Contemporary Status of Illicit Wildlife Genetic Resource Trafficking: Future Policy, Legal and Institutional Consideration of Sustainable Wildlife Conservation in Ethiopia

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Abstract
This review deals with the issue of wildlife genetic resource trafficking with the objective of providing best policy insight, legislative frameworks and institutional considerations for sustainable wildlife conservation in Ethiopia. Pertinent literatures were reviewed from books, review articles, full-length manuscripts, short communication, proceeding, working group reports and factsheets. The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) came into effect in 1975 to protect endangered species of wild fauna and flora against over-exploitation through international trade. Wildlife crime works against the objective of sustainable wildlife conservation. Globally extensive collaboration and cooperation at an international level are key ingredients in fighting illicit protected species trafficking. In an effort of foreign countries to combat wildlife trafficking and as part of a larger strategic framework under a continent-wide programme called Africa’s Regional Response to Endangered Species Trafficking (ARREST) was established. Furthermore, Ethiopia is a signatory of CITES agreement and are taking various national commitments to halt the hindrances of wildlife trafficking. Nevertheless, Ethiopia is identified both as a source and a key trade hub for illegal ivory trafficking.

Keywords: Genetic Resource, CITES, Wildlife trafficking, Hotspot, Institutional Consideration

1. Introduction
Ecosystems play a crucial role and especially for developing economies by supporting revenues, future development opportunities, livelihoods and sustainable harvest sectors relying heavily on natural resources, such as in agriculture, forestry and fisheries. Healthy ecosystems provide the platform upon which future food production and economies are ultimately based (Nellemann et al., 2014) [19]. The opportunities ecosystems provide for future development, however, are threatened by serious and increasingly sophisticated transnational organized environmental crime, undermining development goals and good governance. Transnational organized environmental crime may include illegal logging, poaching and trafficking of a wide range of animals, illegal fisheries, illegal mining and dumping of toxic waste (Nellemann et al., 2014) [19]. Illegal protected species trafficking involves the taking, trading, exploiting or possessing the world’s wild flora and fauna in contravention of local, national and international laws (Kaaria et al., 2011) [10]. The trade is diverse, ranging from live animals and plants to a vast array of wildlife products derived from them, including food products, exotic leather goods, wooden musical instruments, timber, tourist curios and medicines. Levels of exploitation of some animal and plant species are high and the trade in them, together with other factors, such as habitat loss, is capable of heavily depleting their populations and even bringing some species close to extinction (Nellemann et al., 2014) [19].
The search for economic development in developing countries has propelled wildlife crimes and threatens conservation efforts. Wildlife trade has been a major concern in the global community since the dawn of international environmental law. From these concerns several international treaties have emerged, such as the Convention of International Trade in Endangered Species of Wild Fauna and Flora (CITES) (Kaaria et al., 2011) [10].

To curb such ecological, social and economic problems the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) came into effect in 1975 to protect certain species of wild fauna and flora against over-exploitation through international trade (Matthew et al., 2010) [14]. The rate at which African wildlife populations are declining, in most of their historical ranges, continues to intensify. It has been widely proven that poaching, unauthorized or illegal international trade, rapid degradation of habitats, and man and animal conflict at the point of interface are driving certain species of wildlife to the verge of extinction (Mrema, 2009) [16].

The scale of the international wildlife trade is massive, with estimates of billions of live animals and animal products traded globally each year (Katherine and Alex, 2014) [13]. It has also led to the introduction of pathogens that threaten public health, agricultural production, and biodiversity conservation (Katherine and Alex, 2014) [13].

Over half a million shipments of wildlife containing >1.48 billion live animals have been imported by the United States since 2000. The number of shipments has increased considerably over this time. With each shipment representing a potentially different origin, this suggests a growing threat of wildlife conservation. The majority (92%) of imports were designated for commercial purposes, largely the pet trade. Nearly 80% of shipments contained animals from wild populations, the majority of which have no mandatory testing for pathogens before or after shipment (Katherine and Alex, 2014) [13].

Globally, the volume and diversity of traded and consumed wildlife species have increased to phenomenal and unprecedented levels, contributing to very intense species loss. The unsustainable, and often illegal, trade in wildlife has the capacity to drive species into extirpation in large areas and often into worldwide extinction especially species that are already vulnerable as a result of other environmental threats (Vanda, 2011) [28]. Furthermore, these crimes have both direct and indirect negative impacts on local communities, including exhaustion of the resource base on which they depend for their livelihoods and altering of local environmental conditions (David, 2012) [4]. Environmental and wildlife crimes pose a great threat to national, regional, and international conservation efforts (Murimi, 2007) [17]. Thus, the paper is intended to review existing knowledge on illegal wildlife genetic resource trafficking so as to provide policy, legal and institutional recommendation for sustainable wildlife conservation in Ethiopia.


At the global level, CITES has established a legal framework to legalize international trade in endangered species of wild animals and plants listed in the appendices. It is clear that the Convention intends to ensure that, international trade in specimens of endangered wild fauna and flora is regulated and does not threaten conservation status of declining wildlife species (Mrema, 2009) [16].

CITES is arguably the largest, and perhaps most important, wildlife conservation agreement in the world, and a vital tool to combat the threat to plants and animals posed by the international wildlife trade (James, 2012) [9].

Convention on International Trade in Endangered Species of Wild Fauna and Flora is aimed to the achievement of two central objectives: reduce negative impacts of international trade in endangered species, and control international trade that drive species to endangered levels. In this regard, CITES uses a permitting system to regulate trade rather than prohibiting it all together (James, 2012) [9]. Wildlife trade includes all sales or exchanges of wild animal and plant resources by people. Under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), to which governments voluntarily adhere, only trade that does not threaten the survival of a species is permitted (Vanda, 2011) [28].

Wildlife crime threatens sustainable conservation of biodiversity, particularly the illegal wildlife trade, which is driving many species towards extinction. Much of this trade is from developing countries, which contain most of the world’s biodiversity, to developed ones, which provide the demand (David, 2012) [4].

One-hundred and seventy-five countries are currently signatory to CITES, agreeing to ensure that international trade is not detrimental to the survival in the wild of species listed in the CITES Appendices (Matthew et al., 2010) [14]. Today, CITES accords varying degrees of protection to more than 30,000 species of wild animals and plants, whether traded as
live specimens for the pet trade or in dead parts and products. All trade in species categorized as endangered is illegal, both under CITES and under national legislation (Vanda, 2011) [28].

3. Global Status of Illicit Wildlife Genetic Resource Trafficking

Globally, poaching of endangered species to feed the illicit global trade of wildlife is estimated to be worth between $8 and $10 billion per year excluding fisheries and timber is rising at an alarming rate (Katherine et al., 2014) [12]. For example, Southeast Asia, with its linkages into the larger Asian market that includes China, Indonesia, and India, is one of the world’s biodiversity hotspots as well as one of the world’s hotspots for the illegal trade in wildlife and wildlife parts. Although demand markets for wildlife, including illegally traded wildlife are present throughout the world, China ranks as the world’s largest market for illegal trade in wildlife, and wildlife products, followed by the United States (Vanda, 2011) [25].

In the international community, there is now growing recognition that the issue of the illegal wildlife trade has reached significant global proportions. Illegal wildlife trade and environmental crime involves a wide range of flora and fauna across all continents, estimated to be worth USD 70–213 billion annually (Nellemann et al., 2014) [19].

The illegal trade in wildlife involves a complex and diverse set of actors. These include illegal hunters ranging from traditional and poor ones to professional hunters, layers of middlemen, top level traders and organized-crime groups, launderers of wildlife products (such as corrupt captive breeding farms and private zoos), militant groups, as well as local and far-away consumers, both affluent and some of the world’s poorest (Vanda, 2011) [28].

Worldwide, increasing buyer power, population growth, and globalization have led to a rise in demand for wildlife in developed, emerging, and developing countries (Vanda, 2011) [28]. Although important, often specialized, markets for wildlife exist throughout the world, East Asia stands out as a key locus of demand for wildlife (Vanda, 2011) [25]. Such miserable estimates are consistent with global trends. The earth is losing species at 100 to 1,000 times the historical average, the worst loss rate since the dinosaurs died out 65 million years ago (Vanda, 2011) [28]. In 2012 the illegal wildlife trade was considered as ‘a global challenge that spans continents and crosses oceans’. This trade can no longer be viewed exclusively as an environmental concern. Although the trafficking of live animals and animal products remains a serious conservation issue, this crime threatens the stability and security of societies involved at every point along the chain (Katherine et al., 2014) [12].

For rhinos, some 94% of the poaching takes place in Zimbabwe and South Africa, which have the largest remaining populations. Here poaching has increased dramatically from possibly less than 50 in 2007 to over 1,000 in 2013 involving organized syndicates. Rhinos have disappeared entirely from several Asian and African countries in recent years. Rhino horn poached last year is valued around USD 63.8 – 192 million USD, much less at the frontline (Nellemann et al., 2014) [19].

Table 2: Different forms of environmental crime and their approximate estimated scale. Great uncertainties exist regarding the accuracy of the estimates Source; Nellemann et al., 2014 [19]

<table>
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<tr>
<th>Environmental crime</th>
<th>Annual loss of (US$)</th>
<th>Source or reviews</th>
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<tr>
<td>Illegal logging and trade</td>
<td>30–100 billion</td>
<td>UNEP/INTERPOL 2012 [21], OECD 2012 [21]</td>
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<td>Illegal fisheries</td>
<td>11–30 billion</td>
<td>OECD 2012 [20]</td>
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<td>Illegal extraction and trade in minerals/ mining</td>
<td>12–48 billion</td>
<td>GFI 2011 [21]; GA 2012 [20]</td>
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<tr>
<td>Illegal trade and poaching of plants and wildlife</td>
<td>7–23 billion</td>
<td>OECD 2012 [20]</td>
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<td>Sum environmental crime and loss from primarily developing countries</td>
<td>Minus 70–minus 213 billion</td>
<td></td>
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<tr>
<td>Official development assistance (ODA) (2013 estimate)</td>
<td>Ca. 135 billion</td>
<td>Ca. 135 billion</td>
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The illegal wildlife trade is one of the fastest growing illicit trades worldwide. The European Union is a key destination for the legal and illegal trade, both as a point of transit and as a market for consumers (Ragnhild, 2015) [23]. Growing awareness of the widespread impacts of the illegal wildlife has brought about renewed efforts internationally to eradicate this trade.

The recent EU consultation and conference on wildlife crime (2014) initiated a major new initiative to fight wildlife crime and protect biodiversity. The illegal wildlife is facilitated by globalization which has opened borders and expanded the marketplace. The World Wide Web plays a significant role as an intermediary between supply and demand of illicit wildlife and their derivatives (Ragnhild, 2015) [23].

4. Global, African and National Commitment to Fight against Illicit Wildlife Trafficking

Environmental crime is a growing, organized and sophisticated international crime that includes wildlife poaching, smuggling and trafficking of illicit products, waste dumping, illegal logging, and illegal exploitation of fisheries illegal mining of natural resources, bio security and numerous other crimes. Thus, the global community is taking international, continental and national commitment to fight illegal trafficking of wildlife and their derivatives.

4.1. International Commitment to Fight against Wildlife Genetic Resource Trafficking

Illegal wildlife trade is currently gaining exceptional high level of international attention. Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation (Nellemann et al., 2014) [19]. It has been raised as a serious issue at the UN General Assembly and UN Security Council, the G8 and the European Parliament, and by national and regional government led initiatives in Africa and Asia (Anderson, 2014) [11]. Moreover, extensive collaboration and cooperation at an international level are key ingredients in fighting wildlife trafficking. Owing this the global community is formulating various international conventions which binds states and fight the observed illicit trade of wildlife and their products.

4.2. African Commitment to Fight against Wildlife Genetic Resource Trafficking

In Africa the prevention and combating of crime involving natural resources such as water, forests, wildlife, and the environment in general should be of primary concern due to the human population’s reliance on natural resources (Kamweti et al., 2009) [11]. Thus, according to ISS (2008) [8], any crime committed involving natural resources not only degrades the environment, but also deprives the local population of their basic needs. Environmental and wildlife security issues are therefore vital national security interests because most citizens are engaged daily in a struggle to survive, and local people depend on the environment for their livelihoods. Furthermore, Africa’s wildlife is under the greatest poaching pressure in history. Elephant ivory and rhino horn have become two of the world’s most valuable commodities, and bush meat, spotted cat skins, pangolin scales,
plants, live animals and lion bones are part of the growing traffic in African wildlife contraband (Megan, 2014) [15]. Africa is at the forefront of the struggle to combat the trade in endangered species. Intense poaching encouraged by illegal trade has severely depleted certain wildlife populations. To address these problems, Eastern and Southern African countries formed an Inter-Governmental Agreement for cooperative enforcement efforts to curb illegal trade in wild fauna and flora, the Lusaka Agreement. To facilitate the prevention and suppression of the illegal trade in wild fauna and flora, the Lusaka Agreement Task Force developed cooperation agreements with the Secretariats of Interpol, CITES, the World Customs Organization, the Central African Forests Commission, and the Organization for the Conservation of African Wildlife (also known as the Organization pour la Conservation de la Faune Sauvage Africaine (OCFSA)) (Kaaria et al., 2011) [10].

The Lusaka Agreement (1994) is an agreement of CITES at the regional level in Africa. The agreement establishes a framework of cooperation between enforcement agencies in the trafficking in all species of flora and fauna and thus has a somewhat broader mandate than CITES and has often been used in implementing other agreements such as the CBD (James, 2012) [9].

As a result, conservationists have been forced to adopt new and sophisticated methods to stop wildlife poaching. In an effort of foreign countries to combat transnational crimes, including wildlife trafficking and as part of a larger strategic framework under a continent-wide programme called Africa’s Regional Response to Endangered Species Trafficking (ARREST) was established. The ARREST Program is a coalition of over 50 governments and organizations working to decrease wildlife trafficking (SID, 2015) [24].

4.3. Ethiopia Commitment to Fight against Wildlife Genetic Resource Trafficking

Ethiopia has signed various international agreements and is taking other national commitments so as to fight against wildlife trafficking. Besides, Ethiopia burns 6 ton of ivory to discourage poaching activities among the community.
5. Contemporary Status of Illicit Wildlife Genetic Resource Trafficking in Ethiopia

Ten countries have been identified as actively involved in ivory trafficking: Cameroon, Congo, Egypt, Ethiopia, Gabon, Mozambique, Nigeria, Uganda, Democratic Republic of Congo and Taiwan (press kit, 2013)[22]. Ethiopia is one of the East African countries located at the place commonly known as the Horn of Africa. It is scientifically anticipated that the country has about 320 different species of wild mammals (EWCA, 2014) [5]. The African elephant (*Loxodonta africana*) is one of the umbrella species being conserved in Ethiopia. It is found in 8 sites within the country, four of which are cross international boundaries. Ethiopia is identified both as a source and a key trade hub for illegal ivory trafficking (EWCA, 2014) [5].

5.1. Deriving factors of Illicit Wildlife Genetic Resource Trafficking in Ethiopia

Factors like the presence of wildlife criminal justice assistance, considerable knowledge gaps among the judiciary bodies in understanding the deep-rooted challenges associated with wildlife crime are deriving factors of the extent of the problem (IPPF, 2016) [7]. There are still some wildlife trafficking knowledge gaps among law enforcement officers, prosecutors and judiciaries, which are hampering our effort to monitor illicit wildlife trade in Ethiopia (EWCA, 2014) [5].

5.2. Extent of Illicit Wildlife Genetic Resource Trafficking in Ethiopia

Ethiopia has been identified by CITES (Convention on International Trade in Endangered Species) as a major transit hub for illicit ivory. This is evidenced by the significant and regular interceptions of illegal ivory at Bole International Airport and other border posts (Born Free Foundation, 2015) [2]. In 2014 alone, more than 100 people were arrested in the country in association to illegal ivory trade and trafficking, with most being transit passengers at Bole International Airport (BIA) in Addis Ababa, and some as leaving passengers. Thus, there is an indication that ivory trade still occurs within Ethiopia, although it is highly hidden (EWCA, 2014) [8]. According to Ethiopia’s National Ivory Action Plan, authorities have arrested more than 700 people - many of them Chinese nationals - for ivory trafficking in the last five years. In March 2015, the Government of Ethiopia destroyed more than six tons of confiscated ivory (IPPF, 2016) [7].

Table 1: Summary of wildlife trafficking related arrests in Ethiopia Source (EWCA, 2014) [5].

| Year | # Arrests overall | # Arrests at BIA | Value of fines (in ETB) | Nationality of Arrests
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<td></td>
<td>Departure</td>
<td>Transit</td>
<td>Total</td>
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<tr>
<td>2010</td>
<td>109</td>
<td>--</td>
<td>500,000</td>
<td>500,000</td>
</tr>
<tr>
<td>2011</td>
<td>249</td>
<td>59</td>
<td>1.7 million</td>
<td>45 / 185 / 19</td>
</tr>
<tr>
<td>2012</td>
<td>123</td>
<td>4</td>
<td>1.5 million</td>
<td>6 / 107 / 11</td>
</tr>
<tr>
<td>2013</td>
<td>147</td>
<td>7</td>
<td>110,000</td>
<td>9 / 125 / 13</td>
</tr>
<tr>
<td>2014</td>
<td>106</td>
<td>5</td>
<td>&gt;500,000</td>
<td>6 / 91 / 9</td>
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Fig 2: Extent of wildlife genetic resource trafficking in Ethiopia (National geography, 2015) [18].
6. Wildlife Genetic Resource Trafficking Hotspot Sites in Ethiopia

There is an indication that ivory trade still occurs within Ethiopia, although it is highly hidden (EWCA, 2014) [5]. Various reports have shown that, land based border points under the control of Ethiopian custom and revenue authority are also hotspot site for the problem being observed. Furthermore, custom check points located around national park are likely to be sites of importance. For example, Eastern Ethiopia has three around five check points bordered by Babile elephant sanctuary,Awash National park, Alidhagi national park and Milesero wildlife reserve. These areas might be hotspot sites.

The custom and revenue authority located in northern Ethiopia are also bordered by Kafeta sherao National park, a site were a large number of elephants are found. As well, southern Ethiopia and Oromya regional states has also similar tendency of having custom check points surrounded by protected areas. Thus, most of the wildlife under protection can be susceptible for trafficking. Moreover, mapping of the hotspot sites of conservation importance should be done to strategically harmonize the physical map with the scale and nature of wildlife trafficking.

Fig 3: Wildlife trafficking hotspot sites (Fetene Hailu, 2013)[6]

6.1. Bole International Airport

Ethiopia’s Bole International Airport has long been identified as a transit point for illicitly trafficked wildlife products, including ivory (IPPF, 2016)[7].

6.2. Border Points Wildlife Genetic Resource Trafficking Hotspots

According to our preliminary investigation of wildlife trafficking in Eastern Ethiopia some Practices and sites of wildlife trafficking are identified. Accordingly, Awash transit custom checkpoint, Togowechale, Galafi and Dewale are sites of illicit wildlife trafficking importance.

7. Policy, Legal and Institutional Considerations of Illicit Wildlife Trafficking for Sustainable Wildlife Conservation in Ethiopia

Effective implementation of environmental initiatives often requires inter-institutional cooperation including the local, regional, and international levels; governments and nongovernmental organizations; and individual stakeholders (Kaarja et al., 2011) [10].

Furthermore, efforts should be made at the collective, bilateral and national levels for the sake of protecting wildlife of conservation importance. Such efforts entail policy making, strategies, management, legal system and execution and capacitated institutional mentation. The attention afforded to this issue is much needed and
the various international initiatives that have emerged rightly should take a multi-faceted approach.

7.1. Future Policy Consideration of Wildlife Trafficking for Sustainable Wildlife Conservation in Ethiopia

Policy at national and international level can have a major influence on conservation and livelihoods. Policy settings focusing on regulatory and market-based policies can also shift conservation outcomes from trade. This includes the use of CITES-listings, trade bans, permits and quotas settings, as well as particular policies for species stewardship or habitat management (Cooney et al., 2015) [8].

A range of policy options could support a move towards legal and sustainable trade that supports both conservation and livelihoods. Best practices experiences of several states has shown shift of paradigm in a way of coordinated national strategy, legislative authority, or funding devoted to oversight wildlife trade. There is a lack of understanding on the policy space of wildlife trafficking due to limited knowledge on the stipulated problems. Furthermore, scientific risk analysis of imported taxa, at the level of genus or species, would provide a considerable advance in assessing the threat that imported wildlife pose as invasive species or pathogen reservoirs (Katherine and Alex, 2014) [13]. In an effort to strengthen the monitoring Policies and enforcement strategies for curbing the illegal trade in wildlife to ensure wildlife conservation and preserve biodiversity we need to address the complex and actor-specific drivers of the illegal behavior of wildlife trafficking.

7.2. Future Institutional Consideration of Wildlife Trafficking for Sustainable Wildlife Conservation in Ethiopia

There is little institutional capacity to mobilize and link activities effectively within and between sectors mandated to conserve Ethiopian biodiversity genetic resource. Moreover, the asymmetrical natures of sectors are common hindrances. Experiences from other African countries has also revealed that, there is insufficient coordination between national law enforcement agencies and wildlife law enforcement agencies in combating illegal wildlife trafficking (Kaaria et al., 2011) [10]. Thus, multi stakeholder approach of various institutions like the revenues and customs Authority of Ethiopia, Ethiopian postal office, Federal and regional policy offices, Ethiopian wildlife conservation Authority, Ethiopian Biodiversity Institute, Ethiopian environmental and forest research institute and other governmental organizations should take on cooperative efforts to bring to a close the existing wildlife trafficking problem. Likewise, land based port officers should strongly exercise the authority given to detain or refuse shipments if the required documentation is missing or incomplete. Each sector should take care for the problem of wildlife trafficking being observed. Consequently, this gives the opportunity to reinforce the interagency collaboration in all matters of wildlife crime. Furthermore, institutes of concern should reduce the ‘dark’ figure of environmental crime through the development of a more accurate measurement of the prevalence, nature and impact of illegal wildlife trade.

Above all Ethiopian Custom and revenue authority should have a practical hands-on skill in the identification and correct handling of species commonly trafficked within the country and cross borders. Furthermore, Ethiopian wildlife conservation authority law enforcement units should work with stakeholders such as ranchers, local communities and other law enforcement agencies in drawing up and implementing area-specific security strategies to counter poaching threats and other wildlife crimes. Such kind of best practices are proven to reduce the magnitude of wildlife trafficking in Kenya wildlife service’s (David, 2012) [8]. These measures include holding regular security meetings with private conservancies and ranchers in the vulnerable areas, joint law enforcement efforts, and wildlife security review and operations covering the entire country. As well, cross-border operations and collaborations within neighboring states are also in place to address crimes of a transboundary nature.

To prevent and combat wildlife crime, and in particular poaching and trafficking in wildlife species and their products, Ethiopian government sectors working in biodiversity and environmental issues should harmonize their strategic efforts of mitigation wildlife trafficking. Moreover, specialized security units should be deployed throughout the country susceptible cross border Ethiopian Custom Authority checkpoints. Accordingly, the following units must be institutionalized in the checkpoints and other known routes. These include the canine unit, which helps to sniff out wildlife products and track wildlife offenders; the horse unit, to ease movement in mountainous terrains; the prosecution unit for wildlife related offences; the security research and analysis unit, to study emerging trends and recommend appropriate solutions; the wildlife research and analysis unit, to study emerging trends and recommend appropriate solutions; the wildlife investigation, which responds to wildlife crime; the intelligence unit, which gathers information intended to preempt wildlife crime; the emergency management unit to deal with disaster situations; and the security data management unit for information management. Strengthening of these units and creating more collaboration with the Customs
Department and other government agencies will be some of the strategies for winning the war against wildlife crime. Such sorts of institutional harmonization and capacitating activities have shown practical solution in Kenya wildlife service (David, 2012) [4].

8. Future Legal Consideration of Wildlife Trafficking for Sustainable Wildlife Conservation in Ethiopia

Wildlife legislation in some East African countries does not adequately address illegal wildlife trade. Sadly, law enforcement efforts lag far behind the rates of illegal trade. Practices such as illegal bush meat exploitation have been mainly considered as a petty offence and most courts fail to treat the matter as a serious issue. Disparities in punishment among Eastern African countries also make it difficult to deter these crimes. For example, possession of elephant meat in Kenya results in a small fine, whereas in Tanzania and Zambia perpetrators may be imprisoned for up to seven years (Kaaria et al., 2011) [10].

Even though there are remarkable legislative efforts against illicit trafficking of wildlife. Much more legal frameworks which enact a number of laws should be addressed by concerned bodies.

Implementation of any legal measures can occur in a way that supports the healthy trade of wildlife, rather than acting as an economic hindrance to trade stakeholders. Clearly, there is an urgent need to intensify law enforcement efforts against wildlife smuggling. An increase in resources, frequency of law enforcement action, strict corruption-reduction programs among law enforcement officials, toughening of laws (and possibly penalties) and the elimination of legal loopholes would each likely have some positive effect in reducing the trade, given the very low baselines in the wildlife regulation and conservation enforcement in Ethiopia.

Law enforcement agents should focus on critical smuggling hubs, but complement it by ensuring sufficient law enforcement capacity to detect the emergence of a more covert black market. Moreover, prosecution of high-level illegal wildlife traders should get serious legal concern. Diligently enforce existing laws as much as possible given law enforcement’s resources and inherent limitations. Generally, important legal frameworks should be designed which supports Ethiopia’s effort in controlling illegal ivory trade at suspected trade spots and ivory trafficking across its land borders and through International Airports.

9. Conclusion

The consequences of illegal trade in wildlife span from environmental and economic impacts including affecting the resource base for local communities, and resulting in the theft of natural capital at national levels. The illegal trade in wildlife is therefore a barrier to sustainable development, involving a complex combination of weak environmental governance, unregulated trade, loopholes and laundering systems used to conduct serious transnational crime, and undermining government institutions and legitimate business.

Wildlife crime works against the objective of sustainable wildlife conservation globally. It has driven many species to extinction and continues to pose threats to others. One of the tools to enhance wildlife management is effective law enforcement and capacitating institutions. However, it is also important not to lose sight of the ultimate objective of law enforcement from a resource management point of view: preventing resources from being degraded through illegal activities. Owing to the geographical positioning of the country, fighting wildlife crime is both a challenging and an expensive undertaking. Therefore, harmonization of efforts among sectors working in similar issues will ease the complexity.

As is the trend globally and in the region, wildlife crime in Ethiopia is projected to increase unless stringent preventive measures are taken. Towards this end, multi-stakeholder approach should be implemented to bring some innovative solutions to strengthen law enforcement to address wildlife security challenges. Given an environment of decreasing resources, there is a need to change from traditional enforcement practices, which are more reactionary and incident-driven, to a more proactive focus on prevention, problem-solving, and partnerships.

10. Way forwards

Tackling the demand for wildlife is enormously critical, since supply-side dealings are rarely effective on their own. Reducing demand facilitates law enforcement, licensing, and alternative livelihoods efforts. Participatory community campaigns to reduce consumptive use of particular wildlife species should be a focus of future conservation initiatives. Moreover, intensifying on-site- training and anti-corruption measures among park rangers can bring remarkable change. Since committed and well-resourced park management are crucial for rising effective anti-poaching responses.

Undertaking alternative livelihoods efforts for marginalized populations dependent on wildlife use for
basic livelihoods can strengthen our effort of monitoring wildlife trafficking. But such programs need to be designed as broad rural and social development and include policies that specifically target biodiversity-dependent marginalized communities. Moreover, Ethiopian wildlife conservation authority in collaboration with Ethiopian Biodiversity Institute should works very closely with other law enforcement agencies in all matters of wildlife security. Engagement with the provincial administration, police, local communities, Customs and Immigration departments, Ethiopian Airports Authority, private ranches, and other conservation stakeholders should be intensified to address matters of environmental crime. Regionally, cross-border collaborations should be strengthened so as to yield results in tackling crime along shared borders.

Concerned authorities should invest heavily in training and building the capacity of its law enforcement personnel. Accordingly, conservation crime management field training school, which offers paramilitary training and other specialized law enforcement courses to Ethiopian law enforcement staff should be established. Such schools can train personnel from other stakeholders involved in wildlife conservation and law enforcement, including County Councils, private wildlife sanctuaries, and the Ethiopian Airport Authority. This will greatly benefit and provides training opportunities and other capacity-building programs offered to its law enforcement personnel by other partners both within and outside the country.

The illegal wildlife trade will be best controlled not by guns and rangers but by solutions that respect and make partners of local communities and landowners, through providing sound incentives and opportunities to value and conserve wildlife. As well, strengthened enforcement efforts need to be complemented by broader development and awareness raising efforts. End-user markets need to be further analyzed, and consumer awareness campaigns need to be systematically designed, supported and implemented. Wild animal in Ethiopia should be linked with multi-stakeholders of utilising the cost effective skills and experience to increase conservation contribution, capacity and efficiency for wildlife conservation. An overview of the response to the illegal wildlife trade should be discussed and evaluated through SWOT analysis and proposing suggestions for improvements. Moreover, the concerning bodies should expand their efforts to the development need of the local community thorough alternative income opportunities like small scale ecotourism. Generally, sustainable, legal and equitable wildlife trade can be a powerful nature-based solution for meeting the twin challenges of enhancing rural livelihoods and conserving biological diversity.

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12. References


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