.*, 2012; Nasi *et al.*, 2011; Odonkor *et al.*, 2007; Tn *et al.*, 2012); it is the way of life of the people and no matter what anybody may say or do they will always find a way to get it.

Moreover in the few decades biodiversity based medicine has gained a lot of acceptance and usage, especially as ethnobotanical investigations have gained more traction. The encouragement of traditional medicine and the likely growth of the sector in the future means that we are yet to witness the highest rates of poaching and greater wildlife biodiversity demands with the attendant illegal trade. Therefore countries that will invest in sustainable wildlife production in the coming years are the ones that will be poised to benefit from the potential wildlife and products demand storm that is imminent.

**Can we stop poaching and illegal wildlife product trade by going back to the basics?**

**What is the reason for local connivance for poaching?:** Illegal wildlife collection and unsustainable harvesting bedeviling global wildlife resources (Cooney *et al.*, 2017; Lameed *et al.*, 2015; Macdonald *et al.*, 2012; Tn *et al.*, 2012) cannot happen if the immediate local communities are fully incorporated into wild resources management. Without connivance with local communities illegal harvesting be it organized or not will always fail. Therefore the key to ending illegal and unsustainable wildlife harvesting is treating forest communities as the human beings; not as an unwanted pest that must be stamped out and providing effectively for their welfare. Some countries

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like South Africa and Kenya have even militarized their wildlife patrol teams giving a picture that poachers are criminals and bandits (Duffy *et al.*, 2015; Karanja, 2012; Lameed *et al.*, 2015). Some authors have advocated that wildlife trade be completely banned so as to possibly shift consumers' attention to substitutes (Bennett, 2015; Conrad, 2012; Mcallister *et al.*, 2009). There is also the proposition that wildlife be domesticated to reduce pressure on the wild populations (Lindsey *et al.*, 2013). All of these postures of controlling wildlife unsustainable harvest are good however their benefits are not far reaching i.e. they do not solve the problem.

**What is the impact of protected area establishment on local livelihood system?:** Usually rural household security is dependent on wild food collection, medicinal plants harvesting for dealing with family and domestic animal health issues (Enuoh Bisong, 2014). More often than not protected area development impoverishes forest communities, leaves them vulnerable, and poorer than they were before development of parks and protected areas (Isiugo and Obioha, 2015). Studies upon studies of the why of illegal wildlife harvesting cannot stop the problem. Wherever people are treated as inconsequential the inevitable result is that resources weather natural or otherwise are going to be mismanaged. Almost in all parts of the world are forest and indigenous people treated as pests and the culprits in wildlife decimation (Martin *et al.*, 2016).

**Growing human population the fuel of poaching;** If we go back to the basics and consider that the indigenous and forest people have always lived with biodiversity for ages without overharvesting when human populations were small. Then we see that the first culprit in poaching and overharvesting of wildlife is growing human populations and the consequent skyrocketing of demand for wildlife (Martinez-Alier, 2012). Wildlife resources that were previously harvested by immediate local forest communities are now depended upon to support other farther away populations, cities, and even the export market. For example in South Africa it was discovered that the most threat from poaching was from armed bandits from places far-away from the protected areas (Ayling, 2013; Bauer *et al.*, 2017).

Second culprit is the usual colonial method of taking over a forest without concern for the original historical owners of the land; the handling of human beings as things in the matter of development of protected areas and wildlife conservation; this attitude is prevalent in wildlife management efforts all over the world and has not solved the problem of illegal wildlife harvesting and overharvesting (Martin *et al.*, 2016). The people may be powerless by way of political economy

but then they know their way around the forest and their needs for survival have not changed but rather has possibly been aggravated by the establishment of a park or protected area.

**The global need to produce more wildlife and the injustices of conservation;** With these in mind the solution to unsustainable wildlife harvesting is the need to produce more and there is only one key way to producing more wildlife, partnership with the local and indigenous people. I am not talking about the usual community forest or wildlife management that leaves the people as poor as they were in the beginning or even worse (Isiugo and Obioha, 2015). I am dealing with a solution that addresses the various injustices affiliated to wildlife conservation as it concerns the local indigenous forest communities. The prevalent wildlife poaching prevention and fighting methods have their roots creates injustices. Examples are the difficulty of the benefits of protected areas in reaching the immediate communities that suffer the harms resulting from park/protected area development, the poor recognition of the indigenous people and their rights to wildlife resources, and the exclusion of local people from the decision making process.

**Can we borrow a leaf from the environmental justice perspective?:** The fundamental basis of wildlife poaching, overharvesting, and other related conflicts is *conservation injustice* (Martin *et al.*, 2016). When we superimpose the three frameworks of environmental justice of distribution, procedure, and recognition on the problem of poaching and wildlife overharvesting the result is a distillation of lasting solutions to the menace.

**Distribution injustice in wildlife conservation:** When protected areas, parks, or reserves are created how much does the forest communities get out of the total annual net income of the venture? What are the opportunity costs for the community/how is it going to impact on their, livelihoods, culture, and traditions? The distribution of conservation costs and benefits must be clearly analysed and just solutions given to them before conservation can be a success (Schlosberg, 2013). We have come to a point in the human history where it is very obvious that the colonial/western method of wildlife conservation that shows little or no interest on the cost and benefit implications of conservation on forest communities does not work. If the people are handled as animals themselves they will poach, aid and abet the act. If no consideration is given to the fact that they are major stake holders and are entitled to the benefits of conservation as landlords and owners and not as beggars then the consequences will be wildlife decimation. This attitude prevails in oil exploration in Nigeria

(Dunlap and Jorgensen, 2013). The oil companies together with government treat host communities as beggars and the result is the age long unrest, oil theft, bunkering, etc. these are simply agitations of injustices in the way the oil owners and the landlords are treated. There is injustice in the way oil pollution is handled despite its impact on the livelihood of the people of the Niger delta. The cost of oil exploration is borne by the region while government and the oil exploration companies are busy feeding large on the oil dollar. The benefits and costs of conservation of a park or wildlife sanctuary must be distributed so justly as to inculcate in the people ownership of the resources. Once this is achieved they themselves will arise to protect it. This is the problem in Nigeria. It is the reason why citizens destroy public properties and loot government money they have never been given the consciousness that the country belongs to them. The people still are living with the colonial mentality of a hireling. So long as communities and people of a country are living like this nothing will work. It's the responsibility of government to give the people the sense of ownership of their resources and then the policing becomes the responsibility of all.

**Procedural injustice in wildlife conservation:** Many times communities are alienated from the decision making process over their own forests and wildlife resources. A lot of things are simply imposed on them including the size of the protected area and how they must respond to the decision. The people must be included in the decisions regarding the wildlife resources in their jurisdiction (Martin *et al.*, 2016; Martin *et al.*, 2013). They must be brought to the discussion table as stakeholders. They are going to be the direct subjects of the decision outcome and must participate in the making and implementation of the decisions. This is important to ensure that the people themselves are willing to conserve the wildlife.

**Recognition injustice in wildlife conservation:** This is about how the people are viewed or perceived by the conservationist, the government, NGO, or whoever is pushing for demarcation of protected area or park. Is there a recognition of the people's right to good life, to their traditions and culture, to access to wildlife, to respect as a people, to make their own decision etc. (Martinet *al.*, 2016). On many occasions these inalienable rights of the people are given little consideration. They are made to feel that they are subordinate to the authorities and are expected to simply corporate. The advent of militarization of wildlife patrol teams in many wildlife parks all boil down to this one thing- the people are nobodies! If conservation is going to work dignity and respect must be incorporated into our dealings with forest communities. There is need to come down to a level where we are willing

to even learn from them-we must not treat people as stupid and foolish simply because we think we are more civilized than them. Hence conservation starts with building a dignified relationship with forest people and working with them as co-labourers to achieve conservation.

**Who is fighting poaching?:** Global initiatives for fight against poaching and unsustainable wildlife taking have primarily come from the temperate west and from the few tropical nations in the developing world that depend on wildlife tourism for generation of foreign exchange(Ayling, 2013; Wilson-Wilde, 2010). Most other nations though harbouring rich biodiversity handle poaching and wildlife decimation less seriously. International regulatory frameworks are not taken seriously neither is there local political will to protect and conserve biodiversity(Ijeomah and Emelue, 2009). The understanding that the worlds' biodiversity is the basic life support system of the universe is still far from being understood by many peoples and politicians. In such states even when wildlife conservation comes up in the political sphere it is soon politicized.

Beautiful initiatives and funding for wildlife and biodiversity research and conservation all mostly come from the west and developed nations. Wildlife documentaries such as Natgeowild for example are run by people from the west while the tropical countries with rich biodiversity and wildlife species are busy with corruption. Wildlife appreciation in the developing nations must go beyond consumption(Nasi *et al.*, 2011; Kahler and Gore, 2012) to nature appreciation and conservation for posterity.

The world finally is coming to terms with the interconnectedness of life on planet earth and its dependence on rich biodiversity. It therefore presents to the tropical nations that have been ignored, looked down upon, and under-developed the opportunity to rise up and become the world biodiversity super-powers since the worlds' wealth of biodiversity is localized in them. The developing and tropical nations who have been impoverished as a result of their inability to keep up with the industrial revolution have yet another opportunity to become world powers with imminent *biodiversity revolution* that is underway now.

**Shouldn't the wealth owners themselves do more with the biodiversity revolution?:** A new era is come upon the world – it is the era of biodiversity. Unfortunately many nations especially the global south and the tropical world who hold virtually the essential resources that drives the very revolution are about to be left behind again as they were during the industrial revolution! The



era has majorly been heralded by the global consciousness of climate change, the prime place of biodiversity in the continued existence and survival of mankind on planet earth, and the growing need for diversified diet for healthy living. The west as usual already are cashing in on the revolution already! All the talk about climate smart technologies boils down to the green revolution. The resources that will drive the green revolution are most abundant in the tropics. For example solar panels may be built in the temperate world but the solar energy is most abundant in the tropics, medical discoveries of the deadly nature of synthetic foods may happen in the west but the diversity of natural food (both fauna and flora) is most abundant in the tropics, and finally the mono-cropping system of the industrial agricultural revolution era that left the tropics appear foolish as far as food production is concerned is gradually giving way to the age long agroforestry systems of the tropical worlds that we previously labelled backward and anti-commercialization. Therefore normally where there is no delusion, the ones that are to champion the war against global poaching and illegal wildlife trafficking are those nations and people that are richest in wildlife resources.

**What is the real meaning of poaching?:** The real meaning of poaching is robbery. Poaching is the language used to describe the local and international business of robbing the biologically rich regions of the world of their biological wealth. Every wildlife species lost to extinction is equivalent to the loss of opportunities for foreign exchange generation, medical breakthroughs, food security and diversity etc. The opportunity cost of poaching is going to be too much when understood in the long run. Politicians, scientists, and host communities of wildlife resources must all rise up in the tropics to put an end to poaching. Governments in the tropics must put away politicking and rise up to conserve our biological wealth while wildlife host communities all over the world must say no to state unilateral appropriation of their community biological wealth.

**Conclusion:** Poaching though a global threat to wildlife biodiversity is only likely to grow in magnitude vis-à-vis growing human populations and hence the cultures and traditions that underpin the global wildlife and related products demand and trade. Trade bans and related regulatory frameworks will always fuel the demand as it stifles supply resulting in increased product prices and therefore greater incentive to return to poaching and illegal trade. Therefore solutions to poaching and other related activities threatening wildlife extinctions must all be geared towards sustainable productions even as it clear that a greater demand storm is imminent as



underpinned by the trending change in lifestyles all over the world that preaches going green, eating natural and less of processed food, improvement in the diversity of food consumed and biomedicine. Sustainable wildlife production begins with ensuring justice for wildlife host communities and legalizing markets and trade. To legalize markets and trade all stakeholders at all levels (local and international) such as hunters (including organized poachers and international trade chain actors), traders and their links, and the receiving countries must be incorporated. A registration system that identifies all interested parties will help locate stakeholders. Finally receiving countries must also replicate same locally to identify interested parties hold discussions and negotiation with them regularly to proffer solutions to problems in the industry that sustains their livelihoods

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